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Jigsaw in Teaching Reading for Elementary School Students

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#### **ABSTRACT**

The current study investigated the effect of jigsaw on students' reading comprehension. In doing the study, the pretest and posttest design was used. The participants of the study were 6<sup>th</sup> grade students in one public school in Singaraja, Bali. Through descriptive analysis, it was found that the mean score of pre-tests was 66.25, and the posttest was 75.42. The mean difference between pretest and posttest was 9.17. The result of paired sample t test showed a significant value (Sig. 2-tailed=.000). Thus, it can be concluded that jigsaw technique significantly affected students' reading comprehension. English teachers are encouraged to implement jigsaw technique in classroom.

**Keywords**: Jigsaw Technique, Teaching Reading, Reading Comprehension

### INTRODUCTION

Reading is an important skill that needs to be mastered by students who are learning English. By reading, students' awareness of various things will increase (Sartika et al., 2020). Reading is also a very important part of literacy skills in this 21<sup>st</sup> century era of globalization (Boholano, 2017). Each country is competing to improve the literacy capacity of its resources in order to be able to compete with other countries (Zua, 2021). However, reading as a form of literacy is certainly not easy for students, especially in English (Moriyanti et al., 2019). They have difficulty in understanding vocabulary so that the meaning of the reading content cannot be captured properly (Naeghel et al., 2014).

Data in PISA in 2018 as indicator of science and literacy shows that the literacy ability of the Indonesian nation is still lagging behind (Tahmidaten & Krismanto, 2020). The reading literacy movement program does not seem to have shown a positive trend and requires a lot of improvement (Magdalena et al., 2019; Wandasari et al., 2019). In addition, data from English Proficiency Index (EFI) also shows that Indonesia's ranking is in 74<sup>th</sup> out of 100 (EFI, 2019). This ranking indicates the need to improve students' English skills. In addition, in the current digital and technology era, 4C skills also need to be integrated into student learning (Yu et al., 2019). Given the importance of reading skills as a form of

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literacy and 4C skills, teachers as education agents need a strategy and learning technique that supports these skills.

Jigsaw can be a teaching technique that teachers can use in the classroom to teach reading and integrate 4C skills. Jigsaw is a teaching technique that emphasizes students to work cooperatively in solving a problem or creating something (Karacop & Diken, 2017). In Jigsaw, students are actively involved in learning because they have their own tasks that will be done together (Şengül & Katranci, 2014). Abuhamda (2020) states that using jigsaw helps the students to be actively involved in classroom activities and reduces the dependency on teacher. Besides that, Pariati (2018) also supports that the implementation of jigsaw technique could strengthen students' problem solving skill.

Several studies had been conducted in identifying the effectiveness of using jigsaw in teaching reading. Sumiati et al., (2019) found that students' reading comprehension showed a significant improvement after iigsaw technique was implemented. Silalahi (2019) also identified a significant effect of using jigsaw technique for teaching reading. Furthermore, Nurbianta and Dahlia (2018) found that a significant improvement on students' reading comprehension after the implementation of jigsaw was because students showed a high motivation during teaching and learning. After conducting several observations in one elementary school, it was found that the students were having difficulties in comprehending a text and they did not seem enjoy the conventional teaching strategies. Therefore, the current study was intended to test the effect of jigsaw on students' reading comprehension in one public school in Singaraja, Bali. The results of the current study are expected to give a significant contribution towards the technique of teaching reading.

#### **METHOD**

The design of the current study was pretest posttest experimental design. The participants of the study were 24 students of elementary school. They were in 6<sup>th</sup> grade. The instruments for collecting the data were reading comprehension texts, and multiple-choice test. The instruments were tested validity and reliability through SPSS program.

In analyzing the data, this study used descriptive and inferential analysis. The descriptive analysis was conducted to find the distribution, mean score and standard deviation, while the inferential analysis was conducted to find the significant difference of mean score through paired sample t test.

