CHAPTER IV

RESULTS AND DISCUSSION

This chapter discusses The Finding of the Rresearch and Discussion.

4.1 The Result of The Research

Based on the result of the test, the researcher gets the data that will be analyzed in this chapter. In this research uses experimental design, this method has a purpose to know this IOC method is effective or not. The researcher has two classes of seventh grades; they are 7B and 7C. One class has a treatment and the other class is not. With this treatment, it is expected to increase their achievement in speaking ability. This chapter shows up the results in table: the teable of reliable and validity, the table of assessment from all students, and the table of calculation significance of students' speaking ability

Process of research has done at about a month from 30th March2015- 30th April 2015. Before starting the lesson, the researcher gave the pre-test. After that, all of the materials which were given to the class are proceeded in order to get an achievement in speaking ability. The quantitative data was gotten from pre-test and post-test, the researcher gave the test towards 60 students who are divided into two classes which are exprimental group and controlled group. They were given a question about describing their idol that will be done in duration of 60 minutes. After giving the test, the researcher will analyze the result as the data. To count the

quantitative data, it is done by using Microsoft Office Excels 2007and SPSS verse 17, that has been explained in the previous chapter.

4.1.1 Validity and Reliability

Before pre-test and pos-test are held, the test of reliability and validity should be checked at the first place. The results of both items can be seen below :

Table 4.1 The Result of Analyzing Validity

Test item	Standard Competency	Basic Competency	Sub Basic Competence	Indicators	Validity
Please describe your idol by your own word ?	Mengungkapkan makna dalam teks lisan fungsional dan monolog pendek sederhana berbentuk *descriptive*, dan untuk berinteraksi dengan lingkungan sekitar.	Mengungkapkan makna dalam monolog pendek sederhana dengan menggunakan ragam bahasa lisan secara akurat, lancar, dan berterima untuk berinteraksi dengan lingkungan sekitar dalam teks berbentuk *descriptive*	Mengungkapkan makna dalam monolog pendek sederhana dengan menggunakan ragam bahasa lisan secara akurat, lancar, dan berterima untuk berinteraksi dengan lingkungan sekitar dalam teks berbentuk *descriptive*	Melakukan monolog pendek sederhana dalam bentuk *descriptive*	Valid

To analyze the validity of the test, the researcher uses content validity. In this case, Test must correlate with the content of standard competence. Based on the table above, it shows that the test item suites with the standard competence. Therefore, the test item is considered as valid.

Then, the researcher measures the reliability of the test in which inter-rater reliability is applied. The formula which is used is Pearson Product Moment (see appendix 1)

Table 4.2 The Result of Analyzing Reliability

	X (Rater 1)	Y (Rater 2)
Mean	65.5	66.4
Standard Deviation (s)	8.2	9
Pearson product moment (r)	.93	
Explanation	The reliability is very high	

Based on the table above, the result of calculation is .9 which means the try out is reliable with the criteria ‘very high reliability’.

4.1.2 The Pre-Test Score of Both Classes

The researcher inputs the name of students to be listed. This time the researcher will discuss about this chapter. At present, the researcher has been prepared the data of pre-test and post-test which were taken from seventh grade of the

students from 7B and 7C in SMP Muhammdiyah 11 Surabaya as can be seen in the table below:

Table 4.3 Pretest's score of Experimental class and Cotrolled class

No	Passing grade	Score of pre-test	
		Cntrl.*	Exp*
1	70	72	78
2	70	66	58
3	70	66	65
4	70	68	80
5	70	80	68
6	70	72	60
7	70	66	65
8	70	68	60
9	70	66	64
10	70	74	67
11	70	72	68
12	70	84	80
13	70	68	65
14	70	66	82
15	70	72	65
16	70	60	64
17	70	72	55
18	70	84	64
19	70	78	54
20	70	66	54
21	70	66	65
22	70	76	65
23	70	76	58
24	70	60	54
25	70	66	58
26	70	84	80
27	70	74	78
28	70	64	80
29	70	78	80
30	70	64	58
Average score		**70.93**	**66.40**

Explanation: Exp* = Experimental class

Contr* = Controlled class

The table above shows that a pretest questions was given to the students in experimental and control class before the researcher explains the material. The scores of the students are shown in table 2. From the counting the real score results which is got in pretest, shows that the minimum score of expermental class is 54 and the maximum score are 82. Meanwhile, in cotrolled class the minimum score is 60 and the maximum score is 84, whereas, the maximum score in that test must reach 100 score.

