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The Effect of the Scramble-Type Cooperative Learning Model Assisted by Picture Cards on Students' Reading Ability

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Abstract:

The purpose of this study was to investigate the effectiveness of the Scramble-type cooperative learning model, assisted by picture cards, on the reading ability of second-grade students at SD Negeri Kalibanteng Kidul 01. This research employed an experimental method using a Nonequivalent Control Group Design. The study population consisted of 60 students from two classes: Class II B (control group) and Class II C (experimental group), each comprising 30 students. The sample was selected using purposive sampling. Data were collected through oral reading tests. Data analysis involved the use of the Paired Sample t-test to measure the within-group effect, and the Independent Sample t-test to compare outcomes between groups. A significance level of 0.05 (two-tailed) was applied in both tests. The findings indicate that the Scramble-type cooperative learning model assisted by picture cards significantly improved students' reading ability. The Paired t-test results for the experimental class yielded a significance value of 0.000, which is less than 0.05, confirming the effectiveness of the intervention. Similarly, the Independent t-test showed a significance value of 0.013 ($p < 0.05$), indicating a statistically significant difference in reading performance between the experimental and control groups. These results demonstrate that the use of the Scramble cooperative learning model, when supported by picture cards, is more effective in enhancing students' reading skills compared to conventional learning methods.

Abstrak:

Tujuan penelitian ini adalah untuk mengetahui kemampuan membaca peserta didik menggunakan model pembelajaran kooperatif tipe scramble berbantu kartu gambar yang diberikan pada kelas eksperimen SD Negeri Kalibanteng Kidul 01. Penelitian ini merupakan penelitian eksperimen, dengan desain Nonequivalent Control Group Design. Populasi penelitian ini sebanyak 60 peserta didik dari dua kelas B dan C yang terdiri dari II B (kontrol) 30 peserta didik dan kelas II C (eksperimen) 30 peserta didik. Penentuan sampel di dalam penelitian ini menggunakan purposive sampling. pengumpulan data menggunakan tes lisan. dalam menganalisis data menggunakan uji T yaitu uji paired t-test dengan taraf sig. (2-tailed) < 0,05 dikatakan maka ada pengaruh. Hasil penelitian yang telah dilakukan di SD Negeri Kalibanteng Kidul 01 menunjukan bahwa model pembelajaran kooperatif tipe scramble berbantu kartu gambar memberikan pengaruh yang signifikan dalam kemampuan membaca peserta didik, Dibuktikan bahwa nilai 0,000 < 0,05 model pembelajaran yang diterapkan di kelas eksperimen berpengaruh terhadap kemampuan membaca peserta didik. Serta pada Uji Independent T-test, dengan taraf nilai sig. (2-tailed) > 0,05 dikatakan maka ada perbedaan. Model pembelajaran kooperatif tipe scramble berbantu kartu gambar

berpengaruh secara signifikan dibanding pembelajaran konvensional terhadap kemampuan membaca peserta didik, dapat dibuktikan bahwa hasil uji independent t-test, nilai sig. (2-tailed) yang memperoleh 0.013 karena 0,013 < 0,05 maka dapat disimpulkan model pembelajaran kooperatif tipe scramble berbantu kartu gambar memberikan peningkatan terhadap kemampuan membaca dibanding model pembelajaran konvensional.

Keywords:
Learning Model, Scramble, Reading Ability

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Introduction

The purpose of national education is to educate the nation's youth by developing students' potential to become faithful, devout, healthy, knowledgeable, capable, creative, independent, democratic, and responsible individuals (Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional, 2023). To achieve this goal, the implementation of education must uphold key principles, one of which is the cultivation of foundational skills in reading, writing, and arithmetic. These basic skills must be prioritized from early education, particularly through Indonesian language learning, as it equips students for higher levels of education and life in society. The Independent Curriculum is an educational innovation initiated by the Ministry of Education, Culture, Research, and Technology to address the learning crisis caused by the COVID-19 pandemic. This curriculum promotes flexible and creative learning and aims to enhance literacy among elementary school students (Sutisnawati & Yarmi, 2023). Literacy – defined as the ability to understand, use, and convey information – plays a crucial role in supporting children's learning processes and shaping their future.

