

## THE USE OF CROSSWORD PUZZLE GAME TO IMPROVE STUDENTS' UNDERSTANDING OF HOMOPHONE

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**Abstract:** The background of this research was based on students' difficulties in differentiating meaning and spelling of the words with homophone pair, which means their understanding of homophone were less. This research is intend to see whether Crossword Puzzle Game is effective or not in improving the students' ability of understanding homophone. In other words, this research was to find out how much the improvement of students' understanding after being taught using Crossword Puzzle Game. For that reason a strategy must be given to make them learn easily. In this research, Crossword Puzzle Game was used to help students understand homophone words. This study was focused on writing skill, especially on spelling, at the 7th grade of SMP Negeri 5 Manado, specifically class 7.7, in the academic year of 2021/2022. This research discuss about the use of Crossword Puzzle Game to improve students' understanding of homophone. The implementation of Crossword Puzzle Game in teaching homophone was conducted with pre-test and post-test. The participant of the pre-test was 22 students where the average of students' score was 63.77, while the participant of post-test was 21 students where the average of students' score was 81.52. By those results, the increase percentage was calculated and the result showed that the students' of 7.7 in SMP Negeri 5 Manado, in the academic year of 2021/2022 made an improvement score about 30.70%. From the description above, the conclusion of this study was the use of Crossword Puzzle Game could improve students' understanding of homophone.

**Keywords:** *Crossword Puzzle Game, Students' Understanding, Homophone, Writing Spelling.*

### INTRODUCTION

Language takes an important role in all social processes, and to communicate language is a human needed (Samola et al., 2018). On every activity in every

aspect, language plays an important role (Lengkoan & Rombepajung, 2022) and (Rorimpandey et al., 2019). Without language, it would be an issue to give and receive any information and it's hard to interact with other people (Liando & Lumentu, 2017). As a multilingual country, Indonesia is highly contact with foreign cultures which involved English (Olii et al., 2020) and (Liando, Tatipang & Lengkoan, 2022). It is a communicate tools that is use to connect all nations and countries around the world. So, English must be taught to Indonesian children early on... (Hampp, 2019). In Indonesia, English is included in the curriculum to be taught in school as the foreign language (Mogea, 2019).

In English, there are Four Basic Language Skills which are reading and listening as receptive skills, and speaking and writing as productive skills (Tatipang, Oroh & Liando, 2021). As productive skills, speaking and writing are related to each other. One aspect that connects these productive skills is homophone. Homophone is word that sounds the same with a different meaning, some are spelled the same and some are not (Davis & Herr, 2014). On speaking homophone is hidden, but on writing homophone is clearly seen. Any mistake on writing and/or spelling could lead to the miss delivering of messages and could convince other people who aren't fluent on English that the wrong word that was chosen wrongly because of homophone reason are right. This miswriting because of homophone should be handled earlier.

Crossword Puzzle can strengthen vocabulary and spelling and was told as an effective teaching tool to learn about definition, terminology, and pairing key concepts, resulting in greater retention and memorization of facts (Sabiqoh, 2016). Crossword puzzle game could help increasing the students' motivation and interest of learning (Franklin et al., 2003). Crossword Puzzle game has been chosen to help students learning and understand about writing the homophones words, and a different learning method in English teaching and learning process. Solving Crossword Puzzles contributes to help students learn how to spell because beside of the knowledge of vocabulary, spelling ability is needed to solve the Crossword Puzzle game. So, it was chosen as a tool to help the students in SMP Negeri 5 Manado to understand homophone especially on differing and writing the spelling rightly.

## **RESEARCH METHOD**

In order to succeed this study, the writer used quantitative method because the data was presented in the form of numbers (Kaya, 2013). The technique that was used in this study was pre-experimental design to a single group with pretest to find out how much was the students understanding and posttest to find out their achievement after being taught using Crossword Puzzle game.

