THE USE OF HERRINGBONE TECHNIQUE IN TEACHING NARRATIVE READING TEXTS

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Abstract

This research aimed at finding out the effectiveness of Herringbone technique in teaching reading comprehension to the Eighth Grade Students of SMP Nahdlatul Ulama Palembang". This research employed 174 of the eighth-grade students to be the population and 60 students were selected as the sample of the research through two stage random sampling. To collect the data, the researchers used tests, in terms of pretest and posttest. To analyze the data, the researchers applied T-Tests in line with paired sample t-test and independent sample t- test. The results of the showed that the value of sig (2-tailed) was 0.003 less than significant level $p>0.05$ for 2- tailed. So, the null hypothesis (H_o) was rejected, and alternative hypothesis (H_a) was accepted which means that herringbone technique was effective in teaching reading comprehension to the eighth-grade students of SMP Nahdlatul Ulama Palembang.

Keywords: *herringbone technique, narrative text, reading comprehension*

Introduction

Reading is a physical and mental activity to reveal the meaning of the written texts, which has something to do with the process of knowing letters. It is due to the parts of the body, eyes particularly, do it. It is related to perception and memory which is involved in it (Burhan, 2012). Akyol (2012) deciphers reading as meaning-making process that involves complex mental skills, referring to effective communication among the author and readers. It is more challenging than simply removing the words from the paper. The readers need to interpret the words and phrases. It is such an activity that involves a sophisticated problem-solving process.

Furthermore, Grabe & Stoller (2013) define reading as the ability to draw meaning from the printed page and interpret this information appropriately. It allows teachers to use various activities. (Ökcü, 2015). To get or interpret the complete or detailed information or ideas of the texts or passages, students ought to have a good reading comprehension. Burhan, (2012) further states that reading comprehension is the ability of students to read, recognize, and understand the text. It also reflects the author's purpose for writing the text. Besides, Ökcü, (2015), further adds that reading is such extracting meaning from the written text. It means that reading comprehension is the capacity to read, analyze, and understand the meanings of the texts.

As a matter of fact, students are obliged to read some of different genres of texts to develop or improve their reading skills. One ofthe texts is narrative text. It is a type of text or passage that has meaningful sequence of events told in words. It is sequential in that the events are ordered, not merely random. It follows a typical story pattern, and some shorter stories contain simple story patterns, whereas longer stories are more complex what makes narrative text easier for student to comprehend than informational text is their familiarity with stories. There are three common problems that often arise as students learn to read, such as being lack of learning interest, motivation and seriousness, as well as the activities are not varied that make students bored, and also the learning model used by the teacher tended to be not attractive and interesting (Fuzidri, 2014).

In keeping with the results of a study by Central Connecticut State University's Most Literate Nations in the Word in 2016, it showed that Indonesia ranks in 60th out of 61

countries. It proved that many Indonesians do not like to be involved in reading activities, since they have less interest to read. Thus, Indonesia has a reading index of 0.001 which means that in every thousand people only one person has a high reading interest. (Kasiyun, 2015). In relation to interview between the researchers and English teacher of SMP Nahdlatul Ulama Palembang, some information about students' reading problems were figured out. In this case, the researchers found out that the strategy implemented by the teacher did not attract students' learning interest and made them not motivated to join reading activity.

From the problems illustrated. It is very crucial for English teacher to improve his or her teaching performance, especially when teaching reading by applying an effective strategy or technique. One of the effective strategies or techniques in teaching reading is Herringbone technique. It is such a good technique which focuses on comprehension of the main idea by plotting "WH Questions" like "who, what, when, where, how, and why". It allows students to write the main idea across the backbone of the fish diagram (Losi, 2020). It is supported by a former study by Ardayati and Herlina (2020) which reported that herringbone technique was effective in teaching reading comprehension. It was proved by the difference between the two mean scores in pretest and posttest. In other words, there was an improvement of the average scores from pretest (61.33) and posttest (70.33) indicating that there was significant difference between teaching reading using *herringbone technique* and the one using conventional technique.

