THE EFFECT OF THE IMPLEMENTATION OF QUANTUM TEACHING STRATEGY IN TEACHING WRITING A DESCRIPTIVE TEXT

FIKRI ASIH WIGATI
fikriasih.wigati@yahoo.com
LECTURER AT ENGLISH EDUCATION DEPARTMENT
FACULTY OF TEACHER TRAINING AND EDUCATION
SINGAPERBANGSA KARAWANG UNIVERSITY

ABSTRACT

The research was aimed to know the effect of Quantum Teaching Strategy (QTS) on the student's performance of English Writing Skill in comparison to Conventional Teaching Strategy (CTS). The quantitative research was to measure the effects of QTS on the Writing performance. The data was taken from an experimental research, involving 30 students in UNSIKA (Singaperbangsa Karawang University) in the English Education program. The 3rdsemester students were randomly selected. 15 students run learning activity with quantum learning method and 15 students studied in control group. The experimental group got particular treatments related to quantum learning method. The treatment for the experimental group was practicing writing through experiencing the 5 steps of The control group was taught in conventional teaching strategy. Both groups pretest and post test to identify their performance on the writing skill improvement. The measurement for both groups was conducted at the same test. In term of quantitative approach, quasi experiment design was used to describe the different result of experimental group and control group. T-test was used to analyze the data to measure the effect of quantum teaching strategy in comparison to Conventional Teaching Strategy (CTS). By means of The T Test, the finding showed that QTS affected the performance of the students' Writing skill. It is recommended for English Teacher to use QTS as alternative to improve quality of teaching.

Keywords: Quantum Teaching Strategy, Writing

INTRODUCTION

In this era of globalization the ability to communicate in English is important. Writing is also the skill which is often used in the interaction with others. Often, others evaluate a person's language competence from the writing ability. However, students often feel anxiety to practice their writing skill in the class. Many factors influence writing subject, as follows: internal factor, like the students' motivation in learning English and external factor, like suitable techniques in teaching learning process. That is why teacher should be able to choose the best method to teach the skill, writing. The problem arouses when the teacher has lack of creativity regarding the innovative teaching strategy. They don't have the awareness that teacher should also guide the students how to learn something. This often resulted in the incapability of student's skill in having

interaction with other using English in the real life. The active involvement of the student in the learning activity is needed. One of the models which is suitable with to improve the students' involvement is Quantum Teaching Strategy.

Moreover, the quality educator is always the main concern for every government. Based on the statistic data of Peningkatan Mutu Pendidik dan Tenaga Kependidikan (PMPTK) board on 2009, in Karawang there are 7.744 teachers yang are not qualified as educator. That is why Karawang regent government, Dadang S. Muchtar really concerns about the quality improvement of teachers in Karawang. (Harian Ekonomi Neraca, October, 23, 2010)

In line with the government policy, the researcher concerns about improving teacher quality trough applying learning method innovation called quantum teaching strategy which is believed still rarely applied in Karawang. Therefore, the researcher wants to investigate the effect of the implementation of Quantum Teaching Strategies in teaching writing.

REVIEW OF LITERATURE

Quantum Teaching

DePorter (1999) mentioned 5 principles of quantum teaching strategy. The first is the meaningfulness of learning environment. "Everything speaks". It means everything in the classroom has a message to the students. Teacher's way of teaching, materials, media, and arrangement of the chairs will give impacts to the students. Secondly is "Everything is on purpose". It means that there is always a purpose of what teacher does and what the students should learn. So, the teacher should have an appropriate plan to run the teaching activity in order to achieve the goal of the learning process. The third is "aha discovery of learning". It is believed that learning is a matter of interaction with the word. This principle highlights the students' experience in leading to their own formulation or finding the new concept they are learning by their own. "Acknowledge every effort". To learn something takes risk, students should come out from their comfort zone. By acknowledging student's effort and creating a focus of effort, the students will feel themselves as a good student. When students are capable to accomplish the task they also can measure their own ability by their selves. The last principle is "Celebrating". It reflects positive acknowledgement the students receive for their effort and participation. Teacher is encouraged to always express appreciation for their task accomplishment in cheerful way.

Writing

In general, writing can be defined as a meaningful construction of graphic symbols to build a text that reflects a unity organization of ideas. Writing is also the process of expressing ideas, feelings, thoughts, and information in written form to transfer meaning to the reader (Brown, 2001: 335; Byrne, 1988:1; Greenville, 2001:1).

