CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

4.1 Data

This research used quantitative research and is explained through words and numbers. To collect the data of this study, the researcher observed the eight grade students of SMP PAB 19 Manunggal. There were two classes namely VIII-1 and VIII-2. There were 35 student of each class. VIII-1 the experimental class that was taught by applying literacy activity. The control class of this study is VIII-2 that was taught by using conventional method. Then the researcher gave the test to the students to get the data about the students' ability in speaking. The data was taken from the speaking test. After getting the data of this study, the researcher analyzed it.

4.1.1 Pre-Test and Post-Test Scores of Students in Experimental Class

In collecting the data of the students' ability in English speaking ability in experimental class by applying literacy activity. The purpose of this study is to know the students' ability in English speaking of SMP PAB 19 Manunggal. To know the result of this study in English speaking ability in experimental class that was taught by applying literacy activity. The data of students' pre-test and post-test scores of experimental class that had been collected in the table as followed:

Table 4.1 Student's Scores of Experimental Class

No.	Name	Pre-Test	Post-Test	Gained Score
1	AS	43	82	39
2	AD	43	75	32
3	ARP	40	77	37
4	AM	39	78	39
5	AD	43	85	42
6	AS	38	78	40
7	CW	46	80	34
8	FA	45	81	36
9	FA	41	80	39
10	KDA	42	80	38
11	KR	42	81	39
12	KCS	39	81	42
13	LM	43	89	46
14	MR	43	85	42
15	MA	41	80	39
16	MR	40	80	40
17	MEP	40	80	40
18	MI	41	79	38
19	NJ	40	78	38
20	NS	41	78	37

21	NH	38	81	43
22	NAS	33	81	48
23	NAS	33	82	49
24	RS	38	81	43
25	SW	36	86	50
26	SR	36	79	43
27	SN	39	82	43
28	SE	39	80	41
29	SDA	41	80	39
30	SR	39	83	44
31	SAP	40	80	40
32	TW	43	82	39
33	TR	41	82	41
34	RA	40	83	43
35	KA	37	79	42
Total		**1403**	**2828**	**1425**
Mean		**40,09**	**80,80**	**40,71**

Based on the table above, it could be seen that the scores of students' pre-test and post-test in experimental class were different. The mean scores of students' score in the pre-test was 40.09 with the lowest score 33 and the highest score was 46. Meanwhile, the mean score of students' score in post-test was 80.80 with the lowest score was 75 and the highest score was 89.

Table 4.2 Students' Scores of Control Class

No.	Name	Pre-Test	Post-Test	Gained Score
1	AG	50	79	29
2	APU	45	76	31
3	AF	48	76	28
4	AM	52	75	23
5	ADF	51	75	24
6	AA	49	75	26
7	AMR	48	75	27
8	ADL	49	77	28
9	AKR	47	76	29
10	CA	45	80	35
11	CP	48	79	31
12	CW	50	76	26
13	DR	49	75	26
14	DAL	49	75	26
15	FF	51	76	25
16	FN	52	80	28
17	FS	51	76	25
18	GM	46	80	34
19	IK	52	80	28
20	MSA	47	75	28

21	MAA	46	75	29
22	MMS	48	76	28
23	NA	46	80	34
24	PSH	56	78	22
25	PDT	52	75	23
26	RMN	51	75	24
27	RR	50	79	29
28	RS	52	80	28
29	RP	51	70	19
30	RIK	47	75	28
31	SQK	55	82	27
32	SCF	54	75	21
33	WRD	56	82	26
34	YH	51	77	26
35	ZDP	58	76	18
Total		**1752**	**2691**	**939**
Mean		**50,06**	**76,89**	**26,82**

Based on the table above, it could be seen that the scores of students' pre-test and post-test in control class were different. The mean scores of students' score in the pre-test was 50.06 with the lowest score 45 and the highest score was 58. Meanwhile, the mean score of students' score in post-test was 76.89 with the lowest score was 70 and the highest score was 82.