Indonesian language instruction is essential in teaching students to communicate properly and accurately in the national language. It serves as a vehicle for developing students' language skills. Reading instruction in elementary schools is delivered according to grade level: basic reading and writing are taught in lower grades, while advanced reading and writing are emphasized in upper grades. According to Gunawan (2018), reading comprehension is a key aspect of reading activities; the main goal of reading is understanding, not speed. Hence, education must foster students' reading skills through enjoyable learning methods. Language skills encompass four interconnected components:

listening, speaking, reading, and writing. Mastery in one area often involves the development of others. As Tarigan (1989) explains, reading is an integral part of language skills and is closely linked with the other three aspects. The National Council of Teachers of English also defines these four essential skills. Reading is an interactive process that involves understanding a text by connecting the words with prior knowledge (Riyanti, 2021). Through reading, learners gain comprehension and expand their knowledge base. Therefore, mastering reading skills enables students to extract meaningful and useful information from texts.

Reading allows students to process and internalize knowledge. Riyanti (2021) states that reading involves obtaining deep and thorough understanding; it is not merely about decoding text but grasping its content. Readers engage with texts to extract information presented by the author. Seknun, Noho, and Tuhuteru (2023) note that reading is the process of translating written symbols into spoken language. Similarly, Tarigan (2010) describes reading as a process by which readers decode the messages conveyed by authors through text. This process enhances learning outcomes and accelerates academic progress. Reading helps individuals acquire knowledge, experience, and even entertainment. Then, low reading proficiency among students can be attributed to various factors, including limited parental support, low motivation, and monotonous teaching methods such as lecturing. Teacher-centered instruction and the lack of engaging models or media often diminish students' enthusiasm for learning (Putri, Rambe, Nuraini, Lilis, Lubis, & Wirdayani, 2023). Therefore, innovative and student-centered learning approaches are essential to boost students' interest and improve their reading abilities.

Based on interviews conducted on November 11, 2024, with the teachers of classes II B and II C at SD Negeri Kalibanteng Kidul 01, it was found that students' reading abilities remain low. Some students are not yet fluent in reading, have difficulty distinguishing uppercase letters, and often confuse similar-looking letters such as p, d, b, s, and z. Additionally, they struggle with reading letter combinations like sh, ng, sy, and kh. Many students also have difficulty interpreting the meaning of texts they have read, largely due to low learning motivation. This is compounded by continued reliance on traditional lecture-based teaching methods and limited parental involvement in children's learning at home. As a result, students' reading abilities remain suboptimal, which negatively impacts their overall learning development.

One potential solution to address reading difficulties in elementary school students is to implement learning models that actively engage students and make the learning process more interesting. According to Ahyar, Prihastari, Setyaningsih, Rispatiningsih, and Zanthy (2021), a learning model is a deliberately designed instructional activity intended to facilitate effective teaching and learning. Cooperative learning is one such model that encourages active student participation and aims to achieve optimal learning outcomes. Among the various cooperative learning models, the Scramble model is considered suitable for elementary education. This model supports students with reading difficulties by having them rearrange scrambled words into the correct order. Ahmad, Jafar, Hendri, Qurba, and Ingriza (2022) describe the Scramble learning model as an instructional

strategy that utilizes random arrangements of words, sentences, or paragraphs as a game to enhance student engagement.

