The Effect of the SQ3R Strategy Assisted by Interactive Multimedia on Grade V Student's Reading Comprehension

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Abstract: This study examined the effect of the SQ3R strategy assisted by interactive multimedia on fifth-grade students' reading comprehension and compared it with conventional learning. Using a quantitative quasi-experimental nonequivalent control group design, the study involved Grade V students of SD Negeri 1 Cening, divided into experimental and control classes. The instrument was a short-story reading comprehension test administered as pretest and posttest. Data were analyzed using prerequisite tests, Paired Sample t-test, Independent Sample t-test, and N-Gain analysis. Results showed a significant effect in the experimental class (Sig. two-tailed <0.001; mean difference = -29.350). The independent test also indicated a significant difference between groups (t = -2.741; Sig. = 0.009; mean difference = -11.191). The N-Gain score of 0.47 was moderate, suggesting that the SQ3R strategy supported by interactive multimedia is effective for active and meaningful reading comprehension learning in elementary schools and can serve as an innovative alternative for literacy instruction in primary classrooms effectively.

Abstrak: Penelitian ini bertujuan menganalisis pengaruh strategi SQ3R berbantuan multimedia interaktif terhadap kemampuan membaca pemahaman siswa kelas V sekolah dasar serta membandingkannya dengan pembelajaran konvensional. Penelitian menggunakan pendekatan kuantitatif dengan desain quasi-experimental nonequivalent control group pada siswa kelas V SD Negeri 1 Cening yang dibagi menjadi kelas eksperimen dan kontrol. Instrumen yang digunakan adalah tes membaca pemahaman teks cerpen melalui pretest dan posttest. Data dianalisis dengan uji prasyarat, Paired Sample t-test, Independent Sample t-test, dan N-Gain. Hasil menunjukkan pengaruh signifikan pada kelas eksperimen dengan Sig. (two-tailed) <0.001 dan mean difference –29.350. Uji independent juga menunjukkan perbedaan signifikan antara kelas eksperimen dan kontrol (t = –2.741; Sig. = 0.009; mean difference –11.191). Nilai N-Gain sebesar 0.47 berada pada kategori sedang. Temuan ini menegaskan bahwa SQ3R berbantuan multimedia interaktif efektif mendukung pembelajaran membaca pemahaman yang aktif, bermakna, dan menarik di sekolah dasar serta dapat menjadi alternatif inovatif bagi guru dalam merancang pembelajaran literasi yang lebih efektif dan berkelanjutan.

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A. Introduction

Indonesia has experienced dynamic changes in its educational curriculum as a continuous effort to improve the quality of learning. Starting with the 2006 School-Level Curriculum (KTSP), which emphasized decentralized education management, followed by the 2013 Curriculum, which focused on strengthening competencies, and finally the Merdeka Curriculum, the latest policy emphasizing flexibility and independence in the learning process. According to Christiananda et al (2024), the Merdeka Curriculum provides more space for students to develop their potential, interests, and talents according to their individual characteristics. This flexibility is expected to create more contextual, relevant, and meaningful learning. One of the main focuses in the implementation of the Merdeka Curriculum is strengthening literacy and numeracy competencies, particularly in improving students' reading comprehension.

Reading comprehension is a fundamental skill essential for learning Indonesian in elementary schools. Through reading comprehension, students are not only required to read texts technically, but also to understand the meaning of the text, find important information, draw conclusions, and relate the text's content to everyday experiences and contexts. Research shows that good reading comprehension is a crucial foundation for literacy for students and significantly influences their ability to deeply understand texts and their overall academic achievement (Rikmasari et al., 2025). Within the framework of the Independent Curriculum, reading comprehension is an essential part of strengthening literacy to develop students who think critically, reflectively, and reason logically.

