Effect Of Jigsaw Cooperative Learning Model On Reading Ability Of 1st Graders SDN Jrebeng Kidul, Probolinggo City

Didit Yulian Kasdriyanto[1], Verto Septiandika[2], Adetegar Youliyan Primadani[3]

[1]Pendidikan Guru Sekolah Dasar; Universitas Panca Marga; Indonesia
[2]Administrasi Publik; Universitas Panca Marga; Indonesia
[3]Pendidikan Guru Sekolah Dasar; Universitas Panca Marga; Indonesia

ARTICLE INFO	ABSTRACT
Keywords: *learning model;* *jigsaw; readability*	Reading is a basic skill that provides information, creativity, and imagination. The problem of this study is that the first graders are not yet able to read. To overcome this problem, researchers are using the Jigsaw collaborative learning model to improve students' reading skills. The aim of this study was to evaluate the positive/significant impact of this model on the reading ability of first graders in first grade. The research method used in this study is an experimental study with Quasi-Experimental-Control-Group Design (QED) consisting of two groups: experimental group (jigsaw group) and control group (conventional group). The sample size was 37 students, 20 students in the experimental group and 17 students in the control group. Data is collected through observation, testing and documentation. The results show that the Jigsaw cooperative learning model has a large and positive impact on students' reading skills. The t/hypothesis test confirmed the alternative hypothesis (Significance $<0.001 < 0.05$). The data before and after the test are normally and uniformly distributed.

Corresponding Author:
Didit Yulian Kasdriyanto
Pendidikan Guru Sekolah Dasar; Universitas Panca Marga; Indonesia; didityulian@upm.ac.id

INTRODUCTION

Education is an important part of human existence. Schools can further develop thinking skills, help get better jobs, and develop skills, such as language skills. One of the language skills that preschoolers must immediately possess and master is comprehension. Reading can be the ultimate foundational skill. Reading can help you learn new things, be more creative, and expand your imagination. The progress in reading depends a lot on reading comprehension, because without good reading comprehension, reading practice will not bring good results (Fatmasari & Fitriyah, 2018).

Children can start learning to read from the age of 4 by familiarizing themselves with letters or numbers through pictures. Even so, some children still experience reading delays. This delay can be

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caused by a number of factors, such as genetic factors, health problems and lack of effective instruction or teaching system for children (Nuraini & Hera, 2022).

When children enter primary school, the ability to read plays a very important role in acquiring knowledge. For students to become good readers, they need to develop good reading skills. Reading skills can be acquired through a variety of learning activities, both at home, at school, and in the community. Through reading activities, children can understand the meaning of words and sentences in the text. Reading skills of primary school students need to be practiced immediately because they are directly related to the entire learning process, especially in the lower grades.

Based on preliminary research conducted by researchers Jrebeng Kidul of SDN, Probolinggo town, some first graders have been shown to have delays in reading skills, such as slurred spelling, difficulty recognizing letters and arranging letters into words and sentences. The cause of this delay is the lack of optimal teaching methods in the learning process as well as the lack of application of learning models.

 Reading difficulties are special problems that students face when learning the language of reading, spelling, and writing. This can affect understanding of letters and word shapes. Reading difficulties also affect other learning. Children's ability to recognize words when reading depends on the teaching and teaching methods implemented by teachers, because the teacher's role in the process of learning to read is very important. Teachers apply the master method, making students less active and less boring when learning to read. Using traditional methods is not a mistake, but teachers should also apply diverse and fun learning methods and models to make learning to read more interesting, not boring. So, there needs to be an interesting learning method or approach, such as Jigsaw learning model. Jigsaw cooperative learning model is a method to improve the effectiveness of reading instruction in primary schools. Jigsaw learning model is a cooperative learning model. The jigsaw puzzle was first developed and tested by Elliot et al. at the University of Texas, and then adapted by Slavin et al. at Johns Hopkins University (Arends, in Kuntjojo et al.; 2011:

20). In the Jigsaw cooperative learning model, students complete learning by working with other students to achieve a common goal. Cooperative jigsaw learning is a type of cooperative learning that encourages students to actively and help each other master the material for maximum performance (Isjoni, 2010:54).

