

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

In this chapter, the writer presented the data obtained of the students' score in questionnaire, the data obtained of the students' score in vocabulary mastery in class A, and the data obtained of students' score in vocabulary mastery in class B.

A. Data Presentation

1. The Pre Analysis Of Questionnaire

The writer has changer the result of this questionnaire which uses qualitative data to be quantitative data that classification into quantitative score such as:

1. Score 4 for answer "SS" (SangatSetuju)
2. Score 3 for answer "S" (Setuju)
3. Score 2 for answer " TS" (TidakSetuju)
4. Score 1 for answer "STS" (SangatTidakSetuju)

2. The Result of Questionnaire Score

a. The Distribution of Students' Questionnaire Score of Class A

The students' score questionnaire could be distributed by the following table in order to analyze the students' learning style before conducting the test vocabulary.

Table 4.1

The Data Description of Class A Students' Questionnaire Score

No	Name	Score of Visual Style	Score of Auditory Style	Score of Kinesthetic Style
1	AF	34	32	26
2	AD	32	23	24

3	AA	32	28	28
4	AW	30	31	22
5	CK	33	26	25
6	D	30	25	35
7	DC	38	33	27
8	EU	35	28	22
9	ES	33	22	23
10	EP	33	26	25
11	JA	36	22	23
12	LH	24	35	23
13	LE	33	26	24
14	MF	30	21	25
15	MR	32	25	24
16	MRM	31	25	24
17	PP	33	22	30
18	RZR	33	23	21
19	RYK	23	25	34
20	SW	33	26	26
21	SAP	30	25	30
22	SAW	29	28	23
23	YAW	25	31	27
24	LHS	24	33	26
25	S	30	32	26
26	PS	33	24	28
27	AF	32	31	31
28	AK	30	29	30
29	DA	34	24	26
30	EP	25	19	22
31	Ir	30	25	25
32	M	31	25	22
33	RF	33	33	33
34	Sf	35	28	34
35	AAZ	28	22	27
36	ASJ	34	25	28
37	A	34	31	33
38	Ag	33	15	27
39	CM	30	23	25

40	DZP	31	30	24
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b. The Distribution of Students' Questionnaire Score of Class B

The students' score questionnaire could be distributed by the following table in order to analyze the students' learning style before conducting the test vocabulary.

Table 4.2
The Data Description of Class B Students' Questionnaire Score

No	Name	Score of Visual Style	Score of Auditory Style	Score of Kinesthetic Style
1	AP	20	29	24
2	AA	22	28	20
3	A	21	24	25
4	BAA	20	34	32
5	BI	29	22	27
6	CFS	36	27	33
7	DT	24	33	29
8	DM	23	27	24
9	Di	27	23	32
10	DA	30	19	28
11	EV	34	22	30
12	F	30	24	28
13	IFF	31	30	23
14	L	35	32	31
15	MRA	31	20	34
16	MDC	32	17	30
17	MFJ	27	19	22
18	MR	26	33	29
19	RT	21	26	34
20	RM	32	20	34
21	RA	19	21	26
22	SM	24	20	22
23	SAR	19	23	32
24	SE	20	25	24
25	Y	32	31	23
26	YO	22	21	33
27	AK	27	23	33
28	AN	31	24	35
29	EM	30	15	26
30	G	29	23	25

31	HY	26	27	33
32	KM	22	27	28
33	HW	28	23	20
34	SS	20	26	22
35	WA	28	35	34
36	VSR	35	33	27
37	YDR	28	34	33
38	YJ	28	36	27
39	TP	30	32	30
40	K	22	36	34

3. The Result of Questionnaire Score on the Students' Style Classification

The classification of the students' learning style could be distributed by the following table in order to analyze the vocabulary test based on the learning style.

a. The Distribution of the Students' Visual Style

The students are called visual learner when they have the highest score of visual questionnaire than all.

Table 4.3

The Data Description Data of Students' Visual Style

No	Class	Name	Score of Visual Style	Score of Auditory Style	Score of Kinesthetic Style
1	A1	AF	34	32	26
2	A2	AD	32	23	24
3	A3	AA	32	28	28
4	A5	CK	33	26	25
5	A7	DC	38	33	27
6	A8	EU	35	28	22
7	A9	ES	33	22	24
8	A10	EP	33	26	25
9	A11	JA	36	22	23
10	A13	LE	33	26	24

11	A14	MF	30	21	25
12	A15	MR	32	25	24
13	A16	MRM	31	25	24
14	A17	PP	33	22	30
15	A18	RZR	33	23	21
16	A20	SW	33	26	26
17	A22	SAW	29	28	23
18	A26	PS	33	24	28
19	A27	AF	32	31	31
20	A29	DA	34	24	26
21	A30	EP	25	19	22
22	A31	Ir	30	25	25
23	A32	M	31	25	22
24	A34	S	35	28	34
25	A35	AAZ	28	22	27
26	A36	ASJ	34	25	28
27	A37	A	34	31	33
28	A38	Ag	33	25	27
29	A39	CM	30	23	25
30	A40	DZP	31	30	24
31	BB5	BI	29	22	27
32	BB6	CFS	36	27	33
33	B10	DA	30	19	28
34	B11	EV	34	22	30
35	B12	F	30	24	28
36	B13	IFF	31	30	23
37	B14	L	35	32	31
38	B16	MDC	32	17	30

39	B17	MFJ	27	19	22
40	B22	SM	24	20	22
41	B25	Y	32	31	23
42	B29	EM	30	15	26
43	B30	G	29	23	25
44	B33	HW	28	23	20
45	B36	VSR	35	33	27

Based on the data above, it can be seen that the students have highest score in visual style. There are 30 students from the class A in visual style and 15 students from the class B in visual style. The calculation of students' visual style of 80 students is 55%

b. The Distribution of the Students' Auditory Style

The students are called auditory learner when they have the highest score of auditory questionnaire than all.

Table 4.4

The Description Data of Students' Auditory Style

No	Class	Name	Score of Visual Style	Score of Auditory Style	Score of Kinesthetic Style
1	A4	AW	30	31	22
2	A12	LH	24	35	23
3	A23	YAW	25	31	27
4	A24	LHS	24	33	26
5	A25	S	30	32	26
6	B1	AP	20	29	24
7	B2	AA	34	26	30
8	B3	A	27	24	25
9	B4	BAA	34	32	20

10	B8	DM	23	24	27
11	B7	DT	24	33	29
12	B18	MR	26	33	29
13	B24	SE	20	25	24
14	B34	SS	20	26	22
15	B35	WA	28	35	34
16	B37	YDR	28	34	33
17	B38	YJ	28	36	33
18	B39	TP	30	32	30
19	B40	K	22	36	34

Based on the data above, it can be seen that the students have highest score in auditory style. There are 5 students from the class A in auditory style and 14 students from the class B in auditory style. The calculation of students' auditory style of 80 students is 20%

c. The Distribution of the Students' Kinesthetic Style

The students are called kinesthetic learner when they have the highest score of kinesthetic questionnaire than all.

Table 4.5

The Data Description of Students' Kinesthetic Style

No	Class	Name	Score of Visual Style	Score of Auditory Style	Score of Kinesthetic Style
1	A6	D	30	25	35
2	A19	RYK	23	25	34
3	B9	D	27	23	32
4	B15	MRA	31	20	34
5	B19	RT	21	26	34
6	B20	RM	32	20	34

7	B21	RA	19	21	26
8	B23	SAR	19	23	32
9	B26	YO	22	21	33
10	B27	AK	27	23	33
11	B28	AN	31	24	35
2	B31	HY	26	27	33
13	B32	KM	22	27	28

Based on the data above, it can be seen that the students have highest score in kinesthetic style. There are 2 students from the class A in kinesthetic style and 12 students from the class B in kinesthetic style. The calculation of students' kinesthetic style of 80 students is 16,25%

d. The Distribution of the Entire and another learning style

The students have learning style when the score of visual, auditory, and kinesthetic style identifying questionnaire were same score. There is a student who has the entire learning style, he is RF from the class A with the score of visual style is 33, score of auditory is 33, and score of kinesthetic style is 33. The calculation of students' visual style of 80 students is 3,75%

Then, the writer found some students who have multiple learning styles. They have two same score in identifying learning style questionnaire, they are:

Table 4.6

The Data Description of another Students' Learning Style

No	Class	Name	Score of Visual Style	Score of Auditory Style	Score of Kinesthetic Style
1	A	SA	30	25	30
2	A	AK	30	29	30

4. The Result of First Test Score

a. Distribution of First Test Score of Class A

The students' score of the class A is presented in the following table:

