#### **CHAPTER IV**

#### RESEARCH FINDING AND DISCUSSION

This chapter contain research finding and discussion. The researcher divided the chapter into some points. They are (a) description of data, (b) the result of normality and homogeneity, (c) hypothesis testing, and (d) discussion.

#### A. Research Finding

In this sub chapter, the researcher presents the descriptive statistics of the students reading comprehension before and after being taught by using IEPC strategy. To obtain the data, the test was given before (pretest) and after (posttest). The tests were given to class A and B of seventh grade students of MTs PSM Jeli Karangrejo which consists of 80 students as a subject of the research. The different step there are in the treatment, in control class (VII A) without using strategy, just using conventional teaching as ussually. Meanwhile in the eksperiment class (VII B) using IEPC Strategy.

# 1. The students' Comprehension in Reading Descriptive Text when They are Taught without using IEPC Strategy

## a. Pretest of Control Group

Control Group is a class which was given a treatment kn reading descriptive text without using IEPC Strategy. The teaching and learning activity was done by the researcher as usual or using conventional teaching. Before the researcher gave the treatment, the researcher administered a pretest for the control group. The

subject of pretest in control group consisted of 40 students. The highest score was 85 and the lowest score was 40. For the detailed students pretest score in control group.

**Table 4.1 The Students Score on Pretest** 

No	Subject	Score	
1	AT	70	
2	ANFN	60	
3	AA	65	
4	AAA	65	
5	ABN	60	
6	AY	60	
7	AR	65	
8	APS	70	
9	AFH	50	
10	AW	75	
11	AKS	40	
12	BAK	70	
13	DAP	60	
14	DTC	70	
15	ECP	65	
16	ENC	80	
17	FMR	65	
18	FAF	70	
19	FWL	70	
20	FGS	60	
21	GAS	70	
22	IAA	85	
23	ILM	65	
24	MAR	60	
25	MFRR	75	
26	MIAR	65	
27	MAAS	55	
28	MA	65	
29	MALI	55	
30	MAS	60	
31	MFS	55	
32	MZAP	50	
33	MBS	60	
34	PA	60	
35	RFAP	60	
36	S	50	
37	SUWF	60	
38	YP	65	
39	YS	60	
40	SH	80	

By using SPSS program 16.0 version, it was known that the mean of students score in pretest was 63,62, the mode was 60, and the median was 65,00.

**Table 4.2 Descriptive Statistic of Pretest** 

## **Statistics**

Pretest

N	Valid	40	
	Missing	0	
Mean		63.62	
Media	n	65.00	
Mode		60	

**Table 4.3 Frequency of Pretest** 

## **Pretest**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	1	2.5	2.5	2.5
	50	3	7.5	7.5	10.0
	55	3	7.5	7.5	17.5
	60	12	30.0	30.0	47.5
	65	9	22.5	22.5	70.0
	70	7	17.5	17.5	87.5
	75	2	5.0	5.0	92.5
	80	2	5.0	5.0	97.5
	85	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

It can be seen from table above, it showed the numbers that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

a. There are 7 students who got score less than 60, it means that the students vocabulary achievement was fail. It needed much improvement.

- b. There 21 who got score between 60 69, it means that the students vocabulary achievement was still fail. It needed much improvement.
- c. There 9 students who got score between 70 79, it means that the students vocabulary achievement was good. However, it still needed the improvement.
- d. There are 3 students who got score between 80 89, it means that the students' vocabulary achievement was very good. But, it still could be improved.

Based on the result above, it has been known that many students still seemed difficult to master the reading comprehension. Then after getting explaining descriptive text by using conventional strategy, the students showed good improvement in their reading comprehension.

## b. Posttest of Control Group

Administering a posttest in reading descriptive text for control group was done to know the improvement of students comprehension in reading descriptive text although the learning activity was without using IEPC Strategy. The subject of posttest in control group consisted of 40 students. The highest score was 95 and the lowest score was 50.

