

THE EFFECTIVENESS OF HERRINGBONE TECHNIQUE IN TEACHING READING COMPREHENSION

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Abstarct

This study aims to find out whether or not the use of Herringbone technique is effective in teaching reading comprehension to the eighth grade students of SMP Negeri 19 Palu. The research applied quasi-experimental design. The samples of this study were 24 students in VIII C as the experimental group and 26 students in VIII A as the control group. They were selected by purposive sampling technique. To collect the data, test which divided into pre-test and post-test was used as the research instrument. The mean score of pre-test for the experimental group and control group were 50.42 and 54.1 respectively. The mean score of the post-test for the experimental group and control group were 71.25 and 64.23. The result of the test was analyzed statistically by applying T-test formula and interpolation formula using degree of freedom (df) 48 and 0.05 of the significance level. This research indicates that the t-counted value (3.752) is higher than the t-table (1.679). In other words, the hypothesis of this research is accepted.

Keywords: *effectiveness, reading comprehension, Herringbone technique.*

Abstrak

Penelitian ini bertujuan untuk mengetahui apakah Herringbone teknik efektif dalam mengajar pemahaman membaca kepada siswa kelas delapan SMP Negeri 19 Palu. Penelitian ini menerapkan desain quasi-eksperimental. Sampel penelitian ini adalah 24 siswa di VIII C sebagai kelompok eksperimen dan 26 siswa di VIII A sebagai kelompok kontrol. Mereka dipilih dengan teknik purposive sampling. Untuk mengumpulkan data, tes yang dibagi menjadi pre-test dan post-test, digunakan sebagai instrumen penelitian. Nilai rata-rata pre-test untuk kelompok eksperimen dan kelompok kontrol masing-masing adalah 50,42 dan 54,1. Nilai rata-rata post-test untuk kelompok eksperimen dan kelompok kontrol menerapkan *t*-hitung dan interpolasi menggunakan derajat kebebasan (df) 48 dan tingkat signifikansi 0,05. Penelitian ini menunjukkan bahwa nilai *t*-hitung (3,752) lebih tinggi dari *t*-tabel (1,679). Dengan kata lain, hipotesis penelitian ini diterima.

Kata kunci: *keefektifan, pemahaman membaca, Teknik Herringbone.*

INTRODUCTION

Reading cannot be separated from comprehension because they are a package. In reading, the students should comprehend all the contents and information of the text clearly. Rahmani (2012) argues that comprehension is the essence of reading because the goal of written language is the communication of messages. Good readers usually use their experiences and background knowledge to make sense of the text. In addition, reading comprehension is a complex activity between the reader and the text to understand the words meaning and get clear information.

In Indonesia, English is taught as a compulsory subject and it is considered as a foreign language. The objective of teaching English at junior high school is directed to develop language skills so that the graduates are able to communicate in English at a certain level of literacy. English subject is meant to develop students' ability in communicating and mastering English language skills. The point here is English as an important subject that needs to be mastered by the students in order to communicate orally and written in English.

Based on the researcher's observation, reading comprehension of the eighth grade students of SMPN 19 Palu was low. Especially their ability in the literal level of comprehension was not good enough. They were confused in comprehending the information of the text. This problem was caused by some reasons. First, students found it difficult to translate the words in the text without using dictionary. Second, students did not have motivation to practice reading. Last, the technique used in teaching reading was not interesting. Consequently the students getting bored when they are in reading class.

Considering this problem, the researcher chose Herringbone Technique as a solution. Herringbone technique can also be called Graphic Organizer (Thaler, 2008). Graphic Organizers are important and effective educational tools for organizing content and ideas, and facilitating learners' comprehension of newly acquired information. According to McKnight (2010), Herringbone technique is used to establish supporting details for the main idea. This technique uses a fish diagram to help students identify the main idea and supporting ideas of a text.

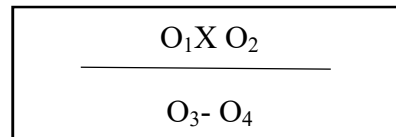
Herringbone technique is a technique that develops comprehension of the main idea by potting who, what, when, where, why and how questions on a visual diagram of a fish skeleton (Deegan, 2006). The visual pattern of the herringbone creates a framework for students to short the information. It guides the students to make a statement that represents the information of the text in the graphic organizer. Thus, Herringbone technique can help students in finding general and specific information of a text.