Table 4.7

**The Description of First Test of the Data Achieved
by the Students in Class A**

NO	CODE	SCORE OF VOCABULARY	NO	CODE	SCORE OF VOCABULARY
1	AF	73	21	SAP	91
2	AD	58	22	SAW	80
3	AA	80	23	YAW	56
4	AW	78	24	LHS	67
5	CK	78	25	S	47
6	D	87	26	PS	67
7	DC	69	27	AF	69
8	EU	91	28	AK	91
9	ES	78	29	DA	64
10	EP	91	30	EP	56
11	JA	80	31	Ir	58
12	LH	67	32	M	60
13	LE	78	33	RF	91
14	MF	73	34	Sf	67
15	MR	71	35	AAZ	67
16	MRM	84	36	ASJ	67
17	PP	64	37	A	47
18	RZR	89	38	Ag	56
19	RYK	56	39	CM	56
20	SW	58	40	DZP	67

Based on the data above, it can be seen that the students' highest score was 91 and the students' lowest score was 47. To determine the range of score the

class interval, and the interval temporary the writer calculated using formula as follows:

$$\begin{aligned}
 \text{The highest score (H)} &= 91 \\
 \text{The lowest score (L)} &= 47 \\
 \text{The range of score (R)} &= H-L \\
 &= 91-47 \\
 &= 44+1 \\
 &= 45 \\
 \text{The class interval (K)} &= 1+(3,3) \times \text{Log } 40 \\
 &= 4,3 \times 1,60205991 \\
 &= 6,888 \\
 &= 7 \\
 \text{Interval of the temporary} &= R/K = 45/7 \\
 &= 6,5 \\
 &= 6 \text{ or } 7
 \end{aligned}$$

So, the range of score was 45, the class interval was 6, it was presented using frequency distribution in the following table:

Table 4.8

The Frequency Distribution of First Test Score of the Class A

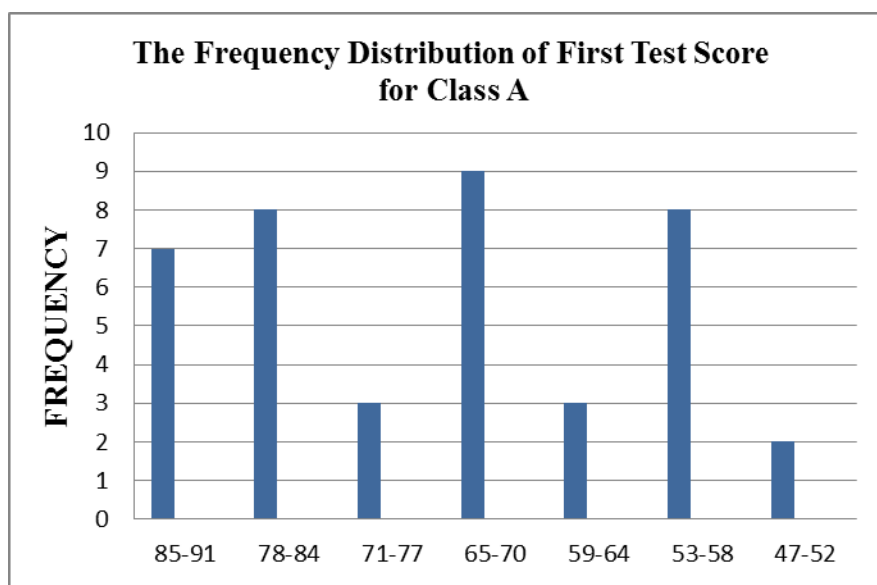
Class Interval (K)	Interval (I)	Frequency (f)	Mid-Point (x)	The Limitation of Each	Frequency Relative (%)	Frequency Cumulative (%)
1	85-91	7	88	84,5-91,5	17.5	100
2	78-84	8	81	77,5-84,4	20	82.5

3	71-77	3	74	70,5-77,5	7.5	62.5
4	65-70	9	67.5	64,5-70,5	22.5	55
5	59-64	3	61.5	58,5-64,5	7.5	32.5
6	53-58	8	55.5	52,5-58,5	20	25
7	47-52	2	49.5	46,5-52,5	5	5
TOTAL		$\Sigma = 40$			$\Sigma = 100$	

The distribution of students' vocabulary score can also be seen in the following figure

Figure 4.1

Histogram of Frequency Distribution of First Test Score for Class A



The table figure above showed the students' vocabulary test of the class A. It could be seen that there were two students who got 47-52. There were eight students who got 53-58. There were three students who got 59-64. There were nine students who got 65-70. There were three students who got 71-77. There eight students who got 78-84. There were seven students who got 85-91. The next step, the writer tabulated the score into the table for the calculation mean and median as follows:

Table 4.9**The Calculation of Mean, Median and Modus of First Test for Class A**

Interval (I)	Frequency (f)	Mid - Point (x)	Fx	fkb (b)	fka (a)
85-91	7	88	616	40	7
78-84	8	81	648	33	15
71-77	3	74	222	25	18
65-70	9	67.5	607.5	22	27
59-64	3	61.5	184.5	13	30
53-58	8	55.5	444	10	38
47-52	2	49.5	99	2	40
TOTAL	$\sum N = 40$		$\sum fx = 2821$		

From the table above, the data could be inserted in the formula of mean. In simple explanation, x is score of student; f is total students who got the score. fx is multiplication both x and f, fkb is the cumulative students calculated from under to the top, in other side fka is the cumulative students calculated from top to the under. The process of calculation used formula below:

a. Mean

$$M = \frac{\sum fx}{N}$$

$$M = \frac{2821}{40}$$

$$M = 70,53$$

The calculation above showed of mean value was 70,53.

b. Median

$$\text{Mdn} = E + \frac{\frac{1}{2}N - fkb}{f_i} x_i$$

$$= 64,5 + \frac{20-13}{9} \times 6$$

$$= 64,5 + \frac{7}{9} \times 6$$

$$= 64,5 + (0,77) \times 6$$

$$= 64,5 + 5,3$$

$$= 69,8$$

c. Modus

$$Mo = l \left(\frac{f_a}{f_a + f_b} \right) \times i$$

$$Mo = 64,5 \left(\frac{3}{3+3} \right) \times 6$$

$$Mo = 64,5 \times (0,5) \times 6$$

$$Mo = 64,5 \times 3$$

$$Mo = 67,5$$

The calculation above showed of mean value was 70,53, median value was 69,8 and modus was 67,5 of the vocabulary score of class A. The last step, the writer tabulated the score of vocabulary test into the table for the calculation of standard deviation and the standard error as follows:

Table 4.10

**The Calculation of the Standard Deviation and Standard Error
of First Test Score for Class A**

Interva l (I)	Frequenc y (f)	Mid- Point (x)	Fx	x'	fx'	fx'2
85-91	7	88	616	3	21	63
78-84	8	81	648	2	16	32
71-77	3	74	222	1	3	3

65-70	9	67.5	607.5	0	0	0
59-64	3	61.5	184.5	-1	-3	3
53-58	8	55.5	444	-2	-16	32
47-52	2	49.5	99	-3	-6	18
TOTAL	$\sum N = 40$		$\sum fx = 2821$		$\sum fx' = 15$	$\sum fx'^2 = 151$

The table above used for calculate standard deviation and standard error by calculated standard deviation in first test. The process of calculation used formula below:

a. Standard Deviation

$$SD = \sqrt{\frac{\sum fx^2}{N} - \frac{(Ff)^2}{N}}$$

$$SD = \sqrt{7 \frac{151}{40} - \frac{(15)^2}{40}}$$

$$SD = \sqrt{7\sqrt{3,775 - 0,375^2}}$$

$$SD = \sqrt{7\sqrt{3,775 - 0,140625}}$$

$$SD = \sqrt{7\sqrt{3,634375}}$$

$$SD = 7 \times 1,90640$$

$$SD = 13,3448$$

b. Standard Error

$$SEM_D = \frac{SD}{\sqrt{N-1}}$$

$$SEM_D = \frac{13,3448}{\sqrt{40-1}}$$

$$SEM_D = \frac{13,3448}{\sqrt{39}}$$

$$SEM_D = \frac{13,3448}{6,244998}$$

$$SEM_D = 2,13687$$

The result calculation showed the standard deviation of vocabulary score was 13,3448 and the standard error of vocabulary score was 2,13678. The next step, the writer calculated the scores of mean, median, standard deviation error of mean of vocabulary test in class A using SPSS as follows:

Table 4.11

The Table Calculation of Mean, Median, Modus, Standard Deviation, and Standard Error of Mean of First Test of Class A Using SPSS 21.0 Program

Statistics		
CLASS A		
N	Valid	40
	Missing	0
Mean		70.6750
Std. Error of Mean		2.01195
Median		68.0000
Mode		67.00
Std. Deviation		12.72467
Variance		161.917
Skewness		.108
Std. Error of Skewness		.374
Kurtosis		-.897
Std. Error of Kurtosis		.733
Range		44.00
Minimum		47.00
Maximum		91.00
Sum		2827.00

b. Distribution of First Test of Class B

The students' score of the class B are presented in the following table:

Table 4.12
The Description of First Test of the Data Achieved
by the students in Class B

NO	CODE	SCORE OF VOCABULARY	NO	CODE	SCORE OF VOCABULARY
1	AP	71	21	RA	47
2	AA	64	22	SM	58
3	A	69	23	SAR	76
4	BAA	76	24	SE	62
5	BI	56	25	Y	64
6	CFS	69	26	YO	58
7	DT	71	27	AK	69
8	DM	64	28	AN	56
9	Di	60	29	EM	56
10	DA	76	30	G	87
11	EV	64	31	HY	53
12	F	71	32	KM	62
13	IFF	47	33	HW	53
14	L	18	34	SS	62
15	MRA	56	35	WA	18
16	MDC	73	36	VSR	87
17	MFJ	40	37	YDR	49
18	MR	73	38	YJ	49
19	RT	60	39	TP	44
20	RM	69	40	K	44

Based on the data above, it can be seen that the students' highest score was 87 and the students' lowest score was 18. To determine the range of score the class interval, and the interval temporary the writer calculated using formula as follows:

The highest score (H) = 87

$$\text{The lowest score (L)} = 18$$

$$\begin{aligned} \text{The range of score (R)} &= H-L+1 \\ &= 87-18+1 \\ &= 69+1 \\ &= 70 \end{aligned}$$

$$\begin{aligned} \text{The class interval (K)} &= 1+(3,3) \times \text{Log } 40 \\ &= 4,3 \times 1,60205991 \\ &= 6,888857 \\ &= 7 \end{aligned}$$

$$\begin{aligned} \text{Interval of the temporary (I)} &= R/K = 70/7 \\ &= 10 \end{aligned}$$

So, the range of score was 70, the class interval was 7, it was presented using frequency distribution in the following table:

Table 4.13

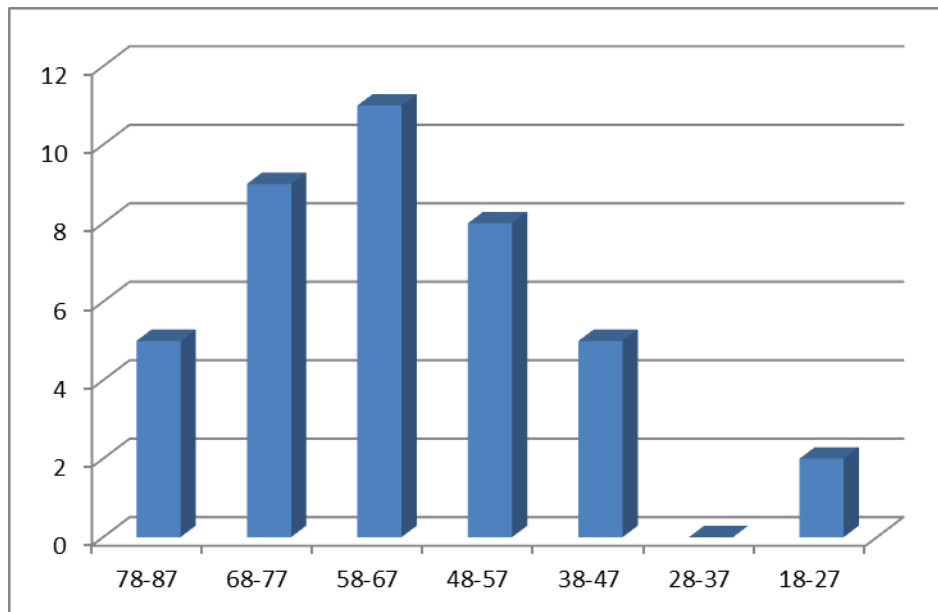
The Frequency Distribution of the First Test Score of the Class B

Class Interval (K)	Interval (I)	Frequency (f)	Mid - Point (x)	The Limitation of Each	Frequency Relative (%)	Frequency Cumulative (%)
1	78-87	5	82.5	77,5-87,5	5	100
2	68-77	9	72.5	67,5-77,5	30	95
3	58-67	11	62.5	56,5-67,5	27.5	65
4	48-57	8	51.5	47,5-57,5	20	37.5
5	38-47	5	41.5	37,5-47,5	12.5	17.5
6	28-37	0	31.5	27,5-37,5	0	5
7	18-27	2	21.5	17,5-27,5	5	5
TOTAL		$\Sigma = 40$			$\Sigma = 100$	

The distribution of students' vocabulary score can also be seen in the following figure.

Figure 4.2

Histogram of Frequency Distribution of Vocabulary Score for Class B



The table figure above showed the students' vocabulary test of the class B. It could be seen that there were two students who got 18-27. There was one student who got 28-37. There were five students who got 38-47. There were eight students who go 48-57. There were eleventh students who got 58-67. There were nine students who got 68-77. There were five students who got 78-87. The next step, the writer tabulated the score into the table for the calculation mean and median as follows:

Table 4.14**The Calculation of Mean, Median and Modus of First Test for Class B**

Interval (I)	Frequency (f)	Mid -Point (x)	fx	fk_b (b)	Fk_a (a)
78-87	5	82.5	412.5	40	5
68-77	9	72.5	652.5	35	14
58-67	11	62.5	687.5	26	25
48-57	8	51.5	412	15	33
38-47	5	41.5	207.5	7	38
28-37	0	31.5	0	2	38
18-27	2	21.5	43	2	40
TOTAL	$\Sigma N = 40$		$\Sigma fx = 2415$		

From the table above, the data could be inserted in the formula of mean. In simple explanation, x is score of student; f is total students who got the score. fx is multiplication both x and f, fkb is the cumulative students calculated from under to the top, in other side fka is the cumulative students calculated from top to the under. The process of calculation used formula below:

a. Mean

$$M = \frac{\Sigma fx}{N}$$

$$M = \frac{2415}{40}$$

$$M = 60,025$$

$$M = 60$$

The calculation above showed of mean value was 60.

b. Median

$$\begin{aligned}
 \text{Mdn} &= E + \frac{\frac{1}{2}N - f_{kb}}{f_i} \times i \\
 &= 57,5 + \frac{20-15}{11} \times 10 \\
 &= 57,5 + \frac{5}{11} \times 10 \\
 &= 57,5 + (0,45) \times 10 \\
 &= 57,5 + (4,5) \\
 &= 62
 \end{aligned}$$

c. Modus

$$\begin{aligned}
 \text{Mo} &= l \left(\frac{f_a}{f_a + f_b} \right) \times i \\
 \text{Mo} &= 57,5 \left(\frac{9}{9+8} \right) \times 10 \\
 \text{Mo} &= 57,5 + (0,53) \times 10 \\
 \text{Mo} &= 57,5 + 5,3 \\
 \text{Mo} &= 62,8
 \end{aligned}$$

The calculation above showed of mean value was 60, median value was 62, and modus was 63 of the vocabulary score of class B. The last step, the writer tabulated the score of vocabulary test into the table for the calculation of standard deviation and the standard error as follows:

Table 4.15

**The Calculation of the Standard Deviation and Standard Error of First Test
Score for Class B**

Interval (I)	Frequency (f)	Mid - Point (x)	Fx	x'	fx'	fx'2
78-87	5	82.5	412.5	2	10	20
68-77	9	72.5	652.5	1	9	9
58-67	11	62.5	687.5	0	0	0
48-57	8	51.5	412	-1	-8	8
38-47	5	41.5	207.5	-2	-10	20
28-37	0	31.5	0	-3	0	0
18-27	2	21.5	43	-4	-8	32
	Σ =40		Σ fx =2415		Σ =-7	Σ =89

The table above used for calculate standard deviation and standard error by calculate standard deviation first. The process of calculation used formula below:

a. Standard Deviation

$$SD = i \sqrt{\frac{\sum fx^2}{N} - \left(\frac{fx'}{N}\right)^2}$$

$$SD = 10 \sqrt{\frac{89}{40} - \left(\frac{-7}{40}\right)^2}$$

$$SD = 10 \sqrt{2,225 - (-0,175)^2}$$

$$SD = 10 \sqrt{2,225 - 0,030625}$$

$$SD = 10 \sqrt{1.96938}$$

$$SD = 10 \times 1,40335$$

$$SD = 14,0335$$

b. Standard Error

$$SEM_D = \frac{SD}{\sqrt{N-1}}$$

$$SEM_D = \frac{14,0335}{\sqrt{40-1}}$$

$$SEM_D = \frac{14,0335}{\sqrt{39}}$$

$$SEM_D = \frac{14,0335}{6,244998}$$

$$SEM_D = 2,24712$$

The result calculation showed the standard deviation of vocabulary score was 14,0335 and the standard error of vocabulary score was 2,24712. The next step, the writer calculated the scores of mean, median, standard deviation error of mean of vocabulary test in class A using SPSS as follows:

Table 4.16

The Table Calculation of Mean, Median, Standard Deviation, and Standard Error of Mean of the First Test Scores of Class B Using SPSS 21.0 Program

Statistics		
N	Valid	40
	Missing	0
Mean		60.0250
Std. Error of Mean		2.33658
Median		62.0000
Mode		56.00 ^a
Std. Deviation		14.77782
Variance		218.384
Skewness		-.918
Std. Error of Skewness		.374
Kurtosis		1.775

Std. Error of Kurtosis	.733
Range	69.00
Minimum	18.00
Maximum	87.00
Sum	2401.00

5. The Result of Second Test Score

a. Distribution of Second Test Score of Class A

The students' score of the class A were presented in the following table:

Table 4.17
The Description of Second Test Score of the Data Achieved
by the students in Class A

No	CODE	Score of Vocabulary	No	CODE	Score of Vocabulary
1	AF	87	21	SAP	100
2	AD	73	22	SAW	100
3	AA	100	23	YAW	80
4	AW	93	24	LHS	87
5	CK	100	25	S	67
6	D	100	26	PS	87
7	DC	87	27	AF	80
8	EU	100	28	AK	100
9	ES	93	29	DA	87
10	EP	100	30	EP	67
11	JA	100	31	Ir	73
12	LH	87	32	M	80
13	LE	100	33	RF	93
14	MF	93	34	Sf	80
15	MR	100	35	AAZ	87
16	MRM	100	36	ASJ	93
17	PP	80	37	A	67
18	RZR	100	38	Ag	80
19	RYK	73	39	CM	73
20	SW	67	40	DZP	93

Based on the data above, it can be seen that the students' highest score was 100 and the students' lowest score was 67. To determine the range of score the class interval, and the interval temporary the writer calculated using formula as follows:

$$\text{The highest score (H)} = 100$$

$$\text{The lowest score (L)} = 67$$

$$\begin{aligned} \text{The range of score (R)} &= H-L+1 \\ &= 100-67+1 \\ &= 33+1 \\ &= 34 \end{aligned}$$

$$\begin{aligned} \text{The class interval (K)} &= 1+(3,3) \times \text{Log } 40 \\ &= 4,3 \times 1,60205991 \\ &= 6,88 \\ &= 7 \end{aligned}$$

$$\begin{aligned} \text{Interval of the temporary} &= R/K = 34/7 \\ &= 4,8 = 5 \end{aligned}$$

So, the range of score was 34, the class interval was 5, it was presented using frequency distribution in the following table:

Table 4.18

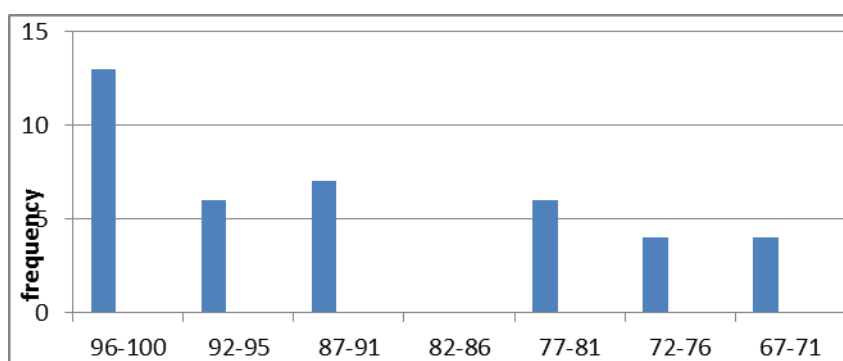
The Frequency Distribution of the Second Test Score of the Class A

Class Interval (K)	Interval (I)	Frequency (f)	Mid-Point (x)	The Limitation of Each	Frequency Relative (%)	Frequency Cumulative (%)
1	96-100	13	98	95,6-100,5	32.5	100
2	92-95	6	94	91,5-95,5	15	67.5

3	87-91	7	89	86,5-91,5	17.5	52.5
4	82-86	0	84	81,5-86,5	0	35
5	77-81	6	79	76,5-81,5	15	35
6	72-76	4	74	71,5-76,5	10	20
7	67-71	4	69	66,5-71,5	10	10
Total		40			100	

The distribution of the second test score can also be seen in the following figure:

Figure 4.3
Histogram of Frequency Distribution of Second Test Score for Class A



The table figure above showed the second test score of the class A. It could be seen that there were four students who got 67-71. There four students who got 72-76. There were six students who got 77-81. There was no one student got at 82-86. There were seven students who got 87-91. There were six students who got 92-95. There were thirteen students who got 96-100. The next step, the writer tabulated the score into the table for the calculation mean and median as follows:

Table 4.19

The Calculation of Mean, Median and Modus of Second Test for Class A

Interval (I)	Frequency (f)	Mid-Point (x)	Fx	Fkb	Fka
96-100	13	98	1274	40	13
92-95	6	94	564	27	19
87-91	7	89	623	21	26
82-86	0	84	0	14	26
77-81	6	79	474	14	32
72-76	4	74	296	8	36
67-71	4	69	276	4	40
Total	40		$\Sigma = 3507$		

From the table above, the data could be inserted in the formula of mean. In simple explanation, x is score of student; f is total students who got the score. fx is multiplication both x and f, fkb is the cumulative students calculated from under to the top, in other side fka is the cumulative students calculated from top to the under. The process of calculation used formula below:

a. Mean

$$M = \frac{\sum fx}{N}$$

$$M = \frac{3507}{40}$$

$$M = 87,68$$

$$M. = 88$$

The calculation above showed of mean value was 88.

b. Median

$$\begin{aligned}
 \text{Mdn} &= l + \frac{\frac{1}{2}N - f_{kb}}{f_i} \times i \\
 &= 91,5 + \frac{20 - 26}{7} \times 5 \\
 &= 91,5 + \frac{-6}{7} \times 5 \\
 &= 91,5 + (-0,857) \times 5 \\
 &= 91,5 + -4,285 \\
 &= 87,22
 \end{aligned}$$

c. Modus

$$\begin{aligned}
 \text{Mo} &= l \left(\frac{f_a}{f_a + f_b} \right) \times i \\
 \text{Mo} &= 91,5 \left(\frac{6}{6+0} \right) \times 5 \\
 \text{Mo} &= 91,5 \times (1) \times 5 \\
 \text{Mo} &= 91,5 \times 5 \\
 \text{Mo} &= 96,5
 \end{aligned}$$

The calculation above showed of mean value was 88, median value was 90,78 and modus value was 96,5 of the second test score of class A. The last step, the writer tabulated the score of vocabulary test into the table for the calculation of standard deviation and the standard error as follows:

Table 4.20

**The Calculation of the Standard Deviation and Standard Error
Of Second Test Score for Class A**

Interval (I)	Frequency (f)	Mid- Point (x)	Fx	x'	fx'	fx'2
96-100	13	98	1274	1	13	13
92-95	6	94	564	2	12	24
87-91	7	89	623	0	0	0
82-86	0	84	0	-1	0	0
77-81	6	79	474	-2	-12	24
72-76	4	74	296	-3	-12	36
67-71	4	69	276	-4	-16	64
Total	$\Sigma N = 40$		3507		-15	161

The table above used for calculate standard deviation and standard error by calculate standard deviation first. The process of calculation used formula below:

a. Standard Deviation

$$SD = i \sqrt{\frac{\Sigma fx'^2}{N} - \frac{(fx')^2}{N}}$$

$$SD = 5 \sqrt{\frac{161}{40} - \frac{(-15)^2}{40}}$$

$$SD = 5\sqrt{4,025} = 0,140625$$

$$SD = 5\sqrt{3,884375}$$

$$SD = 5 \times 1,97088$$

$$SD = 9,85441$$

b. Standard Error

$$SEM_D = \frac{SD}{\sqrt{N-1}}$$

$$SEM_D = \frac{9,85441}{\sqrt{40-1}}$$

$$SEM_D = \frac{9,85441}{\sqrt{39}}$$

$$SEM_D = \frac{9,85441}{6,244998}$$

$$SEM_D = 1,57797$$

The result calculation showed the standard deviation of second test score was 9,85441 and the standard error of vocabulary score was 1,57797. The next step, the writer calculated the scores of mean, median, modus, standard deviation error of mean of vocabulary test in class A using SPSS 21.0 program as follows:

Table 4.21

The Table Calculation of Mean, Median, Modus, Standard Deviation, and Standard Error of Mean of the Second Test Scores of Class A

Using SPSS 21.0 Program

Statistics		
VAR00001		
N	Valid	40
	Missing	0
Mean		87.6750
Std. Error of Mean		1.80327
Median		87.0000
Mode		100.00
Std. Deviation		11.40487
Variance		130.071
Skewness		-.463
Std. Error of Skewness		.374
Kurtosis		-1.050
Std. Error of Kurtosis		.733
Range		33.00
Minimum		67.00

