The Effect of Think-Pair-Share Strategy on Reading Comprehension of Narrative Text at the Eighth Grade of SMP GKPS 3 Pematang Siantar

Enji Debora Sarina Sihite[1], Selviana Napitupulu[2*], Rudiarman Purba[3]
[1][2][3] University of HKBP Nommensen Pematang Siantar, Indonesia

Article Info	ABSTRACT
	This research aims to discover the Effect of Think-Pair-Share Strategy on students' reading comprehension of the eighth-grade students of SMP GKPS 3 Pematang Siantar on Narrative text. This research used quantitative research with quasi experimental method. The data were collected through tests. The sample of this research were the VIII-2 as Experimental group and VIII-1 as Control group. The test was carried out with pre-test and post-test to students using narrative text. As a result, the researchers found the mean score in experimental class from pre-test to post-test were 25.92 and 78.14. The mean score in control class from pre-test to post-test were 32.22 and 56.81. The t-test value was 9.5, at a level of significances 0f 5% (=0.05), whereas t-table was 2.007, or t-test>t-table. Therefore, the Alternative Hypothesis (Ha) was accepted and the Null Hypothesis (H0) was rejected. Hence, there is a significant effect of using Think-Pair-Share Strategy to the reading comprehension at the Eight grade students of SMP GKPS 3 Pematang Siantar.

Corresponding Author:

Selviana Napitupulu
University of HKBP Nommensen Pematang Siantar
Email: selviana.napitupulu@uhnp.ac.id

1. INTRODUCTION

English is a foreign language taught in Indonesia from kindergarten until the University. Nowadays, English is a second language that young learners easily study after they get their first language. The young learners must learn English due to the needs of the globalization. English is used to communicate with each other in globalization era. There are 4 English skills: Listening, Speaking, Reading and Writing. These four skills are the basic abilities that all students should master to help them know English communication well.

In mastering the English language, students need to excel in four fundamental skills, one of which is reading [9]. Reading is a sophisticated cognitive process that involves deciphering symbols to derive meaning from written text. It is a vital tool for language acquisition, communication, and exchanging information and ideas [8]. According to [5], reading is an important activity and has become more important in this globalization era, where developments in every aspect of life occur very quickly. Within the realm of English language skills, reading holds significant importance for learners [7]. Reading comprehension entails the dynamic interaction between readers and text,

encompassing a complex process that draws upon both word knowledge and worldly wisdom [2] Moreover, reading comprehension represents the art of constructing meaning from written material. All reading instruction aims to foster a reader's ability to comprehend text [10]. This implies that the skill to decipher words holds little value if one cannot effectively extract meaning from the text. Therefore, the true goal of reading lies in the ability to construct a profound understanding of written language.

Based on the experience when doing Teacher Training Practice and observing a teacher when teaching in grade eight of SMP GKPS 3 Pematang Siantar, researchers found the problem on their Reading Comprehension. When they read some text, especially Narrative Text, many students found it hard to read and understand a passage in English. They do not know how to read the text and get the meaning well, they can not comprehend the text. This incident occurs frequently and repeatedly in almost every meeting in English subjects. For example, when they learn Procedure Text, when the text tells them to "peel off the banana carefully" they will be stuck in a moment because they can not comprehend the instruction. Students are less knowledgeable in English comprehension because they are less interested in learning English. The reason that makes them less in reading is also in their vocabulary. We know that vocabulary is the most important thing when we read, hear or listen to some communication tool. Especially in experiences when teaching in grade eight, when the teacher told them to determine the main topic of the text, they did not know, it also caused their less vocabulary knowledge. Also when the teacher told them to read a text, they did not know how to pronounce the word well. All the problems stated before show that they are less in reading. But the thing that affects their reading problem is their lack of interest in English.

Their social background also influences the way they learn and the way they receive the lesson. High and low student motivation is caused by several factors that influence learning motivation: students' aspiration, physical and spiritual conditions, dynamic learning elements and teacher efforts to teach students [13]. Parents who focus on material things give children less attention and education from home, as we know that education from home is the first and foremost education [6]. The lack of communication between children and parents also affects the way they express their opinions in learning material. They will doubt their ability or answer, making them passive. Students are unable to think critically when conveying their opinions to friends and their groups. Some students also said that English is difficult and boring to learn. That is why English subject is hard for them. [3] emphasized that peers are a very influential factor in life during adolescence. Lauren's assertion can be understood because teenagers in modern society, like today, spend most of their time together with their peers. Thus, it can be concluded that students will trust their peers more and exchange ideas more with them, they are the class who love to share their opinions with their friends first, so they start to discuss with other friends, then make the class noisy.