4.2 The Fullfilment of Statistical Assumptions

4.2.1 Reliability and Validity of Test

The test of reliability and validity were analyzed by using SPSS 26 version to know the reliability and validity of test that used by the researcher to obtain the data. In this research, the researcher used inter-rater reliability and content validity.

4.2.1.1 Reliability Test

An instrument has a good reliability if the instrument has the consistency. In this research, the researcher used inter-rater reliability, which mean that the level of agreement between two raters of judges. The result of inter-reliability testing could be seen in the following table:

Table 4.3 Reliability Grammar Test Result (Researcher)

Sperman's rho	Grammar	Correlation Coefficient	1.000	.602
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.602	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Grammar Test :

$$\mathbf{R = 1}\frac{6.\sum \mathrm{d}\ 2}{\mathrm{N}\ (\mathrm{N}^2\ -1)}$$

$$R = 1 \frac{6.1788}{30(900-1)}$$

R = 0.60222469

Table 4.4 Reliability Vocabulary Test Result (Researcher)

Sperman's rho	Vocabulary	Correlation Coefficient	1.000	.792
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.792	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Vocabulary Test :

$$\mathbf{R = 1} \frac{6.\sum_{d} 2}{N\,(N^2\,-1)}$$

$$R = 1 \frac{6.932}{30(900-1)}$$

R = 0.79221357

Table 4.5 Reliability Comprehension Test Result (Researcher)

Sperman's rho	Comprehension	Correlation Coefficient	1.000	.733
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.733	1000
		Sig. (2-tailed)	.005	.

N	30	30

Manual Test of Reability Comprehension Test :

$$\mathbf{R = 1}\frac{6.\sum d\,2}{N\,(N^2\,-1)}$$

$$R = 1\,\frac{6.1197,5}{30(900-1)}$$

R = 0.733592881

Table 4.6 Reliability Fluency Test Result (Researcher)

Sperman's rho	Fluency	Correlation Coefficient	1.000	.643
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.643	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Fluency Test :

$$\mathbf{R = 1}\frac{6.\sum d\,2}{N\,(N^2\,-1)}$$

$$R = 1\,\frac{6.1601,5}{30(900-1)}$$

R = 0.64372

Table 4.7 Reliability Pronunciation Test Result (Researcher)

Sperman's rho	Pronunciation	Correlation Coefficient	1.000	.653
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.653	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Pronounciation Test :

$$\mathbf{R = 1}\frac{6.\sum d\,2}{N\,(N^2\,-1)}$$

$$R = 1\,\frac{6.1559{,}5}{30(900-1)}$$

$$R = 0.653058954$$

From the reliability testing above, it could be stated that there was significant result in inter-rater reliability between two raters where the reability of test grammar was 0.602, reliability of test vocabulary was 0.792, reliability of test comprehension was 0.733, the reliability of test fluency was 0.643 and reability of test pronunciation was 0.653. According to the calculation criteria of Spearman's rank correlation where the significance is 0.05. It means that the test > 0.05 and it was reliable.

Table 4.8 Reliability Grammar Test Result (Teacher)

Sperman's rho	Grammar	Correlation Coefficient	1.000	.642
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.642	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Grammar Test :

$$\mathbf{R = 1}\frac{6.\sum d\,2}{N\,(N^2\,-1)}$$

$$R = 1\,\frac{6.1606}{30(900-1)}$$

$$R = 0.64271413$$

Table 4.9 Reliability Vocabulary Test Result (Teacher)

Sperman's rho	Vocabulary	Correlation Coefficient	1.000	.780
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.780	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Vocabulary Test :

$$\mathbf{R = 1}\frac{6.\sum_d 2}{N\,(N^2\,-1)}$$

$$R = 1\,\frac{6.987}{30(900-1)}$$

$$R = 0.78042269$$

Table 4.10 Reliability Comprehension Test Result (Teacher)