In addition to learning models, the use of engaging instructional media, such as picture cards, can also significantly improve students' reading skills. As noted by Saleh, Syahruddin, Saleh, Azis, and Sahabuddin (2023), picture cards function as a medium for conveying information from teachers to learners in a structured and enjoyable manner. In the Scramble learning model, picture cards help students understand text content through visual aids that they find appealing. These cards, typically sized 25x30 cm, can be produced manually or by using illustrated photographs with captions. The use of picture cards has been shown to stimulate students' interest in reading. Fahruddin, Rachmayani, Astini, and Safitri (2022) assert that picture cards can effectively enhance students' reading skills by presenting visual stimuli that activate cognitive processing. These cards serve as a form of educational game, where images are shown briefly to stimulate the child's brain and facilitate the reception of information. Thus, picture cards are effective tools in teaching children to read and in helping them recognize letters and numbers from an early age. Previous research has shown that the cooperative learning model of the Scramble type is frequently used to improve reading skills in elementary school students. However, its integration with picture card media remains limited. Based on this gap, the present study seeks to examine students' reading abilities through the application of the Scramble-type cooperative learning model assisted by picture cards at SD Negeri Kalibanteng Kidul 01.

Research Method

This study used a quantitative approach with an experimental research method, which was employed to determine the significance of the difference in the dependent variable scores between two treatment conditions (Muhidin, 2020). The type of research used was quasi-experimental, which aimed to examine the influence of one or more independent variables on a dependent variable. In this context, the independent variable referred to the factor manipulated by the researcher (i.e., the Scramble-type cooperative learning model assisted by picture cards), while the dependent variable was the outcome influenced by the intervention (i.e., students' reading ability).

The quasi-experimental method provided some control over various factors; however, it could not fully eliminate the influence of external variables that may have affected the experimental outcomes (Kusumastuti, Khoirin, & Achmadi, 2020). The experimental design used in this study was the Nonequivalent Control Group Design, in which participants in the experimental and control groups were not randomly assigned (Abraham & Supriyati, 2022). This design involved two groups: one that received the treatment (experimental group) and another that did not (control group). Both groups were given a pretest and a posttest to assess improvements in reading ability and to measure the effectiveness of the Scramble-type cooperative learning model assisted by picture cards. The research design was illustrated as follows:

Table 1. Research Design

Class	Pre-test	*Treatment*	Post-test
B	O^1		O^3
C	O^2	X	O^4

In the table above, it was explained that Class II B served as the control group, while Class II C was the experimental group. Both groups received a pretest and a posttest; however, only the experimental group received a treatment—namely, the application of reading instruction using the Scramble-type cooperative learning model assisted by picture cards. According to Abraham and Supriyati (2022), there are two groups of subjects in this type of research: an experimental group that is given a treatment, and a control group that is not. Both groups undergo pretesting and posttesting. This study aimed to improve students' reading ability through the implementation of the Scramble-type cooperative learning model assisted by picture cards.

The population of this study consisted of all Grade II students at SD Negeri Kalibanteng Kidul 01, totaling 60 students from two classes: II B and II C. A population refers to a group of subjects that possess certain characteristics and serve as the foundation for conducting research. The sampling technique used in this study was non-probability sampling. According to Sudaryana and Agusiady (2022), non-probability sampling is a technique where not all members of the population have an equal chance of being selected. Specifically, this study used purposive sampling, which, as explained by Sudaryana and Agusiady (2022), is a technique based on specific criteria or considerations. In this case, the criteria included all students from the two existing classes, with Class II B (30 students) designated as the control group and Class II C (30 students) as the experimental group.

Data collection techniques in this study included both test and non-test methods. The test technique involved oral and written assessments, where students were asked to read letters, words, and sentences. The non-test techniques included interviews with classroom teachers and classroom observations. The instrument used in this study consisted of reading tasks designed to assess the reading ability of second-grade students. The instrument measured three main indicators: recognizing letters, recognizing words, and reading words within sentences. To ensure the instrument's validity and relevance, it underwent expert validation (expert judgment) by lecturers specializing in Indonesian language education, who provided feedback on the appropriateness of the instrument for assessing students' reading skills. Then, this study employed prerequisite tests including the normality test, homogeneity test, and hypothesis testing. The hypothesis testing utilized the T-test, including both the paired sample T-test and the independent sample T-test, to analyze differences in student reading ability before and after the intervention.