### FINDINGS & DISCUSSIONS

There are two data collected in this study namely data of pretest and posttest. The data distribution is presented in Table 1.

Table 1. Data Distribution

N	Pretest	Posttest		
1	63	83		
2	73	77		
3	57	63		
4	63	77		
5	77	87		

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6	57	67
7	60	60
8	73	87
9	80	83
10	50	63
11	57	67
12	60	83
13	70	83
14	70	73
15	77	83
16	73	77
17	53	60
18	60	63
19	80	93
20	67	70
21	60	70
22	63	77
23	80	87
24	67	77

Looking at Table 1, the lowest mean score in pretest is 50 and the highest score is 80. Meanwhile, the lowest score in posttest is 60 and the highest score is 93. Table 2 presents the frequency of data distribution.

Table 2. Frequency

				. 0 9 4 0 0	/			
Pretest				Posttest				
Score Frequency		Percent	Score	Frequency	Percent			
	50	1	4.2	60	2	8.3		
	53	1	4.2	63	3	12.5		
	57	3	12.5	67	2	8.3		
	60	4	16.7	70	2	8.3		
	63	3	12.5	73	1	4.2		
	67	2	8.3	77	5	20.8		
	70	2	8.3	83	5	20.8		
	73	3	12.5	87	3	12.5		
	77	2	8.3	93	1	4.2		
	80	3	12.5					

From Table 2 it can be seen that the frequency of the data. The passing grade score based on curriculum 2013 is 75. In posttest there are 78.2% students do not achieve the passing grade, while in posttest only 41.6%. The next analysis conducted was descriptive analysis. The result is presented in Table 3.

Table 3. Descriptive Analysis

	N	Mean	Std. Deviation	
Pretest	24	66.25	8.965	
Posttest	24	75.42	9.682	

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In Table 3, the mean score of pretests is 66.25 with 8.965 standard deviation. Meanwhile, the mean score of posttests is 75.42 with 9.682. It can be concluded that the mean score of posttests is higher than pretest (75.42 > 66.25). A paired sample t test was conducted to identify if the mean difference is significant or not. The result is presented in Table 4.

Table 4. Paired Sample t Test									
Paired Differences									
					95%	Confidence			
					Interval	of the			
			Std.	Std. Error	Differenc	е			Sig. (2-
		Mean	Deviation	Mean	Lower	Upper	t	df	tailed)
Pair	Pretest	9.167	5.693	1.162	-11.570	-6.763	-7.889	23	.000
1	Posttest								

A significant mean difference can be seen from the value of Sig. (2-tailed). A value lower than .05 indicates that the mean difference is significant (Pallant, 2016). From Table 4, the value of Sig. (2-tailed) is .000 which is lower than .05. Therefore, it can be concluded that jigsaw technique affects students' reading comprehension.

The results of the current study confirm that using jigsaw in teaching reading was effective. Students' reading comprehension score was higher in posttest (75.42) than pretest (66.25). The mean difference of pretest and posttest was marked significant (Sig.2 tailed= .000). Several previous studies also identified similar result. Yuhananik (2018) found that students showed better reading comprehension after the implementation of jigsaw of cooperative learning. They were tasked to solve certain problems and working together to find solutions. A significant improvement of reading comprehension was also identified in a study conducted by Sopyan et al. (2019). They found that using jigsaw helped the students to build their conceptual understanding of the content of the reading text. Murniati (2015) identified that students showed positive response towards the implementation of jigsaw. They like to learn English using jigsaw technique.