Sperman's rho	Comprehension	Correlation Coefficient	1.000	.749
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.749	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Comprehension Test :

$$\mathbf{R = 1}\frac{6.\sum_d 2}{N\,(N^2\,-1)}$$

$$R = 1\,\frac{6.1125}{30(900-1)}$$

$$R = 0.749721913$$

Table 4.11 Reliability Fluency Test Result (Teacher)

Sperman's rho	Fluency	Correlation Coefficient	1.000	.637
		Sig. (2-tailed)	.	.005
		N	30	30

	Total	Correlation Coefficient	.637	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Fluency Test :

$$\mathbf{R = 1}\frac{6.\sum_{d} 2}{N\,(N^2\,-1)}$$

$$R = 1\,\frac{6.1629,5}{30(900-1)}$$

R = 0.63749

Table 4.12 Reliability Pronunciation Test Result (Teacher)

Sperman's rho	Pronunciation	Correlation Coefficient	1.000	.613
		Sig. (2-tailed)	.	.005
		N	30	30
	Total	Correlation Coefficient	.613	1000
		Sig. (2-tailed)	.005	.
		N	30	30

Manual Test of Reability Pronounciation Test :

$$\mathbf{R = 1}\frac{6.\sum_{d} 2}{N\,(N^2\,-1)}$$

$$R = 1\,\frac{6.1736,5}{30(900-1)}$$

R = 0.613681869

From the reliability testing above, it could be stated that there was significant result in inter-rater reliability between two raters where the reability of test grammar was 0.642, reliability of test vocabulary was 0.780, reliability of test comprehension was 0.749, the reliability of test fluency was 0.637 and reability of test pronunciation was 0.613. According to the calculation criteria of Spearman's rank correlation where the significance is 0.05. It means that the test > 0.05 and it was reliable.

4.2.1.2 Validity Test

In this research, researcher used content validity to measure the students' speaking ability in literacy activities. The validity of test could be seen by the result of testing. The researcher in this study completed the data only once, and their results were then verified. This is referred to as a single test. Validity is checked using the Product Moment Correlation formula. The validity of the data is assessed as follows:

- "If r count < r table then declared valid."
- "If r count < r table then declared invalid.

To test the content validity, the researcher used Pearson Moment Products with the formula adopted from Arikunto (2010) as followed:

$$r_{xy} \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

Table 4.13 Manual Test of Validity Researcher Test

(∑X)^2	9409	7921	8100	8836	8649
∑XY	1509	1391	1404	1459	1450
∑X^2	321	271	278	298	297
N	30				
N ∑XY	45270	41730	42120	43770	43500
N ∑X^2	9630	8130	8340	8940	8910
∑Y^2	7213				
N ∑Y^2	216390				
(∑Y)^2	214369				
∑X∑Y	44911	41207	41670	43522	43059
N ∑XY- ∑X∑Y	359	523	450	248	441
N ∑X^2- (∑X)^2	221	209	240	104	261
N ∑Y^2- (∑Y)^2	2021				
R	**0.537174**	**0.804721**	**0.646136**	**0.540943**	**0.607205**

The validity of test was measured if r-count > r-table (0.361). Based on the result of validity testing in this research, r-table was 0.361 with 5% degree of significant. Therefore, in the table above showed that r-count of grammar was 0.537, r-count of vocabulary was 0.805, r-count of comprehension was 0.646, r-count of fluency was 0.541 and r-count of pronunciation was 0.607 in rater 1. The

validity of the instrument is indeed correct. It could be concluded that the instrument was valid.

