CHAPTER IV

FINDING AND DISCUSSION

A. FINDINGS

1. Brief History about SMPN 1 Kalumpang Kandangan

This research is held at SMPN 1 Kalumpang Kandangan that is located on Datu Durabo street, Kalumpang, Kalumpang district, South Hulu Sungai Regency, Post code 71262. It is about 15 kilometers from the capital of South Hulu Sungai Regency (Kandangan). This school was built in June 1983.

In academic year 1983, SMPN 1 Kalumpang began teaching and learning activity with the first headmaster was Mr. H. M. Arifin.

2. The Headmaster Description of SMPN 1 Kalumpang Kandangan

Since the school runs the headmaster has changed for six times from the year 1983 until now. To know more closely about the headmaster period condition, it can be seen in appendix 1.

3. Description about Teachers, Administration Staff, Students and Facilities of SMPN 1 Kalumpang Kandangan

a. Teacher

Today, SMPN 1 Kalumpang Kandangan has 18 teachers included the headmaster and vice of headmaster. There are 18 permanent teachers at school who have been teaching different subjects and have different educational background and status. To know more information about the teachers' condition, it can be seen in appendix 2.

Based on the writer's observation, this school has an English teacher in SMPN 1 Kalumpang Kandangan. She is Hj. Siti Arpah, S.Pd.

Hj. Siti Arpah was born in Ulin (Hulu Sungai Regency) on July 16th, 1962 with background of education S1 in UNLAM, English Department. She has taught for 29 years in 1984 until now.

b. Administration Staff and Other Employee

In 2012, SMPN 1 Kalumpang has 6 employees, three persons of administration staff, one person as security, and two persons as librarian. Further information about employee can be seen in appendix 3.

c. Students

In the academic year 2012/2013, the total numbers of students who are administratively registered at SMPN 1 Kalumpang are 108 persons. They are 38 students from class VII, 43 students are from class VIII, and 27 students are from class IX. To make clear, the data can be seen in appendix 4.

d. Facilities

Based on the writer observation, the facilities at SMPN 1 Kalumpang are quite many. So, they are adequate to run the teaching learning process. There are some buildings of the school such as classroom, office, library and laboratory. To know more about the data, it can be seen in appendix 5.

4. Description about The Students' Achievement in Learning Vocabulary by Using Pictures

To better understand about the students' achievement in learning vocabulary by using pictures, the writer conducted the vocabulary test of English lesson on November 2nd, 2012.

Based on the result of vocabulary test of English lesson at seventh grade of SMPN 1 Kalumpang Kandangan academic year 2012/2013, it is found the data that the highest score is 100 and the lowest is 67. The accumulated score is 3610. The vocabulary test result can be seen on the following table:

Table 4.1 The Test Result of Students' Achievement in Learning Vocabulary by Using Pictures

| Number | Subject | Score |
|--------|---------|-------|
| 1. | A | 80 |
| 2. | В | 89 |
| 3. | С | 98 |
| 4. | D | 98 |
| 5. | Е | 67 |
| 6. | F | 98 |
| 7. | G | 100 |
| 8. | Н | 90 |
| 9. | I | 95 |
| 10. | J | 95 |
| 11. | K | 95 |
| 12. | L | 98 |
| 13. | M | 92 |
| 14. | N | 91 |
| 15. | О | 99 |
| 16. | P | 100 |
| 17. | Q | 98 |
| 18. | R | 100 |
| 19. | S | 96 |
| 20. | T | 96 |
| 21. | U | 100 |
| 22. | V | 99 |
| 23. | W | 95 |
| 24. | X | 97 |
| 25. | Y | 100 |
| 26. | Z | 98 |
| 27. | A1 | 95 |
| 28. | B1 | 100 |
| 29. | C1 | 73 |
| 30. | D1 | 98 |
| 31. | E1 | 100 |
| 32. | F1 | 99 |

Continuing of Table 4.1

The Test Result of Students' Achievement in Learning Vocabulary by Using
Pictures

| Number | Subject | Score |
|--------|---------|-------|
| 33. | G1 | 100 |
| 34. | H1 | 98 |
| 35. | I1 | 92 |
| 36. | J1 | 98 |
| 37. | K1 | 99 |
| 38. | L1 | 94 |