RESEARCH METHOD

This research implemented quasi-experimental research design. It used non-equivalent control group design. There were two classes selected by the researcher. One of them entrusted as the experimental group and the other one as the control group. The following research design is exemplified as proposed by Sugiyono (2015:116):

Experimental group:

Control group:



Where:

$O_1 O_3$ = pre-test

X = treatment

$O_2 O_4$ = post-test

Both control and experimental groups received a test (post-test and pre-test). Pre-test was given in the first meeting and post-test in the last meeting. The experimental class undergone a treatment condition using Herringbone technique while the control group was not. The control group only received a conventional teaching strategy.

The population of this research was the eighth grade students of SMP Negeri 19 Palu. In selecting sample, the researcher applied purposive sampling technique and the sample of this research was class VIII B as the experimental group and class VIII D as the control group. Then, Instrument of this research was

written test, the test consisted of 15 items of multiple choice and 5 items of essay. The details of rating score can be seen in the following table:

Table 1
The Scoring Rubric of the Essay Test

No	Explanation	Score
1	Correct answer and grammatical sentence.	3
2	Correct answer and ungrammatical sentence.	2
3	Incorrect answer.	1
4	No answer	0

(Adapted from Depdikbud, 2005)

FINDINGS

The researcher used pre-test and post-test in which these tests aimed in collecting the data of students' ability in reading comprehension. To analyze the data obtained from the tests, the researcher used T-test formula. The following tables describe the scores both of experimental group and control group:

Table 2
Pre-test and Post-test Result of the Experimental group

No.	Students' Initials	Students' Standard Scores		Deviation ($x_2 - x_1$)
		Pre-Test (x_1)	Post-Test (x_2)	
1	AAN	46.67	60.00	13.33
2	AMG	66.67	76.67	10.00
3	AMR	56.67	70.00	13.33
4	ATA	56.67	66.67	10.00
5	DSP	56.67	73.33	16.67
6	DAS	56.67	63.33	6.67
7	FAP	56.67	73.33	16.67
8	FSI	40.00	63.33	23.33
9	IAY	50.00	80.00	30.00
10	IDY	63.33	83.33	20.00
11	MAI	46.67	73.33	26.67

12	MIN	36.67	60.00	23.33
13	MVO	46.67	56.67	10.00
14	MRV	43.33	63.33	20.00
15	MDL	43.33	60.00	16.67
16	NPB	53.33	80.00	26.67
17	NI	53.33	63.33	10.00
18	RM	53.33	73.33	20.00
19	RFW	36.67	56.67	20.00
20	RA	56.67	80.00	23.33
21	SAM	53.33	66.67	13.33
22	YA	53.33	70.00	16.67
23	MRU	46.67	70.00	23.33
24	IF	36.67	60.00	23.33
Total		1210	1710	433.33
Mean		50.42	71.25	18.06

The above table shows that the highest score obtained by the students in the experimental group on the pre-test was 66.67 while the lowest score was 36.67. The total score of the students was 1210 and the means score was 50.42. In deciding the number of students who passed the test, the researcher used score 65 which is the minimum passing standard used at SMP Negeri 19 Palu. After comparing the students' individual score with the minimum passing standard, only one student who success on the pre-test. Meanwhile, the rest of students did not pass the minimum passing standard.

Moreover, the highest score on post-test was 83.33 and the lowest was 60. The total score of the students was 1710 and the mean score was 71.25. By looking at the table, there were 18 students who passed the minimum passing standard. In other words, only 6 students who did not pass the test. The data indicates that there was a significant progress of mean score of the experimental group from (50.42) in the pre-test to (71.25) in the post-test.

Table 3
Pre-test and Post-test Result of the Control Group

No.	Students' Initials	Students' Standard Scores		Deviation ($x_2 - x_1$)
		Pre-Test (x_1)	Post-Test (x_2)	
1	AA	56.67	60.00	3.33
2	AJ	63.33	66.67	3.33
3	APN	56.67	63.33	6.67
4	AF	60.00	73.33	13.33
5	CD	53.33	60.00	6.67
6	DA	43.33	60.00	16.67
7	DA	53.33	60.00	6.67
8	FAG	40.00	66.67	26.67
9	MS	63.33	66.67	3.33
10	MD	43.33	60.00	16.67
11	MR	50.00	60.00	10.00
12	MASH	63.33	66.67	3.33
13	MN	56.67	63.33	6.67
14	MZ	63.33	63.33	0
15	NSN	50.00	60.00	10.00
16	NSP	36.67	66.67	30.00
17	NL	63.33	63.33	0
18	PI	50.00	66.67	16.67
19	PYS	56.67	60.00	3.33
20	RR	43.33	63.33	20.00
21	RC	43.33	53.33	10.00
22	RR	56.67	73.33	16.67
23	RA	70.00	66.67	-3.33
24	RTW	63.33	66.67	3.33
25	SSA	56.67	70.00	13.33
26	SS	50.00	70.00	20.00
Total Score		1670	1406.67	263.33
Mean Score		64.23	54.10	10,13