The use of jigsaws in the classroom is not only able to improve student achievement as its output. The implementation of jigsaw basically emphasizes the values of cooperation and student creativity to obtain maximum results (Eachemapti et al., 2017). In this study, the students were actively engaged in discussion activity. They gave and share their opinion toward each other. These values strongly reflect the 21st century abilities that students need to have in order to face global competition (Tyas et al., 2019). Moreover, the use of jigsaw motivates students in learning so that they actively contribute to the learning process (Siregar & Girsang, 2020). In addition, the use of jigsaws in the classroom will change the learning style that is usually teacher-centered to become learner-centered. The teacher's role was only to facilitate the learning process and give direction when students faced difficulties. This change in learning style is very important so that students have responsibility for the learning process and do not depend on the teacher (Darsih, 2018).

The result of the current study implied that jigsaw can be used as an alternative strategy to enhance students' reading skill. Even though jigsaw is not a new strategy, it still can be applied in classroom. Most importantly, using jigsaw

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provides opportunity for students to be actively engaged in classroom activity and help them to be responsible for their own learning process

### CONCLUSION

This study was aimed at investigating the effect of jigsaw on students' reading comprehension. From the result of the study, it was found that students' reading comprehension was better after the implementation of jigsaw. The result of paired sample t test confirmed that the mean difference between pretest and posttest was significant. Thus, it can be concluded that the implementation of jigsaw significantly affected students' reading comprehension. The study was limited on identifying the effect of jigsaw on reading skill and limited participants. Further study is suggested to explore the effect of jigsaw on different language skill and larger participants.

### REFERENCES

- Abuhamda, E. A. A. (2020). the Effect of Jigsaw Cooperative Learning Strategy on Fourth Graders 'Achievement in Teaching Efl At Qalqilya City . Academic Journal of Business and Social Sciences, 4, 1–8.
- Boholano, H. (2017). Smart social networking: 21st Century teaching and learning skills. Research in Pedagogy, 7(2), 21–29. https://doi.org/10.17810/2015.45
- Darsih, E. (2018). Learner-Centered Teaching: What Makes It Effective. Indonesian EFL Journal, 4(1), 33. https://doi.org/10.25134/ieflj.v4i1.796
- Eachemapti, P., Kumar KS, K., & Ismail, A. R. H. (2017). Cooperative learning through jigsaw classroom technique for designing cast partial dentures - a comparative studv. MedEdPublish. 6(2). https://doi.org/10.15694/mep.2017.000088
- Indeks Bahasa Inggris EF. (2019).Kecakapan https://www.ef.co.id/epi/regions/asia/indonesia/
- Karacop, A., & Diken, E. H. (2017). The Effects of Jigsaw Technique Based on Cooperative Learning on Prospective Science Teachers' Science Process Skill. Education and Practice. Journal of 8(6), 86-97. https://eric.ed.gov/?id=EJ1133003
- Magdalena, I., Rosnaningsih, A., Akbar, M., & Situmorang, R. (2019). Evaluasi Program Gerakan Literasi Sekolah Di Sekolah Dasar Wilayah Kota Dan Kabupaten Tangerang. Pendas: Jurnal Ilmiah Pendidikan Dasar, IV. https://doi.org/10.23969/jp.v4i2.1768
- Moriyanti, M., Muna, H., & Ismail, N. M. (2019). Visualization and Comprehension: Corroborating children's reading ability. Englisia Journal, 7(1), 26-40. https://doi.org/10.22373/ej.v7i1.4508
- Murniati. (2015). The Implementation and Obstacles in Jigsaw Technique in Teaching Reading. English Education Journal, 6(4), 457–468.
- Naeghel, J. De, Keer, H. Van, & Vanderlinde, R. (2014). Strategies for Promoting Autonomous Reading Motivation: A Multiple Case Study: EBSCOhost. Frontline Learning Research, 2(1), 20. http://web.a.ebscohost.com.ezproxy.csp.edu/ehost/detail/detail?sid=010c18 9e-b2ea-4b8f-98b6-
  - 409f4f4e2311%40sessionmgr4008&vid=0&hid=4201&bdata=#AN=EJ10908 39&db=eric
- Nurbianta, N., & Dahlia, H. (2018). The Effectiveness of Jigsaw Method in Improving Students Reading Comprehension. ETERNAL (English Teaching