In reality, research results show that elementary school students' reading comprehension skills remain low and have not yet achieved curriculum targets. Most students are only able to answer questions that require direct understanding, while they struggle with questions that require deeper understanding, such as inferring or interpreting meaning (Ambarita et al., 2021). According to the RISE Programme report, increased access to education in Indonesia has not been accompanied by improvements in the quality of learning outcomes, particularly in elementary school students' reading literacy skills, which still show signs of a learning crisis (Rosser et al., 2022). The results of the 2022 National Assessment show that at the elementary school level, approximately 61.53% of students have reading literacy competencies above the minimum competency. However, more than 38% of students still have not achieved the minimum literacy standard, indicating that the ability to comprehend texts deeply at the elementary level still requires serious attention in learning practices (Kemendikbudristek, 2022)

This problem was also found at SD Negeri 1 Cening, especially among fifth-grade students. Based on initial observations and classroom learning analysis, most students still experience difficulties in comprehensively understanding the contents of short stories. Students tend to only be able to grasp information superficially, but are unable to identify main ideas, understand the storyline, interpret messages, and relate the reading content to personal experiences. This condition is exacerbated by low student interest and motivation in learning and the use of learning strategies that are still conventional and lack variety,

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resulting in monotonous reading learning and less active student participation. In fact, children's short stories have great potential as a means of language learning and character building because they raise themes close to students' lives and contain relevant moral values (Damayanti, 2024). Therefore, learning innovations are needed that can help students read actively, purposefully, and meaningfully.

As a solution to these problems, this study proposes the implementation of the SQ3R (Survey, Question, Read, Recite, Review) strategy combined with interactive multimedia. The SQ3R strategy is a systematic reading strategy that encourages students to develop curiosity, read with a clear purpose, understand the reading content in depth, and recall important information through structured stages. Several studies have shown that the SQ3R strategy is effective in improving elementary school students' reading comprehension skills (Antari et al., 2024; Aisah et al., 2024; Assyifa et al., 2025). Furthermore, the use of interactive multimedia has been shown to increase learning motivation, student engagement, and enrich the learning experience through visuals and audio that support the comprehension process (Ahmad et al., 2022; Akhiruddin et al., 2024). Therefore, the integration of the SQ3R strategy with interactive multimedia is considered relevant for creating more engaging and effective reading learning.

Although the SQ3R strategy has been extensively researched and proven effective, a review of previous research indicates a research gap. Previous studies have applied the SQ3R strategy conventionally without systematically integrating it with interactive multimedia (Nafisah & Koeswanti, 2023; Basuki, 2024; Nuryani et al., 2022). Furthermore, studies specifically examining the effect of the SQ3R strategy assisted by interactive multimedia on reading comprehension skills of fifth-grade elementary school students are still very limited and previous studies have not systematically integrated SQ3R with interactive multimedia within an immersive learning framework.

The novelty of this research lies in the integration of the SQ3R strategy, interactive multimedia, and the deep learning approach in learning to read and comprehend short story texts in elementary schools. The SQ3R strategy guides students through systematic and conscious reading stages so that students not only read the text, but are able to understand the contents of the reading thoroughly with the support of interactive multimedia as a supporting tool that facilitates the implementation of the strategy so that learning to read and comprehend is more contextual, interesting, and in accordance with the characteristics of elementary school students. The deep learning approach emphasizes the active involvement of students cognitively, affectively, and socially so that students are able to understand the meaning of the reading in depth, reflectively, and relate new information to real-life experiences and contexts (Nafi'ah & Faruq, 2025). In contrast to previous research that generally examines the SQ3R strategy or the use of multimedia separately, this research combines both in a structured and meaningful learning framework, so that the reading process is not only oriented towards literal understanding, but also towards deepening meaning and continuous learning.

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Based on the above description, this study addresses two research questions: (1) Does the SQ3R strategy assisted by interactive multimedia significantly affect the reading comprehension skills of fifth-grade elementary school students in short story texts?, and (2) Is there a significant difference in reading comprehension skills between students who learn using the SQ3R strategy supported by interactive multimedia and those who receive conventional instruction?. This study contributes theoretically by enriching the body of knowledge on reading comprehension strategies within a deep learning framework, particularly through the integration of structured cognitive strategies and interactive multimedia. Practically, it provides empirical evidence and pedagogical guidance for elementary school teachers in designing more innovative, engaging, and effective Indonesian language learning, especially in improving students' active and meaningful reading comprehension skills.

