The Effect of Dictogloss towards the Students' Ability in Writing

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ABSTRACT: The objective of this research was to solve the students' problems in writing text by answering the research problem "Does the application of Dictogloss significantly affect the students' ability in writing text?" As the sample the researcher chose two classes of Writing Class in English Education Department Universitas SImalungun. Each class consists of 34 students. One is control group and the other is Experimental group. The control group taught by using speech method and the experimental group taught by using Dictogloss. The researcher designed this research into quantitative research. There were two test which given to the both of groups, pre-test and post-test. After giving the test, the researcher analyzed the test results by using technique of scoring writing, tabulated the scores, and counted it by using t-formula. And then the results showed that t-test was 3,71 and t-table was 1,99 ($t_0 > t_{table}$), It means that Dictogloss technique was significantly affected the students' ability in writing text.
KEYWORDS: *Writing, Text, Dictogloss*

I.   INTRODUCTION

In Indonesia, English is a foreign language taught, so it is logic when many people or especially students have many problems in learning English. English has four skills that must be mastered by students, namely listening, speaking, reading and writing. From the four skills writing is one of difficult skill for the students, it can be seen by their low score in writing tasks, based on the criterion minimum competences (KKM) 68, 75% of the students only get ≤ 68. In the field, the researcher has interviewed some students and the English teacher then found some problems which caused the low score of the students in writing. There are three reasons:The first is the students are less vocabulary, the second is the students are difficult to build their idea into written, and the third is the teacher's method in teaching English. During observation in field teaching practice, the teachers used conventional method (speech and explanation method) in the teaching-learning process. And to overcome these problem the researcher offered Dictogloss technique.

Writing is one of the four English macro skills. It involves communicating with others or conveying messages through symbols or signs including handwriting, spelling or letters, word formations, layouts and punctuation. Same as speaking, writing requires someone to communicate productively. Although they are the same in terms of productive skills, writing has some literacy issues which do not exist in speaking (Nunan: 2004; Harmer: 2007).

According to Siahaan & Shinoda (2008:1), text is a meaningful linguistic unit in a context. A linguistic unit is a phoneme or a morpheme or a phrase or clause, or a sentence or discourse. Linguistic context is the linguistic unit before and after a text. Non linguistic text is outside a text. So, text is any meaningful linguistic unit in both linguistic context and non linguistic context.

According to Jacobs (2003:1), Dictogloss is an integrated skills technique for language learning in which students work together to create a reconstructed version of a text read to them by their teacher.Dictoglossis a classroom dictation activity where learners listen to a text, usually a short one, and then reconstruct it. In this research, the writing ability refers to students' ability to create a reconstructed version of a text read to them.

II.   RESEARCH METHODOLOGY

This research designed into Quantitative research.Khotari (2004: 3) stated that Quantitative research is based on the measurement of quantity or amount. It is applicable to phenomena that can be express in terms of quantity. This research is focused to the verifiable observation as opposed to theory or logic.There are several kinds of Quantitative research design, but in this research the researcher chooses experimental research. According to Cohen et al (2007:272) experimental research involves a study of the effect of one variable on another variable. Hyun et.al (2012:265) also said:

"Experimental research is one of the most powerful research methodologies that researchers can use. Of the many types of research that might be used, experiment is the best way to establish cause –and-effect relationships among variables".
According to Bambang (2006:143) the research design will be shown like the table below:

Table 3.1 Research Design

Group	Pre-test	Treatment	Post-test
Experimental	✓	X T1,T2,T3	✓
Control	✓	Y T1,T2,T3	✓

Note:
X   = Applying Dictogloss
Y   = Applying Conventional
T1   : Teaching 1
T2   : Teaching 2
T3   : Teaching 3