The Think Pair Strategy has proven highly effective in addressing the previous problem, particularly in reading comprehension. Notably, [12] discovered a significant improvement in the mean scores of students' pre-test and post-test. Additionally, the questionnaire results revealed a 73.92% satisfaction rate in addressing the stated problem, indicating that students are genuinely interested in utilizing the Think Pair Share. This is particularly beneficial for shy students, providing them with a supportive environment to engage in discussions. Given these compelling findings, it is clear that the Think Pair Share strategy is highly effective in enhancing students' reading achievements. Furthermore, [11] found that students actively participate in class when using the Think Pair Share method, demonstrating their willingness to share ideas, ask questions, and provide answers. This reinforces the notion that this strategy is undeniably effective. Adding to this evidence, [1] discovered that 87.88% of students successfully met the minimum passing grade (KKM) after implementing this strategy. This signifies a significant improvement in students' reading comprehension and highlights their enthusiasm to engage with their partners in discussing the questions posed by the teacher. As a result, the researchers are particularly intrigued to examine "The Effect of Think-Pair-Share Strategy to Reading Comprehension of Grade Eight of SMP GKPS 3 Pematang Siantar."

2. METHOD

This research employed a quantitative approach and quasi-experimental design. The research design involves two distinct classes: the control class that does not receive instruction using a particular strategy and experimental class that is exposed to Think-Pair-Share (TPS) strategy. The effectiveness of TPS strategy on reading comprehension of eighth-grade students at SMP GKPS 3 Pematang Siantar is assessed through pre-test and post-test.

Population refers to the distinguished assemblage of individuals embodying various attributes of significance. [4] states that a population signifies a collective of individuals with a common trait. The research population is grade eight students of SMP GKPS 3 Pematang Siantar, who comprise two classes. They are VIII-2 (27 students) and VIII-2 (27 students), with total 54 students. The sample represents a specific subset of the larger population, serving as a reliable basis for the research. As stated by [4], the sample is carefully chosen to allow for generalizations about the target population. In this case, researchers opted for purposive sampling, leveraging teaching experience to select two classes, VIII-1 and VIII-2. VIII-1 was designated as a control group, consisting of 27 students who did not receive treatment of being taught using TPS. On the other hand, VIII-2 was an experimental group with 27 students who did receive TPS strategy.

There are three steps applied in collecting the data, including 1) Pre-Test is the initial test before doing experiments on research samples and it's the first step in equalizing conditions between the control and experiment class; 2) Treatment is the giving of conditions that will be assessed its effect. The experiment class is the only class with the treatment of Think Pair Share strategy; 3) Post-Test is the final experiment test with the aim obtaining sample values in the experimental and control groups after receiving treatment of Think Pair Share in experimental class and receiving no treatment in the control class.

After analyzing the data, researchers would calculate the t-test by using the formula below.

$$T_{test} = \frac{\bar{X}e - \bar{X}c}{SE\ (Xe - Xc)}$$

Where :

Xe : Post-test mean (experimental)
Xc : Post-test mean (control)
SE (Xe-Xc) : Standard error

3. RESULTS AND DISCUSSION

The data has been collected through the administration of tests. This test, which measures reading comprehension through multiple-choice questions, allows for a straightforward and accurate scoring process. By administering this test, researchers aimed to ascertain students' reading proficiency.

Table 1. Students' score pre-test and post-test in experimental class.

No.	Students' Initial	Pre-Test (X_1)	Post-Test (X_2)	X_1^2	X_2^2
1	AB	15	75	225	5625
2	ARP	40	95	1600	9025
3	ARS	15	80	225	6400
4	BS	40	75	1600	5625
5	DLAS	15	45	225	2025
6	DSH	35	90	1225	8100
7	FS	20	80	400	6400
8	HM	40	85	1600	7225
9	IS	30	80	900	6400
10	JS	30	80	900	6400
11	JH	15	80	225	6400
12	JSM	5	60	25	3600

13	JVS	25	75	625	5625
14	KAG	15	85	225	7225
15	KPP	40	85	1600	7225
16	KS	20	85	400	7225
17	KSM	25	40	625	1600
18	LCP	30	85	900	7225
19	MT	15	80	225	6400
20	MS	25	80	625	6400
21	RS	15	80	225	6400
22	ROP	15	85	225	7225
23	TJM	75	95	5625	9025
24	TTR	35	50	1225	2500
25	YTSBS	25	90	625	8100
26	YLH	25	90	625	8100
27	ZS	15	80	225	6400
	N= 27	$\sum X_1$ 700	$\sum X_2$ 2110	$\sum X_1{}^2$ 23375	$\sum X_2{}^2$ 169900

