

The Effectiveness Of Using The Herringbone Technique On Students' Reading Comprehension Skill In Recount Text In The Eighth Grade Of Smp Gajah Mada Medan

Putri Kumala Br Turnip¹, Febrika Dwi Lestari², Nenni Triana Sinaga³

^{1,2,3}English Department Faculty Of Teacher Training And Education, HKBP Nommensen University Medan

Email: putrikurmala.turnip@student.uhn.ac.id

*Corresponding Author

Received: 03 April 2024, Revised: 06 May 2024, Accepted: 18 May 2024

ABSTRACT

The objective of this research was to find out the effectiveness of using the herringbone technique on students' reading comprehension skill in recount text. This research was conducted at SMP Gajah Mada. The population of this research was the 8 grade students of the academic year 2023/2024. One class consisted of 34 students. The sample consisted of 34 students and was taken by using quasi-experimental. The sample is divided into 2 groups, the experimental group which consisted of 17 students, and the control group consisted of 17 students. The instrument for collecting data was a reading test. Each group was given a pre-test and post-test. The result of this research showed that the mean score of the experimental group is higher (93,23) than the control group (70,58). Based on the calculation above the alternative hypothesis (Ha) is accepted. It is found from the computation of the t-test that the t-observed is higher than the t-table (7,2> 1,694) at the level significance of one tail test (p=0.05) with a degree of freedom (df-32). The final hypothesis showed that HO was rejected and Ha was accepted. This means that there was a significant effectiveness of using the herringbone technique on students' reading comprehension skill.

Keywords: Herringbone Technique, Reading Comprehension, Recount Text

1. Introduction

Reading carefully is one of the important skills in English and gives many advantages to us. Reading carefully is a window to the world. By using it, individuals can acquire information and data from books, magazines, papers, etc. According to Zaccoletti (2020:663-682) reading comprehension is one of the many learning tasks that children must concentrate on to succeed in school. Reading is the process of fully comprehending a text, and reading comprehension is valuable in the educational system as a means of achieving successful learning outcomes. Students are expected to use their reading comprehension skills to acquire the necessary information following the reading assignment. According to Deegan (2006), it enhances awareness of the core idea. Finding the major idea and supporting information in a reading comprehension lesson is accomplished through the application of the herringbone strategy.

The phenomenon that we encounter around us is that students still lack understanding in literacy or we can call it comprehension in reading, especially in English, and the researcher has made observations at the school. which we know, that English is a foreign language, Additionally, a lot of students believe that learning English is challenging. This shows that many students face difficulties in understanding, analyzing, and using information effectively, which can affect their ability to learn independently since understudies think learning English is truly challenging, and they are consistently confused about dominating and understanding texts.

In schools, reading is a very important subject. During the time spent figuring out how to peruse, students must fully understand the book's substance during the reading process. The student must understand the content of the text to get the information from it. Reading is

the method by which writers transmit knowledge from books to readers' brains; if a reader does not understand the text's content, they will not acquire this information. Vocabulary and pronunciation errors are another reading issue. They will conclude that learning English is challenging due to these numerous issues, particularly about reading comprehension and reading abilities.

The teacher's role must also be qualified to teach to improve students' comprehension in reading, not just giving texts to read without explaining, there is no approach to students to find out whether the students can understand or not, and the lack of understanding in reading approach to the student to find out whether the student can understand or not, and the lack of appropriate methods or techniques. This makes students lack understanding, lack interest in reading, and make students bored. So that they cannot explore more information from the text outside of the learning objectives.

The answer to this issue is for instructors to become more knowledgeable about approaches, techniques, and tactics for learning English. By using these techniques, teachers may enhance the effectiveness of the teaching and learning process, to assist students in resolving these issues, need another technique more interesting in teaching reading. There are numerous approaches to reading instruction. The use of the Herringbone Technique toward students' reading comprehension of recount texts is the method that the author would like to suggest.