B. Method

This study employed a quantitative, quasi-experimental method to test the effect of a learning strategy through numerical data measurement and statistical analysis on changes in students' reading comprehension skills. The design used was a nonequivalent control group design, a quasi-experimental design involving two groups without full subject randomization. This design is commonly used in educational research when established classes are retained as research groups (Sugiyono, 2019).

The study was conducted at Cening 1 Public Elementary School, Kendal Regency, Central Java, with fifth-grade students in the 2025/2026 academic year in January. The study population was all fifth-grade students in two classes. The study sample consisted of 20 students in the experimental class and 20 students in the control class. The sample was determined using a purposive sampling technique, considering the equivalence of the academic characteristics of both classes based on field conditions. To control for external variables, both classes were taught by the same teacher, using the same teaching materials, time allocation, and learning objectives, so that differences in learning outcomes could be attributed to the treatment given.

This research received official permission from the school and was conducted in accordance with ethical principles of educational research. All participants participated voluntarily, student data was kept confidential, and the research results were used solely for academic purposes, thus fulfilling the principles of ethical clearance in educational research.

The learning treatment was carried out over four meetings, with a time breakdown of 2 x 35 minutes for each meeting. In the experimental class, learning to read and comprehend short story texts was carried out using the SQ3R (Survey, Question, Read, Recite, Review) strategy assisted by interactive multimedia, while the control class followed conventional reading learning. The SQ3R strategy was chosen because it guides students in systematic, structured reading and encourages deeper cognitive engagement in reading comprehension (Aisah et al., 2024). Interactive multimedia is used as a supporting tool for

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implementing the SQ3R strategy so that students are more active, motivated, and can easily understand the contents of the reading.