From the above table, the highest score obtained by the students in the control group on the pre-test was 70 while the lowest score was 36.67. The total

score of the students was 1406.67 and the means score was 54.10. It can be seen that only one student who got higher score than 65.

Besides, the highest score on post-test was 73.33 and the lowest was 60. The total score of the students was 1670 and the mean score was 64.23. The total number of students who passed the test were 12 and who failed were 14. Based on the data gained by the researcher, it was clear that the students' score in control group got increased but it was not as high as the experimental group has.

Further, to find out whether there is a significant effect of the treatment that is Herringbone technique for the experimental group in improving reading comprehension or not, the researcher applied T-test formula proposed by Arikunto (2006). Then, interpolation formula using degree of freedom (df) 48 and 0.05 of the significance level using to count the T-table. The result of the data analysis showed that the T-counted value (3.752) was higher than the T-table (1.679). In other words, the hypothesis of this research is accepted. It implies that Herringbone technique is effective in teaching reading comprehension to the eight grade students of SMP Negeri 19 Palu.

DISCUSSION

After analyzing the data, it shows that there is an improvement in students reading comprehension. It can be seen from the increasing of the students' scores on pre-test and post-test of the experimental group. After receiving treatment, the students' scores increased by 20.83% from 50.42% (pre-test) to 71.25% (post-test). Thus, the scores of students on pre-test and post-test of the experimental group increased significantly. Moreover, deviation between the t-counted and t-table values was 2.07 points. Hence, using Herringbone technique

was effective in teaching reading comprehension to the eighth grade students of SMP Negeri 19 Palu. In other words, the result of this study has answered the research question and directly proportional to the hypothesis.

This technique successfully improved students reading comprehension because the diagram allowed students to engage more in reading activities. In the diagram, there were WH-questions that should be answered by the students with their pairs. They have to read the text carefully in order to find the information in the text. After reading the whole text, the students may ask about unfamiliar words among their pair. This led the students to discuss in pair to get more comprehension of the text. Then, the students were given evaluation individually to show their comprehension of the text they have read.

Herringbone technique also worked successfully in solving the problems. The students' vocabulary mastery gradually improved through pair works as they can share what they know or what they had among their pair. In this case, the students also had opportunity to interact and learn from their pair. They can help each other when they found difficulties. Thus, it helped students to add their vocabulary, they can understand the meaning of words they didn't know before.

This technique also motivated students to practice reading. After answering the questions in the diagram, the researcher asked students to write their answers on the whiteboard. Then they have to explain how they got the answer to the questions. This made students motivated to read texts carefully; therefore, they could explain it well in front of the class. They should be sure that their answer and explanation was true because all classmates see their answers.

Thus, they felt enthusiastic to read the text in order to find the answer to those WH-questions.

From explanation above, it can be concluded that Herringbone technique was effective in teaching reading comprehension to the eighth grade students of SMP Negeri 19 Palu. It was due to the benefits of the technique itself. The diagram and pair discussion helped students in adding new vocabulary. Moreover, this technique also enabled students to be more active in practicing reading, they can present their ideas in front of the class. Thus, the students were enthusiastic about reading and finding the information from the text.

CONCLUSION

After discussing and analyzing the data, the researcher concludes that Herringbone Technique is effective in teaching reading comprehension to the eighth grade students of SMP Negeri 19 Palu. It is proven by the result of this research that has been discussed in the previous chapter. It shows that there is an improvement in the students reading comprehension after being given the treatment. The result of this research is supported by seeing the result of t-counted that higher than t-table. The score of t-counted is 3.752 and t-table is 1.679. Hence, it means that the hypothesis is accepted. In this research, there are two kinds of procedures in collecting data which are tests and treatment. The test includes pretest and posttest that are in different questions but in the same level of difficulty.

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