This study was conducted in SMP Negeri 5 Manado, 7.7 class in academic year of 2021/2022. The students that were attended the whole treatment were 19 students. To find out whether the treatment succeed or not, pretest and posttest was used to collect the students score as the data (Ismawati, 2012) that was calculated to see whether the Crossword Puzzle game improved the students' understanding of homophone or not. Both of the test consisted of 24 questions divided into 3 parts which were 10 questions of fill in the blanks, 8 questions of correcting, and 6 pair of questions of name the pictures. To analyze the data, the average score was used to know how well students' scores are (Sugiyono, 2010), and standard deviation was used to find the disparity between the calculated mean (Ayeni, 2014). Both were calculated using SPSS 26.0 to make it easier (Garth, 2008). To find out the percentages of students' improvement increase percentages was used (Lind et al., 2007).

## **FINDINGS AND DISCUSSION**

This study was divided into 2 meetings on a class which consisted of 25 students. The first meeting was giving the pretest and continued with explaining the material of this study. After that, the treatment was conducted with drawn blank Crossword Puzzle on the whiteboard after the class divided into 4 groups. The groups were competed to fill in the Crossword Puzzle after heard the clue that was read. The Crossword Puzzle was filled only a half and the treatment was continued on the second meeting which was started with recalling the words that was answered before on the Crossword Puzzle and continued the rest. The meeting was closed with posttest.

After all the meetings were done, the data of the test was collected and calculated and the result is presented below:

**Table 1: Students' Pre-test result**

<b>No</b>	<b>Students</b>	<b>Score of Pre-test</b>
1	Student 1	83
2	Student 3	70
3	Student 4	66
4	Student 5	76
5	Student 6	63
6	Student 7	66
7	Student 8	56
8	Student 9	56
9	Student 10	53
10	Student 11	63
11	Student 12	46
12	Student 13	80
13	Student 15	56
14	Student 16	43
15	Student 17	70
16	Student 18	70
17	Student 19	43
18	Student 20	56
19	Student 21	63
20	Student 22	70
21	Student 23	66
22	Student 24	86
Total Score		1403

From 22 students that took the pre-test, the result was fair between those who passed the test and those who are not. As shown on the table above, 11 students got score above 64, and another 11 students got score below 65.

**Table 2: Statistic of Pre-test Score**

<b>Statistic</b>	<b>Formula</b>	<b>Result</b>
Mean	$\frac{1403}{22}$	63.77
Median	$\frac{63 + 66}{2}$	64.5
Mode	Mostly appeared	70

The students' average score as shown on table 2 was 63.77, with 64.5 as median score, and 70 for the mode.

**Table 3: Frequency Statistics of Pre-test**

N	Valid	22
	Missing	0
Mean		63.7727
Std. Error of Mean		2.52171
Std. Deviation		11.82786
Variance		139.898
Range		43.00
Minimum		43.00
Maximum		86.00

Table 3 showed the mean specifically, standard error of mean, standard deviation, variance, and range which is gap between minimum (lowest) and maximum (highest) score of pretest.

After the treatment posttest was given to see the effectiveness by comparing the pretest and posttest. The questions on the posttest were exactly the same as the pretest questions. The students who attend on second meeting where posttest was given were only 21 students. The result of posttest was shown below:

**Table 4: Students' Post-test result**

<b>No</b>	<b>Students</b>	<b>Score of Post-test</b>
1	Student 2	60
2	Student 3	86
3	Student 4	83
4	Student 5	86
5	Student 6	90
6	Student 7	86
7	Student 8	90
8	Student 9	86
9	Student 10	86
10	Student 11	73
11	Student 12	60
12	Student 13	90
13	Student 14	60
14	Student 15	66
15	Student 17	93
16	Student 18	83
17	Student 19	63
18	Student 21	97
19	Student 22	97
20	Student 23	80
21	Student 24	97
Total Score		1712

From 21 students that took post-test, the students who achieved above 79 were raised to 15 students, and none of them got bad score which was below 50. Those who passed the pre-test were 17 students from total test takers 21 students, and those who weren't passed the test were only 4 students.

From the table 4, mean, median, and mode were calculated as shown below:

**Table 5: Statistic of Post-test Score**

<b>Statistic</b>	<b>Formula</b>	<b>Result</b>
Mean	$\frac{1712}{21}$	81.52
Median	The middle value	86
Mode	Mostly appeared	86

As seen on table 5, the students' average score was 81.52, with 86 as median score, and the mode score was also 86 which shown up for 5 times.