**Table 4.4 The student Score on Posttest** 

No	Subject Score		
1	AT	80	
2	ANFN	70	
3	AA	70	
4	AAA	75	
5	ABN	80	
6	AY	70	
7	AR	80	
8	APS	70	
9	AFH	70	
10	AW	90	
11	AKS	50	
12	BAK	70	
13	DAP	70	
14	DTC	75	
15	ECP	75	
16	ENC	80	
17	FMR	85	
18	FAF	80	
19	FWL	75	
20	FGS	75	
21	GAS	80	
22	IAA	90	
23	ILM	70	
24	MAR	80	
25	MFRR	85	
26	MIAR	75	
27	MAAS	70	
28	MA	80	
29	MALI	65	
30	MAS	60	
31	MFS	70	
32	MZAP	60	
33	MBS	75	
34	PA	70	
35	RFAP	60	
36	S	70	
37	SUWF	65	
38	YP	60	
39	YS	80	
40	SH	95	

By using SPSS program 16.0 version, it was known that the mean of students score in posttest was 73,75, the mode was 70, and the median was 75,00.

**Table 4.5 Descriptive Statistic of Posttest** 

## **Statistics**

## Posttest

N	Valid	40	
	Missing	0	
Mean	1	73.75	
Medi	an	75.00	
Mode	2	70	

**Table 4.6 Frequency of Posttest** 

#### **Posttest**

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	1	2.5	2.5	2.5
	60	4	10.0	10.0	12.5
	65	2	5.0	5.0	17.5
	70	12	30.0	30.0	47.5
	75	7	17.5	17.5	65.0
	80	9	22.5	22.5	87.5
	85	2	5.0	5.0	92.5
	90	2	5.0	5.0	97.5
	95	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

It can be seen from table above, it showed the numbers that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

- a. There are 1 students who got score less than 60, it means that the students vocabulary achievement was fail. It needed much improvement.
- b. There 6 who got score between 60 69, it means that the students vocabulary achievement was still fail. It needed much improvement.
- c. There 19 students who got score between 70 79, it means that the students vocabulary achievement was good. However, it still needed the improvement.

- d. There are 11 students who got score between 80 89, it means that the students' vocabulary achievement was very good. But, it still could be improved.
- e. Then, there are only 3 student who got score 90-95, it means that the students vocabulary achievement was excellent.

# 2. The students' Comprehension in Reading Descriptive Text when They are Taught without using IEPC Strategy

## a. Pretest of Experiment Group

Experiment Group is a class which was given a treatment in reading descriptive text by using IEPC Strategy. Before the researcher gave the treatment, the researcher administered a pretest of reading descriptive text as a pretest that administered for the control group. The subject of pretest in experiment group consisted of 40 students. The highest score was 90 and the lowest score was 60. For the detailed students pretest score in control group.

**Table 4.7 The Students Score on Pretest** 

No	Subject	Score	
1	AR	80	
2	ARP	65	
3	AT	85	
4	AN	70	
5	AZM	80	
6	ABP	70	
7	AHF	75	
8	DNF	80	
9	DSF	70	
10	DRR	75	
11	EPZ	80	
12	FEA	60	
13	FK	65	
14	HQ	90	
15	MRM	60	
16	MSM	80	
17	MAR	70	
18	MF	85	
19	MHM	75	
20	MHPP	80	
21	MMS	80	
22	MDE	70	
23	MFAN	80	
24	MREA	80	
25	MDS	85	
26	MRF	70	
27	MMS	75	
28	MIZ	70	
29	MIA	80	
30	NFS	70	
31	RQN	70	
32	RE	85	
33	RFS	65	
34	RAD	90	
35	SS	70	
36	SAP	75	
37	TA	75	
38	UKA	65	
39	WPNW	80	
40	YP	85	

By using SPSS program 16.0 version, it was known that the mean of students score in pretest was 75.38, the mode was 80, and the median was 75.00.