There are four main stages in students' writing process which were done in this study: prewriting, planning, writing and revising the draft, and writing the final copy. Prewriting is an activity in which students write freely about a topic to looking for ideas (Oshima and Hogue, 2007: 16; Grenville, 2001: 32). The

purpose of prewriting is to produce as many ideas as possible and to write them down without worrying about appropriateness, grammar, spelling, logic, or organization. In this research, the students were asked to clustering their ideas. Next is outlining, outlining is a strategy to plan for writing. It shows how the main ideas are allied to the thesis statement, how supporting ideas are linked to main ideas, and how the details are connected to supporting ideas. (Oshima & Hogue, 1999:8; Oshima & Hogne, 2007:271). The third is writing and revising the draft. This stage is called writing process. It should be considered that no piece of writing is ever perfect in the first time (Oshima & Hogne, 1999). Each time a writer writes a new draft, he should refine the text to improve the quality of the text. The last is writing the final copy. In this stage, it is expected that the result of writing has been written neatly and legibly in ink or typed. After rereading the final copy, there is always a possibility that writers make a decision to construct a few or even major changes (Oshima and Hogne, 1999).

The Procedure of Quantum Teaching Strategy in Teaching Writing

First, enrolling students to have a desire by asking question to the students about what they know related to Descriptive text including its generic structure and its linguistic features.. Secondly, the student involve in the experience by analyzing some descriptive texts and search for additional information about the descriptive text. Then they compose a descriptive text individually. The teacher supervised this process. Fourth, giving students activities to demonstrate their writing and conveys their abilities by presenting the texts and answering questions from the teacher and friends. Fifth, teacher gives appreciation to the students' works.

METHODOLOGY

The method that used in this research was experimental research method. Frankel & Wallen (1996: 263) stated that: "Experimental research method is a type of research that attempts to influence a particular variable. In the experimental research, researcher looks at the effect(s) of at least one independent variable on one or more dependent variables". After researcher did the treatments several times, the researcher can observe and interpret the data (by means of posttest). The data can show whether treatment made a difference or not.

The writer uses quantum teaching strategy as the treatment on students' writing ability. The sample of this research was intact groups of students in the Singaperbangsa University in the first semester in Karawang. The sample was 30 students comprised experiment and control groups.

The framework of the research, The instrument used in this research was writing test. The test was used to measure the students' achievement after finishing the teaching learning activity in the class.

To analyze the data, quantitative approach is used. Quantitative approach is used to compute the data on the academic achievement through statistical analysis. The students' writing results were analyzed by using writing rubric and

scored by 2 interaters. In analyzing the data, the writer uses the t-test formula. 1. The formula is:

$$t = \frac{M_1 - M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

Explanation:

t : ratio of the difference between two means

M_1 : mean of the experimental class

M_2 : mean of the control class

N_1 : number of students of the experimental class

N_2 : number of students of the control class

σ_1^2 : the square of the standard deviation of the experimental class

σ_2^2 : the square of the standard deviation of the control class.

2. Determining the degree of freedom, the formula is:

df = N +N -2

3. Determining tangible degree = 0.01 (1%)
4. Determining tangible degree = 0.05 (5%)
5. Determining the t in the table, the formula is t (df)
6. Comparing t and t to accept or to reject the null hypothesis by two tiles. If t > t the null.

FINDINGS

The data classifications from pretest and posttest result

Table 1
Pretest Result

Experimental Class

No	Student	Score	
		X	X^2
1	Student 1	2,00	4,00
2	Student 2	2,80	7,84
3	Student 3	2,80	7,84
4	Student 4	5,20	27,04
5	Student 5	2,00	4,00
6	Student 6	3,60	12,96
7	Student 7	4,80	23,04
8	Student 8	4,80	23,04
9	Student 9	2,80	7,84
10	Student 10	2,80	7,84

Control Class

No	Student	Score	
		Y	Y^2
1	Student 1	4,80	23,04
2	Student 2	2,00	4,00
3	Student 3	2,40	5,76
4	Student 4	4,80	23,04
5	Student 5	2,40	5,76
6	Student 6	2,80	7,84
7	Student 7	4,00	16,00
8	Student 8	2,40	5,76
9	Student 9	2,40	5,76
10	Student 10	4,80	23,04

11	Student 11	4,00	16,00
12	Student 12	3,60	12,96
13	Student 13	2,80	7,84
14	Student 14	2,40	5,76
15	Student 15	4,00	16,00
∑	15	50,40	184

11	Student 11	4,00	16,00
12	Student 12	3,60	12,96
13	Student 13	2,80	7,84
14	Student 14	4,00	16,00
15	Student 15	2,40	5,76
∑	15	49,60	178,56

Processing the Pretest Result

After collecting the data, statistical calculation was made:

Experimental Class

$\sum X_1$ (number of all scores) = 50,4

N_1 (number of students) = 15

a. Mean (M)

$$M_1 = \frac{\sum X}{N}$$

$$M_1 = \frac{50,4}{15}$$

$M_1 = 3,36$

b. Standard Deviation (σ)

$$\sigma_1 = \sqrt{\frac{\sum X^2 - \frac{\left(\sum X\right)^2}{N}}{N-1}}$$

$$\sigma^1 = \sqrt{\frac{184 - \frac{(50,4)^2}{15}}{15-1}}$$

$\sigma^1 = 1,02$

Control Class

$\sum X_2$ (number of all scores) = 49,6

N_2 (number of students) = 15

A Mean (M)