Table 4.2 Classifying students' score of learning vocabulary achievement by using pictures at seventh grade of SMPN 1 Kalumpang Kandangan

| No | Category | Score | Frequency | Percentage |
|----|-----------|----------|-----------|------------|
| 1 | Excellent | 80 - 100 | 36 | 94.74 |
| 2 | Good | 70 -< 80 | 1 | 2.63 |
| 3 | Fair | 60 -< 70 | 1 | 2.63 |
| 4 | Low | 50 -< 60 | - | - |
| 5 | Poor | 0 -< 50 | - | - |
| | Total | | N = 38 | 100 |

From the data above, which shows the students achievement in learning vocabulary by using pictures based on its category, there are 36 students (94.74%) who get the score 80-100 in excellent category, 1 student (2.63%) who get the score 70 -< 80 is good category, 1 student (2.63%) who get the score 60 -< 70 is fair category, and no one in low and poor category, it can be concluded that the students' learning vocabulary achievement by using pictures in excellent category.

5. Description about The Students' Motivation in Learning English

To better understand about the students' motivation in learning English, the writer conducted the questionnaire on November 2^{nd} , 2012.

Based on the result of questionnaire at seventh grade of SMPN 1 Kalumpang Kandangan academic year 2012/2013, it is found the data that the highest score is 60 and the lowest is 54. The accumulated score is 2164. The questionnaire result can be seen on the following table:

Table 4.3 The Result of Students' Motivation in Learning English

| Number | Subject | Score |
|--------|---------|-------|
| 1. | A | 57 |
| 2. | В | 58 |
| 3. | С | 60 |
| 4. | D | 58 |
| 5. | Е | 55 |
| 6. | F | 60 |
| 7. | G | 60 |
| 8. | Н | 56 |
| 9. | I | 58 |
| 10. | J | 56 |
| 11. | K | 54 |
| 12. | L | 58 |
| 13. | M | 56 |
| 14. | N | 54 |
| 15. | 0 | 58 |
| 16. | P | 58 |
| 17. | Q | 58 |
| 18. | R | 60 |
| 19. | S | 55 |
| 20. | T | 56 |
| 21. | U | 58 |
| 22. | V | 58 |
| 23. | W | 56 |
| 24. | X | 56 |
| 25. | Y | 58 |
| 26. | Z | 58 |
| 27. | A1 | 58 |
| 28. | B1 | 58 |
| 29. | C1 | 54 |
| 30. | D1 | 58 |
| 31. | E1 | 57 |
| 32. | F1 | 58 |
| 33. | G1 | 56 |

Continuing of Table 4.3

The Result of Students' Motivation in Learning English

| Number | Subject | Score |
|--------|---------|-------|
| 34. | H1 | 56 |
| 35. | I1 | 54 |
| 36. | J1 | 56 |
| 37. | K1 | 56 |
| 38. | L1 | 54 |

To detect how students' motivation in learning English based on the result of questionnaire, it can be seen on the following table:

Table 4.4 The Frequency of Students' Interest toward English Subject

| No | Category | Score | Frequency | Percentage |
|----|------------|-------|-----------|------------|
| 1. | Like | 4 | 29 | 76.32 |
| | Quite Like | 3 | 8 | 21.05 |
| | Less Like | 2 | 1 | 2.63 |
| | Dislike | 1 | 0 | 0 |
| | Total | | 38 | 100 |

The table above shows that students who like English are categorized in high category (76.32%), students who quite like are categorized in low category (21.05%), students who less like and do not like are categorized lower (2.63%) and (0%). It can be concluded that most of students love to study English.

