CHAPTER IV

RESEARCH RESULT AND DISCUSSION

In this chapter, the researcher describes and discusses the data to find out the answer of the statements of the problem in chapter 1. The researcher gave pretest and posttest to know whether it is effective or not to use picture series as media in teaching reading comprehension for Narrative text. The researcher wanted to know whether any significant difference between before and after the students are taught by using picture series as media in teaching reading comprehension for Narrative text.

There were twenty nine students at Science Immersion class of MA Hasyim Asy'ari Bangsri, who were given pretest and posttest. The pretest described the reading comprehension achievement of the eleventh year students of Science Immersion class of MA Hasyim Asya'ri Bangsri before using picture series, while the posttest described the reading comprehension achievement of the eleventh year students of Science Immersion class of MA Hasyim Asya'ri Bangsri after using picture series as media for the treatment.

4.1. The Data Description

4.1.1. The Data of Students' Reading Comprehension Achievement at the Eleventh Year Students' of Science Immersion Class before They Have Been Taught by Using Picture Series

After conducting the pretest to know the reading comprehension achievement of the eleventh year of Science Immersion class in MA Hasyim Asy'ari Bangsri in the academic year of 2017-2018 before being taught by using picture series as media in teaching reading comprehension for Narrative text, the researcher finds the highest score is 15 and the lowest one is 7 from the data of twenty nine students as research subject. The pretest score are in the table as follows:

Table 4-1 Score of Reading Comprehension Achievement Test (Pre-Test) of the Eleventh Year Students of Science Immersion Class in MA Hasyim Asy'ari Bangsri in the Academic Year 2017-2018

No.	Name of the students	Score	No.	Name of the students	Score
1	Ahmad Muhajir	10	16	Nurul Isnaini	7
2	Amalia Fitriatul K	15	17	Nurul Khafidotun N	12
3	Aprilia Normalita S	12	18	Nurul Latifah	6
4	Erina Nur M	11	19	Rouf N. S	12
5	Arzeti Nadila I	15	20	R. Wildan	12
6	Asiyah	15	21	Saifullah Yusuf	12
7	Hanaiya Al Fatihah	7	22	Shiva Fauziyah	10
8	Ita Ainur R	15	23	Syamitha R	15
9	Khofifah Naila I	10	24	Syarifah Zainab A	14
10	Lisa Nurus S	15	25	Tasya Maulida C	9
11	Luluk Yusrul H	14	26	Ulil Muna A. R	15
12	Lutfiana Khoirun N	11	27	Ummi Awwaliyah A	14
13	Maulida M. S	13	28	Viky Andhi P	10
14	M. Ahyaruddin	13	29	Widya Listiyani	15
15	Nur Miftachul A	15			

Explanation:

✓ N = 29

✓ High Score = 15

✓ Low Score = 6

✓ Range = 15 − 6

= 9

✓ Interval = 1 + (3,3) log N

= 1 + (3,3) 1,46

= 1 + 4,82

= 5,82 → 6

$$\checkmark \quad i \qquad = \frac{range}{interval}$$

$$= \frac{9}{6}$$

$$= 1,5 \rightarrow 2$$

From the calculation above, can be found that the sum of interval = 6 and its width = 2. Then, from the data above the pretest result can be computed to the table of frequency as follows:

Table 4-2 The Distribution Frequency of Reading Comprehension Achievement Test (Pre-Test) of the Eleventh Year Students of Science Immersion Class in MA Hasyim Asy'ari Bangsri in the Academic Year of 2017-2018

No	Score	F	Fka	X	FX	%
1	5 – 6	1	1	5,5	5,5	3,45
2	7 – 8	2	3	7,5	15	6,90
3	9 – 10	6	9	9,5	57	20,68
4	11 – 12	7	16	11,5	80,5	24,13
5	13 – 14	5	21	13,5	67,5	17,29
6	15 – 16	8	29	15,5	124	27,59
$\sum$		**29**		**63**	**349,5**	**100**

Note:

F   : Frequency

Fka   : Frequency cumulative

X   : Middle Score

%   : Percentage

Explanation:

