### **Chapter Four**

#### Findings and Discussion

In this chapter, the researcher presents the findings and discussion of this researcher. The findings include the data to answer the research questions. Then, the discussion present further information and relates the findings to the theory reviewed in chapter two.

# **Findings**

This part focused on answering the research questions of this research.

Those are to find out the EED UMY students' TOEFL test score and to find out the effect of joining ILT class towards EED UMY students' TOEFL test score. To answer those questions, the researcher use cause-effect design. The researcher used secondary data which researcher got from the ILT lecturer to answer those questions. There were 151 EED UMY students as participants in this research.

Then, the researcher analyzed the data of the students' TOEFL score.

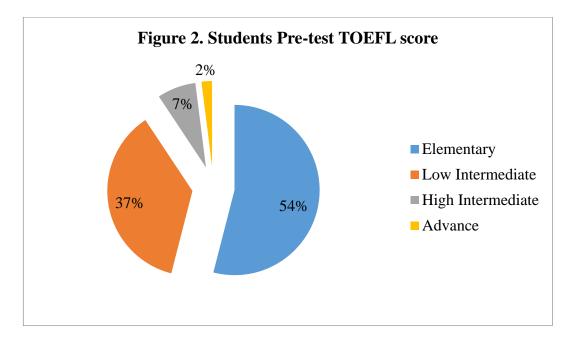
Students' TOEFL score. The first RQ of this research was "How EED UMY students' TOEFL test score? The samples were 151 sixth students at EED UMY batch 2013. Secondary data was used to collect the data which the researcher got from the ILT lecturer. This data was students' TOEFL pretest and posttest score. The pretest which was done in Language center UMY was to know the students' TOEFL score before the lecturer give treatment. Hence, the posttest did in EED's class UMY after the lecturer give treatment. This posttest was to know the student' TOEFL score after the treatment whether it is increase or not. The researcher utilized the TOEFL test score category table by Carson (1990).

Pretest. After the first meeting which discussed the learning contract, ILT teacher held TOEFL pretest in LTC of UMY. This pre-test was done before the treatment was conducted increase the students' TOEFL score. There were 171 students who join this pretest, but the researcher only used the data of 151 students, because the other 20 students were not eligible to become the sample of this research. The sample requirement of this researcher was students joined both the pretest and posttest. However, the 7 students didn't joining the pretest and the 13 students didn't joining post-test. So, they were not including as sample of this research. The result of the pre-test can be seen in Table 4.2 as follow:

Table 3. Descriptive statistic mean of the pretest							
	N	Minimum	Maximum	Mean	Std. Deviation		
PreTest         151         310         580         416.63         47.690							
Valid N							
(listwise) 151							

Based on the table above, the mean total of students' pre-tests scores were in the elementary category. The mean total of the pre-test was 417. It could be concluded that the students' TOEFL score before the treatment was in elementary category based on the TOEFL test score category. Hence, the minimum score in pretest was 310. It was in elementary category. But, the maximum score that students got was 580. It was in advanced.

The students' TOEFL test score category of the pre-test was interpreted in the figure 2 below.



On the figure 2 above, we can see that 54% of 151 students or 81 students are included in the elementary category. Score that they got in the pretest is between 310 - 420. This is the lowest category in the TOEFL score Categorization by Carson (1990). The next category is the low intermediate. It is one level above the elementary category. This category has a score range of 420 - 480. Students who were in the low intermediate category there were 37% of the 151 students or 55 students. Next, there are 7% of the 151 students, or 11 students who were included in the category of high intermediate. In level three, the student gets a score range of 480 - 520. The highest category is Advance, where the range of scores that enter into this category is 520 - 677. In this pretest, 2% of 151 students or only 3 students who were in this category.