Results and Discussion

Based on the results of the pretest and posttest conducted to assess students' reading ability using the Scramble cooperative learning model assisted by picture cards, it was found that there were measurable differences in the scores obtained before and after

the intervention. These differences were reflected in the following pretest and posttest results:

Table 2. Descriptive Statistic of the Experiment Class

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pretest_Eksperimen	30	53.34	43.33	96.67	64.1113	12.37117
Postest_Eksperimen	30	43.33	56.67	100.00	83.7767	8.95791
Valid N (listwise)	30					

Based on the table above, it can be observed that the pretest and posttest scores of the experimental class showed notable improvement. In the pretest, the lowest score was 43.33, while the highest was 96.67, with a mean score of 64.11. After the treatment, the posttest scores ranged from a low of 56.67 to a high of 100, with an increased mean score of 83.77. In comparison, the results of the pretest and posttest in the control class, which used a conventional learning model, are presented in the table below:

Table 3. Descriptive Statistic of the Control Class

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Control_Pretest	30	33.33	46.67	80.00	64.5893	9.93202
Control_Posttest	30	43.33	50.00	93.33	77.6663	9.51514
Valid N (listwise)	30					

Based on the table above, the pretest scores of the control class showed a minimum score of 46.67 and a maximum score of 80.00, with a mean score of 64.58. In the posttest, the control class recorded a minimum score of 50.00, a maximum score of 93.33, and a mean score of 77.66. These results indicate that students in the control class experienced some improvement in their reading ability. In the experimental class, the average score increased from 64.11 (pretest) to 83.77 (posttest), while in the control class, the average improved from 64.58 to 77.66. It can thus be concluded that the experimental class experienced a higher and more consistent improvement in reading ability compared to the control class. These findings suggest that the Scramble-type cooperative learning model assisted by picture cards was more effective in enhancing students' reading ability than the conventional learning approach.

To determine whether the pretest and posttest data from the experimental and control classes were normally distributed, a normality test was conducted using the Shapiro–Wilk formula with the IBM SPSS Statistics Version 25 software. The results of the normality tests for the reading ability scores of Grade II students at SD Negeri Kalibanteng Kidul 01 are presented in the following table:

Table 4. Tests of Normality

Class	Shapiro-Wilk		
	Statistic	df	Sig.
Pretest B (Kontrol)	.935	30	.069
Postest B (Kontrol)	.935	30	.066
Pretest C (Eksperimen)	.947	30	.139
Postest C (Eksperimen)	.941	30	.099

According to Gunawan (2018), the normality test is used to evaluate whether the distribution of data within a particular group or variable follows a normal distribution. The pretest and posttest data for both the experimental and control classes showed significance values above 0.05 – specifically, 0.139 and 0.099 for the experimental class, and 0.069 and 0.066 for the control class. Therefore, it was concluded that the data from both groups followed a normal distribution. The results of the normality test, conducted using the Shapiro–Wilk formula, confirmed that all significance values were greater than 0.05, indicating that the assumption of normality was met for both the pretest and posttest scores in the experimental and control groups.

A homogeneity test was also conducted to determine whether the variance in the research data was homogeneous. The test aimed to examine whether the variances of the two groups were equal. The results showed a significance value greater than 0.05, indicating that the data were homogeneous. The results of the homogeneity test for the posttest scores of the control and experimental classes are presented in the following table:

Table 5. Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Nilai	Based on the Mean	.327	1	58	.570
	Based on the Median	.104	1	58	.748
	Based on the Median with adjusted df	.104	1	57.507	.748
	Based on the trimmed mean	.201	1	58	.655