Table 4.14 Manual Test of Validity Teacher Test

(∑x)^2	9604	8100	7744	8836	8836
∑xy	1531	1412	1381	1465	1469
∑x^2	328	278	268	300	304
N	30				
N∑xy	45930	42360	41430	43950	44070
N∑x^2	9840	8340	8040	9000	9120
∑y^2	7258				
n∑y^2	217740				
(∑y)^2	215296				
∑x∑y	45472	41760	40832	43616	43616
N∑xy-∑x∑y	458	600	598	334	454
N∑x^2-(∑x)^2	236	240	296	164	284
n∑y^2-(∑y)^2	2444				
R	**0.603058**	**0.783421**	**0.70308**	**0.527563**	**0.544937**

The validity of test was measured if r-count > r-table (0.361). Based on the result of validity testing in this research, r-table was 0.361 with 5% degree of significant. Therefore, in the table above showed that r-count of grammar was 0.603, r-count of vocabulary was 0.783, r-count of comprehension was 0.703, r-

count of fluency was 0.528 and r-count of pronunciation was 0.545 in rater 2. The validity of the instrument is indeed correct. It could be concluded that the instrument was valid.

Table 4.15 Validity Test Result (Researcher)

Correlations

		Grammar	Vocabulary	Comprehension	Fluency	Pronunciation	Total
Grammar	Pearson Correlation	1	.451*	.130	.211	-.087	.537**
	Sig. (2-tailed)		.012	.493	.263	.646	.002
	N	30	30	30	30	30	30
Vocabulary	Pearson Correlation	.451*	1	.402*	.231	.398*	.805**
	Sig. (2-tailed)	.012		.028	.220	.029	.000
	N	30	30	30	30	30	30
Comprehension	Pearson Correlation	.130	.402*	1	.190	.240	.646**
	Sig. (2-tailed)	.493	.028		.315	.202	.000
	N	30	30	30	30	30	30
Fluency	Pearson Correlation	.211	.231	.190	1	.291	.541**
	Sig. (2-tailed)	.263	.220	.315		.118	.002
	N	30	30	30	30	30	30
Pronunciation	Pearson Correlation	-.087	.398*	.240	.291	1	.607**
	Sig. (2-tailed)	.646	.029	.202	.118		.000
	N	30	30	30	30	30	30
Total	Pearson Correlation	.537**	.805**	.646**	.541**	.607**	1
	Sig. (2-tailed)	.002	.000	.000	.002	.000	
	N	30	30	30	30	30	30

Table 4.16 Validity Test Result (Teacher)

Correlations

		Grammar	Vocabulary	Comprehension	Fluency	Pronunciation	Total
Grammar	Pearson Correlation	1	.378*	.288	.295	-.008	.603**
	Sig. (2-tailed)		.039	.123	.114	.968	.000
	N	30	30	30	30	30	30
Vocabulary	Pearson Correlation	.378*	1	.450*	.302	.345	.783**
	Sig. (2-tailed)	.039		.013	.104	.062	.000
	N	30	30	30	30	30	30
Comprehension	Pearson Correlation	.288	.450*	1	.172	.235	.703**
	Sig. (2-tailed)	.123	.013		.362	.212	.000
	N	30	30	30	30	30	30
Fluency	Pearson Correlation	.295	.302	.172	1	.065	.528**
	Sig. (2-tailed)	.114	.104	.362		.733	.003
	N	30	30	30	30	30	30
Pronunciation	Pearson Correlation	-.008	.345	.235	.065	1	.545**
	Sig. (2-tailed)	.968	.062	.212	.733		.002
	N	30	30	30	30	30	30
Total	Pearson Correlation	.603**	.783**	.703**	.528**	.545**	1
	Sig. (2-tailed)	.000	.000	.000	.003	.002	
	N	30	30	30	30	30	30

4.2.2 Normality and Homogeneity of Test

Before determining the t-test, the normality and homogeneity of the test were assessed. However, the researcher first examined the test's normality and homogeneity before examining its descriptive statistic. As may be seen in the table below:

Table 4.17 Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviaton
Pre-Test Experimental	35	33	46	40.09	2.894
Post-Test Experimental	35	75	89	80.80	2.666
Pre-Test Control	35	45	58	50.06	3.199
Post-Test Control	35	70	82	76.89	2.553
Valid N (listwise)	35				

Based on the table above, it could be seen the minimum and maximum scores for the pre-test and post-test for both classes. The table also indicated that the mean pre-test score for the experimental class was 40.09, with the standard deviation of 2.894, and the mean pre-test score for the control class was 50.06, with the standard deviation of 3.199. While the mean post-test score for the experimental class was 80.80 and the standard deviation for that class was 2.666, and the mean post-test score for the control class was 76.89 and the standard deviation for that class was 2.553.

4.2.2.1 Normality Test

The normality test was conducted in this research to determine if the data from two classes had been normally distributed or not. The normality test was carried out by the researcher used Kolmogorov-Smirnov. Kolmogorov-Smirnov normality test decision-making is as follows:

1. The data is normally distributed if the significance value (Sig.) > 0,05.
2. The study data is not normally distributed if the significance value (Sig.) is less than 0.05.

Table 4.18 Normality Test Result

Test of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pre-Test Experiment	.125	35	.182	.956	35	.174
Post-Test Experiment	.156	35	.311	.936	35	.142
Pre-Test Control	.129	35	.150	.958	35	.195
Post-Test Control	.236	35	.344	.878	35	.109

Based on the data in the table above, the test showed the significance value of experimental class in the pre-test and post-test was both 0,182 and 0.311. Meanwhile, the significance value of control class in pre-test was 0,150, and post-test significance was 0,344. If the significance value was more than 0,05, the data

said to have normally distributed. Because both classes' significance values were more than 0,05, it was possible to concluded that the data were normally distributed.

4.2.2.2 Homogeneity Test

After doing the test of normality, the researcher conducted the homogeneity test to see if the data was homogenous or not. To determine the homogeneity of the test in this study, the researcher used the Lavene statistic test. The decision making of Lavene statistic homogeneity test as followed:

1. The data is homogenous if the significance value (Sig.) based on mean is greater than 0,05.
2. The study data is not homogenous if the significance value (Sig.) based on mean is less than 0.05.

Table 4.19 Homogeneity Test Result

Test of Homogeneity Variances			
Lavane Statistic	Df1	Df2	Sig.
.293	1	68	.590

According to the results of the table above, the significant value (Sig.) based on mean of test was 0,590 > 0,05, which mean that the significance value was 0,590 which the higher than 0,05. As a result, the data in both classes were homogeneous.

4.3 Hypotheses Testing

Based the normality and homogeneity tests, the researcher obtained a test of hypotheses to check whether there was a significance different in the result of pre-test and post-test after treatment were implemented in both classes.

Based on the table descriptive statistic, it could be seen from both of the tests that the experimental class obtained greater mean score in the post-test rather than control class. The significance score between experimental class and control class could be known by using t-test. The result of t-test could be seen in the following table:

Table 4.20 T-test Result

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	PRE TEST - POST TEST	-40.714	3.816	.645	-42.025	-39.403	-63.118	34	.000

The alternative hypotheses (Ha) is accepted because t-value (63.118) > t-table (2.0322). The t-table result for this research with (N-1) = 34 at 5% degree of significant was 2.0322. The score of the t-count was 63.118 based on the data in table 4.9. above and the score of t-table was 2.0322. It could be seen that the score

of t-test was higher than t-table (t-value (63.118) > t-table (2.0322)). The Sig. 2 tailed result was also obtained in the table above to be 0,000 < 0,05, it means that the t-test is greater than the t-table. It indicated that Alternative Hypotheses (Ha) is accepted and Null Hypotheses (Ho) is rejected. It could be seen that there was significance effect between students who were thaught by applying literacy activities and the students who were thaught by conventional method at the eight grade of SMP PAB 19 Manunggal.