The choice of an alternative Jigsaw learning model that can improve students' math learning outcomes is because it is expected that (1) by using the Jigsaw learning model, students' learning motivation and tolerance, discipline, responsibility and communication among students can be increased because in this learning model, students will work together to solve problems through expert group discussion. native speakers and groups, (2) by applying the Jigsaw learning model, students will gain a deeper understanding of the content and problems encountered. that students' understanding will deepen, thereby improving student learning outcomes (3) by applying Jigsaw learning model, students are not only imparted knowledge by teachers .

METHODS

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FINDINGS AND DISCUSSION

Findings

Data for this study were obtained from pre- and post-test results of students' reading ability and academic performance. Before collecting data, the researcher must perform testing on the testing instrument to determine its validity and reliability.

1. **Validity**

Validity testing is performed to assess the appropriateness of test items used by researchers to collect data from respondents or research samples. Each element is considered valid if the value of r

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count > r table and if the value of r count < ; r then the declared question element is invalid. The results of the validity check of the test questions are shown in the table below:

Table 1 Check Validity Test

Quetion	Check		Validity
	rHitung	rTabel	
1	0,580	0,514	Question Valid
2	0,805	0,514	Question Valid
3	0,773	0,514	Question Valid
4	0,548	0,514	Question Valid
5	0,548	0,514	Question Valid

Based on the results of the validity check of the test items generated from the program SPSS ver.29, the table r value is 0.514. From the test results of the program SPSS ver.29 in the table above, it is found that the test value for each question (number of r) > table r with significance level of 0.05. Therefore, it can be concluded that each of these factors can be considered valid.

2. **Reliability**

Decided during the reliability test: If Cronbach's Alpha > 0.60, the test questions are considered reliable or consistent. If Cronbach's Alpha < 0.60 then the questions are considered unreliable or inconsistent. The results of the reliability test data of the test item are shown in the table below:

Table 2 Check Reliabilty

Reliability Staistics	
Cronbach`s Alpha	N of Items
.0625	5

Based on the results of the reliability test of the test item generated from the program SPSS ver.29, it is found that out of the 5 items, Cronbach's Alpha has a value > 0.60, i.e. 0.625. This shows that 5 items or all of the questions can be considered reliable or consistent.

In this data analysis, there is a test that requires data analysis, namely the normality test and the homogeneity test using SPSS Ver.29. This data analysis test was conducted to analyze first grade readability data at SDN Jrebeng Kidul, Probolinggo City.

first. Test students' standard reading ability

Information about student reading outcomes was collected from the consequences of pre- and post-test information about test and control students' reading skills. Next is information about the results of the common test on the impact of student understanding:

Table Uni Normalitas Reading Competence

Test of Normality					
	Kelas		Kolmogorov-Smirnov		
			Statistic	df	Sig.
Reading Competence	Pretest Eksperimen		.215	20	.016
	Postest Eksperimen		.206	20	.025
	Pretest Kontrol		.188	17	.111
	Postest Kontrol		.186	17	.120
a.. Liliefors Significamce Correction					

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Based on the results of the normality test on the reading ability of students in the experimental class and the control class, the data are normally distributed. Judging from the results in the table above, the Kolmogorov-Smirnov value is significant for the reading ability of students in the experimental class during the first test ($0.16 \geq 0.05$), after the test ($0.16 \geq 0.05$) ,$25 \geq 0.05$) and in the control class, during the pre-test ($0.111 \geq 0.05$), the post-test ($0.120 \geq 0.05$). Therefore, the data are assumed to be normally distributed and the model satisfies the assumption of normality.