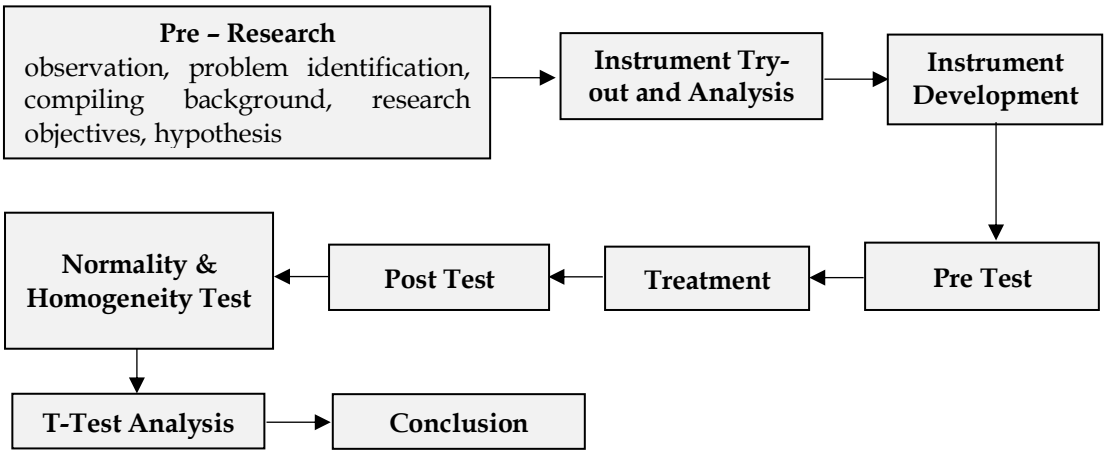

Figure 1. Research Design Flow

This research began with a pre-research phase that included observation, problem identification, background development, formulation of objectives, and research hypotheses. Next, a cognitive test instrument for reading comprehension of short stories was developed based on Barrett's Taxonomy indicators, including literal comprehension, reorganization, inferential comprehension, evaluative comprehension, and appreciative comprehension (Rahmawati et al., 2023). The questions consisted of multiple-choice, complex multiple-choice, and descriptive questions. Before use, the instrument was piloted on students with similar characteristics outside the sample class to determine the quality of the test items in terms of validity, reliability, difficulty level, and discriminating power. Data collection was carried out through pretests and posttests in the experimental and control classes. The experimental class was given treatment in the form of learning using the SQ3R strategy assisted by interactive multimedia, while the control class followed conventional learning and the same teaching teacher to control for external variables. After the treatment was completed, both classes were given a posttest to measure students' reading comprehension. The data obtained were analyzed using prerequisite tests, paired sample t-tests, independent sample t-tests, N-Gain calculations, and effect size analysis to determine the magnitude of the treatment's influence, which was then used as the basis for drawing research conclusions.

C. Result

The instrument testing results showed that 28 out of 30 items (93.33%) were valid, while 2 items (6.67%) were invalid. The reliability test indicated that the instrument was reliable with a Cronbach's Alpha value greater than 0.60. The difficulty level analysis revealed that 57.14% of the items were categorized as easy and 42.86% as moderate. Furthermore, 75% of the items had good discrimination power and 25% were sufficient,

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indicating that the instrument was appropriate for measuring students' reading comprehension.

Prior to hypothesis testing, prerequisite tests were conducted to ensure that the data met the assumptions for parametric statistical analysis. These tests included normality and homogeneity tests, the results of which are presented in Table 1.

Table 1. Normality Test of Pre-test and Post-test of Experimental Class and Control Class

	Class	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Result	Pre-test A (Experimental)	.149	20	.200	.954	20	.425
	Post-test A (Experimental)	.070	20	.200	.970	20	.765
	Pre-test B (Control)	.120	20	.200	.974	20	.796
	Post-test B (Control)	.159	20	.155	.928	20	.110

The results of the normality test using Shapiro–Wilk because the number of samples was less than 50, namely 40 students, showed that the significance value of the experimental group showed a pretest significance value of 0.425 and a posttest of 0.765, while the pretest in the control group was 0.796 and a posttest of 0.110. Thus, the data for both classes were normally distributed and met the requirements for parametric statistical analysis.

After the normality test was conducted, the next step was to conduct a homogeneity test to determine the equality of variance between the experimental and control classes, as one of the requirements for parametric statistical analysis. The results of the homogeneity test are presented in the following table 2.

Table 2. Homogeneity Test of Pre-test and Post-test of Experimental Class and Control Class

		Levene Statistic	df1	df2	Sig.
Value	Based on Mean	3.660	1	40	.063

The homogeneity test results showed a significance value of 0.063. This value is greater than 0.05, thus concluding that the data variance between the control and experimental groups is equal or homogeneous. After the prerequisite analysis tests were met, a paired t-test was conducted. This test aimed to answer the research objective regarding the influence of students' reading comprehension skills by examining the differences in pre-test and post-test results in each class, both the experimental and control classes.

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Table 3. Paired Sample T-Test Experimental Class

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Significance	
					Lower	Upper			One-Sided p	Two-Sided p
Pair 1	Pre Test - Post Test	-29.350	10.033	2.243	-34.046	-24.654	-13.083	19	<,001	<,001

The results of the Paired Sample t-test in the experimental group showed a significance value (Sig. two-tailed) of < 0.001, which is smaller than 0.05. These results indicate a significant difference between the pretest and posttest scores of students' reading comprehension ability of short story texts. The average difference value (mean difference) of -29.350 indicates a significant increase in students' reading comprehension ability after the implementation of the SQ3R strategy assisted by interactive multimedia.

Table 4. Paired Sample T-Test Control Class

Paired Sample T-Test Control Class		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Significance	
					Lower	Upper			One-Sided p	Two-Sided p
Pair 1	Pre Test – Post Test	-17.091	14.887	3.174	-23.691	-10.491	-5.385	21	<,001	<,001

The results of the Paired Sample t-test in the control group also showed a difference between the pretest and posttest scores with a significance value of < 0.001. The mean difference in the control group was -17.091, indicating that the improvement in reading comprehension skills of students who participated in conventional learning was relatively lower than that of the experimental group. Therefore, H_{01} was rejected and H_{a1} was accepted.