Mean score in Pre-test and Post-test :

Pre-Test :

$M = \dfrac{\sum f x1}{N}$

$M = \dfrac{700}{27}$

$M = 25.92$

Post-Test :

$M = \dfrac{\sum f x2}{N}$

$M = \dfrac{2110}{27}$

$M = 78.14$

Based on the insightful analysis presented above, the initial assessment showcased a mean score of 25.92, with the highest mark reaching an impressive 75 and the lowest score being 5. In contrast, the subsequent evaluation displayed a remarkable mean score of 78.14, with the highest mark soaring to an impressive 95 and the lowest score settling at a respectable 40. It is worth noting that according to Table 1, a solitary student scored 70 or above in the pre-test, while the remaining students attained scores below 55. Furthermore, the table also illuminates that the cumulative pre-test score for the experimental class amounted to 700. Astonishingly, 24 students surpassed 70 in the post-test, indicating significant improvement. Regrettably, 3 students scored below 80, while 9 students achieved the median score of 80. Additionally, 3 students obtained scores below 60. Moreover, the table divulges that the collective score for the experimental class reached 1915, with an average score of an impressive 76.60.

Table 2. Students' score pre-test and post-test in control class.

No.	Students' Initial	Pre-Test (Y_1)	Post-Test (Y_2)	$Y_1{}^2$	$Y_2{}^2$
1	AS	75	30	5625	900
2	AL	25	25	623	623
3	ASR	20	25	400	623
4	AH	20	30	400	900
5	DT	30	20	900	400
6	CN	30	15	900	225

7	DT	25	30	623	900
8	ES	45	25	2025	900
9	GP	35	20	1225	400
10	GS	30	15	900	400
11	GSN	35	35	1225	1225
12	JS	35	15	1225	400
13	JG	25	20	623	225
14	JM	25	25	623	900
15	LR	25	40	623	1600
16	LS	20	45	400	2024
17	MH	25	20	623	400
18	OB	25	25	623	623
19	PM	10	35	100	1225
20	RS	45	15	2024	225
21	RSB	35	45	1225	2024
22	SS	30	25	900	623
23	SG	25	45	623	2024
24	WS	25	30	623	900
25	YH	20	20	400	400
26	YS	20	15	400	225
27	ZS	15	20	225	400
	N = 27	$\sum Y_1$ 775	$\sum Y_2$ 710	$\sum Y_1{}^2$ 26106	$\sum Y_2{}^2$ 21714

Mean score in Pre-test and Post-test

Pre-Test :

$M = \frac{\sum f y_1}{N}$

$M = \frac{775}{27}$

$M = 28.70$

Post-Test :

$M = \frac{\sum f y_2}{N}$

$M = \frac{710}{27}$

$M = 26.29$

Based on the data analysis presented, it is evident that the average score in the pre-test was 28.70, with the highest score being 75 and the lowest score being 10. However, in the post-test, the average score dropped to 26.29, with the highest score being 45 and the lowest being 15. These findings indicate a decline in student performance. Despite only one student meeting the minimum passing requirement in pre-test, none of students were able to achieve this in the post-test.

Standard Deviation of control class :

$SD = \frac{\sqrt{\sum y_2 2 - \frac{(\sum y_2)2}{N}}}{N-1}$

$SD = \frac{\sqrt{21714 - \frac{(710)2}{27}}}{27-1}$

$SD = \frac{\sqrt{21714 - 18670}}{26}$

$$SD = \sqrt{\frac{3044}{26}}$$
$$SD = \sqrt{117076}$$
$$SD = 10.82$$

Standard Deviation of experiment class :

$$SD \quad = \frac{\sqrt{\sum x_2 2 - \frac{(\sum x_2)2}{N}}}{N-1}$$

$$SD \quad = \frac{\sqrt{16900 - \frac{(2110)2}{27}}}{27-1}$$

$$SD \quad = \frac{\sqrt{16900 - 164892}}{26}$$

$$SD = \sqrt{\frac{5008}{26}}$$

$$SD = \sqrt{192615}$$

$$SD = 18.87$$

To determine the statistical significance of the t-test compared to the t-table at a 5% level of significance, the following formula was utilized :

$$t_{test} = \frac{\bar{X}x - \bar{X}y}{SE\ (Xx - Xy)}$$

$$t_{test} = \frac{78.14 - 26.29}{4.18}$$

$$t_{test} = \frac{51.83}{4.18}$$

$$t_{test} = 12.39$$

Following the acquisition of the t-test outcome of 12.39, the astute researchers proceeded to the degree of freedom (df) utilizing the formula presented hereinafter :

