THE EFFECT OF APPLYING *INSERT* STRATEGY ON THE STUDENTS' ACHIEVEMENT IN READING COMPREHENSION

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Abstract

The objective of the research was to find the effect of applying INSERT strategy on the students' achievement in reading narrative text. This research was conducted at SMK Tarbiyah Islamiyah, jl. Perintis Kemerdekaan, Hamparan Perak, Sumatera Utara of 2017/2018 academic year. The population of this research was the X grade students consisted of 6 classes, X-1 up to X-6 with total students 189. By using cluster random sampling, 2 classes were chosen; X-3 (30) and X-5 (30), with total 60 students. X-3 class was experimental class taught by INSERT strategy and class X-5 class was control class taught by lecturing method. Multiple choice test with 20 items were administered to the students. The researcher gave a pre-test, treatment and post-test to both groups. Having collected the data by using t-test formula, the result showed that t-test was 12.21 and t-table was 2.002. The fact showed that t-test was greater than t-table (The null hypothesis or Ho was rejected and the alternative hypothesis Ha was accepted). The finding of this research concluded that there was a significant effect of applying INSERT strategy on the student's achievement in reading comprehension.

Keywords: *INSERT Strategy, Achievement, Narrative Text*

A. Introduction

English language teaching in senior high school is aimed at enabling students to reach functional level in a sense that students must be able to catch and express the meaning in short functional written texts and simple essays of descriptive, report, narrative, procedure, analytical exposition, and news item in daily-lie context.

In fact, most students have difficulties grasping the content of reading comprehension such as understanding vocabulary, seeing in the relationship among words and concept organizing ideas, recognizing the author's purpose, making judgment and evaluating. The difficulties might be caused by students' insufficient vocabulary of English, lack of ability to understand English comprehensively, lack motivation to read in another language because the texts given in the reading lesson are not interesting and having no any certain technique of reading in finding the information or content of a text accurately.

Based on the result of observation and interview conducted in SMK TARBIYAH ISLAMIYAH Hamparan Perak, students had many problems in learning reading. In the classroom, students did passive reading activity. They always asked the teacher about the meaning of words that they found in the text. They just read and translated it based on what they have known so that they got wrong ideas. Some of them just copied their friend's answer without doing any discussion to comprehend the text. The students also felt hesitate to ask the teacher and expressed their ideas or opinion about the text. The students failed to express themselve adequately in reading English text. Thus, it made the students feel bored and discouraged in the reading activities.Moreover, the teacher said that the ability of students' reading comprehension was still low. The teacher showed the data of the students' scores in reading test. The data showed that there were only ten out of 35 students who achieved the standard score 70. It means that there were 67% of them failed the text.

INSERT is an active reading strategy designed by Mather and Wetson (2006: 112). This strategy can be used by students during the guided reading phase of class work. It employs a set of symbols or notation and helps students to interact and make connections with text

without taking extensive notes during reading. There are several kinds of notation that are used in this strategy such as (√) for agree with the readers, (X) for disagree with the readers, (?) for confusing and unclear to readers, (+) for new information, (!) for interesting and awesome fact/idea and (*) for important ideas.

Dealing with the fact previously mentioned, the researcher interested in conducting research entitled "The effect of applying *INSERT* Strategy on students' achievement in reading comprehension".

In line with the background, the objectives of this research : was to investigate the significant effect of applying *INSERT* Strategy on students' achievement in reading comprehension.

Theoretically, the finding of this research would gave easier, interesting way and valuable information in teaching reading comprehension through Interactive Notation System for Effective Reading and Thinking (INSERT).

B. Method

The experimental quantitative research was applied in this research. The experimental quantitative was a study with two different groups, experimental group that consisted of 30 students and control group with of 30 students. The experimental group was taught by using *INSERT* Strategy. The control group was taught by using Lecturing Method.

This research was conducted at SMK TARBIYAH ISLAMIYAH, Hamparan Perak, Jl. Perintis Kemerdekaan, Hamparan Perak, Sumatera Utara of the academic year 2017/2018.