Maximum	100.00
Sum	3507.00

b. Distribution of Second Test Score of Class B

The students' score of the class B were presented in the following table:

Table 4.22
The Description of Second Test Score of the Data Achieved
by the students in Class B

NO	CODE	Score of Vocabulary	NO	CODE	Score of Vocabulary
1	AP	78	21	RA	67
2	AA	78	22	SM	67
3	A	73	23	SAR	87
4	BAA	78	24	SE	73
5	BI	73	25	Y	73
6	CFS	78	26	YO	67
7	DT	78	27	AK	87
8	DM	73	28	AN	67
9	Di	67	29	EM	73
10	DA	93	30	G	93
11	EV	73	31	HY	67
12	F	80	32	KM	67
13	IFF	60	33	HW	67
14	L	40	34	SS	73
15	MRA	60	35	WA	47
16	MDC	73	36	VSR	93
17	MFJ	47	37	YDR	53
18	MR	73	38	YJ	67
19	RT	67	39	TP	53
20	RM	67	40	K	53

Based on the data above, it can be seen that the students' highest score was 93 and the students' lowest score was 53. To determine the range of score the

class interval, and the interval temporary the writer calculated using formula as follows:

$$\text{The highest score (H)} = 93$$

$$\text{The lowest score (L)} = 40$$

$$\begin{aligned} \text{The range of score (R)} &= H-L+1 \\ &= 93-40+1 \\ &= 53+1 \\ &= 54 \end{aligned}$$

$$\begin{aligned} \text{The class interval (K)} &= 1+(3,3) \times \text{Log } 40 \\ &= 4,3 \times 1,60205991 \\ &= 6,888 \\ &= 7 \end{aligned}$$

$$\begin{aligned} \text{Interval of the temporary} &= R/K = 54/7 \\ &= 6 \text{ or } 7 \end{aligned}$$

So, the range of score was 54, the class interval was 7, it was presented using frequency distribution in the following table:

Table 4.23

The Frequency Distribution of the Second Test Score of the Class B

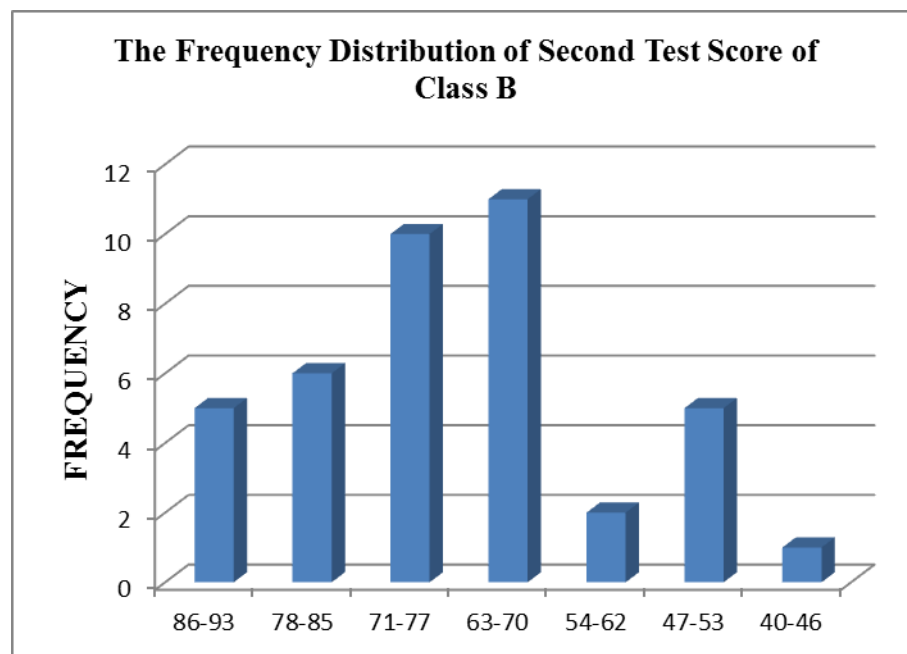
Class Interval (K)	Interval (I)	Frequency (f)	Mid-Point (x)	The Limitation of Each	Frequency Relative (%)	Frequency Cumulative (%)
1	86-93	5	89.5	85,5-93,5	12.5	100
2	78-85	6	81.5	77,5-85,5	15	87.5
3	71-77	10	74	70,5-77,5	25	72.5
4	63-70	11	66.5	63,5-70.5	27.5	47.5

5	54-62	2	58.5	53,5-62,5	5	20
6	47-53	5	50	46.5-53,5	12.5	15
7	40-46	1	43	39.5-46,5	2.5	2.5
Total		$\Sigma = 40$			$\Sigma = 100$	

The distribution of students' vocabulary score can also be seen in the following figure.

Figure 4.4

Histogram of Frequency Distribution of Second Test Score for Class B



The table figure above showed the second test score of the class B. It could be seen that there was one student who got 40-46. There were five students who got 47-53. There were two students who got 54-62. There were eleven students who got 63-70. There were ten students who got 71-77. There were six students who got 78-85. There were five students who got 86-93. The next step, the writer tabulated the score into the table for the calculation mean and median as follows:

Table 4.24

The Calculation of Mean, Median and Modus of the Second Test for Class B

Interval (I)	Frequency (f)	Mid – Point (x)	Fx	fk _b (b)	fka (b)
86-93	5	89.5	447.5	40	5
78-85	6	81.5	489	35	11
71-77	10	74	740	29	21
63-70	11	66.5	731.5	19	32
54-62	2	58.5	117	8	34
47-53	3	50	150	6	39
40-46	3	43	129	1	40
Total	Σ =40		Σ =2804		

From the table above, the data could be inserted in the formula of mean. In simple explanation, x is score of students; f is total students who got the score. fx is multiplication both x and f, fkb is the cumulative students calculated from under to the top, in other side fka is the cumulative students calculated from top to the under. The process of calculation used formula below:

a. Mean

$$M = \frac{\sum FX}{N}$$

$$M = \frac{2804}{40}$$

$$M = 70,1$$

The calculation above showed of mean value was 70.

b. Median

$$\begin{aligned} \text{Mdn} &= E + \frac{\frac{1}{2}N - f_{kb}}{f_i} \times xi \\ &= 62,5 + \frac{20-8}{11} \times 7 \end{aligned}$$

$$= 62,5 + \frac{12}{11} \times 7$$

$$= 62,5 + (1,09) \times 7$$

$$= 62,5 + 7,63$$

$$= 70,13$$

c. Modus

$$Mo = l \left(\frac{f}{f_a + f_b} \right) i$$

$$Mo = 62,5 + \left(\frac{10}{10+12} \right) \times 7$$

$$Mo = 62,5 + (0,45) \times 7$$

$$Mo = 62,5 + 3,15$$

$$Mo = 65,65 = 66$$

The calculation above showed of mean value was 70, median value was 70,13, and modus 66 of the second test score of class B. The last step, the writer tabulated the score of vocabulary test into the table for the calculation of standard deviation and the standard error as follows:

Table 4.25

**The Calculation of the Standard Deviation and Standard Error
of Second Test Score for Class B**

Interval (I)	Frequency (f)	Mid- Point (x)	fx	x'	fx'	fx'2
86-93	5	89.5	447.5	1	5	5
78-85	6	81.5	489	2	12	24
71-77	10	74	740	3	30	90
63-70	11	66.5	731.5	0	0	0
54-62	2	58.5	117	-1	-2	2
47-53	3	50	150	-2	-6	12

40-46	3	43	129	-3	-9	27
Total	$\Sigma = 40$		$\Sigma = 2804$		$\Sigma = 30$	$\Sigma = 160$

The table above used for calculate standard deviation and standard error by calculate standard deviation first. The process of calculation used formula below:

a. Standard Deviation

$$SD = i \sqrt{\frac{\Sigma fx^2}{N} - \frac{(Ff)^2}{N}}$$

$$SD = 7 \sqrt{\frac{160}{40} - \frac{(30)^2}{40}}$$

$$SD = 7 \sqrt{4 - 75}$$

$$SD = 7 \sqrt{4 - 0,5625}$$

$$SD = 7 \sqrt{3,4375}$$

$$SD = 7 \times 1,85404$$

$$SD = 12,97828$$

b. Standard Error

$$SEM_D = \frac{SD}{\sqrt{N-1}}$$

$$SEM_D = \frac{12,9783}{\sqrt{40-1}}$$

$$SEM_D = \frac{12,9783}{\sqrt{39}}$$

$$SEM_D = \frac{12,9783}{6,244998}$$

$$SEM_D = 2,07818$$

The result calculation showed the standard deviation of second test score was 12,9783 and the standard error of second test score was 12,07818. The next

step, the writer calculated the scores of mean, median, standard deviation error of mean of second test score in class B using SPSS 21.0 program as follows:

Table 4.26

The Table Calculation of Mean, Median, Standard Deviation, and Standard Error of Mean of the Second Test Scores of Class B Using SPSS 21.0 Program

Statistics		
N	Valid	40
	Missing	0
Mean		70.0750
Std. Error of Mean		1.92799
Median		73.0000
Mode		67.00
Std. Deviation		12.19371
Variance		148.687
Skewness		-.291
Std. Error of Skewness		.374
Kurtosis		.387
Std. Error of Kurtosis		.733
Range		53.00
Minimum		40.00
Maximum		93.00
Sum		2803.00

6. The Result of Data Normality and Homogeneity

a. Testing of Data Normality

One of the requirements in this research was the test of normality assumption. Related to data normality, Irianto states:

“The data of population will be normal if the mean same with the modus and median. It means that some of scores gather in the middle position,

meanwhile the frequency of average and low score show descent that more balance. Because of the descent of the low score frequency and the high score is balance, so that the down of curve line to right and left will be balance.”⁵⁸

Because of that, to measure the normality data used SPSS 21.0 program. The Normality of the first test Class A and Class B could be seen in the following table.