1. **Homogenitas Reading Competence**

Student readability data for the homogeneity test were obtained from the Experimental and Control classes. The results of the Student Reading Consistency Test can be viewed in the following table:

Table Homogenitas Reading Competence

Test of Homogeneity of Variance		Levene Statistic	df1	df2	Sig.
Kemampuan Membaca Siswa	Based on Mean	3.870	1	35	.057
	Based on Median	1.915	1	35	.175
	Based on Median and with adjusted df	1.915	1	30.643	.176
	Based on trimmed mean	3.818	1	35	.059

Based on the Student's Reading Consistency Test Table, the data results have a significant value (sig) ≥ 0.05. Therefore, it can be concluded that the student's readability homogeneity test is considered to be homogenous.

After performing analytical requirements test and if data analysis results are normal and consistent, then hypothesis testing can be performed. The hypotheses proposed in this study are:

• Working assumption (Ha):

There is a positive and significant influence between the puzzle learning model on the reading ability of 1st grade students SDN Jrebeng Kidul, Probolinggo city.

• Working Assumption (Cough):

There was no significant or positive effect between the puzzle learning model on the reading ability of 1st graders SDN Jrebeng Kidul, Probolinggo City. To test the above hypothesis, the author uses the t-test of two independent samples (independent sample t-test). Below are the data results obtained from the program SPSS ver.29 to test the hypothesis:

Independent Samples Test									
		t-test for Equality of Means							
				Significance		Mean Differen ce	Std. Error Differen ce	95% Confidence Interval of the Difference	
		t	df	One-Sided p	Two-Sided p			Lower	Upper
Kemampuan Membaca Siswa	Equal variances assumed	4.571	35	,001	,001	10.709	2.343	5.952	15.465
	Equal variances not assumed	4.447	28.310	,001	,001	10.709	2.408	5.779	15.639

When making a decision for a t-test or a hypothesis test, if the value sig. (both sides) < 0 > 0.05, then Ho is accepted and Ha is rejected. Based on the results of hypothesis testing using the program SPSS ver.29, sig. (double-sided) 0.001<; 0.05. Therefore, it can be concluded that Ha is accepted and Ho

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is rejected, which means that there is an influence of Jigsaw learning model on reading ability of 1st grade students at SDN Jrebeng Kidul school, Probolinggo city.

Discussions

Research is directed towards SDN Jrebeng Kidul, Probolinggo City, Grade 1 using 2 classes namely Discovery Class with jigsaw learning model and Control Class with Traditional learning model. The purpose of this test is to examine the effect of the Phonics learning model on the reading ability of 1st graders. Before the analyst performs the information collection process, pre-test and post-test are performed first on the two layers to see the initial capabilities and the post-processing results. The pre- and post-test questions were tested for solid validity and quality, and the questions were considered substantial and certain.

The results of the fairness and uniformity test show that information is transmitted in an orderly and uniform manner. Furthermore, hypothesis testing using SPSS version 29 shows that Jigsaw learning model has a positive and significant impact on reading ability of 1st grade students at SDN Jrebeng Kidul, Probolinggo city. Experimental results show that students' reading ability increases after being processed by Jigsaw learning model. Students' understanding of letters increases and this pattern is fun and effective in helping them learn to read.

These results are in line with other studies showing that jigsaw learning improves young children's reading skills. Students' enthusiasm and interest in learning to read increases through this model. In general, the Jigsaw learning model has an effect on the reading ability of 1st grade students at SDN Jrebeng Kidul, Probolinggo city. This model can boost students' energy in learning to read and speed up letter comprehension through letter instruction.

CONCLUSION

Based on the research results, the jigsaw learning model has a positive impact on the reading ability of 1st grade students at SDN Jrebeng Kidul, Probolinggo city. Hypothesis test results show that Ha (alternative hypothesis) is accepted and Ho (null hypothesis) is rejected, with sig value. (double-sided) $0.001 <; 0.05$. Before hypothesis testing, a normality test and homogeneity test were performed showing that the data are normally distributed and homogeneous.

In addition, the improvement in student results from before to after the test showed a significant increase. Thus, it can be concluded that the Jigsaw learning model has a positive impact on the reading skills of students SDN Jrebeng Kidul, Probolinggo city.