Based on the table above, it was found that both the control and experimental classes showed a significance value of 0.570, which is greater than 0.05. This indicates that the data met the assumption of homogeneity of variance, meaning that the variances between the two groups were statistically equal. A paired sample t-test was then conducted to determine whether there was a significant difference in students' reading ability before and after the application of the Scramble-type cooperative learning model assisted by picture cards in the experimental class at SD Negeri Kalibanteng Kidul 01. The following table presents the results of the paired t-test for the experimental class:

Table 6. Paired Samples Test – Experimental Class

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-19.66533	10.14654	1.85250	-23.45412	-15.87655	-10.616	29	.000

Based on the results presented in the table above, it was found that the Sig. (2-tailed) value was 0.000. Since 0.000 < 0.05, it can be concluded that there was a statistically significant difference between the pretest and posttest scores in the experimental class. This indicates that the Scramble-type cooperative learning model assisted by picture cards had a significant effect on improving the reading ability of Grade II students at SD Negeri Kalibanteng Kidul 01. Further, an independent sample t-test was also conducted to compare the posttest scores between the control class and the experimental class to determine whether there was a significant difference in learning outcomes after the treatment. The experimental class received the treatment, while the control class followed a conventional learning model. This analysis aimed to assess the effectiveness of the Scramble-type cooperative learning model assisted by picture cards in enhancing students' reading skills. The results of the independent sample t-test comparing the control and experimental classes are presented in the following table:

Table 7. Independent Samples Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Nilai	Equal variances assumed	.327	.570	-2.561	58	.013	-6.11033	2.38595	-10.88632	-1.33434
	Equal variances not assumed.			-2.561	57.79	.013	-6.11033	2.38595	-10.88669	-1.33398

Based on the table above, it was observed that the Sig. (2-tailed) value was 0.013. Since 0.013 < 0.05, it can be concluded that there was a statistically significant difference between the two groups—namely, the experimental class and the control class. This indicates that the Scramble-type cooperative learning model assisted by picture cards had

a significantly greater effect on improving students' reading ability compared to the conventional learning model. In other words, the use of this innovative model proved to be more effective in enhancing the reading skills of students than traditional teaching methods.

Results of Reading Ability Using the Scramble-Type Cooperative Learning Model Assisted by Picture Cards

The application of the scramble-type cooperative learning model, assisted by picture cards, has a positive influence on the reading ability of Grade II students at SD Negeri Kalibanteng Kidul 01. This model helps students explore pre-prepared questions through word and sentence scramble activities, which involve rearranging randomly ordered words and sentences into complete and meaningful structures. These activities serve as engaging games that enhance students' comprehension and linguistic organization skills. Learning activities using the scramble-type cooperative learning model also encourage collaboration and train students to build group solidarity. In this study, reading ability is measured by three key indicators that learners are expected to master: recognizing letters, recognizing words, and reading words formed from letters. The following is the oral test grid of reading skills for Grade II students at SD Negeri Kalibanteng Kidul 01:

Table 8. Oral Test Grid

Variable	Indicator	Criteria	Data Collection Techniques
Reading Ability	**Recognize Letters**	Learners can name and classify vocal letters	Oral/written test
		Learners can name and classify consonant letters.	
		Learners can identify capital and lowercase consonant letters.	
		Learners can match printed vowels with their capital and lowercase letters.	
	Recognize the word	Learners can read two-syllable words	Oral test
		Learners can read four-character words (e.g., "father," "wind").	
	Read words into letters.	Learners can read two-word sentences aloud with correct pronunciation.	
		Learners can read three-word sentences aloud with correct pronunciation.	
		Learners can read four-word sentences aloud with correct pronunciation.	