Population is all members of any well-defined class of people, events or objects (Ary, 2010:148). According to Burns (2000:83) "A sample is any part of a population regardless of whether it is representative or not". While Ary and Jacobs (2010:148) stated that "the small group that is observed is called a sample". The kind of sample which the researcher has chosen is Cluster random sampling.
The population of this research was the students at fourth semester of English Department Universitas Simalungun where the sample were Group A as the control group and Group B as the experimental group. Each class consists of 34 students, so the sample was 68 students.
Research instrument is the tool used in doing a research. Cohen et al (2007:83) stated that:
"There are several instruments for data collection such as: interviews, questionnaires, observation, tests, accounts, role-playing, simulations, biographies, and case, personal construct".
The instrument used in this research was essay test.
There are some steps which will be done by the researcher to collect the data by the research object, such as: pre-test, treatment, and post-test. Pre-test will be done before the researcher teaches by using Dictogloss. Treatment will be done after the pre-test, where the experimental class will be teach use Dictogloss and the control class will be teach use speech method. And the post-test will be done after the treatment for both of the class.
According to Glass (2005), there are five components to score in a written product:
1.   Idea/contents   Score = <u>True</u> X 100
2.   Organization   25
3.   Word choice
4.   Sentence fluency
5.   Conventions

To analyze the data that has been collected, the researcher did several steps of computation through statistical computation in order to find out whether the hypothesis accepted or rejected. The researcher used the formula (Arikunto, 2010:354) that compare two samples which have relation each other:

$$t = \frac{mx - my}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{NX + NY - 2}\right)\left(\frac{1}{NX} + \frac{1}{NY}\right)}}$$

After collecting the data, the researcher did some steps to analyze it:
1.   Observing the students task result.
2.   Analyzing the students' worksheets by checking the students' understanding of the monolog text based on their written product.
3.   Givingscore to the students' worksheet.
4.   Listing the score of experimental class as variable X and control class as variable Y in the table.
5.   Calculating the mean (M) of variable X and Y by using the following formula : $\bar{X} = \frac{\Sigma X}{n}$

$\bar{X}$ =   Mean of differences; the average of score from the differences gain sscores, between X variable and Y variable.

∑**X** = total score between X variable and Y variable.

n = number of cases

6. Calculating the Standard Deviation of each class or variable by using the following formula (Hyun, 2012: 119). SD_D is the standard deviation from the differences between scores of X variable and Y variable.

7. Calculating for Mean of differences between X variable and Y variable

8. After gaining the standard deviation and mean of differences, the researcher will calculate for determining the result of t_o

III. FINDING AND DISCUSSION

A. Data Analysis

The data had been collected by giving the test instrument. It was essay test form. The data was the students' scores in writing text. Then, the researcher analyzed the data by using the formula as stated in chapter III. The researcher chose Group A as the control class and Group B as the experimental class. Both of the class consists of 34 students. So, the data gathered was 68.

1. Experimental Class

Table 3.1

Scores of Pre-test and Post-test in Experimental Class

No.	Initial Name of the Students	Pre-Test (X1)	$X1^2$	Post-Test (X2)	$X2^2$	X (X_2– X_1)	X^2
1	ARS	60	3600	76	5776	16	256
2	AND	60	3600	75	5625	15	225
3	AAS	60	3600	68	4624	8	64
4	ARS	60	3600	80	6400	20	400
5	BOS	60	3600	72	5184	12	144
6	CACD	60	3600	85	7225	25	625
7	DPIS	60	3600	74	5476	14	196
8	DSP	60	3600	72	5184	12	144
9	DDN	65	4225	75	5625	10	100
10	DJPS	72	5184	78	6084	6	36
11	EP	67	4489	70	4900	3	9
12	GASK	60	3600	64	4096	4	16
13	GRTM	60	3600	75	5625	15	225
14	ICM	68	4624	72	5184	4	16
15	IIS	68	4624	68	4624	0	0
16	JSA	75	5625	80	6400	5	25
17	LLPG	64	4096	72	5184	8	64
18	MYS	62	3844	70	4900	8	64
19	MRP	68	4624	70	4900	2	4
20	MP	48	2304	55	3025	7	49
21	MFS	64	4096	68	4624	4	16
22	NKA	56	3136	72	5184	16	256
23	NRBS	60	3600	80	6400	20	400
24	NW	64	4096	72	5184	8	64
25	REM	72	5184	80	6400	8	64
26	RAAS	66	4356	74	5476	8	64
27	RMT	74	5476	76	5776	2	4
28	RAL	68	4624	72	5184	4	16
29	RLMS	60	3600	68	4624	8	64
30	TMS	68	4624	72	5184	4	16
31	TEA	70	4900	74	5476	4	16
32	TIES	68	4624	72	5184	4	16
33	TF	62	3844	70	4900	8	64
34	YFAS	76	5776	92	8464	16	256
	N= 34	2185	141575	2493	184101	308	3978