The Independent Sample T-Test is used to determine the difference in means between two unrelated groups, such as an experimental and a control group. The goal is to test whether the treatment results in a significant difference in learning outcomes compared to the untreated group.

Table 5. Independent Sample T-Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
Value	Equal variances assumed	3.660	.063	-2.741	40	.005	.009	-11.191	4.084	-19.444	-2.938

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	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					One-Sided p	Two-Sided p			Lower	Upper
Equal variances not assumed			-2.804	34.872	.004	.008	-11.191	3.991	-19.294	-3.088

The results of the Independent Sample t-test on the posttest data showed a t-value of -2.741 with 40 degrees of freedom (df) and a significance value of Sig. (two-tailed) of 0.009 (< 0.05). The Mean Difference value of -11.191 indicates that the average posttest score of the experimental group was higher than that of the control group. Furthermore, the 95% Confidence Interval of the Difference ranged from -19.444 to -2.938 and did not cross zero, thus confirming a significant difference between the two groups. Thus, H_{02} was rejected and H_{a2} was accepted.

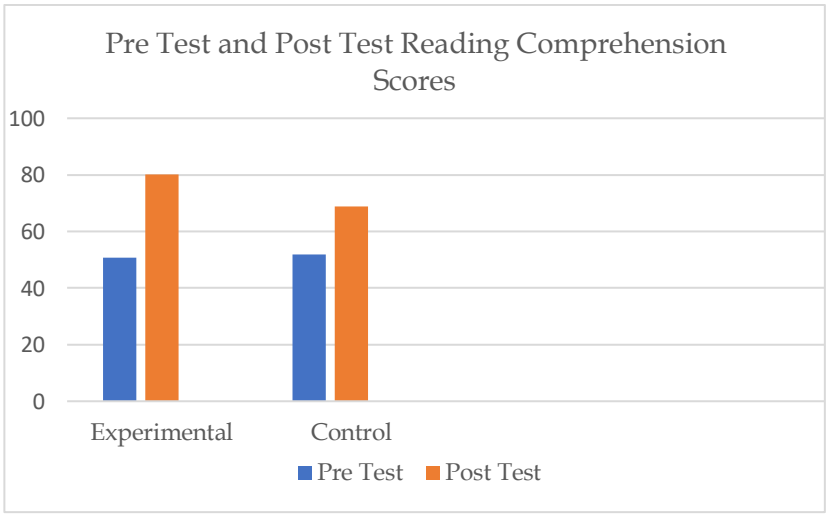

Figure 2. Pretest and Posttest Scores of Experimental and Control Classes

Figure 2 shows a comparison of the average pretest and posttest scores of students' reading comprehension in the experimental and control classes. In the experimental class, the average score increased from 50.75 to 80.10, while in the control class it increased from 51.82 to 68.91. To measure the level of improvement, the N-Gain test was conducted, with effectiveness categorized as high ($g \geq 0.70$), moderate ($0.30 \leq g < 0.70$), and low ($g < 0.30$).

Table 6. N-Gain Test Results of the Experimental Group

Average PreTest	Average Post Test	Average Difference	N-Gain	Criteria
50,75	80,10	29,35	0,60	Moderate

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The average pretest score of students in the experimental group was 50.75, indicating that their initial reading comprehension ability was still in the low category. After being given the learning treatment, the average posttest score increased significantly to 80.10, with a difference of 29.35. The N-Gain calculation result of 0.60 is in the moderate category, indicating that the improvement in students' reading comprehension ability occurred quite optimally.

Table 7. N-Gain Test Results of the Control Group

Average Pretest	Average Post Test	Average Difference	N-Gain	Criteria
51,82	68,91	17,09	0,35	Moderate

The average pretest score in the control group was 51.82, indicating students' initial reading comprehension before learning. After the learning process, the average posttest score increased to 68.91, with a difference of 17.09. The N-Gain score of 0.35 is in the moderate category, but lower than the experimental group.