Df $= (N_x + N_y - 2)$
           $= 27 + 27 - 2$
           $= 52$

Upon conducting the t-test analysis, an exquisite result of 12.39 was obtained, surpassing the t-table value of 2.007. Consequently, this compelling evidence led us to reject the null hypothesis, thereby compelling us to embrace a new hypothesis as outlined below :

    t-test > t-table of 5%

    12.39 > 2.007

The findings demonstrated that implementing the TPS Strategy to enhance reading comprehension in narrative texts yields notable benefits for eighth-grade students at SMP GKPS 3 Pematang Siantar.

Findings

Based on data analysis results, the researchers found that applying TPS significantly impacted the reading comprehension ability of eighth-grade students of the SMP GKPS 3 Pematang Siantar on narrative text. Some of the results are as follows :

1. The research findings indicate that utilizing TPS as a teaching medium leads to significantly higher academic scores among students than traditional teaching methods. This conclusion is supported by compelling evidence, such as the pre-test mean score of the experimental group being 25.92, as opposed to 28.70 for the control group, and the post-test mean score of 26.29 for the control group. Additionally, the experimental class demonstrated a substantial increase in performance, with a post-test response rate equivalent to 21714 squares, while the control class had a response rate of 169900 squares. Moreover, the standard deviation of the experimental group was from 14.17 in the pre-test to 18.87 in the post-test, while the standard

deviation for the control group was from 6.59 to 10.82. These findings unequivocally establish that students in the experimental group outperformed their counterparts in the control group.

2. The t_{table} for a two-tailed test with a significance level of 5% was 2.007, and the degree of freedom was 52. The research accepted the alternative hypothesis at this 5% significance level because the calculated t-test value is greater than the t-table value (12.39 > 2.007). This indicates that implementing TPS as a teaching method has significantly improved the test scores of eighth-grade students at SMP GKPS 3 Pematang Siantar. Consequently, the research accepted the alternative hypothesis (Ha) and rejected the null hypothesis (H0).

Discussion

In order to assess the impact of the Think Pair Share (TPS) Strategy as a tool for teaching reading narrative text, the researchers conducted a pre-test and post-test using multiple-choice questions. The researchers collected data in the form of scores from the pre-test and post-test then analyzed this data using the t-test. The results revealed that the post-test scores of the students who utilized the TPS Strategy were significantly higher (from 27 students of $\Sigma x_2=2110$ with a total mean score of 78.14) compared to the scores of students who did not use TPS (from 27 students of $\Sigma y_2=710$ with a total mean score of 26.29). These findings demonstrate the positive effect of TPS on students' reading comprehension abilities.

The implementation of the Think Pair Share Strategy (TPS) has greatly contributed to the remarkable progress observed in the experimental class, particularly in enhancing students' comprehension of narrative text. To determine the significance of this improvement, a t-test was conducted to compare the scores obtained in the pre-test and post-test. The resulting t-test value was an impressive 12.39. The appropriate formula determined the degrees of freedom (df) to be 52 (27+27-2). Upon consulting a t-table with a significance level of 5%, it was discovered that the df (52) corresponded to a value of 2.007. Comparing the t-test and t-table values (t-test = 12.39; t-table = 2.007), it became unmistakably clear that the Alternative Hypothesis (Ha) was accepted, while the Null Hypothesis (Ho) was rejected. This theory validation confirms that eighth-grade students at SMP GKPS 3 Pematang Siantar significantly improved their scores after being taught using the Think Pair Share Strategy.

After analyzing the data, the researchers have successfully uncovered the key solution to the perplexing problem, namely the importance of determining the significance of TPS in reading narrative text. This revelation is firmly supported by the average scores the students achieved in the experimental class (78.14) and the control class (26.29). In fact, upon conducting the t-test and comparing the t-test value of 12.39 to the t-table value of 2.007, it becomes abundantly clear that the alternative hypothesis (Ha) is accepted. This discrepancy between the t-test and the t-table is a testament to the substantial influence wielded by TPS Strategy on reading comprehension of narrative text.

The sample involved 27 students from each class. One class was designated as the experimental group, where they had the privilege of experiencing the Think Pair Share Strategy. Meanwhile, the other class served as the control group, either receiving an alternative method of instruction or no intervention whatsoever.