According to Deegan (2006), the Herringbone technique is a tactic that helps students comprehend the primary idea while reading by visualizing a fish skeleton and plotting the questions of who, what, when, where, why, and how. The writer intends to investigate The Effectiveness of Using the Herringbone Technique on Students' Reading Comprehension Skills in recounting texts in Class VIII of SMP Gajah Mada. This study will be based on the explanation provided above.

2. Methodology

The researcher used a quantitative method, according to Creswell (2014), which is a technique for assessing objective theories through the analysis of variable relationships. The researcher presents a statistical analysis (mathematical analysis) of the data, which is usually presented in numerical form. The researcher used of experimental design. According to Creswell (2014), the most effective quantitative design for determining cause and effect is the experimental design. It is a quasi-experimental research methodology. A study design that involves assigning people to groups—but not at random—is known as a quasi-experimental design. This is because the researcher is unable to fabricate groups specifically for the experiment. Creswell, John W. (2012). This means that we are not able to randomly allocate students to specific groups under various conditions; this would interfere with the learning process in the classroom.

Two groups were used to participate in the experiment in this study. where the control class uses conventional techniques and the experimental class uses the herringbone technique. This research uses pre-and post-test data to determine the potential impact of the herringbone technique on students' reading comprehension abilities in recount texts at SMP Gajah Mada.

3. Result and Discussion

1) The Data

Reading comprehension is the act of deriving and using meaning from text, where to comprehend the author's message during this process, like about the issue, text structure, and language structure. The data of this research was taken from the students of grade eighth

Junior high school (SMP) Gajah Mada Medan of 2023/2024 academic year. The sample of this research was divided into two groups namely Experimental Class and Control Class. There were 17 students in the experimental group and 17 students in the control group and the total both of groups was 34 students in eighth grade of SMP Gajah Mada Medan. The data was taken by giving reading tests to both of the groups. The experimental class was the class which taught by using Herringbone Technique, while the control class was the class taught without giving Herringbone Technique. Both the experimental and control classes were given the same reading test in pre-test and post-test. The number of the test was 20 items. It consisted of the main idea, information from the text, synonyms, references, and inference.

2) Data Analysis

There were two groups in this study, they experimental and control groups. The writer analyzed the data from the score of the test namely pre-test and post-test. To know the differences between the students in the experimental and control groups, the writer used the t-Test formula to calculate the data. The data analysis was used to know the effectiveness of using The Herringbone Technique on students' reading comprehension skill in recount text.

a. Analyzing the Data by Using t-Test Formula

In this study, the writer used t-Test formula to calculate the difference between the result of pre-test and post-test in experimental and control group. The result of this calculation was to found whether the using of Herringbone Tech nique has significant effectiveness to the students' reading comprehension. The t-Test was calculating as the following:

$$t \frac{Mx - MY}{\sqrt{\left[\frac{\sum X^2 + \sum y^2}{N_X + Ny - 2}\right] \left[\frac{1}{N_X} + \frac{1}{Ny}\right]}} Mx = \sum_{N=1}^{x} \frac{320}{17} = 18,82$$

$$My = \sum_{N=1}^{y} \frac{170}{17} = 10$$

$$dx^2 = \sum x^2 - \frac{(\sum x^2)}{N}$$

$$= 7050 - \frac{(320)^2}{17}$$

$$7050 - 6023$$

$$= 1,027$$

$$dy^2 = \sum y^2 - \frac{(\sum y^2)}{N}$$

$$= 2150 - \frac{170^2}{17}$$

$$= 2150 - \frac{28.900}{17}$$

$$= 2150 - 1700$$

$$= 0,45$$

$$t \frac{Mx - MY}{\sqrt{\left[\frac{\sum X^2 + \sum y^2}{N_X + Ny - 2}\right] \left[\frac{1}{N_X} + \frac{1}{Ny}\right]}}$$

$$t \frac{18,82 - 10}{\sqrt{\left[\frac{1.027 + 0,45}{17 + 17 - 2}\right] \left[\frac{1}{17} + \frac{1}{17}\right]}}$$