$M_2 = 3,3$

b. Standard Deviation (σ)

$$\sigma_2 = \sqrt{\frac{178,56 - \frac{(49,6)^2}{15}}{15-1}}$$

$\sigma_2 = 1,32$

4.1.3 Analyzing of Pretest Result

a. The t-test

$$t_o = \frac{M_1 - M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_1^2}{N_2}}}$$

$$t_o = \frac{3{,}36 - 3{,}30}{\sqrt{\frac{1{,}02^2}{14} + \frac{1{,}32^2}{14}}}$$

t_o = 0,15

So, the obtained t (t_o) is 0,15

POSTTEST

Table 2
Posttest Result

Experimental Class

No	Student	Score	
		X	X^2
1	Student 1	4,00	16,00
2	Student 2	6,40	40,96
3	Student 3	8,00	64,00
4	Student 4	8,80	77,44
5	Student 5	5,20	27,04
6	Student 6	6,00	36,00
7	Student 7	7,20	51,84
8	Student 8	8,80	77,44
9	Student 9	8,80	77,44
10	Student 10	8,80	77,44
11	Student 11	7,50	56,25
12	Student 12	7,20	51,84
13	Student 13	8,00	64,00
14	Student 14	6,00	36,00
15	Student 15	8,80	77,44
∑	15	109,3	831,13

Control Class

No	Student	Score	
		Y	Y^2
1	Student 1	8,00	64,00
2	Student 2	6,80	46,24
3	Student 3	4,40	19,36
4	Student 4	7,20	51,84
5	Student 5	4,80	23,04
6	Student 6	4,80	23,04
7	Student 7	6,40	40,96
8	Student 8	4,80	23,04
9	Student 9	4,80	23,04
10	Student 10	8,00	64,00
11	Student 11	5,20	27,04
12	Student 12	4,40	19,36
13	Student 13	6,40	40,96
14	Student 14	5,20	27,04
15	Student 15	8,00	64,00
∑	15	89,2	556,96

Processing the Posttest result
Experimental Class

$\sum X_1$ (number of all scores) = 109,3

N_1 (number of students) = 15

a. Mean (M)

$$M_1 = \frac{\sum X}{N}$$

$$M_1 = \frac{109{,}3}{15}$$

$M_1 = 7,29$

b. Standard deviation (σ)

$$\sigma_1 = \sqrt{\frac{\sum X^2 - \frac{\left(\sum X\right)^2}{N}}{N-1}}$$

$$\sigma^1 = \sqrt{\frac{831,13 - \frac{(109,3)^2}{15}}{15-1}}$$

$\sigma^1 = 1,57$

Control Class

$\sum X_2$ (number of all scores) = 89,2

N_2 (number of students) = 15

a. Mean (M)

$$M_2 = \frac{\sum X}{N}$$

$$M_2 = \frac{89,2}{15}$$

$M_2 = 5,95$

b. Standard Deviation (σ)

$$\sigma_2 = \sqrt{\frac{556,96 - \frac{(89,2)^2}{15}}{15-1}}$$

$\sigma_2 = 1,38$

c. Analyzing the Posttest Result

The t-test

$$t_o = \frac{M_1 - M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_1^2}{N_2}}}$$

$$t_o = \frac{7,29 - 5,95}{\sqrt{\frac{1,57^2}{15} + \frac{1,38^2}{15}}}$$

$$t_o = \frac{1,34}{0,54}$$

$t_o = 2,48$ So, the obtained t (t_o) of the posttest is 2,48.

Hypothesis testing

a) The alternative hypothesis (H_1) is: "The students who are in the experimental class get better score from those who are in control class or $H_1 = M_1 > M_2$".
b) The null hypothesis (H_o) is: "The students who are taught with QTS do not get better score from those who are not using it or $H_o = M_1 < M_2$".
c) The t obtained (t_o) of the posttest is 2,48.
d) The degree of freedom (df) = (N1+N2) -2 df = (15+15)-2 = 28.
e) This research used two tailed test.
f) This research used the level of significance at p = 0.05
g) To find out the table t (t_t), the research used two tailed test with p = 0.05 with the df = 28. Using the p = 0.05 where the df is 28 then the t table is 2.048.
h) From point 7 it is found that $t_o > t_t$ or 2.48>2,048, since the t_o is bigger than the t_t, then H_o is rejected and H_1 is accepted.

Based on the data above, it can be conclude that the hypothesis of this research which was said "The students who are taught with Quantum Teaching Strategy get better score from those who are taught with Conventional Teaching Strategy" is accepted and significant at p = 0.05.

CONCLUSION

Based on the specific objectives, the research question, the hypothesis and findings discussion in chapter IV, the conclusion of the research is as follows:
From the result of computation by using t – test formula compared with t –table, it founds that quantum teaching can improve the students' English writing ability. .In other words, teaching writing by using Quantum Teaching Strategy (QTS) is more effective in improving students writing' ability than by using Conventional Teaching Strategy (CTS).

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