- ✓ Mean   : $x^- = \dfrac{\sum fx}{N}$

$$= \dfrac{349{,}5}{29}$$

$$= \mathbf{12{,}05}$$

- ✓ Median   : Me $= \text{Bb} + i\left(\dfrac{\frac{1}{2}N - Fka}{Fd}\right)$

$$= 10{,}5 + 2\left(\dfrac{\frac{1}{2}29 - 9}{7}\right)$$

$$= 10{,}5 + 2\,(\,0{,}78)$$

$$= 10{,}5 + 1{,}56$$

$$= \mathbf{12{,}06}$$

- ✓ Modus   : Mo $= b + p\left(\dfrac{b1}{b1 + b2}\right)$

$$= 14{,}5 + 2\left(\dfrac{3}{3+8}\right)$$

$$= 14{,}5 + 2\,(0{,}272)$$

$$= 14{,}5 + 0{,}544$$

$$= \mathbf{15{,}044}.$$

Table 4-3 Deviation Standard of Reading Achievement Test (Pre-Test) of the Eleventh Year Students of Science Immersion Class in MA Hasyim Asy'ari Bangsri in the Academic Year of 2017-2018

No	Score	F	X	fx	$x - x^-$	$(x - x^-)^2$	$f(x - x^-)^2$
1	5-6	1	5,5	5,5	-6,551	42,915	42,915
2	7-8	2	7,5	15	-4,551	20,711	41,422
3	9-10	6	9,5	57	-2,551	6,507	39,042
4	11-12	7	11,5	80,5	-0,551	0,303	2,121
5	13-14	5	13,5	67,5	1,449	2,095	10,475
6	15-16	8	15,5	124	3,449	11,895	95,16
$\sum$		29		349,5		84,426	231,135
x^-				12,051			

$$S = \sqrt{\frac{\sum f (x - x^-)^2}{N-1}}$$

$$= \sqrt{\frac{231,135}{29-1}}$$

$$= \sqrt{8,254}$$

$$= \mathbf{2,872}$$

Based on explanation above, it can be shown that the sum of interval is 6 and its width is 2. The researcher finds the average (mean) = 12, 05; the median = 12, 06; the modus = 15,044; and the deviation standard = 2,872.

After knowing the data above, than the researcher makes the polygon graph based on the data founded. The polygon graph of students' reading comprehension achievement test before being taught by using Picture Series as media in teaching reading comprehension for Narrative text can be seen in the following figure:
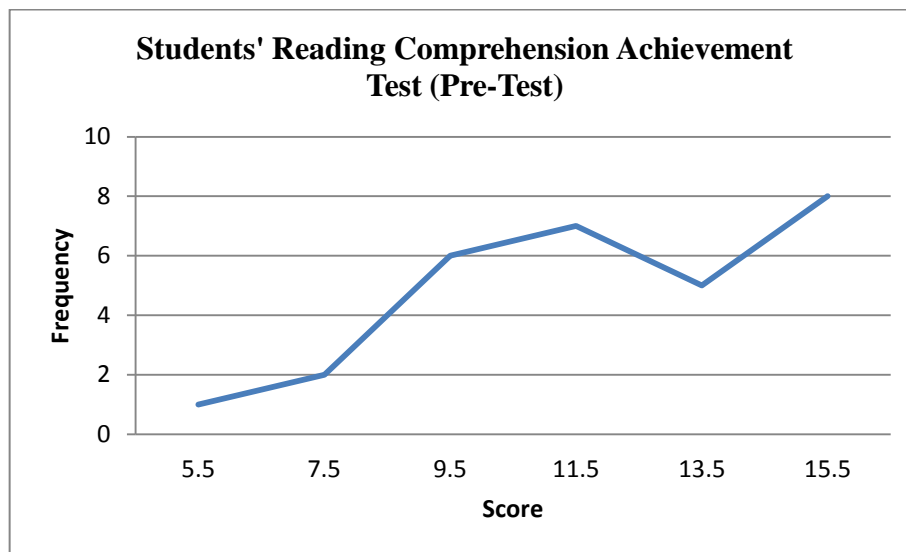
Figure 4-1 Polygon of the Students' Reading Comprehension Achievement Test (Pre-Test) of the Eleventh Year Students' of Science Immersion Class in MA Hasyim Asy'ari Bangsri in the Academic Year 2017-2018

From the polygon graph above it can be seen that the highest frequency of reading comprehension achievement on pretest is 15 at the level 8 and the lowest one is 6 at the level 1.

4.1.2. The Data of Students' Reading Comprehension Achievement at the Eleventh Year Students' of Science Immersion Class After They Have Been Taught by Using Picture Series

After knowing the pretest of the reading comprehension achievement of the eleventh year students of Science Immersion class in MA Hasyim Asy'ari in the academic year 2017-2018 before they got treatment, the researcher continued by giving treatment, then ended by post-test to find out the data result after being taught by using Picture Series as media in teaching reading comprehension for Narrative text.