**Table 4.8 Descriptive Statistic of Pretest** 

## **Statistics**

Pretest

N Valid		40	
	Missing	0	
Mear	ı	75.38	
Medi	an	75.00	
Mode	e	80	

**Table 4.9 Frequency of Pretest** 

#### **Pretest**

	<u>-</u>	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60	2	5.0	5.0	5.0
	65	4	10.0	10.0	15.0
	70	10	25.0	25.0	40.0
	75	6	15.0	15.0	55.0
	80	11	27.5	27.5	82.5
	85	5	12.5	12.5	95.0
	90	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

It can be seen from table above, it showed the numbers that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

- a. There 6 students who got score between 60 69, it means that the students vocabulary achievement was still fail. It needed much improvement.
- b. There 16 students who got score between 70 79, it means that the students vocabulary achievement was good. However, it still needed the improvement.
- c. There are 16 students who got score between 80 89, it means that the students' vocabulary achievement was very good. But, it still could be improved.

e. Then, there are only 2 student who got score 90-95, it means that the students vocabulary achievement was excellent.

Based on the result above, it has been known that many students still seemed difficult to master the reading comprehension. So, the student must be improve the good score in the posttest that have given after treatment by using IEPC Strategy, the explaining can be explain after it.

## b. Posttest of Experiment Group

Administering a posttest in reading descriptive text for experimental group was done to know the stufents comprehension in reading descriptive text although the learning activity was by using IEPC Strategy. The subject of posttest in experimental group consisted of 40 students. The highest score was 95 and the lowest score was 70.

**Table 4.10 The Students Score on Posttest** 

No	Subject	Score	
1	AR	85	
2	ARP	70	
3	AT	95	
4	AN	85	
5	AZM	90	
6	ABP	75	
7	AHF	75	
8	DNF	80	
9	DSF	75	
10	DRR	85	
11	EPZ	80	
12	FEA	70	
13	FK	70	
14	HQ	90	
15	MRM	70	
16	MSM	90	
17	MAR	75	
18	MF	90	
19	MHM	80	
20	MHPP	90	
21	MMS	95	
22	MDE	85	
23	MFAN	95	
24	MREA	80	
25	MDS	90	
26	MRF	80	
27	MMS	90	
28	MIZ	75	
29	MIA	90	
30	NFS	75	
31	RQN	90	
32	RE	95	
33	RFS	80	
34	RAD	95	
35	SS	95	
36	SAP	80	
37	TA	90	
38	UKA	75	
39	WPNW	90	
40	YP	90	

By using SPSS program 16.0 version, it was known that the mean of students score in posttest was 83.88, the mode was 90 and the median was 85.00.

**Table 4.11 Descriptive Statistic of Posttest** 

## **Statistics**

Postest

N Valid		40	
	Missing	0	
Mean		83.88	
Media	n	85.00	
Mode		90	

**Table 4.12 Frequency of Posttest** 

## **Postest**

	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	70	4	10.0	10.0	10.0
	75	7	17.5	17.5	27.5
	80	7	17.5	17.5	45.0
	85	4	10.0	10.0	55.0
	90	12	30.0	30.0	85.0
	95	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

It can be seen from table above, it showed the numbers that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.

- a. There 11 students who got score between 70 79, it means that the students vocabulary achievement was good. However, it still needed the improvement.
- b. There are 11 students who got score between 80 89, it means that the students' vocabulary achievement was very good. But, it still could be improved.
- c. Then, there are only 18 student who got score 90-95, it means that the students vocabulary achievement was excellent.

Based on the table above, then after getting explaining descriptive text by using IEPC strategy, the students showed good improvement in their reading comprehension. So, the strategy that researcher used is effective to improving student score in descriptive text.

## b. The result of normality and homogeneity

In this sub chapter, the researcher presents and discusses the result of normality and homogeneity testing by using SPSS 16.0 version. Calculating normality is used to know whether the data has been normal distributed or not. Meanwhile, calculating homogeneity is used to know whether the sample of data is homogen or heterogen. The result of normality and homogeneity testing are presented below:

## 1. The Result of Normality Testing

The normality of both pretest and post-test was measured by SPSS 16.0 version using the formula of One Sample Kolmogorov-Smirnov Test. In

this research, normality research was done toward the result (students score) of pretest and posttest in experimental group and control group. The result can be seen in the table below:

**Table 4.13 Normality Test Result of Experimental Group** 

# One-Sample Kolmogorov-Smirnov Test

		PRETEST	POSTEST
N	-	40	40
Normal Parameters <sup>a</sup>	Mean	75.38	83.88
	Std. Deviation	7.712	8.203
Most Extreme Differences	Absolute	.176	.222
	Positive	.157	.135
	Negative	176	222
Kolmogorov-Smirnov Z		1.111	1.406
Asymp. Sig. (2-tailed)		.169	.038
a. Test distribution is Norm	al.		
			-

**Table 4.14 Normality Test Result of Control Group** 

# One-Sample Kolmogorov-Smirnov Test

		PRETEST	POSTEST
N		40	40
Normal Parameters <sup>a</sup>	Mean	63.62	73.75
	Std. Deviation	8.842	9.111
Most Extreme Differences	Absolute	.166	.165
	Positive	.138	.135
	Negative	166	165
Kolmogorov-Smirnov Z		1.049	1.046
Asymp. Sig. (2-tailed)		.221	.224
a. Test distribution is Norm	al.		

Based on the result of computation above, it can be concluded that the test distribution of two groups were normal.

## 1. The Result of Homogeneity Testing

Homogeneity testing is used to know whether the gotten is homogeneous or not. In this research, homogeneity test is done toward the result (students score) of pretest in experimental group and control group. To know the homogeneity, the researcher uses Test of Homogeneity Variances formula by using SPSS 16.0 version. The variance can be said homogeneous if the significance of the result is more than 0.050.

Table 4.15 Homogeneity Test Result (Pretest) of Experimental Group

**Test of Homogeneity of Variances**PRETEST

Levene Statistic	df1	df2	Sig
1.063	5	34	.398

**Table 4.16 Homogeneity Test Result (Pretest) of Control Group** 

**Test of Homogeneity of Variances** 

**PRETEST** 

Levene Statistic	df1	df2	Sig.
.461	6	31	.831

The description of the homogeneity data pretest in experimental group and control group showed the significance value. First, the significance value of pretest in experimental group was 0.398, it was bigger than 0.050, means that the data of pretest in experimental group was homogen. Second, the significance value of pretest in control group was 0.831, it was bigger than 0.050, means that the data of pretest in control group was also homogen.

When the data were normal distribution and homogen, next the researcher test the hypothesis, in testing the hypothesis the researcher used parametric testing in term of Independent Sample T Test by using SPSS 16.0 version. The result of hypothesis testing can be seen as below:

## **B.** Hypothesis Testing

The hypothesis testing of this research are as follow:

- 1. When the significant value > significant level, the null hypothesis (H0) is accepted and the alternative hypothesis (Ha) is rejected.
  - It means that there is no significant difference score on the students reading comprehension in reading descriptive text who was taught without and using IEPC Strategy. The different is not significant.
- 2. When the significant value < significant level, the alternative (Ha) is accepted and the null hypothesis (H0) is rejected.
  - It means that there is significant difference score on the students reading comprehension in reading descriptive text who was taught without and using IEPC Strategy. The different is significant.

In this research, the researcher used statistical test using computation Independent Sample T Test by SPSS 16.0. It is used to know the effectiveness of using (IEPC) Imagine, Elaborate, Predict and Confirm Strategy effective for Teaching Reading Comprehension in Descriptive Text. These subjects were referred to as independent because they are independently from the different subject. The result as follow:

**Table 4.17 Group Statistic of Two Group** 

## **Group Statistics**

	Group	N	Mean	Std. Deviation		Error
Student Score	Treatment	40	83.88	8.203	1.297	
	Control	40	73.75	9.111	1.441	

**Table 4.18 The Result on Independent Sample T Test** 

## **Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Sig. (2-	Mean		Interval	onfidence of the
		F	Sig.	T	df	tailed)	Difference	Difference	Lower	Upper
Student Score	Equal variances assumed	.027	.870	5.223	78	.000	10.125	1.938	6.266	13.984
	Equal variances not assumed			5.223	77.156	.000	10.125	1.938	6.265	13.985

Based on the table above, the significant value of this research is 0.000, standard significant is 0.050. It means the significant value is smaller than significant level (0.000 < 0.050). When the significant value (0.000) < significant level (0.050), it can be concluded that the alternative hypothesis (Ha) was accepted and the null hypothesis (H0) was rejected. It means that there is any significant different score on the students reading comprehension in reading descriptive text who was taught without and using IEPC Strategy. The different is significant.