- Journal), 9(1), 70-86. https://doi.org/10.26877/eternal.v9i1.2416
- Pallant, J. (2016). SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS. Open University Press.
- Pariati, N. N. (2018). The Effect of Jigsaw Technique and Students' Vocabulary Mastery on Reading Comprehension of the Eighth Grade Students of SMPN 4 Singaraja. *Yavana Bhasha: Journal of English Language Education*, 1(2). https://doi.org/10.25078/yb.v1i2.730
- Sartika, F. D., Afifah, N., & Anggraini, Y. (2020). The Correlation Between Students' Reading Habit and Their Reading Comprehension. *Jurnal Basis*, 7(1), 207. https://doi.org/10.33884/basisupb.v7i1.1856
- Şengül, S., & Katranci, Y. (2014). Effects of Jigsaw Technique on Seventh Grade Primary School Students' Attitude towards Mathematics. *Procedia Social and Behavioral Sciences*, 116(507), 339–344. https://doi.org/10.1016/j.sbspro.2014.01.218
- Silalahi, E. B. (2019). Jigsaw method in reading comprehension. *EnJourMe* (English Journal of Merdeka): Culture, Language, and Teaching of English, 4(1), 11–17. https://doi.org/10.26905/enjourme.v4i1.3184
- Siregar, N. C., & Girsang, C. N. (2020). The Effect Of Using Jigsaw Technique On Students' Vocabulary Ability At Smp Swasta Kartika 1-2 Medan. *Journal of English Education and Teaching*, *4*(1), 87–101. https://doi.org/10.33369/jeet.4.1.87-101
- Sopyan, F. M., Hasanah, K. U., & Haryudin, A. (2019). Improving Reading Skill Using Jigsaw. *PROJECT (Professional Journal of English Education)*, 2(5), 745. https://doi.org/10.22460/project.v2i5.p745-751
- Sumiati, C., Zulkaidah, D., & Kaswan, K. (2019). Teaching Reading Comprehension Using Jigsaw Technique. *PROJECT (Professional Journal of English Education)*, 2(4), 461. https://doi.org/10.22460/project.v2i4.p461-465
- Tahmidaten, L., & Krismanto, W. (2020). Permasalahan Budaya Membaca di Indonesia (Studi Pustaka Tentang Problematika & Solusinya). *Scholaria: Jurnal Pendidikan dan Kebudayaan*, 10(1), 22–33. https://doi.org/10.24246/j.js.2020.v10.i1.p22-33
- Tyas, M. A., Nurkamto, J., Marmanto, S., & Laksani, H. (2019). Developing Higher Order Thinking Skills (HOTS) Based Questions: Indonesian EFL Teachers' Challenges. October, 52–63. https://doi.org/10.17501/26307413.2019.2106
- Wandasari, Y., Kristiawan, M., & Arafat, Y. (2019). Policy evaluation of school's literacy movement on improving discipline of state high school students. *International Journal of Scientific and Technology Research*, 8(4), 190–198.
- Yu, T. X., Mohammad, W., & Ruzanna, M. (2019). Integration of 21st century learning skills (4C elements) in interventions to improve english writing skill among 3K class students. *International Journal of Contemporary Education*, 2(2), 100. https://doi.org/10.11114/ijce.v2i2.4498
- Yuhananik, Y. (2018). Using Jigsaw Model To Improve Reading Comprehension of the Ninth Graders of Smpn 1 Karangploso. *IJOLTL: Indonesian Journal of Language Teaching and Linguistics*, 3(1), 51–64. https://doi.org/10.30957/ijoltl.v3i1.404
- Zua, B. (2021). Literacy: Gateway to a World of Exploits. *International Journal of Education and Literacy Studies*, *9*(1), 96. https://doi.org/10.7575/aiac.ijels.v.9n.1p.96