**Posttest.** After students did the pretest, the lecturer gave some treatment to all students in the next meeting. The treatment was done in many forms, such as;

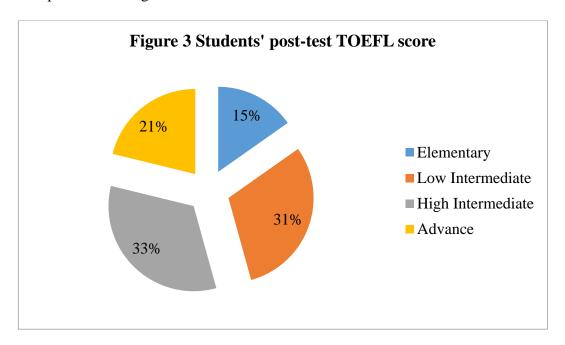
studying the "TOEFL Preparation Test" book, reading the "Kincaid" book, and doing a TOEFL test simulations. The "TOEFL Test Preparation" book is a book which was published by LTC of UMY. This book contains all of the materials tested in the TOEFL test, like; listening skills, structure, and reading skills. The lecturer taught those skills one by one. Then, at the end of discussion in every skill the lecturer held some test to the students' understanding. Furthermore, students were given the reading task the "Kincaid" book per part by the lecturer. In each meeting, the lecturer gave the essay quiz related to the reading task on the book. Students had to use their own language to answer the essay quiz. After all the treatments were given, there was TOEFL test simulation in EED's classroom. There was a posttest at the end of the meeting. The TOEFL-like test for post-test was same with the pretest which was done by language center UMY. Here is the results table of the students' post-test score.

Table 4. Descriptive statistic mean of the posttest						
	N	Minimum	Maximum	Mean	Std. Deviation	
PreTest	151	320	587	479.97	52.536	
Valid N	151					
(listwise)						

On the table 4.3 above, the data showed that the mean of the post-test was 480. Based on the TOEFL test score category if the score was around 420-480, the score was considered as low intermediate. It meant that the mean of the post-test was categorized as low intermediate. The minimum score that students got

was 320. It was in the elementary of category. Then, the maximum score was 587. It meant the maximum score was in advanced.

The result of the post-test revealed that the students' TOEFL score increased. The students' TOEFL test score category of the post-test was interpreted in the figure 3 below.



On the figure 3 above, there are 15% of 151 students or 23 students are in elementary category. Elementary has a score range between 310 - 420. Low Intermediate is the second category after Elementary. There are 31% of 151 students or 46 students who are in low intermediate. Students who are included in this category got a TOEFL score range of 420 - 480. High Intermediate category got a score range of 480 - 520. There are 33% of 151 students or numbered 50 students are included in high intermediate category. Next is the Advance.

Advance is the highest category in a TOEFL scores Categorization. This category

has a category range of 520 - 677. There are 21% of 151 students or 32 students who were in advanced category.

The effect of joining ILT class towards TOEFL test score. After the researcher collected the data and analyzed it, the researcher found that there was an improvement of the students' TOEFL score. It was shown from the mean of pre-test and post-test. The mean score of the pre-tests was 417 and the mean score of the post-tests was 480. It meant that the mean of the post-test was higher than the mean of pre-test. The difference was calculated from the post-test minus the pre-test, so 480 - 417 = 63. It meant that the result of students' vocabulary mastery improvement was increased 63 points.

A normality test was used to check the distribution of the data pre-test and post-test whether the distribution was normal or not. The formula used to check the normality was the Kolmogorov-Smirnov formula. Cohen (2011) stated that the data is normal if the variable significance ( $\alpha$ ) is > 0,05. The data were analyzed by using SPSS version 17. The results can be seen in Table 4.4 below.

Table 5. One-Sample Kolmogorov-Smirnov Test				
		PreTest	PostTest	
N		151	151	
Normal Parameters <sup>a,,b</sup>	Mean	416.63	479.97	
	Std. Deviation	47.690	52.536	
Most Extreme	Absolute	.049	.086	
Differences				
	Positive	.049	.048	
	Negative	028	086	

Kolmogorov-Smirnov	.608	1.053
Z		
Asymp. Sig. (2-tailed)	.854	.218

a. Test distribution is Normal.

#### b. Calculated from data.

Based on the Table 4.4 above, the data showed that the data distribution was categorized as a normal. The Significance of the pre-tests was 0.854 and the significance of the post test was 0.218. Both of the pre-test value (0.854>0.05) and the post-test value (0.218>0.05 were up to 0.05. It meant that the data was categorized as normal. It meant that the researcher was able to use this data and went to the next step to find the data that the researcher needed to know in order to the answer of the research questions of this research.

Besides testing the normal distribution of data above, it was also necessary to test the homogeneity whether variance of data drawn from the same population had uniform variance or not. The results of the homogeneity test can be seen below.