Table 4.5 The Frequency of Students' Reasons to Learn English

| No | Category | Score | Frequency | Percentage |
|-------|--------------------------|-------|-----------|------------|
| 2. | To be fluency in English | 4 | 31 | 81.58 |
| | Asked by parents | 3 | 4 | 10.53 |
| | Asked by teacher | 2 | 2 | 5.26 |
| | Join by friend | 1 | 1 | 2.63 |
| Total | | | 38 | 100 |

The table shows there are 31 students (81.58%) who want to be fluency in English are categorized in higher category, 4 students (10.53%) who learn English asked by parents, 2 students (5.26%) who learn English asked by teacher and 1 student (2.63%) who learn English join by friend are categorized in lower category. From the table above, it can be known that most of students learn English because they want to be fluency in English.

Table 4.6 The Frequency of the Place Where the Students Enjoy to Learn English

| No | Category | Score | Frequency | Percentage |
|-------|-------------------|-------|-----------|------------|
| 3. | Everywhere | 4 | 29 | 76.32 |
| | At school | 3 | 9 | 23.68 |
| | At home | 2 | 0 | 0 |
| | At English course | 1 | 0 | 0 |
| Total | | | 38 | 100 |

The table shows there are 29 students (76.32%) who like study English everywhere are categorized in high category, 9 students (23.68%) who like study English at school are categorized in low category, and students who like to study English at home and in the course are categorized in lower category. From the table above, it can be known that most of students like to study English everywhere.

Table 4.7 The Frequency of Students' Attendance in Learning English

| No | Category | Score | Frequency | Percentage |
|----|-----------|-------|-----------|------------|
| 4. | Always | 4 | 33 | 86.84 |
| | Sometimes | 3 | 5 | 13.16 |
| | Seldom | 2 | 0 | 0 |
| | Never | 1 | 0 | 0 |
| | Total | | 38 | 100 |

The table shows there are 33 students (86.84%) who always present in English subject are categorized in higher category, 5 students (13.16%) who sometimes present and no one who absent in English subject are categorized in lower category. From the table above, it can be known that students who always present in English subject in higher level.

Table 4.8 The Frequency of Students in Using Dictionary

| No | Category | Score | Frequency | Percentage |
|----|-----------|-------|-----------|------------|
| 5. | Always | 4 | 32 | 84.21 |
| | Sometimes | 3 | 5 | 15.79 |
| | Seldom | 2 | 0 | 0 |
| | Never | 1 | 0 | 0 |
| | Total | | 38 | 100 |

The table shows there are 32 students (84.21%) who always using dictionary when learning English are categorized in higher category, 5 students (15.79%) who sometimes using dictionary and no one who seldom or never using dictionary when learning English are categorized in lower category. Based on the table above, it can be known that most of students always using dictionary in learning English.

Table 4.9 The Frequency of Students' Interest toward tasks / exercises

| No | Category | Score | Frequency | Percentage |
|-------|-----------|-------|-----------|------------|
| 6. | Very like | 4 | 28 | 73.68 |
| | Like | 3 | 7 | 18.42 |
| | Less Like | 2 | 3 | 7.90 |
| | Dislike | 1 | 0 | 0 |
| Total | | | 38 | 100 |

The table shows there are 28 students (73.68%) who very interested toward the tasks that teacher given are categorized in high category, 7 students (18.42%) who like it, 3 students who less like and no one who dislike toward

English tasks are categorized in lower category. Based on the table above, it can be known that most of students are very interested towards English tasks.

Table 4.10 The Frequency of Students' Interest in Using Media

| No | Category | Score | Frequency | Percentage |
|----|-----------------------------------|-------|-----------|------------|
| 7 | If there is picture | 4 | 33 | 86.84 |
| | If there is music | 3 | 4 | 10.53 |
| | If voice of the teacher loud | 2 | 1 | 2.63 |
| | If the other students get spirits | 1 | 0 | 0 |
| | Total | | 38 | 100 |

The table shows that 33 students (86.84%) who excited in learning English if there is picture are categorized in higher category, 4 students (10.53%) who excited if there is music, 1 student (2.63%) who excited if voice of the teacher is loud and no one who excited in learning English if the other students get spirits are categorized in lower category. Based on the table above, it can be known that most of students are excited in learning English if there is picture. It can be concluded that picture influences students' interest in learning English.