From the post-test, the researcher got the highest score is 19, while the lowest one is 14, as described on the table below:

Table 4-4 Score of Reading Comprehension Achievement Test (Post-Test) of the Eleventh Year Students of Science Immersion Class in MA Hasyim Asy'ari Bangsri in the Academic Year 2017-2018

No.	Name of the students	Score	No.	Name of the students	Score
1	Ahmad Muhajir	17	16	Nurul Isnaini	14
2	Amalia Fitriatul K	17	17	Nurul Khafidotun N	15
3	Aprilia Normalita S	18	18	Nurul Latifah	18
4	Erina Nur M	14	19	Rouf N. S	17
5	Arzeti Nadila I	19	20	R. Wildan	17
6	Asiyah	16	21	Saifullah Yusuf	17
7	Hanaiya Al Fatihah	15	22	Shiva Fauziyah	17
8	Ita Ainur R	16	23	Syamitha R	16
9	Khofifah Naila I	15	24	Syarifah Zainab A	18
10	Lisa Nurus S	16	25	Tasya Maulida C	17
11	Luluk Yusrul H	18	26	Ulil Muna A. R	18
12	Lutfiana Khoirun N	14	27	Ummi Awwaliyah A	17
13	Maulida M. S	16	28	Viky Andhi P	17
14	M. Ahyaruddin	18	29	Widya Listiyani	18
15	Nur Miftachul A	16			

Explanation:

- ✓ N = 29
- ✓ High Score = 19
- ✓ Low Score = 14
- ✓ Range = 19 – 14

  = 5

- ✓ Interval = 1 + (3,3) log N

  = 1 + (3,3) 1,46

  = 1 + 4,82

  = 5,82 → 6

$$\checkmark \quad i \quad = \frac{range}{interval}$$

$$= \frac{5}{6}$$

$$= 0{,}83 \rightarrow 1$$

From the calculation above, can be found that the sum of interval = 6 and its width = 1.

The distribution frequency of reading comprehension achievement test (post-test) result is computed as follows:

Table 4-5 The Distribution Frequency of Reading Comprehension Achievement Test (Post-Test) of the Eleventh Year Students of Science Immersion Class in MA Hasyim Asy'ari Bangsri in the Academic Year Of 2017-2018

No	Score (x)	F	Fka	Fx
1	14	3	1	42
2	15	3	2	45
3	16	6	8	96
4	17	9	15	153
5	18	7	19	126
6	19	1	29	19
∑		**29**		**481**

Note:

F   : Frequency

Fka   : Frequency cumulative

X   : Middle Score

%   : Percentage

Explanation:

- ✓ Mean : $x^- = \dfrac{\sum fx}{N}$

$$= \dfrac{481}{29}$$

$$= 16{,}58$$

- ✓ Median : Me $= Bb + i\left(\dfrac{\frac{1}{2}N - Fka}{Fd}\right)$

$$= 16{,}5 + 1\left(\dfrac{\frac{1}{2}29 - 12}{9}\right)$$

$$= 16{,}5 + 1\ (0{,}28)$$

$$= 16{,}5 + 0{,}28$$

$$= 16{,}78$$

- ✓ Modus : Mo $= 17$

The average score (mean) of the students' reading achievement in post-test = 16,58; median = 16,78; modus = 17.

Table 4-6 Deviation Standard of Reading Achievement Test (Post-Test) of the Eleventh Year Students of Science Immersion Class in MA Hasyim Asy'ari Bangsri in the Academic Year of 2017-2018

No	Score (x)	f	fx	$x - x^-$	$(x - x^-)^2$	$f(x - x^-)^2$
1	14	3	42	-2,586	6,687	44,715
2	15	3	45	-1,586	2,515	6,325
3	16	6	96	-0,586	0,343	0,117
4	17	9	153	0,414	0,171	0,029
5	18	7	126	1,414	1,999	3,996
6	19	1	19	2,414	5,827	33,953

$\sum$		29	481		17,542	89,135
x^-			16,586			

Explanation:

$$S = \sqrt{\frac{\sum f\,(x-x^-)^2}{N-1}}$$

$$= \sqrt{\frac{89,135}{29-1}}$$

$$= \sqrt{3,183} \qquad = 1,784$$

Based on the explanation above, it is found that the average (mean) of the students' reading comprehension achievement test (post-test) of the eleventh year students of Science Immersion class in MA Hasyim Asy'ari Bangsri in the academic year 2017-2018, is 16,58; the median is 16,78; the modus is 17; and the standard deviation is 3,1.