The descriptive statistics and frequency statistics which showed standard deviation, variance, standard error mean, and the gap between lowest and highest score was shown on the table below:

**Table 6: Frequency Statistics of Post-test**

N	Valid	21
	Missing	1
Mean		81.5238
Std. Error of Mean		2.76855
Std. Deviation		12.68708
Variance		160.962
Range		37.00
Minimum		60.00
Maximum		97.00

After having the data above, the comparison result of pre-test and post-test for one group experimental exclude the students who didn't took both of the test and who didn't took either one was shown as follow:

**Table 7: Comparison of pretest and posttest score**

<b>No</b>	<b>Students</b>	<b>Pre-Test Score</b>	<b>Post-test Score</b>	<b>Increase Percentage</b>
1	Student 3	70	86	22.85%
2	Student 4	66	83	25.75%
3	Student 5	76	86	13.15%
4	Student 6	63	90	40.63%
5	Student 7	66	86	42.85%
6	Student 8	56	90	60.71%
7	Student 9	53	86	62.26%
8	Student 10	53	86	62.26%
9	Student 11	63	73	15.87%
10	Student 12	46	60	30.43%
11	Student 13	80	90	12.5%
12	Student 15	56	66	17.85%
13	Student 17	70	93	32.85%
14	Student 18	70	83	18.57%
15	Student 19	43	63	46.51%
16	Student 21	63	97	53.96%
17	Student 22	70	97	38.57%
18	Student 23	68	80	17.65%
19	Student 24	86	97	12.79%

Statistical test with paired sample t-test was calculate using SPSS 26 to convince of pretest and posttest to see the effectiveness of using Crossword Puzzle Game in improving the students' understanding of homophone. The result was as follows:



**Table 8: Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean
Pretest	64.1053	19	11.02973	2.53039
Posttest	83.7895	19	11.04324	2.53349

The mean score of pretest was shown on table 8 which was 64.10, while N was 19. While the pretest standard deviation was 11.02, and the standard error mean was 2.530.

For the posttest, 83.78 was stand as the mean score with 19 as the N, 11.04 as the standard deviation, and the mean standard error of posttest was 2.533.

**Table 9: Paired Samples Correlations**

	N	Correlation	Sig.
Pretest & Posttest	19	.660	.002

The large correlation between samples was shown on the table 9 and the result was the numeral of both correlations was 0.660 with 0.002 as the numeral significance.

**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			
Pretest - Posttest	19.6842	9.0985	2.0873	24.0695	15.2988	-9.430	18	.000

Analysis using T-test, table 10 showed that the mean of pre-test and post-test was 19.6842, with 9.09 as standard deviation, standard error mean was 2.087. 24.06 stand as the lower different with 15.298 as the upper different. As seen above that the t = -9.430 with 18 as the df, and the significance was 0.000.

**Table 11: Increase Percentages Result**

Test	Mean	N	Increase Percentage
Pre	64.10	19	Gap value = $83.78 - 64.10 = 19.68$
Post	83.78	19	IP (%) = $19.68 : 64.10 = 0.3070$ = $0.3070 \times 100 = 30.70\%$

From the mean score of each test as shown on the table 4.14, the increase percentage was count and the result was class 7.7 of SMP Negeri 5 Manado made an improvement about 30.70%.

From the result above, it could be seen that from 19 test takers, the mean score of the pretest that was found was 64.10 and 83.78 for posttest. As it was stated before that the T-test was used to check the significant different in scores achieved by one group. The t-count that was shown on the data analysis was bigger than t-table of df 18 ( $9.430 > 2.101$ ). It means that the  $H_a$ , known as the alternative hypothesis, was accepted. The opposite was happened to the  $H_0$  which known as the null hypothesis that was definitely rejected. By that, the significant different score of before and after treatment was proved. This result was brought a conclusion that the Crossword Puzzle Game can improve students' understanding of homophone.