Table 4.11 The Frequency of Students' Interest toward teacher's strategy in teaching English

| No | Category | Score | Frequency | Percentage |
|----|-----------|-------|-----------|------------|
| 8 | Very like | 4 | 31 | 81.58 |
| | Like | 3 | 7 | 18.42 |
| | Less like | 2 | 0 | 0 |
| | Dislike | 1 | 0 | 0 |
| | Total | 38 | 100 | |

The table shows that 31 students (81.58%) who very interested toward teacher's strategy in teaching English are categorized in higher category, 7 students (10.53%) who like it and no one who dislike the teacher's strategy in teaching English are categorized in lower category. Based on the table above, it

can be known that most of students are very interested toward their teacher's strategy in teaching English.

Table 4.12 The Frequency of Students' Interest to Speak English Words

| No | Category | Score | Frequency | Percentage |
|---------|-----------|-------|-----------|------------|
| 9 | Yes | 4 | 27 | 71.05 |
| | Sometimes | 3 | 9 | 23.68 |
| | Seldom | 2 | 2 | 5.26 |
| Never 1 | | | 0 | 0 |
| | Total | 38 | 100 | |

The table shows that 27 students (71.05%) who like to speak English words are categorized in high category, 9 students (23.68%) who sometimes speak in English are categorized in low category, 2 students (5.26%) who seldom to speak in English and no one who never to speak English words are categorized in lower category. Based on the table above, it can be known that most of students are interested to speak in English.

Table 4.13 The Frequency of Students' interest to review English subject at home

| No | Category | Score | Frequency | Percentage |
|----|------------------------|-------|-----------|------------|
| 10 | Yes | 4 | 28 | 73.68 |
| | Sometimes | 3 | 8 | 21.05 |
| | if there is a homework | 2 | 2 | 5.26 |
| | No | 1 | 0 | 0 |
| | Total | 38 | 100 | |

The table shows that 28 students (73.68%) who like to review English subject at home are categorized in high category, 8 students (21.05%) who sometimes to review English subject are categorized in low category, 2 students (5.26%) who review English subject if there is a homework and no one who dislike to review English subject at home are categorized in lower category. Based

on the table above, it can be known that most of students are interested to review English subject at home.

Table 4.14 The Frequency of Students' Attention toward teacher's explanation in teaching learning process

| No | Category | Score | Frequency | Percentage |
|----|-----------------------|-------|-----------|------------|
| 11 | Yes | 4 | 35 | 92.11 |
| | Sometimes | 3 | 2 | 5.26 |
| | When there is picture | 2 | 1 | 2.63 |
| | No | 1 | 0 | 0 |
| | Total | 38 | 100 | |

The table shows that 35 students (73.68%) who always give attention to teacher's explanation in teaching learning process are categorized in high category, 2 students (5.26%) who sometimes to give attention to teacher's explanation, 1 student (2.63%) who give attention to teacher's explanation only when there is picture and no one who never give attention to teacher's explanation while teaching learning process are categorized in lower category. Based on the table above, it can be known that most of students are give attention to teacher's explanation while teaching learning process. It can be concluded that there is big attention of students toward English subject.

Table 4.15 The Frequency of Students' interest toward Teacher strategy in using pictures

| No | Category | Score | Frequency | Percentage |
|----|-----------|-------|-----------|------------|
| 12 | Very like | 4 | 33 | 86.84 |
| | Like | 3 | 5 | 13.16 |
| | Less like | 2 | 0 | 0 |
| | Dislike | 1 | 0 | 0 |
| | Total | 38 | 100 | |

The table shows that 33 students (86.84%) very interest toward teacher strategy in using pictures are categorized in higher category, 5 students (13.16%)

who like it and no one who dislike toward teacher strategy in using pictures are categorized in lower category. Based on the table above, it can be concluded that most of students interested if the teacher uses picture as media in teaching English.

