CHAPTER IV

RESEARCH FINDING AND DISCUSSION

Having gained the whole needed data, the researcher then did analysis which refers to the statistical data analysis to find out whether or not there is a difference of students achievement on vocabulary concrete nouns and their understanding between students taught by Direct Method technique and those taught by non Direct Method technique. The researcher analyzed the gathered data by employing statistical tool of t-test formula to respond to the objective of the study.

A. Hypothesis Test

1. T-Test Pre-Test Between Experimental and Control Group

Table 10

Data t Pre-test of Experiment and Control Group

Source Variants	Experiment Group	Control Group
Total	3085	3190
n	40	40
$\overline{X}$	77.13	77.25
Variants	187.0353	194.8077
Standard Deviation	13.676	13.957

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

$$= \frac{(40-1)187.0353 + (40-1)194.8077}{40 + 40 - 2}$$

$$= \frac{39 \times 187.0353 + 39 \times 194.8077}{78}$$

$$= \frac{39(381,843)}{78}$$

$$= \frac{14891.877}{78}$$

$$= 190.9215$$

S $\quad = 13.817$

Based on calculated above, t_{value} between experiment and control group is 13.817 that result than consulted with t_{table} where α 5% with dk $= n_1 + n_2 - 2(40 + 40 - 2)$ get $t_{(0..975)(78)} = 1.66$ because $-t_{(1-1/2\alpha)(n1+n2-2)} \le t \le t_{(1-1/2\alpha)(n1+n2-2)}$. So could be concluded that there is no differences mean of pre-test from both group.

2. **T- Test Post-Test Between Experimental and Control Group**

Having gained the mean of the two groups, the researcher then tested the hypothesis that has been determined that can be stated as follows.

H_o : The using of Direct Method technique is not more effective to improve the students' understanding on concrete nouns than non Direct Method

Ha : The using of Direct Method technique is more effective to improve the students' understanding on concrete nouns than non Direct Method

Table 11

Data T Post-test of Experiment and Control Group

Source Variants	Experiment Group	Control Group
Total	3435	3190
n	40	40
$\overline{X}$	85.875	79.75
Variants	62.6763	107.6282
Standard Deviation	7.9168	10.3744

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

$$= \frac{(40 - 1)62.6763 + (40 - 1)107.6282}{40 + 40 - 2}$$

$$= \frac{39 \times 62.6763 + 39 \times 107.6282}{78}$$

$$= \frac{39(170.3045)}{78}$$

$$= \frac{6641.8755}{78}$$

$$= 85.15225$$

$$S = \sqrt{85.15225}$$

$$= 9.228$$

$$t = \frac{\overline{x}_1 - \overline{x}_2}{S\sqrt{\dfrac{1}{n_1} + \dfrac{1}{n_2}}}$$

$$= \frac{85.875 - 79.75}{9.228\sqrt{\dfrac{1}{40} + \dfrac{1}{40}}}$$

$$= \frac{6.125}{9.228 \times 0.2236}$$

$$= \frac{6.125}{2.0634}$$

$$= 2.968$$

Based calculation get t $_{value}$ between experiment and control group is 2.968. That result consulted with t $_{tabel}$ where $\alpha = 5\%$ with dk $= n_1 + n_2 - 2$ then get $t_{(0.95)(78)} = 1.66$ because $t \geq t_{(1-\alpha)(n1+n2-2)}$. So can be concluded that t $_{value} \geq$ t $_{tabel}$ until Ha accept. So, post-test of experiment group better than control group. Such here hypothesis can accepted or significant.

Thus, the t-value in this case is about 2.968 by 80 degrees of freedom (df), the t-value could be looked in the t-test table. Because the exact degrees of freedom (df) of 80 is not shown in the table, the researcher took the closest value above it which is 120. In that row, the critical value for t at the 0.05 level of significance is 1.658 or 1.66. The t-value calculated for the difference between students' vocabulary achievement taught by Direct Method technique and those taught by non Direct Method was 2.968 and that value is greater than the critical value found in the table at 0.05 levels of significance. It means that H_o is rejected and H_a is accepted.

B. Observation

The observation used two observers; to look the teachers' ability in teaching learning process. Here using more than one observer so that getting the data more accurate and objective.

The observation form contains of twelve indicators teaching where the point score 1 until 4.

Where: 1 score   = poor

2 score   = fair

3 score   = good

4 score   = very good

The observation forms were computed and got the result:

1) First, form from Mrs. Sri Fitri Rejeki, S. Pd

Total score   = 48

Total getting   = 47

Percentage $= \dfrac{47}{48}$ X 100%

             = 97.916 %

2) Second, form from Mrs. Kurniyah, S. Pd.i

Total score   = 48

Total getting   = 45

Percentage $\quad = \dfrac{45}{48}$ X 100%

$\qquad\qquad = 93.75$ %

Mean score from two observer, $\dfrac{97.916\% + 93.75\%}{2} = 95.83$ %

So, the teachers' ability in teaching vocabulary concrete nouns using Direct Method is 95.83 %

C. Further Analysis: Different Score of The Two Groups and The Benefits of Direct Method

Having known the result of t value, and consulted it to the appropriate t table, it has been found that there is a significant difference between two groups. This indicates that the difference of two groups' mean probably did not happen accidentally. It could be said in another way; this result means that the mean of students taught by Direct Method is higher than the students taught by non Direct Method.

Based on the post test score of the students related to their achievement on vocabulary concrete nouns, it can also be seen that the mean between the two groups was different in which the experimental group's score (class 3A) was higher than the control one (class 3B). Meanwhile, before they were given the treatment they were in equal capabilities and almost had equivalent level of competence.

The students' problems covered with content goals and attitude goal. The general problems of the students are grammatical structure and pronunciation. Teacher treats to the students by correcting the grammatical error not only with who takes a false but also all the students in the class by repeat correction together.

Besides, the teaching and learning activities offered in Direct Method also affected students' non-cognitive aspect. This non-cognitive aspect refers to the motivation and interest in learning English especially in learning vocabulary concrete nouns. The students' responses towards the teaching

learning by Direct Method technique they have practiced and experienced during the treatment shown that they felt so motivated and were welcome to the application of this kind of technique in next English class. This was caused by many factors that enhance and increase their motivation. The factors might refer to the class interaction pattern that allow them enjoy the teaching and learning process but it is still encourage them to use their academical potentials maximally. In addition, to the give of the reward, reinforce them in study English.

According to Taghavi the advantage of Direct Method is paying attention to speaking, interaction between teacher and students. Then, the disadvantage of Direct Method is less paying attention to writing, reading, and comprehension, not based on a scientific method.[1] So, the students just pay attention for the teacher presentation and answer short question, no writing or reading.

The method to teaching concrete nouns for elementary school students is suitable using Direct Method.

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[1] Taghavi, "Advantage and Disadvantages", retrieved from http://www.usingenglish.com/forum/ask-teacher/80782-advantages-disadvantages-methods.html#post368936 on March 16 2009.