In this study, eight learning sessions were conducted to evaluate students' reading abilities, comparing those who received treatment with those who did not. The scramble-type cooperative learning model assisted by picture cards was implemented in the experimental class (Class II C), while the conventional learning model was used in the control class (Class II B). Prior to instruction, students in both groups were given a pretest to assess their initial reading abilities. The following are the average pretest scores for each indicator from both classes:

Table 9. Average Pretest Indicator Scores

Indicator	Experimental Class	Control Class
Recognize Letters	75.56%	72.89%
Recognize the word	66.11%	70.00%
Read words into letters.	66.85	72.89%

As shown in the table, the experimental class scored 75.56% on the "Recognize Letters" indicator, while the control class scored 72.89%. This indicator consisted of 15 items, and the percentage was calculated by dividing the number of correct answers by 15 and multiplying by 100. Based on these results, the experimental class performed slightly better in recognizing letters. For the "Recognize Words" indicator, the experimental class obtained an average score of 66.11%, while the control class scored 70.00%. This section contained 6 items, and the calculation followed the same method (correct answers divided by 6 × 100). In this case, the control class outperformed the experimental class.

In the final indicator, "Read Words into Sentences," the experimental class achieved an average score of 66.85%, while the control class scored 72.89%. This indicator included 9 items, and the percentage was calculated by dividing correct answers by 9 and multiplying by 100. Here, the control class again outperformed the experimental class. After the pretest, students underwent eight learning sessions. The experimental class was treated using the scramble-type cooperative learning model assisted by picture cards, whereas the control class continued with the conventional learning approach. The following section presents the average posttest scores for each reading indicator after the learning sessions.

Table 10. Average Posttest Indicator Scores

Indicator	Experimental Class	Control Class
Recognize Letters	85.11%	75.11%
Recognize the word	78.89%	81.13 %
Read words into letters.	84.45	78.82%

The posttest results reveal that, for the Recognizing Letters indicator, the experimental class achieved an average score of 85.11%, while the control class scored 75.11%. This indicates that the experimental class outperformed the control group in this indicator. In contrast, for the Recognizing Words indicator, the experimental class scored an average of 78.89%, whereas the control class scored slightly higher at 81.13%, showing the control class's advantage in this area. Lastly, in the Reading Words into Sentences indicator, the experimental class scored 84.45%, while the control class obtained 78.82%, suggesting the experimental class performed better in this aspect. Comparing the pretest

and posttest results for both groups, it can be concluded that the experimental class demonstrated a more significant improvement in the first and third indicators. For instance, in the Recognizing Letters indicator, the experimental class improved from 66.33% to 85.11%, while the control class showed only a modest increase. In the Recognizing Words indicator, both classes improved, but the control class showed a greater gain. For the final indicator, Reading Words into Sentences, the experimental class again outperformed the control class, indicating that the application of the scramble-type cooperative learning model assisted by picture cards had a substantial impact on enhancing students' reading skills.

This learning approach – combining visual stimuli with interactive group activities – makes it easier for students to grasp the material in a fun and engaging way. According to Damayanti, Nur, Anggereni, and Taufiq (2023), "Cooperative learning is a form of learning that can provide a stimulus for students to engage in learning behaviors," emphasizing how such methods activate student participation. The scramble learning model encourages students, to work in small groups to solve problems collaboratively. Saputra (2019) supports this by stating that cooperative learning facilitates structured processes and motivates students to engage with their peers. The scramble-type cooperative learning model, in particular, emphasizes playful group activities aimed at solving problems. Through this model, students engage in a learning process that integrates play with problem-solving, thereby enhancing early reading skills, fostering group solidarity, and improving social interaction.

Manalu and Prawijaya (2023) note that this model incorporates game-like elements, where speed and accuracy in responding are key to success. The significant difference in outcomes between the experimental and control classes suggests that the scramble-type cooperative model assisted by picture cards was more effective in promoting foundational reading comprehension. It encourages students to be active, collaborative, and engaged in constructing meaningful sentences from scrambled words. Rahmaniati (2024) describes the scramble model as one that motivates students to explore and solve problems through distributed questions. Activities involving sentence construction using illustrated cards stimulate literacy skills and learner engagement. This model, particularly in activities that involve recognizing letters, words, and constructing sentences, captivates students' attention and fosters motivation. According to Nurtikasari and Fahri (2020), this approach allows students to learn while playing in a stress-free environment, enhancing creativity, group cooperation, and reading skills. In conclusion, the comparison between the experimental class using the scramble-type cooperative learning model with picture cards and the control class using a conventional model clearly shows that the former results in more positive learning outcomes. The active, playful, and collaborative nature of this model significantly contributes to the development of students' beginning reading abilities.