#### C. Discussion

In this research, a researcher conducted the research in two classes during the teaching and learning process. The subject of he research consisted of 80 students. The sample was gotten by using purposive sampling technique in term suggestion by some eligible people in the school. The purpose of this research is to find out whether there is any significant different score on the students reading comprehension before and after being taught by using IEPC strategy. The researcher decided VII A class as control class which was not given the treatment by using IEPC Strategy and VII B class as experimental class which was given the treatment by using IEPC Strategy.

To know whether this strategy is effective or not, the researcher used the score of students' pre-test and post-test then calculate both of the tests into SPSS 16.0 version software. Based on the result of statistical calculation, the use of IEPC Strategy is effective toward the students' vocabulary mastery it was proved in hypothesis testing by the gained significance value which less than 0.050, when

the significance value less than 0.050, thus the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected. It means there is any significant difference score on students' vocabulary mastery before and after being taught by using IEPC Strategy. It was proved by the mean score in posttest was higher than the mean score in pretest. The mean of of pretest was 73.75 and the mean score of posttest was 83.88. Thus finding result by using IEPC strategy, the students reading comprehension was increased.

From the result of data analysis above, strategy in teaching reading comprehension was very influential to the students like Imagine, Elaborate, Predict and Confirm Strategy (IEPC). It is supposed by some research study (Wood and Douville 1999:92) that IEPC is strategy to support students in using their imagination in understanding information of their viewed, listened and read. Student have their own imagination toward something that they have seen, listen and read. So the students have prediction about information itself. It can be helps the students to more understanding the text when they are reading. Then it is performance, Wood and Endres in Kinberg (2007:55) states that IEPC Strategy is a strategy that uses by teacher to help students in using their imagination that suitable with students' experience. Thus, the students are able to use their imagination to understand the information by using taste, eye to make prediction based on a picture or other sources for study reading.

The result of this research was also similar to the previous studies. The first from Erlina (2011), she is findings of the research indicated that by using IEPC strategy in teaching reading has made the students success in reading comprehension. The result of the research in which mean score of pre test was

53.25 and post test was 69.5. The last result indicated the students had a significant through teaching reading comprehension at the school.

The second from Warman (2016), her research same with the researcher that using IEPC Strategy, but using different research, that is classroom action research, this research consisted of three cycle, where in each cycle consisted of fourmeetings. The four meetings in one cycle involving three meetings for teaching reading by using IEPC strategy and one meeting for post-test at the end of every cycle. The participants of this research were the researcher, a collaborator and the students of grade VIII.4 of SMP Negeri 3 Pekanbaru totalling 40 students. The instruments of this research were reading comprehension test, an observation sheet, field note and interview. There were two findings of this research: (1) IEPC strategy could improve the students' reading comprehension; (2) Teaching material and media, class activity, class management, and teacher's approach were the factors that could influence the change of students' reading comprehension.

The third from Sulistyowati (2015, this research same with the researcher used quasi experimental research, but using different design, that is non-equivalent control group design. The subjects of this research were taken from class VIII A (control group) and VIII C (Experimental group). The researcher used judgmental sampling method, where the students were not taken randomly. Based on the analyzed result, the value of effect size obtained was 1.2, tt was categorized as big effect since the value was higher than 0.8 (ES > 0.8). Therefore, it can be concluded that teaching reading recount text by using Imagine, Elaborate, Predict, and Confirm (IEPC) Strategy effectively improved the students' comprehension.

Based on the result on this study above indicates that the Imagine, Elaborate, Predict and Confirm (IEPC) Strategy treatment increase students ability in reading comprehension. And also proved that this strategy is also effective to use in Junior High School. It is stated by Vacca in Moss and Loh (2010:43) define that IEPC Strategy is require students in imagine and elaborate which is a crucial skill in reading. This strategy to help student to predict information of text. Besides that, the students can explore their imagination toward what they have seen, listened and read, that contribution for reading activity.