## CHAPTER IV

## RESEARCH FINDING AND DISCUSSION

This chapter discussed about the research finding and discussion. Research finding in this case consisted of description of the data of the third students TBI of IAIN Palangka Raya and the result of the data analyze (testing hypothesis using manual calculations and testing hypothesis using SPSS 16 program).

## A. Research Finding

In this section would be describe the obtained data of vocabulary mastery of the third semester students of English education study program of IAIN Palangka Raya. The presented consisted of Mean, Median, Modus, Standard Deviation, Testing Validity and Reliability, Testing Normality, Index of Difficulties, Data Interpretation, and The Result of Analyze.

## B. Description of The Data and Data Presentation

The writer choose random class sampling in other to the writer can classify into two classess, the first class for trying out and the second for study class. The test done in first class the study of writing class that category B class, the test about the students of mastery vocabulary with number of test 140 items, and the last class are the study of writing class that category $\mathrm{A}, \mathrm{B}$, and C class with the test about the students of mastery vocabulary with number of test 100 items. When the research took the data in all of the classes, there were
students did not following the vocabulary mastery level of the third semester students of English education study program of IAIN Palangka Raya. The presented data consisted of the score test score. The components below such as noun, verb, and adjective. From the table above it can be seen where the highest score and the lowest score.

The data presentation of the score of the third semester students shown in the table frequency distribution, the chart of frequency distribution, the measurement of central tendency (mean, median, and modus) and the measurement of standard deviation.

Based on the items of the test in vocabulary mastery level of third semester students of English education study program of IAIN Palangka Raya, the writer constructed the description the students score of research class.

Table 4.1

## The Description of Students' Score Test

Based on the Vocabulary Mastery Level of Third Semester A Class

| NO | NAME | SCORE |
| :---: | :---: | :---: |
| $\mathbf{1}$ | FA | 67 |
| $\mathbf{2}$ | DR | 57 |
| $\mathbf{3}$ | NADP | 58 |
| $\mathbf{4}$ | M | 64 |
| $\mathbf{5}$ | DW | 74 |
| $\mathbf{6}$ | AFSP | 41 |
| $\mathbf{7}$ | I | 66 |
| $\mathbf{8}$ | AH | 60 |
| $\mathbf{9}$ | AP | 44 |
| $\mathbf{1 0}$ | H | 60 |
| $\mathbf{1 1}$ | NA | 61 |


| $\mathbf{1 2}$ | NS | 60 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 3}$ | RW | 55 |  |  |
| $\mathbf{1 4}$ | A | 57 |  |  |
| $\mathbf{1 5}$ | MA | 64 |  |  |
| $\mathbf{1 6}$ | Y | 62 |  |  |
| $\mathbf{1 7}$ | FMR | 58 |  |  |
| $\mathbf{1 8}$ | ST | 62 |  |  |
| $\mathbf{1 9}$ | MT | 31 |  |  |
| $\mathbf{2 0}$ | DS | 79 |  |  |
| $\mathbf{2 1}$ | TI | 56 |  |  |
| $\mathbf{2 2}$ | RH | 56 |  |  |
| $\mathbf{2 3}$ | SF | 44 |  |  |
| TOTAL |  |  |  | $\mathbf{1 3 3 6}$ |

Based on the study data above, there was 3 student's absent, it can be seen the student's there was 2 student's interpretation good, there was 10 student's interpretation fair, there was 7 student's interpretation poor, and there was 4 student's interpretation very poor.