Theoretical Review
Reading Comprehension

Reading can be defined as the process when readers learn various written symbols and associate these symbols with existing theory to obtain information and knowledge (Patiung, 2016). It is an activity when someone attempts to learn a sequence of words, intellect, and emotion, which is connected with prior knowledge and to figure out the information from the text (Maggie, 2014; Nugroho, 2015; Salehi & Vafakhah, 2013; Smith & Feng, 2018). In addition, comprehension means the transaction between the reader and the text. In reading comprehension, the reader is supposed to draw information from a text and then combine with information he has, reading in second language is a complex and for reading comprehension learners must combine the skills to understand the text (Pourkalhor & Kohan, 2013; Zaccoletti, Altoè & Mason 2020)

In general, reading comprehension is closely related to word recognition, word meaning, phonetic analysis and structure. When word recognition skills are not developed, problems arise in reading comprehension (Kodan, 2017). Thus, reading comprehension is a complex interaction among automatic and strategic cognitive processes that enables the reader to create a mental representation of the text. It is the process of deriving meaning from the text; in other words, reading entails understanding, not just the symbols used in writing but also the meaning of the words (Wolley, 2015). It means that reading comprehension is a multi-step mental process where different parts of the brain work together to interpret the meaning of the text. It has something to do with how a reader interprets a text. It is the primary goal of the reading activity, which is carried out to ensure reading success and improve the reader's comprehension.

Narrative Text

Narrative text is one of the text genres which can entertain the reader and it also has a moral value inside the story (Djatmika & Wulandari, 2013). It has a structural organization that includes orientation, complication, and resolution (Djatmika & Wulandari, 2013). It also has some textures like preposition, conjunction, adverb, tenses (past tense and past perfect

tense) as well as direct and indirect speech (Djatmika & Wulandari, 2013).

In addition, narrative text can be regarded as a story stated in a book containing a series of events which deal with problematic running which lead to a crisis or turning into a resolution. It is used to entertain readers. It is also written to teach or inform, to change attitudes or social opinions e.g. soap operas and television dramas that are used to raise topical issues. (Sulaiman, 2017)

Herringbone Technique

Herringbone technique is such a technique used to teach reading with the help of fishbone pattern or diagram that enables studentsto organize the text (Losi, 2020). It focuses on comprehension of the main idea by plotting WH Questions, "*who, what, when, where, how, and why*". The students solely write the main idea across the backbone of the fish diagram (Losi, 2020). The students are asked to identify the ideas of main topic or main idea of the text given and illustrates them across the backbone of the fish diagram (Rahila & Sakdiah, 2016). To be clear, Figure 1 was illustrated
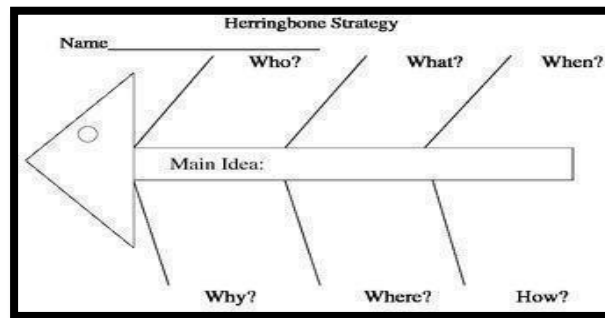

Figure 1. Herringbone Diagram

Methodology

The method of this research was quantitative method or approach in line with a true experimental design. In experimental research design, the researcher manipulates at least one independent variable, controls other relevant variables, and examined the influence on one or more dependent variables (Creswell, 2012). This research employed 174 students in grade eight as the population of the research. To be vivid, Table 1 was presented.

Table 1. Population of the Research

No.	Class	Number of Students
1	VIII 1	30
2	VIII 2	30
3	VIII 3	27
4	VIII 4	30
5	VIII 5	27
6	VIII 6	30
Total		**174**

(Source: SMP Nahdlatul Ulama *Palembang in the Academic Years 2022/2023)*

Based on the population stated in Table 1, the researchers took two classes to be the sample through random sampling for a group of character who are clearly together not all the population will be taken as the samples. In this research, the researchers did two stages

random sampling since the researchers cannot easily identify the population in a large group (Creswell, 2012). The samples of the research that the researchers got were VIII 1 (as experimental class) and VIII 6 (as control class). This research has two kinds of variables, independent variable which refers to herringbone technique and dependent variable which refers to reading comprehension on narrative text.

To collect the data, the researchers used tests in terms of pretest and posttest and to analyze the data, t-test was applied. T-test is used to measure separately the contribution of each independent variable to the dependent variable and also used to see the significance of a correlation coefficient through SPSS calculation (Sugiyono, 2014; Syahri, Sulaiman & Susanti, 2017). In this research, the researchers used paired sample t-test and independent sample t-test. Paired sample t test is one of testing methods used to assess the effectiveness of handing, characterized by a difference in the average before and average after giving a treatment While, independent sample t-test or two average different test is used to test two meals of two independent data groups. The purpose of independent sample t-test is to be able to compare the averages of the two unrelated groups.