4.1.3 The Post-Test Score of Both classes

After doing the learning teaching process of experiment and free class, the student was given post-test for to measure the student's achievement in speaking ability. At present, the post-test score is data of students 7B and 7C SMP Muhamadiyah 1 Surabaya, is in the table below:

Table 4.4 Post-test's Score of Experimental class and Cotrolled class

No	Passing grade	Score of post-test	
		Cntrl.*	Exp*
1	70	88	84
2	70	86	72
3	70	86	88
4	70	90	84
5	70	82	86
6	70	88	80

7	70	90	84
8	70	88	84
9	70	90	80
10	70	82	80
11	70	86	72
12	70	90	90
13	70	82	68
14	70	86	88
15	70	90	72
16	70	90	72
17	70	90	78
18	70	90	72
19	70	90	88
20	70	82	72
21	70	84	80
22	70	82	72
23	70	86	72
24	70	84	80
25	70	90	90
26	70	90	70
27	70	90	74
28	70	90	90
29	70	90	90
30	70	82	70
Average score		**87.13**	**79.40**

Explanation: exp* = Experimental class

Contr* = Controlled class

The table above shows that, a post-test question was given to the students in experimental and controlled classes after the researcher explains the material. The scores of the students are shown. From the counting, the real score results which are got in post-test, it is shown that the minimum score of experimental class is 68 and the maximum score is 90. Meanwhile, in controlled class the minimum score is 82 and the maximum score is 90.

From both of tables shows that there is rising from the experimental group in posttest. In pretest, percentage of experimental is just about 26.7% but after giving treatment, the percentage increase up to 63.7% as shown in experimental's posttest is almost excellent 90%. From this results can be concluded that there is significance in experimental group after giving treatment'.

4.2. Analyzing Data

To examine that is there influence in students' results of study, there are so many steps that must be done. They are:

4.2.1 Normality Test

The researcher gave pre-test to the students to measure whether there is significant difference or not of both classes. Test of normality distribution of both classes in pre-test is used statistics with hypothesis formulate as below:

H_0 : the data is normality distribution

H_1 : the data is not normality distribution

To test the normality distribution, the researcher uses software SPSS 17.0 of Kolmogorov-Smirnov test. It is used terminology *P-value* that means significant (sig.) the standard of significant is called alpha (α) 0.05. In the other hand, H_0 push away if *P-value* < α and H_1 push away if *P-value* > α. The result as below:

Table 4.5

Descriptie Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Control	30	70.9333	6.76162	60.00	84.00
Experimental	30	66.4000	9.14858	54.00	82.00

One-Sample Kolmogorov-Smirnov Test

		Control	Experimental
N		30	30
Normal Parameters[a,,b]	Mean	70.9333	66.4000
	Std. Deviation	6.76162	9.14858
Most Extreme Differences	Absolute	.168	.194
	Positive	.168	.194
	Negative	-.099	-.164
Kolmogorov-Smirnov Z		.919	1.063
Asymp. Sig. (2-tailed)		.367	.208

a. Test distribution is Normal.

Based on the table above, it can be seen that the result of Kolmogorov-Smirnov is significant because the value of control and experimental class are 0,367

and 0,208. The significance of both classes is more than the significant value (0,05). So, H_0 is accepted and the data is normality distribution.

4.2.2 Homogenity Test

After calculating normality test, it will be continued with homogenity test. In this study the reseracher calculates data uses SPPS 17.0 with pretest both of groups as the main data. The table will be shown in below:

Table 4.6

Test of Homogeneity of Variances

VAR00001

Levene Statistic	df1	df2	Sig.
2.316	1	58	.133

From table above, it can be described that sig. Is gotten 0.133and more significant than σ 0.05 . To support this result, the researcher also counts homogenity by using another way with calculating F_{table}. In table above is gotten F_{count} = 2.316. To get F_{table}, the researcher uses Microsoft Excel 2007 and the result of Ft_{able} = 4.006. So from both of calculations, it can be concluded that H_1 push away and H_0 is accepted because Pvalue > σ (0.133 > 0.05) and $F_{count} < Ft_{able}$. It means that there is no difference between both of groups ($H_0 : \sigma_1^2 = \sigma_2^2$).

4.2.3 T-test

The researcher will measure the effectiveness of Inside-Outside Circle method is used in teaching speaking using T-test with software SPSS 17.0. The hypothesis is formulated as below:

H_0: IOC method by using cue card is not effective in teaching speaking at seventh graders.

H_1: IOC method by using cue card is effective in teaching speaking at seventh graders.

H_0 is pushed away if the significant standard in T-test which is done using SPSS 17.0 < α, (0.05) it means there is effective in teaching speaking using IOC method at seventh graders. But H_1 push away if the significant standard in T-test which is done use SPSS 17.0 > α (0.05), it means there is no effective in teaching speaking using IOC method at seventh graders. The result is shown as below:

Table 4.7

Group Statistics

	Grup	N	Mean	Std. Deviation	Std. Error Mean
Experimental	Pretest	30	66.4000	9.14858	1.67029
	Post test	30	79.4000	7.37470	1.34643

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Experimental	Equal variances assumed	.704	.405	-6.059	58	.000	-13.00000	2.14540	-17.29449	-8.70551
	Equal variances not assumed			-6.059	55.499	.000	-13.00000	2.14540	-17.29862	-8.70138

Based on the table above, the significant (sig.) uses Levene's Test for Equality of Variances test is 0.000, the value significant less than 0,05 or *P-value* < α,so H_0 is pushed away. Meanwhile, T-test for Equality of Means got the same significant is 0.000, the value significant less than 0,05 or *P-value* < α,so H_0 is pushed away.