Table 4.2
Data Interpretation A Class

| NO | Student's | Interpretation | Value |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 0 | Very Good | A |
| $\mathbf{2}$ | 2 | Good | B |
| $\mathbf{3}$ | 10 | Fair | C |
| $\mathbf{4}$ | 7 | Poor | D |
| $\mathbf{5}$ | 4 | Very Poor | E |

Table 4.3
The Description of Students' Score Test
Based on the Vocabulary Mastery Level of Third Semester B Class

| NO | NAME | SCORE |
| :---: | :---: | :---: |
| $\mathbf{1}$ | PRS | 75 |
| $\mathbf{2}$ | MI | 70 |
| $\mathbf{3}$ | SW | 69 |
| $\mathbf{4}$ | K | 64 |
| $\mathbf{5}$ | DTH | 77 |
| $\mathbf{6}$ | EAA | 74 |
| $\mathbf{7}$ | TT | 66 |
| $\mathbf{8}$ | SH | 71 |
| $\mathbf{9}$ | IS | 46 |
| $\mathbf{1 0}$ | S | 74 |
| $\mathbf{1 1}$ | WN | 70 |
| $\mathbf{1 2}$ | RA | 87 |
| $\mathbf{1 3}$ | DKN | 79 |
| $\mathbf{1 4}$ | R | 56 |
| $\mathbf{1 5}$ | A | 56 |
| $\mathbf{1 6}$ | AN | 82 |
| $\mathbf{1 7}$ | FM | 71 |
| $\mathbf{1 8}$ | RR | 80 |
| $\mathbf{1 9}$ | IR | 31 |
| $\mathbf{2 0}$ | TOTAL | 28 |
|  | $\mathbf{1 3 2 6}$ |  |

Based on the study data above, there was 4 student's absent, it can be seen the student's there was 3 student's interpretation very good, there was 9 student's interpretation good, there was 3 student's interpretation fair, there was 2 student's interpretation poor, and there was 3 student's interpretation very poor.

Table 4.4
Data Interpretation B Class

| NO | Student's | Interpretation | Value |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 3 | Very Good | A |
| $\mathbf{2}$ | 9 | Good | B |
| $\mathbf{3}$ | 3 | Fair | C |
| $\mathbf{4}$ | 2 | Poor | D |
| $\mathbf{5}$ | 3 | Very Poor | E |

Table 4.5
The Description of Students' Score Test
Based on the Vocabulary Mastery Level of Third Semester C Class

| NO | NAME | SCORE |
| :---: | :---: | :---: |
| 1 | A | 70 |
| 2 | BL | 67 |
| 3 | DR | 64 |
| 4 | DSW | 61 |
| 5 | ES | 60 |
| 6 | FF | 55 |
| 7 | LAR | 57 |
| 8 | MR | 71 |
| 9 | NH | 46 |
| 10 | NA | 69 |
| 11 | N | 70 |
| 12 | RH | 36 |
| 13 | RJ | 29 |
| 14 | RAA | 73 |
| 15 | SF | 82 |
| 16 | SP | 56 |


| 17 | S | 56 |
| :---: | :---: | :---: |
| 18 | YSS | 81 |
| TOLAL |  | $\mathbf{1 1 0 3}$ |

Based on the study data above, there was 4 student's absent, it can be seen the student's there was 2 student's interpretation very good, there was 4 student's interpretation good, there was 5 student's interpretation fair, there was 4 student's interpretation poor, and there was 3 student's interpretation very poor.

Table 4.6
Data Interpretation C Class

| NO | Student's | Interpretation | Value |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 2 | Very Good | A |
| $\mathbf{2}$ | 4 | Good | B |
| $\mathbf{3}$ | 5 | Fair | C |
| $\mathbf{4}$ | 4 | Poor | D |
| $\mathbf{5}$ | 3 | Very Poor | E |

Table 4.7
The Description of Students' Score Test Based on the Vocabulary Mastery Level of Third Semester

| NO | Name | Score |
| :---: | :---: | :---: |
| 1 | FA | 67 |
| 2 | DR | 57 |
| 3 | NADP | 58 |
| 4 | M | 64 |
| 5 | DW | 74 |
| 6 | AFSP | 41 |
| 7 | I | 66 |
| 8 | AH | 60 |
| 9 | AP | 44 |
| 10 | H | 60 |
| 11 | NA | 61 |
| 12 | NS | 60 |
| 13 | RW | 55 |
| 14 | A | 57 |
| 15 | MA | 64 |
| 16 | Y | 62 |
| 17 | FMR | 58 |
| 18 | ST | 62 |
| 19 | MT | 31 |
| 20 | DS | 79 |
| 21 | TI | 56 |
| 22 | RH | 56 |
| 23 | SF | 44 |
| 24 | PRS | 75 |
| 25 | MI | 70 |