The population of this research is taken from X grade students of SMK TARBIYAH ISLAMIYAH of the academic year 2017/2018 at Jl. Perintis Kemerdekaan, Hamparan Perak, Sumatera Utara, who consisted of six classes ; X-1 up to X-6 with the total students were 189. The sample in this research was X-3 that consisted of 30 students as the experimental group, and X-5 that consisted of 30 students as the control group which was choosen by using Cluster Random Sampling Technique.

The instrument of this research was multiple choice test. In the test, the students read narrative text about thing and answer the questions based on the text. The material was taken from internet and LKS Bahasa Inggris X Grade by Sulistiani, S.S. Both experimental and control groups were given the same test for the pre-test and different of post-test. The test consisted of 20 items. Each correct answer was given one, and the incorrect answer was zero. So, the total score was calculated by using Sugiyono is formula : S = $\frac{R}{N}$ x 100 % (Sugiyono,2015)

S = Scoring of the test
R = Number of correct answer
N = Number of item

After collecting the data from the test, the data were analyzed by using the following procedures:

1. Listing the scores into two tables; first for the experimental group scores as X variable, the second for the control group scores as Y variable.
2. Calculating the total score of pre-test and post-test in experimental group and control group. Calculating would be conducted by using t-test as shown below, according to Sugiyono (2015):
   a. Calculating Mean Score :

   $\bar{x} = \frac{\sum x}{n x}$ for the experimetal class (Sugiyono,2015)

   $\bar{y} = \frac{\sum y}{n y}$ for the control class (Sugiyono,2015)

   b. Standard Deviation

   $SD_1 = \sqrt{\frac{n(\sum x_1^2)-(\sum x_1)^2}{n_1(n_1-1)}}$ for the experimetal class (Sugiyono,2015)

   $SD_2 = \sqrt{\frac{n(\sum y_1^2)-(\sum y_1)^2}{n_1(n_1-1)}}$ for the control class (Sugiyono,2015)

   c. Calculating correlation Product Moment between X and Y

$$R_{\chi\gamma} = \frac{n\sum x_i y_i - (\sum x_i)(\sum y_i)}{\sqrt{(n\sum x_i^2 - (\sum x_i)^2)(n\sum y_i^2 - (\sum y_i)^2}}$$

(Sugiyono,2015)

d. Hypothesis test (t-test)

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\left(\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}\right) - 2R\left(\frac{S_1}{\sqrt{N_1}}\right)\left(\frac{S_2}{\sqrt{N_2}}\right)}}$$

(Sugiyono,2015)

e. Finding degree of freedom (df) or t-table as formula :

Df = 2N-2

Where :

t = t-test

$\overline{X_1}$ = Mean of variable 1 (experimental group)

$\overline{X_2}$ = Mean of variable 2 (control group)

SD_1 = Standard deviation of sample 1 (experimental group)

SD_2 = Standard deviation of sample 2 (control group)

S_1^2 = Standard deviation squared (variants) of sample 1 (experimental group)

S_2^2 = Standard deviation squared (variants) of sample 2 (control group)

N = Total of sample

N_1 = Number of cases for variable 1 (experimental group)

N_2 = Number of cases for variable 2 (control group)

R = Correlation of product moment between X and Y

Df = degree of freedom (df) or t-table

C. Research Finding

The findings of this reseach were described that the students who were taught by applying INSERT Strategy got higher score than those who were taught by using Lecturing Method. It was proved from the result of t-test was 12.21 and t-table was 2.002, ttest > t-table, 12.21 > 2.002. It meant that the students' achievement in reading narrative text by applying INSERT Strategy was significant than using Lecturing Method.

D. Discussion

a. Narrative Text

Narrative is the most famous type of any text. Various purposes are communicated in a narrative type. Narrative text has social function to amused, certain and to deal with actual or vicarious experiencein different ways. It means narrative text can comfort someone, when they read the narrative text (Grace, 2007:154).