CONFLICTS OF INTEREST

The research team is a lecturer in the bachelor's degree program in primary education and bachelor's degree in public administration at Panca Marga University. Based on this, the research team has no conflict of interest with the results of the study conducted at Jrebeng Kidul Primary School, Probolinggo town.

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REFERENCES

ADAMS, M. J. (2019). Konsep Metode Pembelajaran Fonik Dalam Membaca Permulaan Perspektif Marilyn Jager Adams. *Beginning to Read: Thinking and Learning About Print*, 51–64.

Afrom, I. (2022). Studi Tentang Faktor Penyebab Rendahnya Kemampuan Membaca. *Anterior Jurnal*, *13*(1), 122–131. https://doi.org/10.33084/anterior.v13i1.298

Arfatin Nurrahmah. (2021a). *pengantar statistika*.

Arfatin Nurrahmah. (2021b). *pengantar statistika*.

Fatmasari, R. K., & Fitriyah, H. (2018). *Ketrampilan Membaca*.

Isjoni. 2010. *Cooperative Learning*. Yogyakarta: Pustaka Pelajar

Kemp & Dayton, A. (2019). *Fungsi media pembelajaran*.

Khusnin. (2017). Faktor anak kesulitan belajar. *Umpr*.

Kuntjojo dkk ; 2011. *Modul Model-model Pembelajaran*. Modul disajikan dalam Pendidikan dan Latihan Guru Profesional PSG Rayon Universitas Nusantara PGRI Kediri, Kediri, 2011

Kurniawati, U. (2020). Peran Orang Tua Terhadap Kemampuan Membaca Peserta didik Kelas 2 SD. *Jurnal of Education, Psychology and Counseling*, *2*(1), 40–50.

Miftah, M., & Nur Rokhman. (2022). Kriteria pemilihan dan prinsip pemanfaatan media pembelajaran berbasis TIK sesuai kebutuhan peserta didik. *Educenter : Jurnal Ilmiah Pendidikan*, *1*(4), 412–420. https://doi.org/10.55904/educenter.v1i4.92

Nuraini, S., & Hera, T. (2022). Faktor-Faktor Penghambat Belajar Membaca Permulaan pada Peserta didik Kelas II di SD Negeri 91 Palembang. *Jurnal Pendidikan Dan Konseling*, *4*(3), 1540–1545.

Pramesti, F. (2019). Analisis Faktor-Faktor Penghambat Membaca Permulaan pada Peserta didik Kelas 1 SD. *Jurnal Ilmiah Sekolah Dasar*, *2*(3), 283. https://doi.org/10.23887/jisd.v2i3.16144

Puspitasari, A. D., Hafidah, R., & Sujana, Y. (2018). Pengaruh Phonics Method Terhadap Kemampuan Membaca Permulaan Anak Kelompok B TK Aisyiyah Bustanul Athfal Kertonatan. *Kumara Cendekia*, *6*(2), 91–98. https://jurnal.uns.ac.id/kumara/article/view/35111

Sari, A. (2018). Rancangan Penelitian. *Angewandte Chemie International Edition, 6(11), 951–952.*, 5–24.

Shilphy A. Octavia. (n.d.). *pengertia model model pembelajaran*.

soetopo. (2018). kemampuan membaca pada anak usia dini. *ump.ac.id/6177/3/WINDARTI%20BAB%20II.pdf*.

Suparlan, S. (2020). Pembelajaran Bahasa Indonesia di Sekoah Dasar. *Fondatia*, *4*(2), 245–258. https://doi.org/10.36088/fondatia.v4i2.897

Syakir, A. (2020). Implementasi Metode Jolly Phonics Bermuatan Nilai Islami Untuk Pengenalan Huruf Dan Kemampuan Melafalkan Fonem Bagi Anak Usia Dini. *Jurnal Bahasa, Sastra Dan Pembelajarannya*, *10*(1), 59. https://doi.org/10.20527/jbsp.v10i1.8396