Learning media play a crucial role in supporting the development of learners' reading skills. Ruslan (2023) stated that learning media encompass any tools that can convey information and stimulate students' thoughts, emotions, attention, and motivation

to learn. In reading instruction, picture cards serve as effective visual aids that help learners form stronger associations between words and their meanings. The use of such media benefits both teachers and students by enhancing the quality of the learning process and promoting educational excellence. According to Afifah, Pratama, Setyaningrum, and Mughni (2023), learning media provide multiple benefits: for teachers, they serve as guides to help achieve instructional goals; for students, they increase learning motivation and support comprehension of the material. Learners tend to grasp information more effectively when it is presented visually. Picture cards, in particular, facilitate the cognitive process by linking images with language content, thus helping students arrange scrambled words into meaningful sentences through visual stimuli. In conclusion, picture card media play an active role in improving learners' reading comprehension and serve as a valuable tool in strengthening basic literacy skills.

Conclusion

Based on research conducted at SDN Kalibanteng Kidul 01, it can be concluded that the scramble-type cooperative learning model assisted by picture cards has a significant impact on students' reading abilities. The experimental class, which implemented this model, demonstrated a notable improvement in average reading scores – from 64.11 on the pretest to 83.77 on the posttest. In comparison, the control class, which used a conventional teaching approach, also improved but to a lesser extent, with scores rising from 64.58 to 77.66. Statistical analysis supports these findings. The paired t-test yielded a significance value of $p = 0.000$ ($p < 0.05$), indicating a significant effect of the learning model on student performance. The normality test showed significance values greater than 0.05 for both groups, confirming that the data were normally distributed. The homogeneity test produced a significance value of 0.570, suggesting equal variances between the two groups. Finally, the independent t-test showed a significance value of $p = 0.013$ ($p < 0.05$), indicating a statistically significant difference in reading outcomes between the experimental and control classes. Therefore, it can be concluded that the scramble-type cooperative learning model assisted by picture cards is more effective than conventional methods in improving the reading abilities of students.

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Ethical Statement

This research was conducted in accordance with recognized ethical standards to ensure the protection, welfare, and rights of all participants. Necessary approvals and permissions were obtained before the study began. Ethical procedures were applied

consistently throughout the research, aligning with institutional regulations and international ethical norms, thus maintaining the study's transparency and integrity.

CRediT Author Statement

- **Author 1:** Conceptualization, Methodology, Investigation, Writing – Original draft preparation.
- **Author 2:** Conceptualization, Methodology, Investigation, Formal analysis.

Conflict of Interest

The authors declare that there are no competing financial interests or personal relationships that could have influenced the work reported in this article.

Data Availability

The datasets generated and analyzed during the current study are available upon reasonable request.

References

Abraham, I., & Supriyati, Y. (2022). Desain kuasi eksperimen dalam pendidikan: Literatur review. *Jurnal Ilmiah Mandala Education*, *8*(3). http://dx.doi.org/10.58258/jime.v8i3.3800.

Afifah, S. M. N., Pratama, A., Setyaningrum, A., & Mughni, R. M. (2023). *Inovasi media pembelajaran untuk mata pelajaran ipas*. Cahya Ghani Recovery.

Ahmad, A., Jafar, M., Hendri, H., Qurba, A.-Q., & Ingriza, R. (2022). Analisis Model Pembelajaran Kooperatif Tipe Scramble pada Pembelajaran Pendidikan Agama Islam. *Jurnal Pendidikan Agama Islam Al-Thariqah*, *7*(2), 503–514. https://doi.org/10.25299/al-thariqah.2022.vol7(2).11523.