Table 4.16 The Frequency of Students' comprehension when teacher using pictures in teaching

| No | Category | Score | Frequency | Percentage |
|-----------------|------------------|-------|-----------|------------|
| 13 | Very understand | 33 | 86.84 | |
| | Understand | 3 | 5 | 13.16 |
| Less understand | | 2 | 0 | 0 |
| | Don't understand | 1 | 0 | 0 |
| | Total | 38 | 100 | |

The table shows that 33 students (86.84%) very understand when teacher using picture to explain the material are categorized in higher category, 5 students (13.16%) who understand and no one who don't understand if the teacher uses picture in teaching English are categorized in lower category. Based on the table above, it can be concluded that most of students can understand the material when the teacher explains it using pictures.

Table 4.17 The Frequency of Students' suggestion toward teacher's strategy in teaching English

| No | Category | Score | Frequency | Percentage |
|----|---|-------|-----------|------------|
| 14 | Using pictures (big and colorful), full | 4 | 33 | 86.84 |
| | music, writing explanation of pictures | | | |
| | on the blackboard, etc. | | | |
| | Using pictures & explain by writing on | 3 | 5 | 13.16 |
| | the blackboard | | | |
| | Using pictures & hold them only | 2 | 0 | 0 |
| | Using blackboard only | 1 | 0 | 0 |
| | Total | | 38 | 100 |

The table shows that 33 students (86.84%) suggest to use pictures (big and colorful), full music, writing explanation of pictures on the blackboard, etc. are categorized in higher category and 5 students (13.16%) suggest to use pictures and explain by writing on the blackboard are categorized in lower category. There is no one suggests to use pictures and hold them only and using blackboard only. Based on the table above, it can be concluded that most of students suggest for the teacher to use picture when teaching English.

Table 4.18 The Frequency of Teacher's frequency in using picture

| No | Category | Score | Frequency | Percentage |
|----|-----------|-------|-----------|------------|
| 15 | Always | 4 | 33 | 86.84 |
| | Sometimes | 3 | 5 | 13.16 |
| | Seldom | 2 | 0 | 0 |
| | Never | 1 | 0 | 0 |
| | Total | | 38 | 100 |

The table shows that 33 students (86.84%) stated that the teacher always uses picture to present the new English words are categorized in highest category and 5 students (13.16%) stated that the teacher sometimes using picture are categorized in lower category. There is no one stated that the teacher rarely or never to use picture in teaching new English words. Based on the table above, it can be concluded that the teacher often uses picture as media in present the new English words.

Based on the result of each question from questionnaire, it can be concluded that students' motivation in learning English in high category. it can be seen that the media influence students' motivation to learning English, in spite of there were some others factor, such as teacher method in teaching, the condition

of classroom, parents' attention, teacher and students' relationship and subject equipment could influence learning achievement, because learning activity not only influenced by internal factor, but also external factor. It supported by the interview result between the writer and the English teacher. The teacher stated that the students might have a high interest in following the teaching learning process when the teacher using media in teaching. Most of students are interested in some teaching aids, especially pictures. The students might be motivated to be active in the class and it can be easier to ask students to give respond and opinion. The motivation from the teacher will increase the students' interest to learn better.

6. Description about The Correlation between Learning Vocabulary Achievement by Using Pictures and Students' Motivation in Learning English

The data is taken directly from the students using vocabulary test to get their achievement in learning vocabulary by using pictures and using questionnaire to get their motivation in learning English. The data of score of the students' learning vocabulary achievement by using pictures and students' motivation in learning English can be seen on the table below.

Table 4.19 The Scores of Students' Learning Vocabulary Achievement by Using Pictures and Students' Motivation in Learning English

| Number Subject | | The score of students' achievement | The score of students' motivation |
|----------------|---|------------------------------------|-----------------------------------|
| 1. | A | 80 | 57 |
| 2. | В | 89 | 58 |
| 3. | С | 98 | 60 |
| 4. | D | 98 | 58 |
| 5. | Е | 67 | 55 |