The students' reading comprehension achievement test result after being taught by using Picture Series as media in teaching reading comprehension for Narrative text can be seen in the following graph:

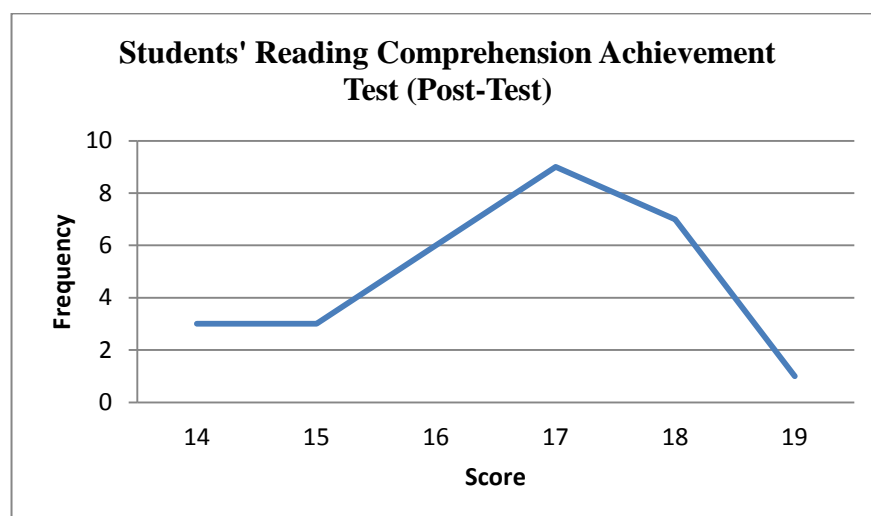Students' Reading Comprehension Achievement Test (Post-Test)

Figure 4-2 Polygon of the Students' Reading Comprehension Achievement Test (Post-Test) of the Eleventh Year Students' of Science Immersion Class in MA Hasyim Asy'ari Bangsri in the Academic Year 2017-2018

From the figure above, it can be seen that the highest score is 19 at the level 1, and the lowest one is 14 at the level 3.

4.2. The Hypothesis Testing

Hypothesis is an opinion which is sometimes possibly true or false. It will be unacceptable if it is false. While it will be acceptable if it is true by proving some facts. In this research, the researcher uses hypothesis as follow:

➢ **Ha = to > tt**, it means that the result of the students' reading comprehension achievement after using picture series is greater than before using picture series as media in teaching reading comprehension for Narrative text for the eleventh year students of Immersion Class of MA Hasyim Asy'ari Bangsri in the academic year 2017/2018. Thus, the using of Picture Series as media is effective.

➢ **Ho = to < tt**, it means that the result of the students' reading comprehension achievement after using picture series is smaller than before using picture series as media in teaching reading comprehension for Narrative text for the eleventh year students of Immersion Class of MA Hasyim Asy'ari Bangsri in the academic year 2017/2018. Thus, the using of Picture Series as media is not effective.

In finding a significant difference between the result of teaching reading before and after using Picture Series as media in teaching reading comprehension for Narrative text at the Eleventh year students of Science Immersion class in MA Hasyim Asy;ari Bangsri in the academic year 2017-2018, the researcher uses statistical analysis of t-test method which explained as follow:

- The data of students' reading achievement after using Picture series as media is:

  ➢ N1 = 29
  ➢ X1 = 16,58
  ➢ SD1= 1,7

- The data of students' reading achievement before using Picture series as media is:

  ➢ N2 = 29
  ➢ X2 = 12,39
  ➢ SD2= 2,8

$$S = \frac{[N_1-1]\, SD_1^2 + [N_2-1]\, SD_2^2}{N_1+N_2-2}$$

$$= \frac{[29-1]\,(1,7)^2 + [29-1]\,(2,8)^2}{29+29-2}$$

$$= \frac{(28.\,2,89) + (28.\,7,84)}{56}$$

$$= \frac{80,92+219,52}{56}$$

$$= \frac{300,44}{56} \rightarrow 5,365$$

To get the result the researcher uses the pattern as follow:

$$t = \frac{x_1 - x_2}{s\sqrt{\dfrac{1}{N_1}+\dfrac{1}{N_2}}}$$

$$= \frac{16,58-12,05}{5,365\sqrt{\dfrac{1}{29}+\dfrac{1}{29}}}$$

$$= \frac{4,53}{5,365\sqrt{\dfrac{2}{29}}}$$

$$= \frac{4,53}{5,365\sqrt{0,06}}$$

$$= \frac{4,53}{1,304} \rightarrow 3,484$$

Explanation:

N : Sample

X : Mean

SD : Deviation Standard

S : Variant

Based on the explanation above, the result (t_o) is 3,484. The result will be consulted to r-product moment table with a number of research subjects 29 with the degree of freedom (db) is N – 1 = 28 (level of significance 5%), with t-table 2,048. Because 'to' = 3,484 ≥ 'tt' 2,048, so the hypothesis mentions that the students' reading comprehension achievement after being taught by using Picture Series as media in teaching reading comprehension for Narrative text is more effective is accepted.