$$t \frac{8,82}{\sqrt{\left[\frac{1477}{32}\right] \left[\frac{2}{17}\right]}}$$

$$t = \frac{8,82}{\sqrt{(1477)(0,1)}}$$

$$t = \frac{8,82}{\sqrt{(1477)}}$$
$$t = \frac{8,82}{1,21}$$
$$t = 7,2$$

b. Testing the Validity of The Test

The term validity refers to whether or not the test measures. Where the alvidity constructis test taken from the internet, in Reading Comprehension Test, it aimed to enable students in reading comprehension text. So, the domain of this text was based on the level achievement, and the test items were created as the representative of the domain of the test. The validity test was carried out using Ms. Excel 2010 with the following criteria:

- 1) If r count > r table then the statement is declared valid
- If r count

Table 1. Result validity Test

	Person Product Mon	nent
R_{count}	R_{table}	Result
0,8435	0,514	r count > r table
		(Valid)

c. Testing of Reliability of The Test

The reliability of the test is needed in the research to look the quality of consistency of the test. The test is called reliable when there is consistency whenever it is used to measure. In order to measure the reliability of the test instrument. The form of the the test is multiple choices reading test which consist of 20 items. To obtain the reliability of the test, the winter used Kuder Richardson Formula 21 as follow: $\mathrm{Kr_{21}} = \left(\begin{array}{c} \frac{k}{k-1} \\ \end{array} \right) \left(1 - \frac{M(k-M)}{k \cdot S^{-2}} \right)$

$$Kr_{21} = \left(\left(\frac{k}{k-1} \right) \left(1 - \frac{M(k-M)}{k \cdot S^{-2}} \right)$$

Before calculate the reliability if the test, it must be determined the value of the mean and standard deviation can be seen in the following:

a. The mean score of reliability class

$$M = \frac{\sum x}{N}$$

$$M = \frac{320}{17}$$

$$M = 18.82$$

b. Standard deviation

$$s = \sqrt{\frac{\Sigma x^2}{N}}$$

$$s = \sqrt{\frac{7050}{17}}$$
$$s = \sqrt{414,70}$$
$$s = 20,36$$

After getting the mean and deviation, the calculation of the reliability test used is needed. It is done to know the consistency of the test, whether it is higher or not, and whether it is suitable to the students as follows:

$$\begin{aligned} &\mathsf{Kr}_{21} = \big(\left(\frac{k}{k-1} \right) \left(1 - \frac{M(k-M)}{k \cdot S^{-2}} \right) \\ &\mathsf{Kr}_{21} = \left(\frac{20}{20-1} \right) \left(1 - \frac{18,82(20-18,82)}{k \cdot (20,36)^{-2}} \right) \\ &\mathsf{Kr}_{21} = \left(\frac{20}{19} \right) \left(1 - \frac{9,94(10,6)}{20 \cdot 414.529} \right) \end{aligned}$$

$$\begin{aligned} & \text{Kr}_{21} = \left(\frac{20}{19}\right) \left(1 - \frac{222076}{8290592}\right) \\ & \text{Kr}_{21} = 1.05(1 - 0.02) \\ & \text{Kr}_{21} = 1.0 \end{aligned}$$

Based on calculation, it can be said that the teat is reliability. So it can be use in the research. From the calculation, it was found that the reliability of the teat was 1,0. The reliability was is high. So the Effectiveness of Herringbone Technique is significantly in the class interaction and also the test was reliable to the students in SMP Gajah Mada Medan.

3) Testing Hypothesis

Testing Hypothesis was conducted to find out whether the hypothesis was accepted or rejected. Ha was accepted if the t- $_{observed} > t$ - $_{table}$. Based on the calculation of the t-test, it was found that t calculated (7,2) was higher than t-table (1,694) for a degree of freedom (df) = N1+ N2 - 2 = (17 + 17 - 2 = 32) at the level significant p = 0,05 it can be seen as follows:

Thus, it can be said that Ha is accepted and Ho is rejected. In other words, It can be said that there was a significant effectiveness of using The Herringbone Technique on students' reading comprehension skill in recount text.