| 26 | SW | 69 |
| :---: | :---: | :---: |
| 27 | K | 64 |
| 28 | DTH | 77 |
| 29 | EAA | 74 |
| 30 | TT | 66 |
| 31 | SH | 71 |
| 32 | IS | 46 |
| 33 | S | 74 |
| 34 | WN | 70 |
| 35 | RA | 87 |
| 36 | DKN | 79 |
| 37 | R | 56 |
| 38 | RN | 56 |
| 39 | A | 82 |
| 40 | AN | 71 |
| 41 | FM | 80 |
| 42 | RR | 31 |
| 43 | IR | 28 |
| 44 | A | 70 |
| 45 | BL | 67 |
| 46 | DR | 64 |
| 47 | DSW | 61 |
| 48 | ES | 60 |
| 49 | FF | 55 |
| 50 | LAR | 57 |
| 51 | MR | 71 |
| 52 | NH | 46 |
| 53 | NA | 69 |
| 54 | N | 70 |
| 55 | RH | 36 |


| $\mathbf{5 6}$ | RJ | 29 |
| :---: | :---: | :---: |
| $\mathbf{5 7}$ | RAA | 73 |
| $\mathbf{5 8}$ | SF | 82 |
| $\mathbf{5 9}$ | SP | 56 |
| $\mathbf{6 0}$ | S | 56 |
| $\mathbf{6 1}$ | YSS | 81 |

Based on the study all of the data above, it can be seen student's highest score was 87 and the student's lowest score was 28 . To determine range of the score, the calss interval, and interval of temporary, the writer calculated using formula as follows:

The Highest Score (H) : 87

The Lowest Score (L) : 28

The Range of Score (R) : H $-\mathrm{L}+1$
: 87-28 + 1
: 60

The Class Interval (K) : $1+(3.3) \times \log n$
$: 1+(3.3) \times \log 61$
$: 1+(3.3) \times 1.78$
$: 1+5.89$
: 6.89 (7)

Interval of Temporary (I) $: \frac{R}{K}=\frac{60}{7}$
$: 8.57142$
: 9

The range of score was 60 , the class interval was 7 , and interval of temporary was 9 . It was presented using frequency distribution in the following table :

Table 4.8
Frequency Distribution of Students

| No | Interval <br> (I) | Frequency <br> (F) | Mid Point <br> $(\mathbf{X})$ | The Limitation of Each <br> Group |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $82-90$ | 3 | 86 | $81.5-90.5$ |
| 2 | $73-81$ | 10 | 77 | $72.5-81.5$ |
| 3 | $64-72$ | 17 | 68 | $63.5-72.5$ |
| 4 | $55-63$ | 21 | 59 | $54.5-63.5$ |
| 5 | $46-54$ | 2 | 50 | $45,5-54.5$ |
| 6 | $37-45$ | 3 | 41 | $36,5-45,5$ |
| 7 | $28-36$ | 5 | 32 | $27,5-26.5$ |
| Total |  |  |  |  |

The distribution of the score students can also be seen in the following chart:

Table 4.9
Figure of Interval, Frequency, and Mid Point


It can be seen from the figure above about the score of students. There were three students who got score between $82-90$. There were ten students also who got score between $73-81$. So, there were seventeen students who got score $64-72$. There were twenty students who got score $55-63$. There were two students who got score between $46-54$. Also, there were three students who got score between $37-45$. Then there were five students got score between $28-36$. The next step
is, the writer tabulated the scores into table for the calculating of mean, median and modus as follows:

Table 4.10
The Calculation Mean, Median, Modus

| No | Interval <br> (I) | Frequency <br> (F) | Mid <br> Point <br> $(\mathbf{X})$ | FX | Fkb | Fka |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $82-90$ | 3 | 86 | 258 | 61 | 3 |
| 2 | $73-81$ | 10 | 77 | 770 | 58 | 13 |
| 3 | $64-72$ | 17 | 68 | 1156 | 48 | 30 |
| 4 | $55-63$ | 21 | 59 | 1239 | 31 | 51 |
| 5 | $46-54$ | 2 | 50 | 100 | 10 | 53 |
| 6 | $37-45$ | 3 | 41 | 123 | 8 | 56 |
| 7 | $28-36$ | 5 | 32 | 160 | 5 | 61 |
|  | Total | $\mathbf{N}=\mathbf{6 1}$ |  | $\sum \mathbf{F X}=\mathbf{3 8 0 6}$ |  |  |

a. Mean

$$
\mathrm{M}_{\mathrm{x}}=\frac{\Sigma f X}{N}
$$

$$
\begin{aligned}
& =\frac{3806}{61} \\
& =62.39
\end{aligned}
$$

b. Median

$$
\begin{aligned}
\operatorname{Mdn} & =1+\left(\frac{\frac{1}{2} N-f k b}{f i}\right) \mathrm{X} i \\
& =45,5+\left(\frac{30.5-10}{21}\right) \times 9
\end{aligned}
$$

$$
\begin{aligned}
& =45,5+(0,9) \mathrm{X} 9 \\
& =45,5+8,1 \\
& =53,6
\end{aligned}
$$

c. Modus

$$
\begin{aligned}
\text { Mo } & =1+\left(\frac{f a}{f a+f b}\right) \mathrm{X} i \\
& =45,5+\left(\frac{17}{14+2}\right) \times 9 \\
& =45,5+(1,06) \times 9 \\
& =45,5+9,54 \\
& =55,04
\end{aligned}
$$

The calculation above showed of mean value of students was 62.39 , median value was 53.6 , and modus was 55.04 . Then the writer tabulated the score into table of standard deviation as follows:

Table. 4.11
The Calculation of Standard Deviation

| No | Interval | $\mathbf{f}$ | Fkb | Fka | Persentase | X | fX | X2 | FX2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $87-79$ | 7 | 61 | 7 | 11 | 83 | 581 | 6889 | 48223 |
| 2 | $78-70$ | 13 | 54 | 20 | 21 | 74 | 962 | 5476 | 71188 |
| 3 | $69-61$ | 14 | 41 | 34 | 23 | 65 | 910 | 4225 | 59150 |
| 4 | $60-51$ | 17 | 27 | 51 | 28 | 56 | 952 | 3136 | 53312 |
| 5 | $50-42$ | 4 | 10 | 55 | 7 | 46 | 184 | 2116 | 8464 |
| 6 | $41-33$ | 2 | 6 | 57 | 3 | 37 | 74 | 1369 | 2738 |
| 7 | $32-24$ | 4 | 4 | 61 | 7 | 28 | 112 | 784 | 3136 |
| Total |  | $\mathbf{6 1}$ |  |  | $\mathbf{1 0 0}$ |  | $\mathbf{3 7 7 5}$ | $\mathbf{2 3 9 9 5}$ | $\mathbf{2 4 6 2 1 1}$ |

$\mathrm{SD}=\sqrt{\frac{\Sigma f x^{2}}{N}}$

$$
\begin{aligned}
& =\sqrt{\frac{246211}{61}} \\
& =63.53
\end{aligned}
$$

From the calculation above, the result of standard deviation of the students was 63.53.

## C. Testing Validity and Reliability

The writer tabulated the score into table of the Coefision correlation Pearson product. Totally responden of students were 61. The total score of third semester students in A class was 1232, B class was 3123 and C class was 1103 (see in appendix 15) the writer used SPSS 16 to prove the calculation, as following table.

