

# THE EFFECT OF HERRINGBONE TECHNIQUE ON THE STUDENT'S READING SKILL AT 8TH GRADE JUNIOR HIGH SCHOOL

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## Abstract

This research is purposed to analyze the effect of using herringbone technique on the student's reading skill. In this research, the researcher used quasi experiment method. There are 2 variables in this research. Herringbone Technique as independent variable (variable x) and Student's Reading Skill as dependent variable (variable y). The technique of collecting the data by using test, the test consist of 20 items of pre test and 20 items of post test. From the data analyzes, it found that the mean of pre test score is 35,3. The mean of post test score 69,7. The researcher used the pooled variance model t-test to find out the effect variable X towards variable Y. The result of applying pooled variance model t-test, ( $t_{table}$ ) is 2,093 and ( $t_{test}$ ) is 5,55 the degree of significant 5%. It means  $t_{test}$  is higher than  $t_{table}$  ( $5,55 > 2,093$ ), so the alternative hypothesis ( $H_1$ ) is accepted and null hypothesis ( $H_0$ ) is rejected. The conclusion of this research, herringbone technique is effective in teaching reading to improve student's reading skill.

**Keywords:** *Herringbone Technique and Student's Reading Skill*

## INTRODUCTION

Reading is one of important skills in learning English because it gives big contribution to students to perform their communication skill better. As international language, most people around the world use English in their daily life to communicate each other. Based on Permendikbud No.68 2013 on the 2013 Curriculum to prepare Indonesian people to have the ability to live as individuals and citizens who believe, productive, creative, innovative, affective, and able to contribute to society, nation, state, and world civilization.

Moreover, also stated in Permendikbud No.54 2013 about *Standar Kompetensi Lulusan* on junior high competency standards. Junior high school graduates have attitudes, knowledge, and skills. As for skills qualifications, the ability of thought and affective and creative acts in the realm of the abstract and the

concrete in accordance with the school and similar other sources. According to Harmer (2007), "Reading is useful for language acquisition. Provided that students more or less understand what they read, the more they read, the better they get at it" (p.99). Reading also provides opportunities to study language: vocabulary, grammar, punctuation, and the way we construct sentences, paragraphs, and texts.

Based on the observation in SMPIT Al-Mustofa, it is found that many students had difficulties in reading. It can be seen from students' low reading achievement. They are not able to understand the purpose of the text because they are not able to comprehend the text and lack of vocabulary. In addition, teachers still use traditional methods in teaching. Those difficulties sometimes make them bored and feeling unmotivated to read. Thus, reading should be enjoyable; otherwise, the exercise would not be worth teaching. The

students need many kinds of interesting materials so that they feel happy and motivated. Therefore, the existence of the teaching method is important.

Teaching with graphic organizer is one of teaching technique that can increase students' motivation in learning English. McKnight stated (2010), "Graphic organizers are important and effective pedagogical tools for organizing content and ideas, and facilitating learner's comprehension of newly acquired information". The one of graphic organizers is Herringbone Technique. "Herringbone Technique is introduced as a tool to help students recognize the important relationships in the material by seeking answers to specific types of question." (McCune & Shirley, 2002, p. 35). In addition, Herringbone Technique helps students understand the connections between supporting details to identify a main idea. In relation to the background of study, the problems can be identified as follows:

1. Is there any effect of the use of herringbone technique on the student's reading skill?
2. Is the use of herringbone technique can increase student's reading achievement?

## **METHOD**

Pang, Muaka, Bernhardi, & Kamil (2003) stated that reading is about understanding written texts. It is a complex activity that involves both perception and thought. Reading involves both the acquisition of meanings intended by the researcher and the reader's own contributions in the form of interpretation, evaluation, and reflection on those meaning.

The Herringbone Technique graphic organizer is used for establishing supporting details for a main idea. It can be used to organize information for all content areas. Coe & Glass (2004) stated that the herringbone pattern is used to help students identify the main idea and the related supporting ideas of a lesson, text, or concept.

Tierney, Readence, & Dishner (1985) explained that herringbone technique is a structured outlining procedure designed to help students organize important information in a text chapter. The teacher helps students put the information that they are looking at a diagram like a fish skeleton. Then, the students write the summary along the central spine of the diagram. This diagram is useful to review the information and provide a visual structure to the selection of which can be seen at a glance.

Thus, Herringbone technique helps the students understand the connections between supporting details to identify a main idea. The herringbone is a useful graphic organizer for students to organize the information. According to Deegan (2006), Herringbone strategy is a strategy that develops comprehension of the main idea by plotting who, what, when, where, how, and why questions on a visual diagram of a fish skeleton. Using the answers to the WH-questions, the students write the main idea across the backbone of the fish diagram.

The procedures of herringbone techniques are:

1. The teacher selects a text at the appropriate reading level.
2. The teacher constructs a visual diagram of the herringbone.