4) Findings

The objective of this research is to know whether the effectiveness of using the herringbone technique on students' reading comprehension skill in recount text in the eighth grade of SMP Gajah Mada Medan or not. After the writer applied the herringbone technique, the result shows that there is a significant difference between technique reading comprehension by using herringbone technique and without herringbone technique. Teaching reading comprehension by using herringbone technique is more effectiveness than teaching reading comprehension without using herringbone technique. It can be shown by the difference of mean score post- test of experimental group Based on the calculation, the mean score post test of experimental group (93,23) and the deviation (7050) is higher than the mean score post test in control group (70,58) and the deviation (2150). The result of t-test (tcalculated) is also higher than 1 - table at the level of significant p = 0.05 (7.2 > 1.694). It means that using herringbone technique significantly effectiveness on students' in reading comprehension skill. The treatment that is conducted in experimental group is better than control group Herringbone technique worked succesfully when the writer used it on students achievement in reading comprehension. It can be said that by applying of Herringbone technique, the learning process at the class was more effective it could be seen in students' scores after the writer gave them post-test.

Discussions

There are four skills language in English, namely, reading, speaking, writing, and listening. In this study, the writer focused on reading skill. Reading is one of the basic language skills. Reading is the practice of using text to create meaning. The two keywords here are creating and meaning. If there is no meaning being created, there is no reading taking place. In other meaning, reading is an active process that consists of recognition and comprehension skill, an important skill activity in life with which one can update his/her knowledge, and an important tool for academic success

By reading, the reader will get something to add to his knowledge, information, and pleasure, instruction to do something, and also know what is happening and has happened. It turns out that based on the results of this research, there is significance in the effectiveness of using the herringbone technique in reading comprehension skills in recount text. Where previous researchers are relevant as explained in previous research, The first is the entitled

"Effect of Herringbone Technique on Students, Achievement in Reading Narrative Text at AMA Budisatrya in Academic Years of 2021/2022, written by Dinda Suryani (2023) where the difference in this research is the purpose where the researcher is to know the effect whereas the researcher used Narrative text. technique in data collection, and the difference with this research is type of the text used narrative text, comics, and the last sample is different. The second, the research written by Desi Riana (2020) was titled "The Implementation of Herringbone Technique to Improve Student's Reading Comprehension, The difference between this thesis is the title, and the difference of this thesis in terms of the total sample, and how to instruments to collecting data, this research uses quasi-experimental. And the title was is different. And the third, the research entitled "The Effectiveness of Herringbone Technique Improve Listening Comprehension for the Eighth Grade Students' At SMPN 1 Baron in the Academic Years of 2018/2019. The difference between this thesis is the titled, and the difference of this thesis in terms of the total sample, and the skill used, where the researchers was used skill listening, and the writer using skill reading. So it can be seen from the explanation of previous research that the similarities between previous researchers are that the herringbone technique has an impact on the effectiveness of English language skills, especially reading skills.

4. Conclusion

The research conclusion is presented by the data which have been analyzed in the previously chapter. From the data analysis about the effectiveness of using herringbone technique on students' reading comprehension skill in recount text in the eighth grade of SMP Gajah Mada Medan, it can be concluded that Herringbone technique is that visual organizers are valuable teaching aids that help students comprehend freshly learned material by organizing thoughts. Students can find comprehensive information about what they have studied more easily by using a graphic organizer to help them recall it. Where students use the Herringbone Technique to answer 5W+1H questions who, what, when, why, where, and how—about graphic elements like fish skeletons. It can be seen from the difference of mean score from both of the groups. The mean score of experimental group is higher (93,23) than control group (70,58). Based on the calculation above the alternative hypothesis (Ha) is accepted. It is found from the computation of the 1- test that t-observed is higher than t-table (7,2> 1,694) at the level significance of one tail test (p=0.05) with degree of freedom (df-32).

References

Adenmosun, E. O., Liehr, P., & Smith, M. J. (2021). Measuring ease: Content validity and early reliability of a newly developed measure. *Applied Nursing Research*, *61*, 151459.