Table 4.27
Test of Normality Distribution Test on the First Test Score
Class A and Class B

One-Sample Kolmogorov-Smirnov Test		class a	Class b
N		40	40
Normal Parameters ^{a,b}	Mean	69.0000	60.0250
	Std. Deviation	16.51969	14.77782
Most Extreme Differences	Absolute	.142	.118
	Positive	.091	.090
	Negative	-.142	-.118
Kolmogorov-Smirnov Z		.912	.744
Asymp. Sig. (2-tailed)		.376	.637

a. Test distribution is Normal.

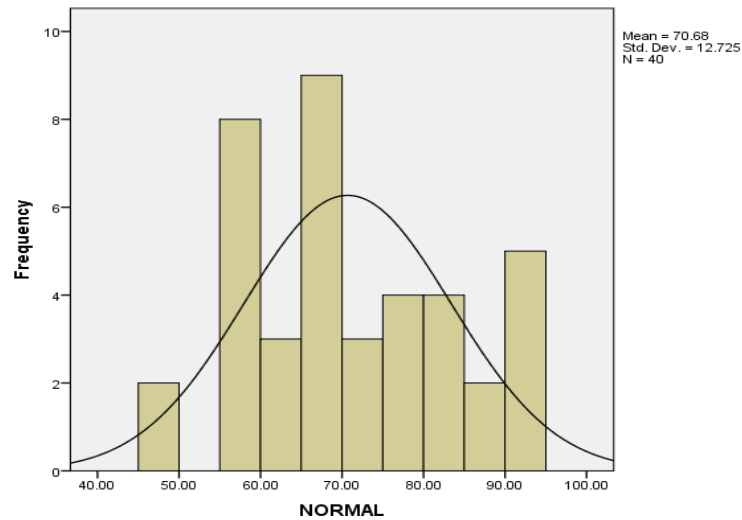
b. Calculated from data.

Based on the table above, it could be seen that the P value (Sig.) of the first test scores of the Class A is 0,376 and Class B is 0,637 which are higher than the level of significance (0.05). Thus, it could be concluded that the null hypothesis is accepted and the data were normally distributed.

⁵⁸AgusIrianto, *Staitistik: KonsepDasardanAplikasinya*, Jakarta: Prenada Media, 2004, p. 62

The Figure 4.5

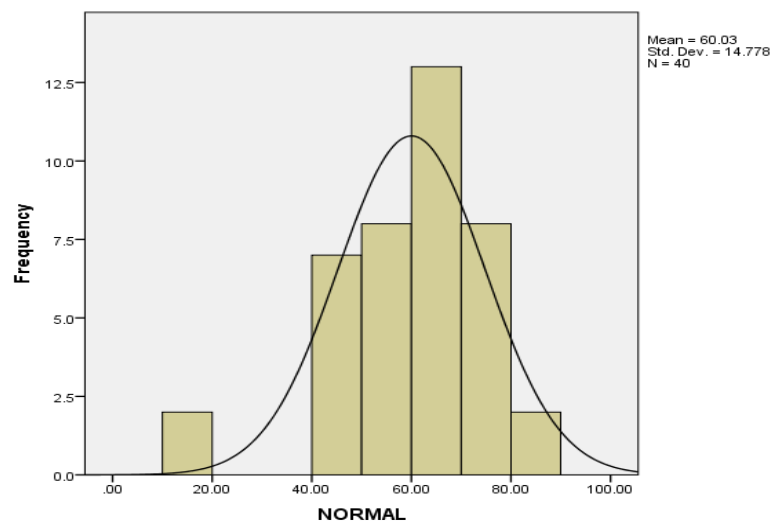
Histogram of Normality Distribution Test on the First Test of Class A



Based on the figure above, it could be conclude that normal curve of the score on the first test of class A is normally distributed.

The Figure 4.6

Histogram of normality Distribution Test on the First Test of Class B



Based on the figure above, it could be conclude that normal curve of the score on the first test of class B is normally distributed.

Table 4.28

**Test of Normality Distribution Test on the Second Test Score
Class A and Class B**

		class a	Class b
N		40	40
Normal Parameters ^{a,b}	Mean	87.6750	70.0750
	Std. Deviation	11.40487	12.19371
Most Extreme Differences	Absolute	.185	.200
	Positive	.140	.130
	Negative	-.185	-.200
Kolmogorov-Smirnov Z		1.171	1.268
Asymp. Sig. (2-tailed)		.129	.080

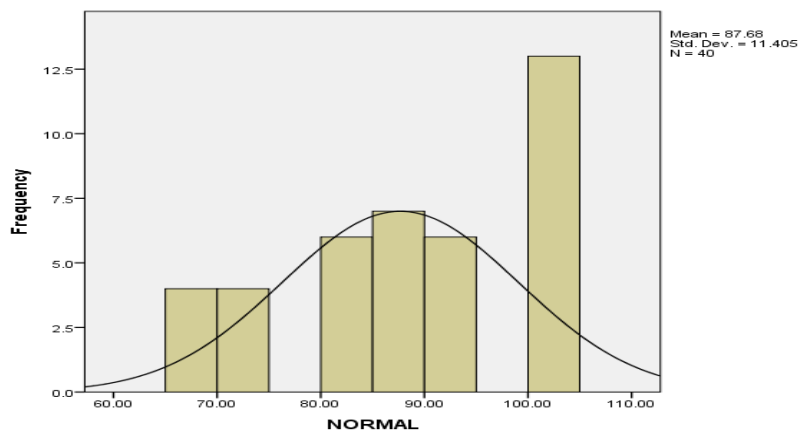
a. Test distribution is Normal.

b. Calculated from data.

Based on the table above, it could be seen that the P value (Sig.) of vocabulary test scores of the Class is 0,129 A and Class B are 0,080 which are higher than the level of significance (0.05). Thus, it could be concluded that the null hypothesis is accepted and the data were normally distributed.

The Figure 4.7

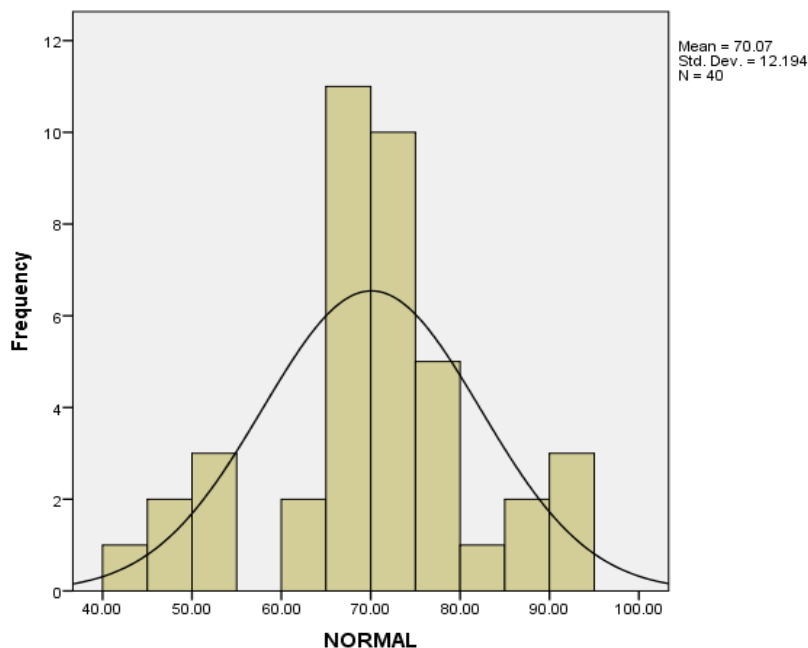
The Histogram of Normality Distribution Test on the Second Test of Class A



Based on the figure above, it could be conclude that normal curve of the score on the first test of class A is normally distributed.