4.3. Discussion

Picture series is series of pictures which has continuity each other. The pictures provided in systematic plot which tell the story. Those pictures may even help the students in learning language, in this case in English, because the pictures and images are far interesting than only words, especially when they are colored. The readers will get more fun while they are read the text; they also can gain some information from the pictures.

This research has a purpose to find out the answers from the three statements of the problem stated in chapter 1, they are: (i) how is the English reading achievement of the eleventh year students of Immersion Class of MA Hasyim Asy'ari Bangsri before they have been taught by using picture series as media of teaching and learning; (ii) how is the English reading achievement of the eleventh year students of Immersion Class of MA Hasyim Asy'ari Bangsri after they have been taught by using picture series as media of teaching and learning; (iii) is it effective to use picture series as media in teaching reading comprehension for Narrative text in the eleventh year students of Immersion Class of MA Hasyim Asy'ari Bangsri.

The purposes above are expected to be able to solve the problems of teaching reading comprehension for narrative text. That is why the researcher tries to promote Picture Series as one of teaching aids to support the teaching reading methods and techniques, because teachers hold the important role to solve the problems in teaching and learning process. Thus, the teachers should search the better approach in teaching English to the students in the class.

4.3.1 The Students' Reading Comprehension Achievement at the Eleventh Year of Science Immersion Class before They Have Been Taught by Using Picture Series

The researcher did five meetings for the experimental group, who was taught English in reading comprehension skill by using Picture Series. First, the researcher gave pre-test to know how far the reading achievement of the students

before they use Picture series as media of teaching reading comprehension for Narrative text. It is done in the first meeting and before giving the treatment to them. The researcher used the second, third, and the fourth meeting for giving the treatment to the students using Picture Series as media in teaching reading comprehension for Narrative. The researcher used three different stories in each meeting, those stories are: The Ant and Grasshopper, The fox and the Crow, The Princess and the Pea. In the last meeting, the researcher gave post-test to the students; it was aimed to measure the students' reading comprehension achievement after they got the treatment.

Based on the explanation above, the researcher found the data by applying pre-test with the highest score is 15 and the lowest score is 6. From the calculation done is acquired the average score (mean) = 12,05; the median = 12,06; the modus = 15,04; and the deviation standard = 2,872. Many students felt uneasy for them to search some difficult words from dictionary. They also felt uneasy while they had to do the pre-test which contained twenty items of multiple choices before using Picture Series; they felt bored when they had to read many long texts.

4.3.2 The Students' Reading Comprehension Achievement at the Eleventh Year of Science Immersion Class after They Have Been Taught by Using Picture Series

The post-test score of the students at the eleventh year students of Science Immersion class in MA Hasyim Asy'ari Bangsri is higher than the pre-test score. The mean = 16,58; the median = 16,78; the modus = 17; and the deviation standard 1,784. They felt enjoy when doing the post-test, because there are many pictures which make them interested in reading the Narrative texts. They said that Picture Series help them in understanding the Narrative text because it has systematic plot.

4.3.3 The Significant Difference of Students' Reading Comprehension Achievement at the Eleventh Year of Science Immersion Class before and after They Have Been Taught by Using Picture Series

From the data above, it can be concluded that the result of teaching reading comprehension for Narrative text using Picture Series at the eleventh year students of Science Immersion class in MA Hasyim Asy'ari Bangsri in the academic year of 2017-2018 is different from before they use Picture Series as teaching reading media. Most students felt it was fun activities (reading long text with picture series for their guidance), so they were engaged to read more. They were even more active and not easily to get bored. This condition happened when the students got the treatment, which then continued by post-test. The students felt easier to absorb and understand the material through Picture Series, even though they have not been perfect but it was done successfully. Of course, the students' reading comprehension achievement score in the post-test is higher than the pre-test score.

The researcher uses t-test method to analyze the data, and the result is = 3,484. The result will be consulted to the table of significant with the degree of freedom (db) is N − 1 = 28 (level of significance 5%), with t-table 2,048. It shows that the result is higher than level of significance. Therefore, it means that there is significant difference between students' reading comprehension achievement score of the eleventh year of Science Immersion class in MA Hasyim Asy'ari Bangsri in the academic year of 2017-2018 before and after being taught by using Picture Series.