The social function of narrative text is to entertain and amuse the readers or the viewer with the fictive or non-fictive experience. Generally, narrative text has a generic structure, there are: orientation, complication, and resolution (Freez, 1998:79).

a. Orientation

This is part in which the narrator tells the audience about who is in the story. When the story is taking place and where the action is happening. It can also be called as introductory part of a story. Therefore, the reader can figure out what will happen next and who are involved in it.

b. Complication

This is the part of story where the narrative tells about something that will begin a chain of events. These events will affect one or more of the characters. The complication is the trigger. From this part, the story begins. This is the part where the characters totally play their role. This part also tells about events with the conflict or problem in the story.

c. Resolution

This is the part that can be found in the end of the story. This is the part ofthe narrative where the complication is sorted out or the problem is solved insome narratives, the narrator includes the part which is called coda, if there is amoral or message to be learned from the story. That is only the optimal part ofa story.

b. Interactive Notation System for Effective Reading and Thinking (INSERT) Strategy

Interactive Notation System for Effective Reading and Thinking (INSERT) is a strategy which helps students in reading comprehension

through making decision about the students' reactions to the texts. It means that, this strategy helps students in reading class process through metacognitive behavior while reading. This strategy is also guide students in teaching reading (Vaughn and Ester, 1998:174). It employs symbols that help a student monitor and comprehend a text or selection reading. In here, during the reading the student is constantly making decisions about her/his reactions to the texts. Teacher gives students chance for making decision or comments about the text that they read and the explanation from others. Students are taught to reflect on their reading, connect to prior knowledge, and insert one of four symbols as they think about their reading. Students will get information and transfer their knowledge based on the text that they read before. This strategy helps students in monitor their thinking and learning while reading (Mather and Wetson, 2006: 112)

c. The Process of *INSERT* Strategy

During reading precess, the students are constantly making decisions about their reactions to the text. Using a set of symbols (I knew that, I don't understand that, I don't agree with that , I must remember that, etc), students note their reactions in the margin of the text. The signs can be erased periodically after completing study of the reading, or use a strip of paper folded over-the margin and number lines of the reading.

1. Tell the students that as they read, you want them to think about what they already know about the topic and the new information they are learning. As they read, you want them to make some decision about the text and their understanding of what they are reading.
2. Provide students with a copy of the symbols and their meaning. These could also be replaced on a wall poster or on the document camera for easy reference. Once students are familiar with the symbols, bookmark with abbreviated definition can help them study at home. Key words for the boomark are placed in the right column after the symbols.
3. If you wish to have students look for certain types information in a text, you can use other symbols to vary the use of the strategy. For

example, C= cause, E= effect, W= important vocabulary, F= fact, O= opinion.

4. When student complete the reading, you can begin discussion by having students look for certain symbols in their margin.
5. Then the symbols is :

✓ = I agree
X = I disagree
+ = that's new
? = I don't understant (raises a question)
= = that's important
! = that's interesting and awesome

Based on the data from the test, the scores were analyzed in other to know differences between pre-test and post-test of experimental group.

Differences between pre-test and post-test in experimental group

No	Student's Initial	Pre-test ($X_{1)}$	Post-test ($X_{2)}$	$\sum X_1^2$	$\sum X_2^2$
1	AA	45	80	2025	6400
2	ABM	50	85	2500	7225
3	AR	45	75	2025	5625
4	DSP	50	85	2500	7225
5	DW	40	75	1600	5625
6	FA	40	75	1600	5625
7	FAS	65	85	4225	7225
8	IA	45	80	2025	6400
9	IP	45	80	2025	6400
10	KAM	40	75	1600	5625
11	MA	55	90	3025	8100
12	MAF	40	70	1600	4900
13	MAS	45	75	2025	5625
14	MDP	45	75	2025	5625
15	MIL	45	80	2025	6400
16	MI	60	90	3600	8100
17	MIW	50	80	2500	6400
18	MRS	40	75	1600	5625
19	MS	55	85	3025	7225

20	PP	55	90	3025	8100
21	PR	50	75	2500	5625
22	PT	40	80	1600	6400
23	RD	55	75	3025	5625
24	RH	60	70	3600	4900
25	RS	40	75	1600	5625
26	RR	40	85	1600	7225
27	RWS	40	85	1600	7225
28	RF	55	90	3025	8100
29	SH	40	70	1600	4900
30	TAF	55	85	3025	7225
TOTAL		X_1 = 1430	X_2 = 2395	$\sum X_1^2$ = 69.750	$\sum X_2^2$ = 192.325