Findings
The Results of Pretest and Posttest in Control Group
Statistic Data of Pretest in the Control Group

The results in control group showed the highest score, the lowest score, the mean of score, median of the students' scores and mode of the scores. The pretest control statistics are shown in Table 2.

Table 2. Statistic Data of Pretest in Control Group

Statistics		
N	**Valid**	**30**
	Missing	**0**
Mean		49.47
Std. Error of Mean		1.492
Median		48.00
Mode		48[*]
Std. Deviation		8.169
Variance		66.740
Range		24
Minimum		36
Maximum		60
Sum		1484
*) Multiple modes exist. The smallest value is shown		

Table 2 shows the result of pretest in the control group, it was found out that the maximum score of pretest control group was 60 and the minimum score was 36. The mean score was 49.47, the median of the students score was 48.00 and mode of score was 48.

The frequency of pretest control can be seen in Table 3. Table 3 shows seven students (23.3) got 60, four students (13.3) got 56, two students (6.7) got 52, seven students (23.3) got 48, two students (6.7) got 44, six students (20.0) got 40, two students (6.7) got 36 as the lowest score.

Table 3. Frequency of Pretest in Control Group Pretest Control

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	36	2	6.7	6.7	6.7
	40	6	200	20.0	26.7
	44	2	6.7	6.7	33.3
	48	7	233	23.3	56.7
	52	2	6.7	6.7	63.3
	56	4	133	13.3	76.7
	60	7	233	23.3	100.0
	Total	**0**	**100**	**100.0**	

Statistic Data of Posttest Control Group

The results in the control group showed the highest score, the lowest score, the mean of score, median of the students score and mode of the score. The posttest control statistics are shown in Table 4.

Table 4. Statistic Data of Posttest in Control Group

Statistics		
N	Valid	**30**
	Missing	**0**
Mean		81.47
Std. Error of Mean		1.279
Median		80.00
Mode		76
Std. Deviation		7.006
Variance		49.085
Range		24
Minimum		72
Maximum		96
Sum		**2444**

Table 4 shows three students (10.0) got 96, four students (13.3) got 88, six students (20.0) got 84, six students (20.0) got 80, seven students (23.3) got 76 and four students (13.3) got 72 as the lowest score.

The Result of Pretest and Posttest in Experimental Group
Statistic Data of Pretest in the Experimental Group

The result in the experimental group showed the highest score, the lowest score, the mean of score, median of the students' score and mode of the score. The pretest experimental statistics are shown in Table 5. Table 5 shows the result of pretest experimental group, it was found that the maximum score was 68 and the minimum score was 48. The mean of score was 59.73, median of the students score was 60.00 and mode of scores was 60.

The frequency of posttest control can be seen in Table 6. Table 6 shows seven students (23.3) got 68, five students (16.7) got 64, seven students (23.3) got 60, five students (16.7) got 56, two students (6.7) got 52, and four students (13.3) got 48 as the lowest score.

Table 5. Statistic Data of Pretest in Experimental Group

Statistic		
Pretest-Experiment		
N	**Valid**	30
	Missing	0
Mean		5973
Std. Error of Mean		1.227
Median		60.00
Mode		60[*)]
Std. Deviation		6.721
Variance		45.168
Range		20
Minimum		48
Maximum		68
Sum		1792
*) Multiple modes exist. The smallest value is shown.		

Table 6. Frequency of Pretest in Experimental Group

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	48	4	13	13.3	13.3
	52	2	6.7	6.7	20.0
	56	5	17	16.7	36.7
	60	7	23	23.3	60.0
	64	5	17	16.7	76.7
	68	7	3	23.3	100.0
	Total	**30**	**10.0**	**100.0**	

Statistic Data of Posttest in the Experimental Group

Table 7. Statistic data of Posttest in the Experimental Group

Statistic		
Posttest-Experiment		
N	**Valid**	30
	Missing	0
Mean		84.13
Std. Error of Mean		1.293
Median		84.00
Mode		84
Std. Deviation		7.084
Variance		50.189
Range		24
Minimum		72
Maximum		96
Sum		**2524**

The result in the experimental group showed the highest score, the lowest score, the mean of score, median of the students' score and mode of the score. The posttest experimental statistics are shown in Table 7. Table 7 shows the result of posttest experimental group, it was found that the maximum score was 96 and the minimum score was 72. The mean of score was 84.13, median of the students score was 84.00 and mode of scores was 84. The frequency of posttest experimental can be seen in Table 8.