The Figure 4.8

Histogram of Normality Distribution Test on the Second Test of Class B



Based on the figure above, it could be conclude that normal curve of the score on the second test of class A is normally distributed.

b. Testing of Data Homogeneity

In testing the homogeneity of the scores test on SPSS for windows was employed. Firstly, the hypothesis was stated as follows:

Ho: The variance of class A score and class B score are homogeneous.

After that, the homogeneity variance was computed. The next steps compared the result of homogeneity test with the level of significance at 0.05.

Table below showed the result of homogeneity test.

Table 4.29**Test of Homogeneity of Variance Result on the First Test Score****Class A and Class B****Test of Homogeneity of Variances**

VAR00002

Levene Statistic	df1	df2	Sig.
.031	1	78	.861

The significance value of test shown in the table is 0,861. Since the significance value is higher that the level of significance (0.05). Therefore, the null hypothesis of class A score could be accepted in which the variance of class B score in both classes are homogeneous.

Table 4.30**Test of Homogeneity of Variance Result on the Second Test Score****Class A and Class B****Test of Homogeneity of Variances**

VAR00002

Levene Statistic	df1	df2	Sig.
.116	1	78	.734

The significance value of test shown in the table is 0,734. Since the significance value is higher that the level of significance (0.05). Therefore, the null hypothesis of class A score could be accepted in which the variance of class B score in both classes are homogeneous.

B. The Result of Data Analysis

1. The Result of Significance First Test and Second Test of Class A

The writer calculated the significance different of first test and second test of class A. It meant that there is difference score between first test and second test of class A. The writer chosen the level of significance in 5%, it means that the level significance of the refusal null hypothesis in 5%. The writer decided the level of significance at 5% due to the hypothesis type stated on non-directional (two-tailed test).

Variable	Mean Difference	t _{table}		df/db
		5%	1%	
X ₂ -X ₁	18	2.00	2.66	78/60

Where:

X₂ : Mean of Second Test

X₁ : Mean of First Test

Based on the result of the first test and second test calculation, it was found that the value of mean difference was greater than the value of t_{table} at the level significance in 5% or 1% that was 2.00 <18> 2.66. It meant the mean first test and mean second test have difference is 18.

It could be interpreted based on the result or calculation that there is significant difference on learning style in first test and second test of Class A. The students' score have improvement in the second test.

2. The Result of Significance First Test and Second Test of Class B

The writer calculated the significance different of first test and second test of class B. It meant that there is difference score between first test and second test of class B. The writer chosen the level of significance in 5%, it means that the level significance of the refusal null hypothesis in 5%. The writer decided the level of significance at 5% due to the hypothesis type stated on non-directional (two-tailed test).

Variable	Mean Difference	t _{table}		df/db
		5%	1%	
X ₂ -X ₁	10	2.00	2.66	78/60

Where:

X₂ : Mean of Second Test

X₁ : Mean of First Test

Based on the result of the first test and second test calculation, it was found that the value of mean difference was greater than the value of t_{table} at the level significance in 5% or 1% that was 2.00 <10> 2.66. It meant the mean first test and mean second test have difference is 10.

It could be interpreted based on the result or calculation that there is significant difference on learning style in first test and second test of Class B. The students' score have improvement in the second test.

3. Testing Vocabulary Score Using t_{test}

The writer chosen the level of significance in 5%, it means that the level significance of the refusal null hypothesis in 5%. The writer decided the level of significance at 5% due to the hypothesis type stated on non-directional (two-tailed test). It meant that the hypothesis cannot directly the prediction of alternative hypothesis. To test the hypothesis of the study, the writer used t-test statistical calculation. First, the writer calculated the standard deviation and the standard error of X_1 and X_2 at the previous data presentation. It could be seen in this following table:

Table 4.31

The Standard Deviation and Standard Error of X_1 and X_2

Variable	The Standard Deviation	The Standard Error
X_1	9,85441	1,57797
X_2	12,97828	2,07818

Where :

X_1 = Class A

X_2 = Class B

The table showed the result of the standard deviation calculation of X_1 was 9,85441 and the result of the standard error was 1,57797. The result of the standard deviation calculation X_2 was 12,97828 and the result of the standard error calculation was 2,07818.

The next step, the writer calculated the standard error of the differences mean between X_1 and X_2 as follows:

Standard error of the Difference Mean Scores between Variable I and Variable II:

$$SE_{M1}-SE_{M2} = \sqrt{SE_{M1}^2 + SE_{M2}^2}$$

$$SE_{M1}-SE_{M2} = \sqrt{1,57797^2 + 2,07818^2}$$

$$SE_{M1}-SE_{M2} = \sqrt{2,48999 + 4,31888}$$

$$SE_{M1}-SE_{M2} = \sqrt{6,80887}$$

$$SE_{M1}-SE_{M2} = 2,60938$$

The calculation above showed the standard error differences mean between X_1 and X_2 was 2,60938. Then it was inserted the t_o formula to get the value of $t_{observed}$ as follows:

$$t_o = \frac{M1 - M2}{SE_{M1} - SE_{M2}}$$

$$t_o = \frac{88 - 70}{2,60938}$$

$$t_o = \frac{18}{2,60938}$$

$$t_o = 6,89819$$

$$t_o = 6,89819$$

With the criteria:

If $t_{test} (t_{observed}) \geq t_{table}$, H_a is accepted and H_o is rejected.

If $t_{test} (t_{observed}) \leq t_{table}$, H_a is rejected and H_o is accepted.

Then, the writer interpreted the result of t_{test} . Previously, the writer accounted the degree of freedom (df) with the formula:

$$Df = (N_1 + N_2) - 2$$

$$Df = (40 + 40) - 2$$

$$Df = 78$$

T_{table} at df 78/60 at the level of significant = 2.00

The writer choose the level of significance in 5%, it means that the level of significance of the refusal null hypothesis in 5%. The writer decided the level of significance at 5% due to the hypothesis typed stated on non-directional (two-tailed test). It meant that the hypothesis cannot direct the prediction of alternative hypothesis. The calculation above showed the result of t_{test} calculation as in the table follows:

Table 4.32

The Result of t_{test}

Variable	$t_{observed}$	t_{table}		df/db
		5%	1%	
$X_1.X_2$	6,89819	2.00	2.66	78/60

Where:

X1 : Class A

X2 : Class B

$t_{observed}$: The Calculated Value

t_{table} : The Distribution of t value

df/db : Degree of Freedom

Based on the result of hypothesis test calculation, it was found that the value of t_{observed} was greater than the value of t_{table} at the level significance in 5% or 1% that was $2.00 < 6,89819 > 2.66$. It meant H_a was accepted and H_o was rejected.

It could be interpreted based on the result or calculation that there is significant difference on learning style in vocabulary test of Class A and Class B. H_a stating that there is significant difference on learning style (visual, auditory, and kinesthetic) towards vocabulary mastery of the tenth grade students of SMK N 1 Palangka Raya is accepted and H_o stating that there is no significant difference on learning style (visual, auditory, and kinesthetic) towards vocabulary mastery of the tenth grade students of SMK N 1 Palangka Raya is rejected.

4. Testing Vocabulary Score Using SPSS Program

The writer also applied SPSS 21.0 program to calculate t-test in testing hypothesis of the study. The result of t-test using SPSS 21.0 was used to support the manual calculation of the t-test. The result of the test using SPSS program 21.0 could be seen as follows:

Table 4.33

The Standard Deviation and the Standard Error of X_1 and X_2

Using SPSS 21.0 Program

Group Statistics					
	CLASS	N	Mean	Std. Deviation	Std. Error Mean
SCORE	1.00	40	87.6750	11.40487	1.80327
	2.00	40	70.0750	12.19371	1.92799

The table showed the result of the standard deviation calculation of X_1 was 11,404878 and the result of the standard error mean calculation was 1,80327 . The result of the standard deviation calculation of X_2 was 12,19371 and the standard error mean calculation was 1,92799.

Table 4.34

The Calculation of T-test Using SPSS 21.0

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.116	.734	6.667	78	.000	17.60000	2.63988	12.34441	22.85559
Unequal variances not assumed			6.667	77.654	.000	17.60000	2.63988	12.34404	22.85596

The table showed the result of t-test calculating using SPSS 21.0 program. Since the result of Class A and Class B had difference score of variance, it meant the t-test calculation used at the equal variances not assumed. It found that the result of t_{observed} was 6,667, the result of mean difference between class A and class B was the standard error difference between class A and class B was 2,63988.

5. Interpretation

To examine the truth or the false null hypothesis stating that there are difference students' learning style in class A and class B toward vocabulary mastery, the result of t-test was interpreted on the result of degree of freedom to get the t_{table} . The result of degree of freedom (df) was 78/60, it found from the total number of the students in both class minus 2. The following table was the result of t_{observed} and t_{table} from df at the 5% and 1% significance level.