Based on the table above, it could be seen that there was difference between pre-test and post-test of experimental class. After calculating the data for the experimental group, the score for pre-test was 1430 and the total score for post-test was 2395. It meant that the score for post-test was higher than pre-test. The mean score was calculated as follows :

a. The average (Mean)

$$\bar{x} = \frac{\sum x}{n x}$$

(Sugiyono,2015)

$$= \frac{2395}{30}$$

$$= 79.8$$

b. Standart deviation of X variable

$$SD_1 = \sqrt{\frac{n(\sum x_1^2) - (\sum x_1)^2}{n_1(n_1 - 1)}}$$

(Sugiyono,2015)

$$= \sqrt{\frac{30(192325) - (2395)^2}{30(30-1)}}$$

$$= \sqrt{\frac{5769750 - 5736025}{870}}$$

$$= \sqrt{\frac{33725}{870}}$$

$$= \sqrt{38.8}$$

= 6.2

Differences between pre-test and post-test in control group

No	Student's Initial	Pre-test ($Y_{1)}$)	Post-test ($Y_{2)}$)	$\sum Y_1^2$	$\sum Y_2^2$
1	ABN	50	70	2500	4900
2	AAS	55	70	3050	4900
3	AP	45	60	2025	3600
4	AA	30	60	900	3600
5	AY	40	60	1600	3600
6	AP	35	50	1225	2500
7	AH	40	65	1600	4225
8	BP	65	80	4225	6400
9	DS	50	65	2500	4225
10	FR	65	80	4225	6400
11	FRD	45	55	2025	3025
12	FL	40	75	1600	5625
13	FNP	50	65	2500	4225
14	LNH	40	65	1600	4225
15	MA	45	65	2025	4225
16	MAF	40	70	1600	4900
17	MFA	40	70	1600	4900
18	MI	30	55	900	3025
19	MRS	30	60	900	3600
20	MRA	35	70	1225	4900
21	NS	50	60	2500	3600
22	NPK	40	55	1600	3025
23	RZS	55	65	3025	4225
24	R	40	60	1600	3600
25	RN	45	70	2025	4900
26	RP	45	60	2025	3600
27	RS	30	65	900	4225
28	SN	55	70	3025	4900
29	SL	55	70	3025	4900
30	TA	30	60	900	3600

TOTAL	Y_1 = 1315	Y_2 = 1945	$\sum Y_1^2$ = 60.425	$\sum Y_2^2$ = 127.575

Based on the table above, it could be seen that there was difference between pre-test and post-test score of control class. After calculating the data for the control group above, the score for pre-test was 1315 and the total score for post-test was 1945. It meant that the score for post-test was higher than pre-test. The mean score was calculated as follows :

a. The average (Mean)

$$\bar{y} = \frac{\sum y}{n y}$$

(Sugiyono,2015)

$$= \frac{1945}{30}$$

$$= 64.8$$

b. Standart deviation of Y variable

$$SD_2 = \sqrt{\frac{n(\sum y_1^2)-(\sum y_1)^2}{n_1(n_1-1)}}$$

(Sugiyono,2015)

$$= \sqrt{\frac{30(127575)-(1945)^2}{30(30-1)}}$$

$$= \sqrt{\frac{3827250-3783025}{870}}$$

$$= \sqrt{\frac{44225}{870}}$$

$$= \sqrt{50.8}$$

= 7.12

Based on the previous data it was concluded in the following table

Calculating Correlation Product Moment between X1 and X2

No	Student's Initial	Pre-test (X_1)	Post-test (X_2)	$\sum X_1^2$	$\sum X_2^2$	$\sum X_1 X_2$
1	AA	45	80	2025	6400	3600
2	ABM	50	85	2500	7225	4250
3	AR	45	75	2025	5625	3375
4	DSP	50	85	2500	7225	4250
5	DW	40	75	1600	5625	3000
6	FA	40	75	1600	5625	3000