Continuing of Table 4.19

The Scores of Students' Learning Vocabulary Achievement by Using Pictures and Students' Motivation in Learning English

| Number | Subject | The score of students' achievement | The score of students' motivation |
|--------|---------|------------------------------------|-----------------------------------|
| 6. | F | 98 | 60 |
| 7. | G | 100 | 60 |
| 8. | Н | 90 | 56 |
| 9. | I | 95 | 58 |
| 10. | J | 95 | 56 |
| 11. | K | 95 | 54 |
| 12. | L | 98 | 58 |
| 13. | M | 92 | 56 |
| 14. | N | 91 | 54 |
| 15. | 0 | 99 | 58 |
| 16. | P | 100 | 58 |
| 17. | Q | 98 | 58 |
| 18. | R | 100 | 60 |
| 19. | S | 96 | 55 |
| 20. | T | 96 | 56 |
| 21. | U | 100 | 58 |
| 22. | V | 99 | 58 |
| 23. | W | 95 | 56 |
| 24. | X | 97 | 56 |
| 25. | Y | 100 | 58 |
| 26. | Z | 98 | 58 |
| 27. | A1 | 95 | 58 |
| 28. | B1 | 100 | 58 |
| 29. | C1 | 73 | 54 |
| 30. | D1 | 98 | 58 |
| 31. | E1 | 100 | 57 |
| 32. | F1 | 99 | 58 |
| 33. | G1 | 100 | 56 |
| 34. | H1 | 98 | 56 |
| 35. | I1 | 92 | 54 |
| 36. | J1 | 98 | 56 |
| 37. | K1 | 99 | 56 |
| 38. | L1 | 94 | 54 |
| To | otal | $\Sigma X = 3610$ | $\Sigma Y = 2164$ |

B. DISCUSSION

To define the degree of students' learning vocabulary achievement by using pictures and students' motivation in learning English, it can be defined the mean (M) of the students' score by using the formula below:

$$M_x = \frac{\sum X}{N}$$
 $M_y = \frac{\sum Y}{N}$

Thus, based on table score, it can be known that:

$$\sum X = 3610$$

$$\sum Y = 2164$$

$$Mx = \frac{3610}{38} = 95$$

$$My = \frac{2164}{38} = 56.95$$

After the mean of data X and Y are defined, the writer makes working table as follow:

Table 4.20 Working Data of Data Analysis

| Subject | X | Y | \mathbf{X}^2 | \mathbf{Y}^2 | XY |
|---------|-----|----|----------------|----------------|------|
| A | 80 | 57 | 6400 | 3249 | 4560 |
| В | 89 | 58 | 7921 | 3364 | 5162 |
| С | 98 | 60 | 9604 | 3600 | 5880 |
| D | 98 | 58 | 9604 | 3364 | 5684 |
| Е | 67 | 55 | 4489 | 3025 | 3685 |
| F | 98 | 60 | 9604 | 3600 | 5880 |
| G | 100 | 60 | 10000 | 3600 | 6000 |
| Н | 90 | 56 | 8100 | 3136 | 5040 |
| I | 95 | 58 | 9025 | 3364 | 5510 |
| J | 95 | 56 | 9025 | 3136 | 5320 |
| K | 95 | 54 | 9025 | 2916 | 5130 |