The researchers introduced a transformative learning medium, Think Pair Share (TPS), to address the issue in the experimental class. This method encourages students to engage in meaningful discussions with their peers, collaboratively working together to solve questions and explore solutions. By utilizing the Think Pair Share approach, students are able to identify and resolve any obstacles they encounter during their lessons, fostering a sense of ownership and autonomy in their learning. Moreover, this innovative approach to learning is met with enthusiasm from the students, as it ignites their motivation to study and actively participate in the educational process.

According to the previous explanation, using the Think Pair Share (TPS) method as an educational tool can elevate reading comprehension to new heights. It has been observed that students who were instructed using TPS experienced superior academic performance compared to their counterparts who were not exposed to this innovative learning medium. After conducting a

thorough analysis of the data, the researchers concluded that the implementation of TPS as an educational tool is remarkably effective in enhancing reading comprehension among eighth-grade students at SMP GKPS 3 Pematang Siantar.

4.   CONCLUSION

Upon thorough analysis of the data, researchers have discovered that utilizing the Think Pair Share (TPS) Strategy as a pedagogical tool for teaching reading comprehension in narrative texts remarkably enhances students' reading abilities. The impact of TPS on students' reading comprehension is undeniably significant, as evidenced by the t-test results surpassing the t-table value (12.39>2.007). Notably, teaching reading comprehension through this method has proven more effective than traditional teaching approaches, as indicated by the disparity in mean scores between the experimental and control groups' post-tests (78.14 > 26.29). Furthermore, implementing the Think Pair Share (TPS) teaching method has fostered a heightened interest in reading comprehension amongst students, as they are allowed to engage in meaningful discussions and share their insights with their peers.

REFERENCES

[1] Amin, Yadhi Nur. "Penggunaan Think-Pair-Share untuk Meningkatkan Keaktifan dan Pemahaman Membaca Siswa dalam Reading Comprehension." *Jurnal Edutrained: Jurnal Pendidikan dan Pelatihan* 4.2: 64-72, 2020.

[2] Ayu, Mutiara, Chuzaimah Dahlan Diem, and Machdalena Vianty. "Secondary school students' English literacy: Use of interactive read aloud instructional strategy." *International Journal of Applied Linguistics and English Literature* 6.7: 292-299, 2017.

[3] Burk, William J., and Brett Laursen. "Adolescent perceptions of friendship and their associations with individual adjustment." *International journal of behavioral development* 29.2: 156-164, 2005.

[4] Creswell, John W., and J. David Creswell. *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications, 2017.

[5] Djiwandono, M. Soenardi. "Tes Bahasa dalam Pengajaran". Bandung : ITB. Bandung, 1996.

[6] Hamalik, Oemar. Proses Belajar Mengajar. Jakarta: Bumi Aksara, 2011.

[7] Januarty, Resky, and Hanna Novariana Azizah Nima. "Energizing Students' Reading Comprehension through Multimodal Texts." *International Journal of Language Education* 2.2: 14-22, 2018.

[8] Kaganang, Greselia. "The use of problem-based learning to improve students' reading comprehension at the first grade students of Senior High School 1 of Middle Halmahera." *Langua: Journal of Linguistics, Literature, and Language Education* 2.1: 45-53, 2019.

[9] Lestari, Endah Dwi. "THE CORRELATION BETWEEN STUDENTS'VOCABULARY MASTERY AND READING COMPREHENSION OF THE ELEVENTH GRADE STUDENTS OF SMAN 5 PALU." *e-Journal of ELTS (English Language Teaching Society)* 6.1, 2018.

[10] Melsandi, Melsandi. "IMPROVING READING COMPREHENSION OF THE GRADE EIGHT STUDENTS AT SMP NEGERI 1 BOLANO LAMBUNU THROUGH COMPREHENSION MONITORING STRATEGY." *e-Journal of ELTS (English Language Teaching Society)* 6.3, 2018.

[11] Mutiara, Wa Ode, Riki Bugis, and H. Hanapi. "Students' Reading Skill Improvement through Think Pair Share (TPS) Method at the Eight Grade Of Madrasah Tsanawiah Uswatun Hasanah Lala." *Jurnal Retemena* 3.2, 2018.

[12] Sapsuha, Sahrin, and Riki Bugis. "Think pair share technique to improve students' reading comprehension." *Jurnal Jupiter* 13.2: 101-111, 2013.

[13] Sudaryono. "Dasar-Dasar Evaluasi Pembelajaran". Yogyakarta: Graha Ilmu, 2012.