Table 4.35

The Result of T-test Using SPSS 21.0

Variable	T observed	T table		Df/db
		5%	1%	
X_1-X_2	6,667	2.00	2.66	78

Interpretation of the result of t-test using SPSS program, it was found the t-observe was greater that the t-table at 1% and 5% significance level or $2.00 < 6,667 > 2.66$. It means that H_a was accepted and H_o is rejected.

It could be interpreted based on the result or calculation that H_a stating that there is significant difference on learning style (visual, auditory, and kinesthetic) towards vocabulary mastery of the tenth grade students of SMK N 1 Palangka Raya is accepted and H_o stating that there is no significant difference on learning style (visual, auditory, and kinesthetic) towards vocabulary mastery of the tenth grade students of SMK N 1 Palangka Raya is rejected.

C. The Comparison between the Result of Learning Style of Class A and Learning Style of Class B

1. The Result of First Test

The comparison of the beginning of the students on vocabulary mastery in the first test without their learning style could be seen through the following table:

Table 4.36

The Comparison of the First Test of the student in Class A and Class B

Interval	Category/ Predicate	Sum Of Respondent							Percentage		
		Class A			T O T A L	Class B			T O T A L	Class A	Class B
		V	A	K		V	A	K			
70-100	Master	15	1	1	17	4	6	1	11	47,5%	27,5%
0-<70	Not Master	15	4	1	20	11	8	10	29	50%	72,5%

Based on the table above, it is known that there were 20 (50%) students were 15 visual learners, 4 auditory learners, and 1 kinesthetic learner from class A students score at 0-<70 who have did not master vocabulary, and there were 30 students (72,5%) were 11 visual learner, 6 auditory learners, and 10 kinesthetic

learner from class B who have score at $< 0-70$ who have did not master vocabulary.

Therefore, there were 19 students (47,5%) were 15 visual learners, 1 auditory learners, and 1 kinesthetic learners from class A at 70-100 who had master vocabulary. Therefore, there were 11 students (27,5%) were 4 visual learners, 6 auditory learners, and 1 kinesthetic learner from class A at 70-100 who had master vocabulary.

Meanwhile, there were 3 students (7,5%) who have multiple learning style. They have the high score in first test. The score of them is 91.

From the explanation above, it could be known that there is no significance difference between learning style of class A and class B were same. The percentage of students class A and class B still fewer than 50% to master vocabulary.

Table 4.37

The Comparison of the Second Test of the student in Class A and Class B

Interval	Category/ Predicate	Sum Of Respondent							Percentage		
		Class A			T O T A L	Class B			T O T A L	Class A	Class B
		V	A	K		V	A	K			
70-100	Master	28	3	2	33	11	8	2	21	82,5%	52.5%
0-<70	Not Master	2	2	0	4	4	6	9	19	10%	40%

Based on the table above, it is known that there were 4 (10%) students, 2 visual learner, 2 auditory learners, and 0 kinesthetic learner from class A students score at $0 < 70$ who have did not master vocabulary, and there were 19 students (40%) were 4 visual learner, 6 auditory learner, and 9 kinesthetic learner from class B who have score at $< 0-70$ who have did not master vocabulary.

Therefore, there were 33 students (82,5%) were 28 visual learner, 3 auditory learner, and 2 kinesthetic learners from class A at 70-100 who had master vocabulary. Therefore, there were 21 students (52,5%) were 1 visual learners, 8 auditory learners, and 2 kinesthetic learners from class B at 70-100 who had master vocabulary.

Meanwhile, there were 3 students (7,5%) who have multiple learning style. They have the high score in second tests. The score of them are 91 and 100.

From the explanation above, it could be known that there was significance difference between learning style of class A and class B. It meant that the students style on vocabulary after was gave the vocabulary test based on their learning style were difference. It could be seen through the comparison of the sum of student who master and not master vocabulary. While, the comparison of learning style of class A and class B was significant.

If the result on the table on the table was compare with the table first test result, it was known that there was increasing of students' learning style after got the vocabulary test based on their learning style. It could be seen through the increasing on category. Where on the result of first test, there were not many

students who have master category. While on the second test, there were some students who have master category. It meant that after did the second test based on their learning style, there was increasing on vocabulary both class A and class B.

D. Discussion

The result of data analysis showed that the questionnaire in chapter IV to identifying student's learning style towards vocabulary mastery of tenth grade students of SMK N 1 Palangka Raya. From the questionnaire was found that students' visual style or visual learner is 45 students that 30 students of class A and 15 students of class B, students' auditory style or auditory learner is 5 students' that 14 students of class B and 5 students of class A, students' kinesthetic style or kinesthetic learner is 19 students' who 2 students of class A and 11 students of class B, and 3 students have multiple learning style of class A. Most of the tenth grade students of SMK N 1 Palangka Raya are visual learner in mastering vocabulary. It can be seen the percentage of visual learner is 56,25%, auditory learner is 23,75%, kinesthetic learner is 16,25%, and multiple learner 3,75%. Most of the tenth grade students of SMK N 1 Palangka Raya are visual learner in mastering vocabulary. In the chapter II at the page 15, according to Dunn, visual learners tend to prefer reading and studying charts, drawing, and other graphic information. The students strong to remember what they see than they hear. The students who have multiple learning styles got the high score in the first and second test. Then, in the chapter II at the page 16, brown says that auditory learners prefer listening to lectures and audiotapes. And kinesthetic learner will show a preference for demonstration and physical activity involving body movement. It could be shown from the previous study in the chapter II at the page 13 a study entitle "The Influence of Learning Styles (Visual, Auditory, and kinesthetic) towards vocabulary mastery at the second year students of MAN

Salatiga in the Academic year of 2012-2013” by Nur Khafifudin that the research said there were influence learning style towards vocabulary mastery.

The result of data analysis showed that there was significant difference learning style towards vocabulary mastery of the tenth grade students of SMK N 1 Palangka Raya. The students of class A who have the highest on the visual style in second test with mean score (88) than those students of class B who have both learning style in second test with mean score (70). Moreover, after the data calculated using T-test with level 5% of significant. It was found that t_{observed} was higher than t_{table} .

The students, learning style of class A have significant difference on vocabulary mastery than class B at the tenth grade students of SMK N 1 Palangka Raya. It can be seen first from the vocabulary score of class A and class B $2.00 < 6,89819 > 2.66$. It indicated that there is significant difference on the learning style of class A and Class B towards vocabulary mastery of the tenth grade students of SMK N 1 Palangka Raya. Meanwhile, after the data were calculated using t_{test} formula using manual calculation showed that t_{observed} was 6,89819. By comparing the t_{observed} with the t_{table} . It was found that t_{observed} was higher than the value of t_{table} at 1% and 5% significance level or $2.00 < 6,89819 > 2.66$.

It could be concluded there was significant difference of score at the first test and the second test. In the first test meeting, the students gave the first test was not depending of their learning style. The students answered all of learning style item. In the second test meeting, the students gave the second test was depending their learning style. The students answered the item based on their learning style. The

result showed that the students' score of the first test have the mean score (class A 70 class B 58). Then, the students' score have difference when they answered the test based on their learning style. The results showed that the students' score of the second test have the mean score (class A 88 and class B 70). In the chapter II page 14, Brown defines that learning styles as the manner in which individuals perceive and process information in learning situation.

The result supported by theory about the learning style is a way to students to learn English. There are some reason how the learning style can give the way to students' vocabulary mastery, that are about the learning style in learning process, such as the students' will be more interesting to learn, the students will be easy to comprehend knowledge based on their learning style, the teacher will be more easy to teach the students if the teacher know the students' learning style.

Other reason was in teaching learning process, the technique or the style is the best way for teaching vocabulary. DePorter said "Learning style is the way and technique that is used to learn information and knowledge. DePorter said "Learning style is the way and technique that is used to learn information and knowledge. It helps students learn more fast and easier with selecting and using the appropriate learning style that they like".⁵⁹ It could be shown how the learning style gives the best way towards vocabulary mastery of the tenth grade students of SMK N 1 Palangka Raya. Based on the result, the visual learner had the highest score towards vocabulary mastery and auditory learner had the lowest score

⁵⁹NurKhafifudin, "*The Influence of Learning Styles (Visual, Auditory, Kinesthetic) Towards Vocabulary Mastery at the Second Year Students of MAN Salatiga in the Academic Year 2012-2013*", Thesis S1 Programme, State Institue For Islamic Studies(STAIN) Salatiga, 2013

towards vocabulary mastery. The students will be enjoying in learning process if they can remember the vocabulary with their learning style.

In this case, the writer did not found problems when conducting the study in giving the questionnaire and instrument test to the students, because the students still like to study together.