Amumpuni, R. (2021). The Effect of the Herringbone Technique on Reading Comprehension. Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran, 7(1). 50-54. doi:https://doi.org/10.33394/jk.v7i1.2677

Arikunto, S. (2010). Prosedur Penelitian (P. R. Cipta (ed.)).

Best, J. W., & Kahn, J. V. (2016). Research in education. Pearson Education India.

Best, J. W., & Kahn 1948-, J. V. (2006:289). Research in education. In TA - TT - (10th ed). Pearson/Allyn and Bacon. https://doi.org/LK - https://worldcat.org/title/58807350

Brown*, G. T. (2004). Teachers' conceptions of assessment: Implications for policy and professional development. *Assessment in Education: Principles, Policy & Practice*, 11(3), 301-318.

Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. (4th ed.). SAGE.

- Deegan J. (2006a). Herringbone technique translation journal, Teacher web. Herringbone Technique Translation Journal, Teacher Web., volume A. http://www.teacherweb.com/HerringboneTechnique.doc
- Dorn, L. J., & Soffos, C. (2005). Teaching for deep comprehension: A reading workshop approach. *Teaching for Deep Comprehension: A Reading Workshop Approach*.
- Education, E., & Program, S. (2016). An undergraduate thesis the influence of using herringbone technique toward the students' reading comprehension at the eighth grade of MTS. Darun Najah Sambikarto Sekampung. AN
- Guichard, J., & Lenz, J. (2005). Career theory from an international perspective. The Career Development Quarterly, 54(1), 17-28. Career Theory from an International Perspective. The Career Development Quarterly, 54(1), 17-28.
- Harris, A., Ansyar, M., & Radjab, D. (2014). An Analysis of Students' Difficulties in writing Recount Text At Tentth Grade of SMA N 1 Sungai Limau. . *English Language Teaching* (*ELT*), 2(3).
- H.DouglasBrown.(2000).[H._Douglas_Brown]_Teaching_by_Principles,_Second_(BookFi.org).p df. In *Teaching by Principles An Interactive Approach to Language Pedagogy* (p. 491).
- Hutabarat, B. A., Pohan, A. E., & Adam, A. (2017). The Effectiveness of Shared Reading Strategy toward Students' Reading Achievements. *ANGLO-SAXON: Jurnal Ilmiah Program Studi Pendidikan Bahasa Inggris*, 8(1), 75. https://doi.org/10.33373/anglo.v8i1.986
- KS McKnight. (2010). The teacher's big book of graphic organizers: 100 reproducible organizers that help kids with reading, writing, and the content areas (K. S. McKnight (ed.); 2010th ed.).