Table 8. Frequency of Posttest in the Experimental Group

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	2	2	16 .7	6.7	6.7
	6	4	3.3	13.3	20.0
	0	6	0.0	20.0	40.0
	4	7	3.3	23.3	63.3
	8	6	0.0	20.0	83.3
	6	5	6.7	16.7	100.0
	Total		**00.0**	**100.0**	

Table 8 shows five students (16.7) got 96, six students (20.0) got 88, seven students (23.3) got 84, six students got (20.0) got 80, four students (13.3) got 76, two students (6.7) got 72 as the lowest score.

The Competency between Pretest and Posttest of Experimental Group

To compare pretest and posttest in experimental group, the researcher used paired sample t-test in SPSS 26 Program, and the result of the paired sample statistics can be seen in Table 9.

Table 9. Paired Samples Statistics

	Mean		N	Std. Deviation	Std. Error Mean
Pair 1	Pretest-Exp	59.73	30	6.721	1.227
	Posttest-Exp	84.13	30	7.084	1.293

Table 9 shows the mean of average of pretest was 59.73, standard deviation of pretest 6.721, and standard error mean was 1.227. The mean of the posttest was 84.13, standard deviation was 7.084, and standard error mean was 1.293.

Table 10. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
	Mean		Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest Exp - Posttest Exp	-24.400	11.619	2.121	-28.739	-20.061	-11.502	29	0.000

Table 10 shows the differences between pretest and posttest, the mean pretest and posttest was -24.400, the standard deviation was 11.619, and the standard error mean was 2.121. In 95% confidence interval of the difference, the lower was -28.739, the upper was -20.061. The value of the t- obtained was -11.502. df (Degree of Freedom), the Formula is (n-1) sample is n, df was 29. At the significant level p <0.05 in 2- tailed was 0.000.

The Comparison between Posttest of Control and Experimental Group

The comparison of score posttest in experimental group and control group were analyzed using independent sample t-test.

Table 11. Independent Samples Test

Levene's Test for Equality of Variances				t-test for Equality of Means						
F			Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Students'Score	Equal variances assumed	.161	.690	-3.129	58	0.003	-5.867	1.875	-9.620	-2.114
	Equal variances not assumed			-3.129	57.725	0.003	-5.867	1.875	-9.620	-2.113

Table 11 shows that the value of sig (2-tailed) was 0.003, at significant level p>0.05 for 2-tailed. Since the value of sig. (2-tailed) was less than significant level. So, the null hypothesis was rejected, and alternative hypothesis was accepted. It can be concluded that using herringbone technique in teaching reading comprehension to the eighth-grade students of SMP Nahdlatul Ulama Palembang was effective.

Discussion

Based on the results of the independent sample t-test shows that the value of sig (2-tailed) was 0.003 less than significant level p>0.05 for 2-tailed. So, the null hypothesis was rejected, and alternative hypothesis was accepted. It means that herringbone technique had significance improvement in teaching reading comprehension to the eighth-grade students of SMP Nahdlatul Ulama Palembang. In addition, Losi (2020) also found that herringbone technique was one of the effective techniques which can be applied in teaching reading comprehension. It could be seen from students' posttest score which showed that there was such an improvement from students' pretest score.

Additionally, the students looked interested during the reading activity with this technique because they think that it will be easier to understand the topic and automatically it makes their motivation high. Motivation is a very important factor which determines the success or failure in a target language. Once students have high motivation, they will enjoy learning, as soon as it will increase their learning achievements. (Gagne, 2008; Smith, 2012).

Naturally, herringbone technique is one of the effective techniques that can be used by an English teacher in improving students' reading comprehension achievements. It is such a technique that enables students to analyze the topic or main idea of a text. It is line with the

theory by Thaler (2008) who states that effective technique used for analyzing a single idea or text is the herringbone for it consists of a short graphic organizer and concrete way of helping students to find the comprehensive ideas in a paragraph or passage. Therefore, the students have good responses during reading activity in the classroom, and the average of students' scores in pretest and posttest plays an important role in determining the successful of teaching reading activities. In other words, herringbone technique has significant improvement in teaching reading comprehension achievements, particularly on narrative texts.