N = 34   ∑X = 356   ∑X_2 = 2581   ∑X_1 = 2225   ∑$(X)^2$ = 4687

Mean of Pre-Test

Mean of Post-Test

$$\overline{X} = \frac{\sum X}{n}$$

$$\overline{X} = \frac{\sum X}{n}$$

$$\overline{X} = \frac{2185}{34} = 64,2$$

$$\overline{X} = \frac{2493}{34} = 73,3$$

Standard Deviation
Standard Deviation of Pre-Test

$$\mathrm{SD_D} = \frac{\sqrt{\sum (X - \overline{X}^2)}}{n^2}$$

$$\mathrm{SD_D} = \frac{\sqrt{141575 - 2185}}{1156}$$

$$\mathrm{SD_D} = \frac{\sqrt{139390}}{1156} = 0,32$$

Standard Deviation of Post-Test

$$\mathrm{SD_D} = \frac{\sqrt{\sum (X - \overline{X}^2)}}{n^2}$$

$$\mathrm{SD_D} = \frac{\sqrt{184101 - 2493}}{1156}$$

$$\mathrm{SD_D} = \frac{\sqrt{181608}}{1156} = 0,36$$

Standard Deviation of Experimental Group

$$\mathrm{SD_D} = \frac{\sqrt{\sum (X - \overline{X}^2)}}{n^2}$$

$$\mathrm{SD_D} = \frac{\sqrt{3978}}{1156} = 0,05$$

The table showed that in experimental class, the highest score of pre-test was 76 and the lowest score was 48. In post-test, the highest score was 92 and the lowest score was 55. Mean score of pre-test (Mx_1) was 64,2 and the mean score of post-test (Mx_2) was 73,3. The mean score of post-test was higher than the mean score of pre-test. It showed that Dictogloss technique was efficient in increasing the students' ability in writing text.

2.   **Control Class**

Table 3.2
Scores of Pre-test and Post-test in Control Class

No.	Initial	Pre-Test (Y1)	Y1²	Post-Test (Y2)	Y2²	Y (Y₂ – Y₁)	Y²
1	AFA	72	5184	74	5476	2	4
2	AS	76	5776	76	5776	0	0
3	APS	64	4096	66	4356	2	4
4	BJFH	70	4900	70	4900	0	0
5	CSS	70	4900	72	5184	2	4
6	CPS	68	4624	70	4900	2	4
7	DP	70	4900	74	5476	4	16
8	DHTSD	68	4624	72	5184	4	16
9	DGN	58	3364	62	3844	4	16
10	DYS	68	4624	70	4900	2	4
11	FDS	64	4096	66	4356	2	4
12	GIAG	74	5476	74	5476	0	0
13	HS	70	4900	74	5476	4	16
14	ISS	60	3600	65	4225	5	25
15	JJS	64	4096	68	4624	4	16
16	JLM	70	4900	70	4900	0	0
17	MS	68	4624	70	4900	2	4
18	NTT	70	4900	78	6084	8	64
19	NSN	68	4624	72	5184	4	16
20	NPSM	68	4624	78	6084	10	100

No.	Initial	Pre-Test (Y1)	Y1²	Post-Test (Y2)	Y2²	Y (Y₂ – Y₁)	Y²
21	NHD	64	4096	70	4900	6	36
22	PIS	68	4624	78	6084	10	100
23	RLS	68	4624	84	7056	16	256
24	RW	68	4624	72	5184	4	16
25	RFPS	64	4096	68	4624	4	16
26	RH	68	4624	80	6400	12	144
27	RR	78	6084	80	6400	2	4
28	RZ	68	4624	76	5776	8	64
29	SN	60	3600	64	4096	4	16
30	SP	76	5776	80	6400	4	16
31	SAR	66	4356	66	4356	0	0
32	TCBS	64	4096	72	5184	8	64
33	TMS	68	4624	78	6084	10	100
34	WAS	58	3364	60	3600	2	4
	N = 34	2298	156044	2449	177449	151	1149