Table 4.12

## Level of Significance of Reliability Test Correlations

|  |  | A | B | C |
| :---: | :---: | :---: | :---: | :---: |
| A | Pearson Correlation | 1 | .198 | .339 |
|  | Sig. (2-tailed) |  | .402 | .168 |
|  | N | Pearson Correlation | .198 | 1 |
|  | Sig. (2-tailed) | .402 |  | -.255 |
|  | N | 20 | 20 | .308 |
|  |  |  | 18 |  |


| C | Pearson Correlation | .339 | -.255 | 1 |
| :---: | :---: | :---: | :---: | :---: |
|  | Sig. (2-tailed) | .168 | .308 |  |
|  | N | 18 | 18 | 18 |

From the table above it can be seen the level of significance was 0.402 . the test can be said reliable, if the probability was higher than 0.05 . So, it can be conclude that the level of significance 0.402 was higher than 0.05 and it can be stated that the test was reliable.

## D. Testing Normalitas

Normality test is used to know the normality of the data, whether both groups have normal distribution or not. In this case, the SPSS program 16 was applied. It can be seen in the following table.

Table 4.13
The Level Significance of the Normality Test One-Sample Kolmogorov-Smirnov Test

|  |  | A | B | C |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 23 | 20 | 18 |
| Normal Parameters $^{\mathrm{a}}$ | Mean | 58.09 | 66.30 | 61.28 |
|  | Std. Deviation | 10.436 | 15.818 | 13.999 |
| Most Extreme <br> Differences | Absolute | .210 | .218 | .160 |
|  | Positive | .112 | .110 | .090 |


|  | Negative | -.210 | -.218 | -.160 |
| :---: | :---: | :---: | :---: | :---: |
| Kolmogorov-Smirnov Z | 1.006 | .974 | .680 |  |
| Asymp. Sig. (2-tailed) | .264 | .299 | .744 |  |
| a. Test distribution is Normal. |  |  |  |  |

From the table above, level of significance class A was 0.264 , class B was 0.299 and class C was 0.744 . The data were normal if the value of the probability was higher than 0.05 . It can be said that the data were normal, because the significance of class A was 0.264 , class $B$ was 0.299 and class $C$ was 0.744 was higher than 0.05 . Then it can be concluded test distribution is normal.

## E. Index of Difficulties

The writer used index of difficulties to know how difficult and easy items. After calculating the data, the writer got the number of two criteria of it, such as fair and easy items. Based on the data, there are 6 students assumed that the test was in fair criteria. So, there are 55 students assumed that the test was in easy criteria. It is proved by the level of difficult items. (see on appendix 13)

## F. Data Interpretation

Finding the average score of the students' vocabulary mastery, the formula is:

Table 4.14
Distribution Frequency and Presentation Score of the Students' Mastery

## Level in Vocabulary Size of IAIN Palangka Raya

| No | Level | Interpretation | Letter Value |
| :---: | :---: | :---: | :---: |
| 1 | $80-100$ | Very good | A |
| 2 | $70-<80$ | Good | B |
| 3 | $60-<70$ | Fair | C |
| 4 | $50-<60$ | Poor | D |
| 5 | $0-<50$ | Very poor | E |

$$
\begin{aligned}
S & =\frac{\mathrm{R}}{\mathrm{~N}} \\
& =\frac{3765}{61} \\
& =\mathbf{6 1 . 7 2}
\end{aligned}
$$

Notes:
S = The Average Score of the Students' Mastery
R = The Total Students' Score (the right answers)
$\mathrm{N} \quad=$ The Number of Students

It can be seen from the table above, the interpretation of students vocabulary mastery was fair, based on the result above, the average score of students' mastery was 61.72

## G. The Result of Data Analyze

The result of data analysis showed that the interpretation of students' vocabulary mastery was fair. It based on the result of the average score (61.72). It could be proved from the result of the scores. Then it was found the mean of the students' vocabulary mastery 62.39 and the deviation standard was 63.53. Futhermore, to prove the test was reliable or unreliable, the writer used spss 16 to prove it, and the result stated that the test was reliable based on the level of significance (0.402). It stated that the level significance was higher than 0.05 .

In the next up is about normality of the test, the writer analyzed itby using spss 16, and the result stated that the data was normal, the data were normal if the value of the probability was higher than 0.05 . It can be said that the data were normal, because the significance of class A was 0.264 , class B was 0.299 and class C was 0.744 was higher than 0.05 . Then it can be concluded test distribution is normal.