Conclusion

It was effective to teach reading comprehension by using herringbone technique to the eighth-grade students of SMP Nahdlatul Ulama Palembang. It was proved by looking at the value of sig (2-tailed) which was 0.003 less than significant level $p > 0.05$ for 2-tailed. The improvement or progress can be also known from the results of paired sample t-test and independent sample t-test analyses. In this case, the researchers figured out that the results of the calculation of t-test showed that $t_{obtained}$ was higher than t_{table} as the critical value which means that the alternative hypothesis (H_a) was accepted and the null hypothesis was rejected (H_o).

References

Akyol, H. (2012). Türkçe ilk okuma yazma öğretimi: Turkish literacy teaching). Ankara: Pegem Academy.

Ardayati, & Herlina. (2020). Teaching reading comprehension by using herringbone technique to the eighth grade students of SMP Negeri 11 Lubuklinggau. *Journal of English Education, Literature and Linguistics 3*, (1), 79-85.

Burhan. (2012). Definition of reading by experts. Retrieved from https:// mrrabbitmymvp.blogspot.com/2013/11/pengertian reading- menurut para-ahli.html.

Creswell, J. W. (2012). *Educational research; Planning, conducting, and evaluating quantitative and qualitative research*. New York, NY: Pearson Education.

Djatmika & Wulandari. (2013). *Writing narrative text*. Bandung: Pakar Raya

Fuzidri. (2014). Peningkatan keterampilan pemahaman membaca melalui metode pembelajaran kooperatif tipe CIRC. *Jurnal Bahasa, Sastra dan Pembelajaran, 2*(3), 109–110.

Gagne, R. M. (2008). *Prinsip-prinsip belajar untuk pengajaran di sekolah*. Surabaya: Usaha Nasional.

Grabe, W., & Stoller, F. L. (2013). *Teaching and researching reading*, New York, NY:: Pearson Education.

Kasiyun, S. (2015). Upaya meningkatkan minat baca sebagai sarana untuk mencerdaskan

bangsa. *Jurnal Pena Indonesia, 1*(1), 79–95.

Kodan, H. (2017). Determination of reading levels of Primary School Students. *Universal Journal of Educational Research, 5*(11)

Losi, R. V. (2020). The effect of herringbone technique on students' reading comprehension through narrative text at MTs PAB 1 Helvetia. *Jurnal Humaniora Teknologi*, *6*(1), 1-8.

Maggie (2014). *The teaching of reading in inclusive classrooms*. Oslo: University of Oslo.

Nugroho, C. D. (2015). The effect of vocabulary mastery and sentence structure on reading comprehension. *Deixis Journal, 7*(03), 191–200.

Ökcü, D. (2015). Effects of task-based instruction on reading comprehension of Turkish EFL learners. *International Journal of English Language Teaching, 3*(2), 23–37.

Patiung, D. (2016). Reading as a source of intellectual development. Al Daulah: *Journal of Criminal and Administrative Law, 5*(2), 352–376.

Pourkalhor & Kohan (2013). Teaching reading comprehension through short stories in advance classes. *Asian Journal of Social Sciences & Humanities.2*(2), 52-60..

Rahila, C D I., & Sakdiah, H. (2016). The effectiveness of herringbone technique to enhace students' ability in comprehending narrative text of the Eighth Grade Students at MTs N Takengon II, Aceh Tengah, Aceh. *Inovish Journal 1* (2), 1-10.

Salehi, M., & Vafakhah, S. (2013). A comparative study of reciprocal teaching only (RTO) and explicit teaching of strategies before reciprocal teaching (ET-RT) on reading comprehension of EFL learners. *Australian Journal of Basic and Applied Sciences, 7*(2), 148-155.

Smith, A., & Feng, J. (2018). Literature circle and gifted students: Boosting reading motivation and performance. *Online Submission Journal,* 1–36

Smith, R. C. (2012). Situational language teaching. *ELT Journal, 2*(4), 71-79

Sugiyono. (2014). *Metode penelitian kuantitatif, kualitatif dan R&D.* Bandung: Alfabeta.

Sulaiman, M. (2017). *Teach the students not the books: A Handbook of TEFL* Palembang: Noerfikri.

Syahri, I., Sulaiman, M., & Susanti, R. (2017). *Metodologi penelitian pendidikan bahasa.* Palembang: Roemah Sufie.

Thaler, E. (2008). Teaching English literature. verlag Ferdinand choningh Gmbh& Co. KG.

Wolley, G. (2015). *Reading comprehension: Assisting children with learning difficulties*. New York, NY: Springer press.

Zaccoletti, S., Altoè, G., & Mason, L. (2020). Enjoyment, anxiety and boredom, and their control-value antecedents as predictors of reading comprehension. Learning and Individual Differences. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S1041608020300492