 Jossey-Bass. https://books.google.co.id/books?hl=id&lr=&id=_zsgDiRDSO8C&oi=fnd&pg=PA1&ots=q VF40oKLIl&sig=a308TuJnghTnHGKsWG1Gj1lDoeE&redir esc=y#v=onepage&q&f=false
- Losi, R. V. (2020). Effect of Herringbone Technique on Studentsâ€[™] Reading Comprehension through Narrative Text at MTs PAB 1 Helvetia, Medan. *Jurnal Humaniora Teknologi*, *6*(1), 1–8. https://doi.org/10.34128/jht.v6i1.74
- Masturoh, I., & Anggita, N. (2018). No The Effect of Heringbone Technique on The Student's Reading Skill At 8th Grade Junior High School. 5 (1), 40-45.
- Muflikhati, A. (2013). Improving students' writing skills on recount texts through the use of dialogue journal writing of the tenth grade students of sma it abu bakar yogyakarta in the academic year of 2012/2013. *Universitas Negeri Yogyakarta, Yogjakarta*, 33.
- Nadira, S., Huzairin, H., & Burhanuddin, B. (2021). The implementation of Herringbone technique to improve reading comprehension. *U-Jet: Unila Journal of English Language Teaching*, 10(1), 167–182. https://doi.org/10.23960/ujet.v10.i1.202102
- Nugroho, A., Warnars, H. L. H. S., Heriyadi, Y., & Tanutama, L. (2019, November). Measure the level of success in using google drive with the Kuder Richardson (KR) reliability method. In 2019 International Congress on Applied Information Technology (AIT) (pp. 1-7). IEEE.
- Rahila, C. D. I., & Sakdiah, H. (2016). the Effectiveness of Herringbone Technique To Enhance Students' Ability in Comprehending Narrative Text of the Eighth Grade Students At Mtsn Takengon Ii, Aceh Tengah, Aceh. *Inovish Journal*, 1(1), 1. https://doi.org/10.35314/inovish.v1i2.80
- Reading Comprehension to Students with Visual and Auditory Learning Styles. *English Education Journal*, *11*(1), 56–70. https://doi.org/10.15294/eej.v11i1.41912
- Riana, D. (2020). The Implementation of Herringbone technique to improve students' Reading comprehension (Doctoral dissertation, UIN Ar-Raniry).
- Rosnaeni, R., Dj, M. Z., & Nur, H. (2020). Students' Metacognitive Awareness and Reading Comprehension of Narrative Texts. IJEE (Indonesian Journal of English Education), 7(1), 73–86. https://doi.org/10.15408/ijee.v7i1.17027
- Sinaga, N. T., Parhusip, E. N., & Saragih, C. N. (2023). THE STUDENTS' FACTOR DIFFICULTY IN READING ARTICLES IN THE JAKARTA POST NEWSPAPER. J-Shelves of Indragiri (JSI), 4(2), 133–139. Retrieved from https://ejournal-fkip.unisi.ac.id/shelves/article/view/2560

- Sinambela, Rindu Kaya, and Kammer Tuahman Sipayung. "Improving Students Reading Ability by using Guided Reading Procedure (GRP) at Elementary School." *Jurnal Scientia* 12.01 (2023): 69-74.
- Tampubolon, S., & Rajagukguk, D. (2023). The Effect of Synthesizing Strategy on Students' Reading Comprehension at SMA Serdang Murni Lubuk Pakam. The Explora, 9(1), 1-28.
- Trifona, D. (2019). No Title: The Effectiveness of Herringbone Technique to Improve for the Eighth grade students' at SMPN 1 Baron in the Academic Year 0f 2018/2019.
- Patel. (2008). Defenition Reading.
- Prianti S, A., Tampubolon, S., & Dwi Lestari, F. (2023). The Effect Of Sticky Notes In Teaching Method Reading Skill On Narrative Text At SMP Mahkota Hidup. Innovative: Journal Of Social Science Research, 3(5), 6466–6478. https://doi.org/10.31004/innovative.v3i5.5619
- Snow, C. E. (2002). Reading for Understanding Toward an R&D Program in Reading Comprehension. RAND Corporation. In C. E. Snow (Ed.), Reading for Understanding Toward an R&D Program in Reading Comprehension. RAND Corporation (2002nd ed., p. 19).

 2002. https://books.google.co.id/books?hl=id&lr=&id=R1t9btYnK_EC&oi=fnd&pg=PR1&dq=Sn ow,+C.+(2002).+Reading+for+Understanding+Toward+an+R%26D+Program+in+Reading +Comprehension.+RAND+Corporation.&ots=ERnLXt2wLv&sig=rkol1ZNOvqMJx6A1Yyes5 QUoF4s&redir_esc=y#v=onepage&q=Snow%2C C. (2002). Reading for Understanding Toward an R%26D Program in Reading Comprehension. RAND Corporation.&f=false
- Wilson, R. M. (1968). English language. In *Year's Work in English Studies* (Vol. 49, Issue 1). https://doi.org/10.1093/ywes/49.1.34
- Yuliana 1, K. M. (n.d.). No Title The Effectiveness of Herringbone Technique in Teching Reading Comprehension. 1-10.
- Zaccoletti, S., Altoè, G., & Mason, L. (2020). The interplay of reading-related emotions and updating in reading comprehension performance. *British Journal of Educational Psychology*, 90(3), 663-682.