As described in the previous chapter that the researcher also count T-test by using another way with calculating T_{table}. In table above is gotten T_{count} is 6.059. To get T_{table}, the researcher uses Microsoft Excel 2007 and the result of T_{table} is 2.007. It means that H_0 push away and H_1 is accepted because $T_{count} > T_{table}$. So the researcher can conclude that the Inside-Outside Circle by using cue card is effective in teaching speaking at seventh graders

4.2.4 Eta Square

After getting the result of T-Test, the researcher measure the effect size of treatment given by a calculation of Eta Square. This calculation is used to support the result of the T-Test. According to Pallant (2010:243) there are three scales of this calculation, 0.01 is small effect, and 0.06 is moderate effect and 0.14 or above is large effect. The calculation of this research as seen below:

$$eta\ squared = \frac{t^2}{t^2+(N_1+N_2-2)} = \frac{(6.059)^2}{(6.059)^2+(30+30-2)} = \frac{36.7}{36.7+58} = 0{,}38$$

From the calculation above, the Eta square value is 0,38. This number is higher than 0,14. It means that the treatment give large effect to the post-test form. This number also supports the T-Test result that substitute hypothesis is confirmed and the null is rejected. To sum up, the IOC method using cue card is effective for students' speaking abilty at seventh graders.

4.2.5 The Results of Experimental in Each Term of Speaking

In this following table the result of the pretest and posttest experimental group is presented in term of pronounciation.

Table 4.8 The Significance of the Post-test in Term of Pronounciation

Calculation	Posttest	Pretest
N	**30**	**30**
Score	**90**	**74**
Means	**3**	**2.4**

Standard Deviation	**0**	**0.8**
Standard Error of Difference	**0.14**	
T-value **($t_{.05}$ = .245)**	**4.28**	
Explanation	**Significant**	

Based on the table above the mean score of experimental's posttest in term of pronounciation is higher than the mean score of experimental's pretest. While the t-value of the experimental in pretest and posttest which are 4.28 is higher than t-table which is .245 with the level of significance .05 and the degree of freedom (df) 58. It shows that the achievement of the experimental in posttest is higher than pretest. So that it can be concluded that there is a significance difference between before giving treatment (pretest) and after giving treatment (posttest) in term of pronounciation. It means that the use of IOC method by using cue card is effective for students' speaking ability at seventh graders because it can increase students' speaking ability in term of pronounciation. The detail calculation can be seen in Appendix 2

The second term is grammar. The table below will illustrate the result of experimental's pretest and posttest in term of grammar.

Table 4.9 The Significance of the Post-test in Term of Grammar

Calculation	Posttest	Pretest
N	**30**	**30**
Score	**100**	**82**
Means	**3.3**	**2.7**

Standard Deviation	**0.70**	**0.70**
Standard Error of Difference	**0.17**	
T-value **($t_{.05}$ = .245)**	**3.52**	
Explanation	**Significant**	

Those data tells about the mean score of experimental's posttest is higher than the mean score of pretest. Whereas the t-value of both data which are 3.5 are higher than the t-table which is .245 with level of significance .05 and degree of freedom (df) 58. It shows that the achievement of experimental group in posttest is higher than pretest.

So that, it can be concluded that there is a significant difference before giving treatment and after giving treatment especially in term of grammar. It means that the use of IOC method by using cue card for students' speaking ability is effective because students can increase their speaking ability in term of grammar. The detail calculation can be seen in Appendix 3.

The next term is vocabulary. The table below will show the result of experimental's pretest and posttest in term of Vocabulary.

Table 4.10 The Significance of the Post-test in Term of Vocabulary

Calculation	Posttest	Pretest
N	**30**	**30**
Score	**103**	**86**
Means	**3.4**	**2.8**

Standard Deviation	**0.7**	**0.8**
Standard Error of Difference	**0.22**	
T-value **($t_{.05}$ = .245)**	**2.73**	
Explanation	**Significant**	

Based on the table above the mean score of experimental's posttest in term of vocabulary is higher than the mean score of experimental's pretest. While the t-value of the experimental in pretest and posttest which are 2.73 is higher than t-table which is .245 with the level of significance .05 and the degree of freedom (df) 58. It shows that the achievement of the experimental in posttest is higher than pretest. So that it can be concluded that there is a significance difference before giving treatment (pretest) and after giving treatment (posttest) in term of vocabulary. It means that the use of IOC method by using cue card is effective for students' speaking ability at seventh graders because it can increase students' speaking ability in term of vocabulary. The detail calculation can be seen in Appendix 4

The next term is fluency. The table below will illustrate the result of experimental's pretest and posttest in term of fluency.