Mean of Pre-Test

$$\overline{X} = \frac{\sum X}{n}$$

$$\overline{X} = \frac{2298}{34} = 67{,}5$$

Mean of Post-Test

$$\overline{X} = \frac{\sum X}{n}$$

$$\overline{X} = \frac{2449}{34} = 72{,}02$$

Standard Deviation

Standard Deviation of Pre-Test

$$SD_D = \frac{\sqrt{\sum (X - \overline{X}^2)}}{n^2}$$

$$SD_D = \frac{\sqrt{156044 - 2298}}{1156}$$

$$SD_D = \frac{\sqrt{153476}}{1156} = 0{,}33$$

Standard Deviation of Post-Test

$$SD_D = \frac{\sqrt{\sum (X - \overline{X}^2)}}{n^2}$$

$$SD_D = \frac{\sqrt{177449 - 2449}}{1156}$$

$$SD_D = \frac{\sqrt{175000}}{1156} = 0{,}36$$

Standard Deviation of Control Group

$$SD_D = \frac{\sqrt{\sum (X - \overline{X}^2)}}{n^2}$$

$$SD_D = \frac{\sqrt{1149}}{1156} = 0{,}02$$

The table showed that in control class, the highest score of pre-test was 78 and the lowest score was 58. In post-test, the highest score was 84 and the lowest score was 60. Mean score of pre-test (My₁) was 67,5 and the mean score of post-test (My₂) was 72,02. The mean score of post-test was higher than the mean score of pre-test, but not significantly. It could say that the conventional technique (speech method) was not efficient in increasing the students' ability in writing text.

Table 3.3
Table T-observation (t₀) in Experimental and Control Group

No	Experimental Group				Control Group			
	Pre-Test (X1)	Post-Test (X2)	X ($X_2 - X_1$)	X^2	Pre-Test (Y1)	Post-Test (Y2)	Y ($Y_2 - Y_1$)	Y^2
1	60	76	16	256	72	74	2	4
2	60	75	15	225	76	76	0	0
3	60	68	8	64	64	66	2	4
4	60	80	20	400	70	70	0	0
5	60	72	12	144	70	72	2	4
6	60	85	25	625	68	70	2	4
7	60	74	14	196	70	74	4	16
8	60	72	12	144	68	72	4	16
9	65	75	10	100	58	62	4	16
10	72	78	6	36	68	70	2	4
11	67	70	3	9	64	66	2	4
12	60	64	4	16	74	74	0	0
13	60	75	15	225	70	74	4	16
14	68	72	4	16	60	65	5	25
15	68	68	0	0	64	68	4	16
16	75	80	5	25	70	70	0	0
17	64	72	8	64	68	70	2	4
18	62	70	8	64	70	78	8	64
19	68	70	2	4	68	72	4	16
20	48	55	7	49	68	78	10	100
21	64	68	4	16	64	70	6	36
22	56	72	16	256	68	78	10	100
23	60	80	20	400	68	84	16	256
24	64	72	8	64	68	72	4	16
25	72	80	8	64	64	68	4	16
26	66	74	8	64	68	80	12	144
27	74	76	2	4	78	80	2	4
28	68	72	4	16	68	76	8	64
29	60	68	8	64	60	64	4	16
30	68	72	4	16	76	80	4	16
31	70	74	4	16	66	66	0	0
32	68	72	4	16	64	72	8	64
33	62	70	8	64	68	78	10	100
34	76	92	16	256	58	60	2	4
	2185	2493	308	3978	2298	2449	151	1149

- Mean of differences of Experimental Class

$$MD = \frac{\Sigma X}{N}$$

$$MD = \frac{308}{34} = 9,05$$

- Mean of differences of Control Class

$$MD = \frac{\Sigma X}{N}$$

$$MD = \frac{151}{34} = 4,44$$

So, the data is calculated t-observation formula:

$$t = \frac{mx - my}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{NX + NY - 2}\right)\left(\frac{1}{NX} + \frac{1}{NY}\right)}}$$