Table 6. Test of Homogeneity of Variance						
		Levene		Df1	Df2	Sig.
		Statistic				
Score	Based on Mean		1.784	1	300	.183
	Based on Median		1.305	1	300	.254

Based on Median and	1.305	1	294.612	.254
with adjusted df				
Based on trimmed mean	1.653	1	300	.200

The data above showed that the Sig. value of Score Based on Mean was 0.183, the Sig. value of Score Based on Median 0.254, the Sig. value of Based on Median and with adjusted df was 0.254, and the Sig. value of Based on trimmed mean was 0.200. The data called homogenous if all the Sig. value was more than 0.05 (all Sig. > 0.05). Based on the data above, all the Sig. value were bigger than 0.05. So, the variance of the pretest and the posttest data was homogeneous. Homogenous mean that the data are all the same kind.

Paired-sample t-test. The second research question is how is the effect of joining ILT class towards EED UMY students' TOEFL test score. The researcher used the statistical analysis in SPSS statistic 17.0 by using Paired sample T-test. In table 5 showed that the pre-test and post-test data were normal. It meant the data went to the next step. In table 6 showed that the variance of the pre-test and post-test data was homogenous. It meant that the data is already to calculate in t-test. Paired sample t-test was used to compare two means that were from the same individual, object or related unit (Kent, 2014). That was why the researcher used Paired sample T-test because the researcher wanted to compare the students' TOEFL score before and after joining ILT class. The result was shown by paired sample correlation below.

Table 7. Paired Sample Test	
Paired Differences	Pair 1

		PreTest – PostTest
Mean		-63.338
Std. Deviation		40.548
Std. Error Mean		3.300
95% Confidence Interval of the	Lower	-69.858
Difference	Upper	-56.818
Т	-19.195	
Df	150	
Sig. (2 – tailed)	.000	

Based on the result of this study, the table 4.6 above shows the coefficient effectiveness of joining ILT towards toward EED UMY students' TOEFL test score. Firstly, the researcher focused on Significant (Sig.) where it explained how effectiveness of joining ILT towards toward EED UMY students' TOEFL test score was. Based on the table 4.6, the researcher found  $\rho=0.000$ , i.e.  $\rho<0.005$ , It meant that the hypothesis is rejected. The hypothesis is there is no effect of joining ILT class towards students TOEFL test score at EED of UMY. Based on the data, the null hypothesis is rejected. So, it means joining ILT give effect on EED UMY students' TOEFL test score.

To know the effect size of joining ILT towards students' TOEFL score, this research used Effect Size method. This method was used to calculate the effectiveness of joining ILT class towards students' TOEFL score. Here is the formula of effect size:

Effect size = 
$$\frac{\sqrt{T^2}}{\sqrt{T^2 + df}}$$

Effect size = 
$$\frac{\sqrt{19.195^2}}{\sqrt{19.195^2 + 0.150}} = 0.99$$

#### **Note:**

## T: T value Df: degree of freedom

To know the result of the effect size calculation, here is the criterion of effect size as in the table below by Cohen (2011):

Table 8. The criteria of effect size				
Effect size	Level	Criteria		
0.10	Small effect	The effect explains 1%		
		of the total variance.		
Effect size	Level	Criteria		
0.30	Medium effect	The effect accounts for		
		9% of the total variance.		
0.50	Large effect	The effect accounts for		
		25% of the variance.		

Joining ILT had a large effect in increasing students' TOEFL score. The effect size value of the students' score was 0.99. This value was higher than 0.50. Based on the table above, when the value was higher than 0.50 meant the independent factor gave a large effect to the dependent factor. The value was 0.99, so it could be concluded that joining ILT had a large effect to increase students' TOEFL score.

## **Discussion**

In this part, the researcher presents the discussion of this research which gives further information and relates the findings to the theory reviewed in chapter two. Then, the researcher also wanted to identify whether joining ILT class was effective to increase the students' TOEFL score or not. It is also discuss about the interpretation and analyze in findings section in order to answer the research questions.

Students' TOEFL score. The first research question is to find out the EED UMY students' TOEFL test score. The researcher got the data of students' TOEFL score from the ILT lecturer. The data that were analyzed by TOEFL score categorization by Carson (1990) would be used to identify whether any increasing on students' TOEFL score or not.