Manual Test of T-test :

$$\boldsymbol{t = \frac{ma - mb}{\left(\frac{da^2 + db^2}{na + nb - 2}\right)\left(\frac{1}{na} + \frac{1}{nb}\right)}}$$

$$t = \frac{80{,}8 - 76{,}89}{\left(\frac{7.106 + 6.516}{35 + 35 - 2}\right)\left(\frac{1}{35} + \frac{1}{35}\right)}$$

$$t = \frac{80{,}8 - 76{,}89}{\left(\frac{7.106 + 6.516}{35 + 35 - 2}\right)\left(\frac{1}{35} + \frac{1}{35}\right)}$$

$$t = 63.118$$

4.4 Research Findings

Based in the analysis in the data, it was found that teaching speaking skill by applying literacy activities at SMP PAB 19 Manunggal was effective. There was significance different between experimental class were thaught by applying literacy activites and control class who were thaught by conventional method.

This research showed that teaching speaking skill by applying literacy activities, especially narrative texts where the reading material is fairy tale and personal experience. It was have a signicant effect on students' speaking ability. It can be seen from all of the test result. The reliability test result showed all reliable because the test result higher than 0.05. The validity test result also showed all the test was valid because the r-count higher than r-table (0.361). The normality and homogeneity test result showed was normal and homogene. It can be seen from the table 4.16 and 4.17, it showed all the significant value higher than 0.05. The last, based on the t-test result, the t-test value 63.118 was higher than t-table 2.0322. This happens because it gives a lot of fun and interesting for students as evidence by the fact that the mean score of students' pre-test is 40.09 and the mean score of students' post-test is 80.80. It meant that the students' mean score improved from the lowest to the highest.

This means that there is a significant differences between students' speaking ability in the experimental class with literacy activities and control class using conventional method.

4.5 Discussion

This research was conducted to find out the Effect of Literacy Activities on Students' Speaking Ability:

Literacy Activities had significant effect on students' speaking ability. The significant effect of students could be seen on pre-test, post-test data and the learning process in both classes. The result of the speaking test on students in the pre-test of experimental class got the mean score was 40,09 and in the control class was 50,06. After giving the treatment through applying literacy activities on students' experimental class, there was a progress of students' speaking ability as shown in post-test data. The mean score of post-test was 80,80 in experimental class who were learned by applying literacy activities. While the mean score of post-test in control class was 76,89 who were learned by using conventional method. In could be seen the mean score of experimental class better than mean score of control class.

So, the researcher obtained that the implementation literacy activities was successful to affect the students' speaking ability at the eighth grade students of SMP PAB 19 Manunggal. The use literacy activities in the learning process in classroom, this method not only had effect of students' speaking, but also increase self-confidence and accuracy of thinking.

Based on the researcher's view, before implementing literacy activities, many students did not know how to speak properly. They don't know how to pronounce the word "late" correctly and also their teachers say that it is difficult for students to come forward and speak. After implementing literacy activities,

starting from the pre-test, treatment and post-test, it was easy for them to go ahead and talk about their personal experiences because they talked and heard each other.

The finding is also in line with the previous research. Yumna Wahyuni (2018) in her title of research "*The Effect of Literacy Ability on the Creative Writing Ability of Grade VIII Middle School Students' Drama Manuscripts Private Gajah Mada Medan Academic Year 2017-2018*". The results of the study show that there is an intermediate effect literacy skills on students' creative writing abilities grade VIII of Gajah Mada Private Middle School in Medan. Ainun Mardhiah (2020) in her title of research "*The Use of Literacy Text Approach to Improve Writing Ability at the First Grade of Sma Muhammadiyah Limbung*". This research focused on the use of literacy text approach to improve writing ability of the students.

In contrast with the findings of other research, based on what the researcher found, it was resulted that the implementation of literacy activities had a positive and significant effect on students' speaking ability. So it can be said that differences were found with previous researchers who obtained results that literacy activities had an effect on students' writing skill.