Continuing of Table 4.20

Working Data of Data Analysis

| Subject | X | Y | \mathbf{X}^2 | \mathbf{Y}^2 | XY |
|---------|-----------------|------------------|---------------------|---------------------|----------------------|
| L | 98 | 58 | 9604 | 3364 | 5684 |
| M | 92 | 56 | 8464 | 3136 | 5152 |
| N | 91 | 54 | 8281 | 2916 | 4914 |
| О | 99 | 58 | 9801 | 3364 | 5742 |
| P | 100 | 58 | 10000 | 3364 | 5800 |
| Q | 98 | 58 | 9604 | 3364 | 5684 |
| R | 100 | 60 | 10000 | 3600 | 6000 |
| S | 96 | 55 | 9216 | 3025 | 5280 |
| T | 96 | 56 | 9216 | 3136 | 5376 |
| U | 100 | 58 | 10000 | 3364 | 5800 |
| V | 99 | 58 | 9801 | 3364 | 5742 |
| W | 95 | 56 | 9025 | 3136 | 5320 |
| X | 97 | 56 | 9409 | 3136 | 5432 |
| Y | 100 | 58 | 10000 | 3364 | 5800 |
| Z | 98 | 58 | 9604 | 3364 | 5684 |
| A1 | 95 | 58 | 9025 | 3364 | 5510 |
| B1 | 100 | 58 | 10000 | 3364 | 5800 |
| C1 | 73 | 54 | 5329 | 2916 | 3942 |
| D1 | 98 | 58 | 9604 | 3364 | 5684 |
| E1 | 100 | 57 | 10000 | 3249 | 5700 |
| F1 | 99 | 58 | 9801 | 3364 | 5742 |
| G1 | 100 | 56 | 10000 | 3136 | 5600 |
| H1 | 98 | 56 | 9604 | 3136 | 5488 |
| I1 | 92 | 54 | 8464 | 2916 | 4968 |
| J1 | 98 | 56 | 9604 | 3136 | 5488 |
| K1 | 99 | 56 | 9801 | 3136 | 5544 |
| L1 | 94 | 54 | 8836 | 2916 | 5076 |
| Total | $\sum X = 3610$ | Σ Y =2164 | $\sum X^2 = 344890$ | $\sum Y^2 = 123348$ | $\sum XY^2 = 205803$ |

Then the writer determines the degree of r_{xy} by implementing formula as follow:

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

Where:

 r_{xy} = Number of correlation index between variable X and Y.

 $\sum XY$ = Amount of product of a multiplication between score variable x deviation and score of variable y deviation.

 $\sum X^2$ = Amount of quadrate variable x.

 $\sum Y^2$ = Amount of quadrate variable y.

 $(\sum X)^2$ = Amount of variable x in quadrate

 $(\sum Y)^2$ = Amount of variable y in quadrate

Finally, from the working table, it can be known that:

$$N = 38$$

$$\sum XY = 205803$$

$$\sum X^2 = 344890$$

$$\sum Y^2 = 123348$$

$$\sum X = 3610$$

$$\Sigma Y = 2164$$

So, the result is

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

$$= \frac{38 \times 205803 - (3610)(2164)}{\sqrt{38 \times 344890 - (3610)^2} \sqrt{38 \times 123348 - (2164)^2}}$$

$$= \frac{38 \times 205803 - (3610)(2164)}{\sqrt{38 \times 344890 - 13032100} \sqrt{38 \times 123348 - 4682896}}$$

$$= \frac{7820514 - 7812040}{\sqrt{13105820 - 13032100} \sqrt{4687224 - 4682896}}$$

$$= \frac{8474}{\sqrt{73720} \sqrt{4328}}$$

$$=\frac{8474}{\sqrt{319060160}}$$

$$=\frac{8474}{17862.26}$$

$$r_{xy} = 0.474$$

Furthermore, after obtaining the result "r" product moment and for interpreting about the result of "r" product moment itself, the writer is counting the degree of freedom (db).

To know the degree of freedom (db/df):

$$db = N-2$$

$$db = 38-2$$

$$db = 36$$

By obtaining db 36 of "r" percentage table in the significance standard, it is found that in the significance standard level 5% = 0.329 and 1% = 0.424. To know more about "r" table, it can be seen in appendix 6.

Than it is consulted with critical table of Product Moment

- In the level of significance 5% = 0.329
- In the level of significance 1% = 0.424

By comparing between the result of "r" product moment and "r" percentage table in the significance standard level 5% and 1%, it is known that "r" product moment result is 0.474 and "r" table are 0.329 and 0.424. It means 0.329<0.474>0.424, the result of "r" product moment is higher than "t" table in level 5% and level 1%. In other word, the hypothesis alternative (H_a) is accepted and hypothesis null (Ho) is rejected. It can be concluded that there is correlation

between learning vocabulary achievement by using pictures and students' motivation in learning English.

To know the degree of correlation, the writer also interprets the result by referring to rough standard. The result of "r" product moment is 0.474, it can be concluded that the coefficient correlation between 0.40 -< 0.60 in fair category. In other word, the degree of correlation of this research is fair category.