In a pretest, before the treatment in ILT class, based on mean the students were in Elementary category based on the mean. It can be seen that 54% students were include in elementary, 37% students were included in low intermediate, 7% students were included in high intermediate, and 2% students were included in advance. Hence, after the treatment given in ILT class, the students' TOEFL score were improve. In a post-test, based on mean the students were in low intermediate. It can be seen that 15% students were included in elementary, 31% students were include in low intermediate, 33% students were include in high intermediate, and 21% students were include in advance.

After joining ILT class, the students' TOEFL score were improving significantly. The mean total of students' pre-tests scores was 417 while the mean total of the post-test was 480. It meant that the result of students' TOEFL score was increased 64 points. The other findings showed that in a pretest the minimum

score was 310 while in a posttest was 320. Then, the maximum score in pretest was 580 while in a posttest, the maximum TOEFL score was 587. Thus, the researcher concluded that joining ILT class give improvement to the students TOEFL score.

The explanation above clarified about the increasing on students' TOEFL score after joining ILT class. Besides, ILT was very good class which has an appropriate treatment for the students. It supported with the previous study which satates that ILT/ TOEFL preparation program effective is improving students' TOEFL score. Al-Rawashdeh (2010) stated that determining an appropriate TOEFL preparation course can give benefit to the students; they can get the top percentiles among the TOEFL test. Heffernan (2006) also argued that any successful TOEFL preparation course have to effective prepare students for the TOEFL test, with the ultimate goal of increasing any previous score they may have achieved. Then, Dewi, Darna, and Suprapto (2015) conclude that the result of their research showed that the students' TOEFL scores have increased significantly by compared the final test and the entrance test in BINUS University. The last was Habiby (2013) who investigated TOEFL preparation course at RAM English course also stated that the instructor was successful to improve their students' TOEFL score by giving treatments to the students. In conclusion, joining ILT class could affect the students' TOEFL score.

The effect of joining ILT class towards TOEFL test score. The second question of this research is to find out the effect of joining ILT class towards EED UMY students' TOEFL test score. This research question could be answered based on the findings.

The researcher used Paired sample T-test to analyze the data then he can find out the effectiveness of joining ILT class towards students' TOEFL score at EED UMY batch 2013. On the Table 4.6 showed the coefficient of the effectiveness. The researcher found  $\rho = 0.000$ . The  $\rho$  value was less than 0.001. It meant that the null hypothesis was not supported. The null hypothesis was there is no an effect of joining ILT class towards students TOEFL test score at EED of UMY. Therefore, joining ILT class affected the students' TOEFL score.

Hence, the size of the effectiveness of joining ILT class towards students' TOEFL score could be seen from the value of the t-value. The effect size method by Cohen (2011) was the method that was used to calculate the effectiveness of joining ILT class towards students' TOEFL score. Then, the researcher found the value of effect size was 0.99. Based on the Table 4.7, the effect size value was higher than 0.50 meant the treatment gave large effect. So, it could be concluded that joining ILT had a large effect to increase students' TOEFL score at EED UMY batch 2013. This result is supported with the previous study from Dewi et al. (2015) who argued that students who joined TOEFL preparation program in BINUS learnt a lot during one year studying TOEFL and the study helped them to improve their TOEFL score.

There were three factors that maybe as the factors in students' TOEFL score after joining ILT class. First was TOEFL preparation book. After the pretest held, the lecturer gave a TOEFL preparation book to the students. This book consists of strategies to face the TOEFL test. The students learnt those strategies in every meeting. It was in line with previous study, Habiby (2013) who argued that TOEFL preparation book contained materials related to the TOEFL test and it

was effective to help students increase their TOEFL score. Second was TOEFL simulation. There were several TOEFL simulations in ILT class; listening simulation, structure simulation, reading simulation, and TOEFL simulation. All of the simulation used standardized TOEFL test. Previous studies proved that TOEFL simulation was good way to improve TOEFL course was from Liu (2014). Liu (2014) stated that practicing using TOEFL simulation tests has a largest effect to the TOEFL score. Another previous study was from Al-Rawashdeh (2010) who argued that a good TOEFL preparation course that can increase students' TOEFL score was a course that make students familiarizes with the TOEFL test format by giving a lot of practices. Third was students' motivation. It came from students' self which make students motivated or demotivated to get high TOEFL score. Dewi et al. (2015) stated that motivation becomes the factor supporting the changing of the TOEFL scores. Students with high motivation would achieve the TOEFL scores more than 500 was their own desire. On the other hand, students with low motivation could not find a reason to achieve the TOEFL scores of 500 or more.