3. The teacher tells the student to record the answers to the questions on the diagram. She will look for answers to:
  - a. Who is the author talking about?
  - b. What did they do?
  - c. When did they do it?
  - d. Where did they do it?
  - e. How did they do it?
  - f. Why did they do it?
4. The student reads to find the answers and records the answers on the diagram.
5. After the information is recorded, the teacher shows the student how each answer fits into a slot in a main idea sentence.
6. The student writes a main idea, using the information from the herringbone diagram.
7. The teacher duplicates sheets with the diagram, and students complete diagram on their own.
8. The diagram becomes a tool for story discussion. During the discussion, the teacher and students compare their answers and their rationales. (<http://www.teacherweb.com/PA/NazarethAreaMiddleSchool/TheSpecialistTeam/HerringboneTechnique.doc>)

This research used quasi experimental method. Here below is the research hypothesis:

**Pre test hypothesis:**

$H_0$  : There is no difference in the achievement of students between control class and experimental class.

$H_1$  : There is difference in the achievement of students between control class and experimental class.

**Post test hypothesis:**

$H_0$  : There is no difference in the achievement of students between those who are taught by using Herringbone Technique and by using conventional method.

$H_1$  : There is difference in the achievement of students between those who are taught by using Herringbone Technique and by using conventional method.

**RESEARCH FINDING**

Pretest and post test were administered to both experimental and control group for measuring students' reading skill. Pretest result was used to measure students' initial reading skill. Meanwhile, post test was used to measure students' reading skill after treatment. Pre test and post test results were used to investigate the significant difference between the experimental and the control groups. The result of post test was statistically analyzed by using t-test formula for independent samples to find out whether or not using herringbone technique could improve students' reading skill at the eighth grade of SMP Al-Mustofa in the academic year 2014/2015.

The following table presents data description of post test. These data would be analyzed by using t-test formula for independent samples to draw an inference of the study.

**Table 1.** Data Description of Post Test

|                           | Experimental Group<br>(1) | Control Group<br>(2) |
|---------------------------|---------------------------|----------------------|
| <b>Mean</b>               | 69.7                      | 50.7                 |
| <b>Standard Deviation</b> | 10.3                      | 11.4                 |
| <b>Variance</b>           | 105.44                    | 129.76               |
| <b>Sample size</b>        | 20                        | 20                   |

Furthermore, the data above were computed as follows.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1 + n_2 - 2} \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} = \frac{69.7 - 50.7}{\sqrt{\frac{(20-1)105.44 + (20-1)129.76}{20 + 20 - 2} \left( \frac{1}{20} + \frac{1}{20} \right)}} =$$

$$\frac{69.7 - 50.7}{\sqrt{\frac{(20-1)105.44 + (20-1)129.76}{20 + 20 - 2} \left( \frac{1}{20} + \frac{1}{20} \right)}} = \frac{19}{\sqrt{\frac{2003.36 + 2465.44}{38} (0.1)}} =$$

$$\frac{19}{\sqrt{11.76}} = \frac{19}{3.42} = 5.55$$

The result showed that the value of statistical computation or  $t_{\text{value}}$  was 5.55, while  $t_{\text{table}}$  at the significance level of 0.05 was 2.093. It means that  $t_{\text{value}} = 5.55$  was higher than  $t_{\text{table}} = 2.093$  ( $5.55 > 2.093$ ). Therefore, the formulated null hypothesis ( $H_0$ ): “There is no significant difference in the achievement of students who are taught by using herringbone technique and those who are not” was rejected. On the other hand, the formulated alternative hypothesis ( $H_1$ ): “There is significant difference in the achievement of students who are taught by using herringbone technique and those who are not” was accepted.

Since the null hypothesis ( $H_0$ ) was rejected and the alternative hypothesis ( $H_1$ ) was accepted, it can be concluded that there was significant difference in the achievement of students who were taught through herringbone technique and those who were not. In other words, the use of herringbone technique could improve

students’ reading skill at the eighth grade of SMP Al-Mustofa in the academic year 2014/2015. The purpose of these studies was to seek the effect of herringbone technique on reading skill, and they concluded the similar results that herringbone technique had significant effect on the improvement of students’ reading skill.

The positive significant effect of using herringbone technique on students’ reading skill in this study has important practical implication for English teaching and learning, particularly at the high school level in Indonesia. As to the result of the study, teaching reading can be undertaken by using herringbone technique in order to evade students struggling with reading a text in foreign language. Teacher can develop students’ comprehension of a text they are reading by plotting who, what, when, where, why, and how questions on a visual diagram of a fish skeleton (Deegan,

2006). To achieve effective result of using this technique, the teacher should understand the procedures and be well-prepared before applying this technique in the classroom.

## CONCLUSION

To conclude, this study proved that there was significant effect of using herringbone technique on students' reading skill at the eighth grade of SMP Al-Mustofa in the academic year 2014/2015. This conclusion is based on the decision making to reject the null hypothesis and accept the alternative hypothesis, leading to the interpretation that students who were taught by using herringbone technique achieved better scores on reading than those who were not.

After proving the effect of herringbone technique on students' reading skill, some suggestions are put forward. First, it is suggested that English teacher should encourage him/herself to find appropriate technique in teaching English, particularly teaching reading skill. Second, it also suggested to the students to practice reading English texts by using herringbone technique in order to gain more knowledge and information. Finally, for further researchers, they are suggested to explore other aspects such as motivation and belief of using herringbone technique as the way for teaching reading so that the study can be more comprehensive.

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