## **CONCLUSION**

The result of this research was in line with the theory of the effectiveness of using game in teaching. It was easier for the students when a method was used to help them achieve the objectives the content or message (Henrich et al., 1982). Using a game in studying can make students interest. In learning, a game could help the students more to increase their interesting and make them more relax in learning. It also makes the class fun. By game, the students are easier to understand the material. This activity invites the students to be active in participate on the game and creative in filling the chequer.

After all the discussed and also the result which shown by calculated numbers as written above, it can be said that the use of Crossword Puzzle Game gives a positive effect in teaching and learning process proved by the improvement of

students' achievement. A fun learning process was the key to make it happened. The information that can be understood and maintained well proved that the students can learn better. Consequently, they can improve their understanding of homophone through the implementation of the game.

## REFERENCES

- Ayeni, A. W. (2014). Empirics of Standard Deviation. *Empirics of Standard Deviation*, 29 July, 1–8.
- Davis, D. F., & Herr, P. M. (2014). From bye to buy: Homophones as a phonological route to priming. *Journal of Consumer Research*, 40(6), 1063–1077.
- Franklin, S., Peat, M., & Lewis, A. (2003). Non-Traditional Interventions to Stimulate Discussion: The Use of Games and Puzzles. *Journal of Biological Education*, 37(2), 76–82.
- Garth, A. (2008). *Analysing data using SPSS ( A practical guide for those unfortunate enough to have to actually do it .)*.
- Hampp, P. L. (2019). Use of Songs in Teaching Simple Tobe and Past Tense Teaching. *Journal of English Language and Literature Teaching*, 4(1), 15–24.
- Henrich, R., Molenda, M., & Russel, J. (1982) Instructional Media and the New Technologies of Instruction. *Performance & Instruction Journal*, 25.
- Ismawati, E. (2012). Metode Penelitian Pendidikan Bahasa dan Sastra. *Ombak*, 73–74.
- Kaya, Y. (2013). Comparison of Quantitative and Qualitative Research Traditions: epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311–325.
- Lengkoan, F., & Rombejagung, P. A. (2022). Teachers' Perception of Online Learning in The Pandemic Era. *Jurnal Lingua Idea*, 13(1), 1-11.
- Liando, N. V., Tatipang, D. P., & Lengkoan, F. (2022). A Study of Translanguaging Practices in an EFL Classroom in Indonesian Context: A Multilingual Concept. *Research and Innovation in Language Learning*, 5(2), 167-185.
- Liando, N. V., & Lumentu, R. (2017). Students' Personal Initiative towards Their Speaking Performance. *International Education Studies*, 10(8), 21–28.
- Lind, D. A., Marchal, W. G., & Wathen, S. A. (2007). *Teknik-teknik Statistika dalam Bisnis dan Ekonomi Menggunakan Data Global*.

- Mogea, T. (2019). Enhancing Students' Speaking Ability Through Small Group Discussion Technique to the First Year of SMA Negeri 1 Ratahan. *Journal of Educational Method and Technology*, 41.
- Olii, S. T., Andries, F., & Gerungan, F. N. (2020). *an Analysis of Code Switching in Instagram Captions*. 5(01), 61–85.
- Rorimpandey, R., Kumajas, T., & Mandang, F. H. (2019). Prefixes in Tontemboan Language. *International Joint Conference on Science and Technology (IJCST)*, 2, 109–116.
- Sabiqoh. (2016). *Teaching Vocabulary By Using Crossword Puzzle At The Fifth Semester of The Seventh Grade Students of MTS Ma'arif Nadatul Ulama Mataram*.
- Samola, N., Maru, M. G., & Sudarsono, L. (2018). a Discourse Analysis of Figurative Language in Barrack H. Obama'S Speech. *Journal of English Language and Literature Teaching*, 1(01), 7–15.
- Sugiyono, D. (2010). *Metode Penelitian Kuantitatif, Kualitatif, dan Tindakan*.
- Tatipang, D., Oroh, E. Z., & Liando, N. V. (2021). The Application of Mind Mapping Technique To Increase Students' reading Comprehension at The Seventh Grade of SMP. *KOMPETENSI: jurnal Bahasa dan seni*, 1(03), 389-397.