Ahyar, D. B., Prihastari, E. B., Setyaningsih, R., Rispatiningsih, D. M., Zanthy, L. S., Fauzi, M., Mudrikah, S., Widyaningrum, R., Falaq, Y., & Kurniasari, E. (2021). *Model-Model Pembelajaran*. Pradina Pustaka.

Damayanti, E., Nur, F., Anggereni, S., & Taufiq, A. U. (2023). The Effect of Cooperative Learning on Learning Motivation: A Meta-Analysis. *Buletin Psikologi*, *31*(1). https://doi.org/10.22146/buletinpsikologi.59583.

Fahruddin, F., Rachmayani, I., Astini, B. N., & Safitri, N. (2022). Efektivitas Penggunaan Media Kartu Bergambar Untuk Meningkatkan Kemampuan Berbicara Anak. *Journal of Classroom Action Research*, *4*(1), 49–53. https://doi.org/10.29303/jmp.v2i2.3546.

Gunawan, C. (2018). *Mahir menguasai SPSS (mudah mengolah data dengan IBM SPSS Statistic 25)*.

Kusumastuti, A., Khoiron, A. M., & Achmadi, T. A. (2020). *Metode Penelitian Kuantitaif*. CV Budi Utama.

Manalu, J. P., & Prawijaya, S. (2023). Pengaruh Model Pembelajaran Scramble Terhadap Motivasi Belajar Siswa Pada Tema 1 Subtema 1 Kelas V Sd Negeri 106453 Suka

Damai. *Jurnal Pendidikan Tambusai*, *7*(3), 20200–20206. https://doi.org/10.31004/jptam.v7i3.9460.

Muhidin, A. (2020). *Skripsi Sarjana Kependidikan: Pendekatan Kuantitatif dan Kualitatif: Pendekatan Kuantitatif dan Kualitatif* (Vol. 1). Aeng Muhidin.

Nurtikasari, E., & Fahri, M. (2020). Penerapan Model Pembelajaran Scramble Untuk Meningkatkan Hasil Belajar Mata Pelajaran Bahasa Indonesia Pada Siswa Kelas III MI Nurul Huda 1 Curug. *JPG: Jurnal Pendidikan Guru*, *1*(1), 42–51. https://doi.org/10.32832/jpg.v1i1.2869.

Putri, A., Rambe, R. N., Nuraini, I., Lilis, L., Lubis, P. R., & Wirdayani, R. (2023). Upaya peningkatan keterampilan membaca di kelas tinggi. *Jurnal Pendidikan Dan Sastra Inggris*, *3*(2), 51–62.

Rahmaniati, R. (2024). *Model–Model Pembelajaran Inovatif*. Uwais Inspirasi Indonesia.

Riyanti, A. (2021). *Keterampilan membaca*. Penerbit K-Media.

Ruslan, T. S. (2023). *Membaca Apresiatif*. Langgam Pustaka.

Saleh, M. S., Syahruddin, S., Saleh, M. S., Azis, I., & Sahabuddin, S. (2023). *Media pembelajaran*.

Saputra, R. R. (2019). Model Pembelajaran Kooperatif Dalam Pembelajaran IPS. *Judika (Jurnal Pendidikan Unsika)*, *7*(1), 19–28.

Seknun, M. F., Noho, M. P. D. M., & Tuhuteru, M. A. D. L. (2023). *Model pembelajaran inovatif dan keterampilan membaca*. CV. Azka Pustaka.

Sudaryana, B. & Agusiady, R. (2022). *Metodologi penelitian kuantitatif*. Yogyakarta: Deepublish.

Tarigan, H. G. (1989). *Membaca dalam kehidupan*. Angkasa.

Undang-Undang (UU) Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional, Pub. L. No. 17 (2023).