Table 4.11 The Significance of the Post-test in Term of Fluency

Calculation	Posttest	Pretest
N	**30**	**30**
Score	**103**	**86**
Means	**3.4**	**2.8**

Standard Deviation	**0.7**	**0.9**
Standard Error of Difference	**0.22**	
T-value **($t_{.05}$ = .245)**	**2.73**	
Explanation	**Significant**	

Those data tells about the mean score of experimental's posttest is higher than the mean score of pretest. Whereas the t-value of both data which are 2.73 are higher than the t-table which is .245 with level of significance .05 and degree of freedom (df) 58. It shows that the achievement of experimental group in posttest is higher than pretest.

So that, it can be concluded that there is a significant difference before giving treatment and after giving treatment especially in term of fluency. It means that the use of IOC method by using cue card for students' speaking ability is effective because students can increase their speaking ability in term of fluency. The detail calculation can be seen in Appendix 5.

And the last term is comprehension. The table below will show the result of experimental's pretest and posttest in term of comprehension.

Table 4.12 The Significance of the Post-test in Term of Comprehension

Calculation	Posttest	Pretest
N	**30**	**30**
Score	**82**	**74**
Means	**2.7**	**2.4**

Standard Deviation	**0.8**	**0.8**
Standard Error of Difference	**0.22**	
T-value **($t_{.05}$ = .245)**	**1.36**	
Explanation	**Significant**	

Based on the table above the mean score of experimental's posttest in term of comprehension is higher than the mean score of experimental's pretest. While the t-value of the experimental in pretest and posttest which are 1.36 is higher than t-table which is .245 with the level of significance .05 and the degree of freedom (df) 58. It shows that the achievement of the experimental in posttest is higher than pretest. So that it can be concluded that there is a significance difference between before giving treatment (pretest) and after giving treatment (posttest) in term of comprehension. It means that the use of IOC method by using cue card is effective for students' speaking ability at seventh graders because it can increase students' speaking ability in term of comprehension. The detail calculation can be seen in Appendix 6.

4.3 Discussion

Some research finding mention that the use of IOC method by using cue card gives many benefits when it is applied at seventh graders. One of them is the students are more interested with the materials. This due to that the media of cue card and IOC method allows the students to interact as much as they can with their partners. Because the reason, students can increase the amount of time to speak in the target language by doing pair work and group work. Besides, students are able to increase

their ability to cooperate and communicate with their friends. Moreover, the use of cue card as media in IOC method gives positive contribution toward the students' achievement in speaking. So that, the use of Inside-Outside Circle method by using cue card can be an alternative media to help the students' speaking ability especially describing people. As stated by Nunan (2003:55) that the advantages of IOC one of them is students can increase the amount of time to speak in the target language by doing pair work and group work. Besides, students are able to increase their ability to cooperate and communicate with their friends.

Therefore, in order to prove the theory, the researcher conducts a study about the effectiveness of Inside-Outside Circle by using cue card for student's speaking ability when it is applied at seventh graders. The researcher uses speaking test in a subjective test type as an instrument. At the beginning of the study, the researcher conducted the validity and reliability of the test. The researcher counted valid using indonesian basic and standard competency, and for reliable using data from SMP Muhammadiyah 16 Surabaya that later it was counted with researcher data's pretest. Based on the analysis, the test was considered valid and reliable. Then the researcher calculated a pre-test for both groups; experimental and control groups to get normality and homogenity. Based on the calculation of the pre-test score, it shows that for the normality of both groups are normal because their significance (0.367 and 0.208) are higher than alpha (0.05), as well as for homogenity there is no diffrence between both of groups because significance its self (0.133) is higher than alpha (0.05)

The treatment was given in the experimental group only. The experimental group is taught using IOC method by using cue card to help students to speak in which the procedure was applied. While the control group was taught as usual method “lecturing” without using cue card.

At the end of this study, the researcher counted the post-test of experimental as T-test to get the IOC method is effective or not for students’ speaking ability at seventh graders. Based on the t-test calculation of T-test, it shows that the significance(0.000) is under than alpha (0.05). It means that The use of IOC method by using cue card is effective for students’s speaking ability at seventh graders. And for studens’ speaking ability, it also gives positive contribution for all components of speaking. It can be seen on the analysis above that shows all components of speaking get t_{value} is higher than t_{table} 0.05=0.245. So that it can be concluded that the use of Insisde-Outside Circle by using cue card gives more effectiveness for students’ speaking ability at seventh graders.