7	FAS	65	85	4225	7225	5525
8	IA	45	80	2025	6400	3600
9	IP	45	80	2025	6400	3600
10	KAM	40	75	1600	5625	3000
11	MA	55	90	3025	8100	4950
12	MAF	40	70	1600	4900	2800
13	MAS	45	75	2025	5625	3375
14	MDP	45	75	2025	5625	3375
15	MIL	45	80	2025	6400	3600
16	MI	60	90	3600	8100	5400
17	MIW	50	80	2500	6400	4000
18	MRS	40	75	1600	5625	3000
19	MS	55	85	3025	7225	4675
20	PP	55	90	3025	8100	4950
21	PR	50	75	2500	5625	3750
22	PT	40	80	1600	6400	3200
23	RD	55	75	3025	5625	4125
24	RH	60	70	3600	4900	4200
25	RS	40	75	1600	5625	3000
26	RR	40	85	1600	7225	3400
27	RWS	40	85	1600	7225	3400
28	RF	55	90	3025	8100	4950
29	SH	40	70	1600	4900	2800
30	TAF	55	85	3025	7225	4675
TOTAL		X_1 = 1430	X_2 = 2395	$\sum X_1^2$ = 69.750	$\sum X_2^2$ = 192.325	$\sum X_1X_2$ = 114.825

$$R_{\chi Y} = \frac{n\sum x_i y_i - (\sum x_i)(\sum y_i)}{\sqrt{[n\sum x_i^2 - (\sum x_i)^2][n\sum y_i^2 - (\sum y_i)^2]}}$$

(Sugiyono,2015)

$$= \frac{30\,(114825) - (1430)(2395)}{\sqrt{[30(69750) - (1430)^2][30(192325) - (2395)^2]}}$$

$$= \frac{3444750 - 3424850}{\sqrt{[2092500 - 2044900][5769750 - 5736025]}}$$

$$= \frac{19900}{\sqrt{[47600][33725]}}$$

$$= \frac{19900}{\sqrt{[1605310000]}}$$

$= \frac{19900}{40.06}$

= 496.8

Determining the value of t-test with formula :

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\left(\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}\right) - 2R\left(\frac{S_1}{\sqrt{N_1}}\right)\left(\frac{S_2}{\sqrt{N_2}}\right)}}$$

(Sugiyono,2015)

$$= \frac{79{,}8 - 64{,}8}{\sqrt{\left(\frac{38.44}{30} + \frac{50.6}{30}\right) - 2(496.8)\left(\frac{6.2}{\sqrt{30}}\right)\left(\frac{7.11}{\sqrt{30}}\right)}}$$

$$= \frac{79{,}8 - 64{,}8}{\sqrt{(1.28 + 1.69) - 2(496.8)\left(\frac{6.2}{5.47}\right)\left(\frac{7.11}{5.47}\right)}}$$

$$= \frac{15}{\sqrt{(1.28 + 1.69) - (993.6)(1.13)(1.3)}}$$

$$= \frac{15}{\sqrt{2.97 - 1.4595}}$$

$$= \frac{15}{\sqrt{1.511}}$$

$$= \frac{15}{1.228}$$

= 12.21

After measuring the data above by using t-test formula. It showed that t-test value was 12.21. After seeking the table of the distribution of t-test as the accounting in certain degree of freedom (df). The calculation showed that :

Df = 2N-2

= 2(30)-2

= 60-2

= 58

After counting the data previously by using t-test formula that critical value was 12.21 then after seeking the table of distribution written test method as the basic of counting t-critical degree of freedom(df), the calculation showed that df was 2n-2=60-2=58 in line of 58 that t-table was 2.002 for 0.05. It could be concluded that t-test > t-table or 12.21 > 2.002. So, Ho was rejected and Ha was accepted or there was the significant

effect of applying *INSERT* Strategy on students' achievement in reading comprehension.

E. Conclusion

After analyzing the data, it was found there was a significant effect of using *INSERT* Strategy on the students' achievement in reading narrative text. It was proved from the total scores of pre-test before and after giving treatment, 1430 and 2395 respectively. It was found that was t-test higher than t-table or 12.21> 2.002 with df = 58, α= 0.05.

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