Note:

mx	: mean deviation of experimental group
my	: mean deviation of control group
$\sum x^2$	: standard deviation of experimental group
$\sum y^2$	: standard deviation of control group
Nx	: total number samples of experimental group
Ny	: total number samples of control group

$$t = \frac{mx - my}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{NX + NY - 2}\right)\left(\frac{1}{NX} + \frac{1}{NY}\right)}}$$

$$t = \frac{9,05 - 4,44}{\sqrt{\left(\frac{3978 + 1149}{34 + 34 - 2}\right)\left(\frac{1}{34} + \frac{1}{34}\right)}}$$

$$t = \frac{4,61}{\sqrt{\left(\frac{5127}{66}\right)\left(\frac{2}{68}\right)}}$$

$$t = \frac{4,61}{\sqrt{(77,68)(0,02)}}$$

$$t = \frac{4,61}{\sqrt{1,55}} = \frac{4,61}{1,24}$$

$$t = 3,71$$

After gaining, the result of t-test was 3,71.

The result show that there is a difference of degree as much 3,71 between variables X and Y.Then, to complete this research, the researcher tried to find out the degree of freedom (*df*) with the formula below:

df =N - k (variables)

df = (34+34) – 2 (X and Y variables)

df = 66

Based on the counting above, *df* at the significance level of 5% = 1,99 < 3,71. It means that t_0 (t-observation) is higher than t-table. Ha is accepted if t_0> t-table and it is rejected if t_0< t-table.

$t_{test} > t_{table}$or 3,71>1,99

IV. RESEARCH FINDINGS

Based on the analyzed data, there were some findings which the researcher found as follows:

1. Dictogloss technique was good to increase the students' at fourth semester of English department Universitas Simalungun in writing ability. It makes the students in experimental class more active and easier to bound ideas. It shows by the students' score where better than the value of the students in control class (conventional teaching method).

2. Conventional teaching method (speech) was not good enough to increase the students' at fourth semester of English department Universitas Simalungun in writing ability. The students of control class still got difficulties in writing text. It can be seen by the students' post-test score which not shows a very meaningful increasing of the students' score from the pre-test.

3. Dictogloss technique significantly affected the students' achievement in writing text at fourth semester of English department in Universitas Simalungun. From the data analysis t_0 is higher than t_{table} (3,71>1,99) at the level of significance 0,05 with df = N-k (variables). The conclusion, the test was significantly affected.

V. DISCUSSION

Dictogloss was one of dictation techniques applied in teaching learning process was supposed to improve students' writing ability. In this research, Dictogloss technique was success in increasing the students' scores in writing text. The researcher compared the value of t_0 and t_{table} to answer the hypothesis testing. The value of t_0 was 3,71 and the value of t_{table} was 1,99. It means, t_0 is bigger than t_{table}. When the t_0 is bigger than t_{table}, the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected, the theory is verified. It was proved by the students' average score in experimental class was 73,3 and in control class the students' average was 72,02 ($t_0 > t_{table}$ or 3,71>1,99).

At the end, the researcher thought that Dictogloss technique effective to increase the students' ability in writing text by follow the steps of Dictogloss.

VI. CONCLUSIONS AND SUGGESTIONS

A.   Conclusions

After analyzing the data, It was found out that the t-observe was higher than t-table (3,71>1,99). It means that the alternative hypothesis (Ha) is accepted, while the null hypothesis (Ho) is rejected. So, Dictogloss technique significantly affected the students at fourth semester of English department Universitas Simalungun in writing recount text.

B.   Suggestions

Teaching learning process can be categorized success do not only show from the students score or interest in learning activity, but also the teacher creativity to make the class more active, more interest, and more fun to the students. Making the class to be monotonous and passive give not very good effect for the students in learning English. So, the researcher has some suggestions which hopefully will be useful, especially for as follows. The first, to be a good English teachers s/he should know the difficulties which felt by the learners in writing, so that the teachers can give the right treatment in teaching English for the learners. The second, the teachers must be able to read the situation and condition of the learners, that is why the teachers must be mastering some teaching techniques or methods which suitable to the class situation that will be success the teaching learning process.For the other researchers, This research will be useful for other researchers who want to do a research in the same field or same technique. It can add their information about Dictogloss which is good to increase the students' score in writing text. They can conduct this research in other level of study such as primary or senior high school for more satisfaction.

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