Table 8. N-Gain Test Results of Experimental and Control Groups

Average PostTest Control	Average Post Test Experimental	Average Difference	N-Gain	Criteria
68,91	80,10	11,19	0,47	Moderate

The experimental group's average posttest score of 80.10 was higher than the control group's average of 68.91, a difference of 11.19 points. The combined N-Gain score of 0.47 was in the moderate category, indicating a difference in reading comprehension improvement between the two groups, with more optimal results in the experimental group.

In addition to statistical significance testing, this study also used effect size analysis to determine the strength of the impact of the SQ3R strategy, supported by interactive multimedia, on students' reading comprehension skills. Effect size analysis was used as a complement to hypothesis testing because it can provide a more comprehensive picture of the magnitude of the learning intervention's impact.

Table 9. Effect Size (Cohen's d)

Comparison	t-value	Cohen's d	Effect Size Interpretation
Experimental Group (Pretest–Posttest)	−13.083	2.86	Very Large Effect
Control Group (Pretest–Posttest)	−5.385	1.18	Large Effect

The effect size (Cohen's d) value in the experimental class was 2.86, which is included in the very large effect category, indicating a strong difference between the pretest and posttest scores after implementing the SQ3R strategy assisted by interactive multimedia.

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Meanwhile, the control class had a Cohen's d value of 1.18 with a large effect category, but still lower than the experimental class.

D. Discussion

The findings of this study demonstrate that the implementation of the SQ3R strategy assisted by interactive multimedia significantly improves students' reading comprehension skills, particularly in identifying main ideas, interpreting messages, and relating texts to real-life contexts. This indicates that structured reading strategies do not merely support surface-level comprehension but also facilitate deeper cognitive processing. The effectiveness of SQ3R lies in its systematic stages, which guide students to actively engage with texts through questioning, reflecting, and reviewing, thereby promoting meaningful learning. This finding is consistent with previous research showing that SQ3R enhances reading comprehension through directed and reflective reading activities (Siregar et al., 2020).

Furthermore, the results suggest that students' low reading comprehension is not solely attributed to limited technical reading ability, but rather to the absence of instructional strategies that foster active and purposeful engagement with texts. Conventional reading instruction tends to position students as passive recipients of information, whereas the SQ3R strategy encourages active participation and cognitive involvement throughout the reading process. This is in line with previous studies indicating that structured and active learning strategies significantly improve students' reading comprehension by promoting systematic engagement in reading activities (Purwatiningsih et al., 2024; Setianingsih et al., 2024). In addition, the integration of digital and interactive media further enhances this process by providing meaningful learning support and increasing student engagement (Dewi et al., 2025).

The integration of interactive multimedia within the SQ3R framework plays a crucial role in strengthening students' comprehension by facilitating the construction of mental representations through visual and auditory stimuli. This supports the cognitive process of meaning-making, enabling students to move beyond literal understanding toward inferential and reflective comprehension. The use of multimedia also increases students' motivation and engagement, making reading activities more interactive and less monotonous (Monalisa et al., 2024). These findings are supported by previous studies showing that visual and audio integration in learning helps students build deeper understanding of texts (Afriyanti et al., 2023; Aghisni et al., 2025).

From a cognitive perspective, this study reinforces the view that reading is an active and constructive process in which learners build meaning through the interaction between text, prior knowledge, and cognitive strategies. The SQ3R stages facilitate this process by activating prior knowledge, guiding information processing, and encouraging reflection, thereby supporting the development of higher-order thinking skills. This is consistent with research indicating that structured learning strategies contribute to improved

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comprehension through better information organization and critical thinking development (Hamzah, 2025).

However, despite the significant impact, the improvement in students' reading comprehension was categorized as moderate based on the N-Gain analysis. This suggests that learning improvement is a gradual process influenced by several factors, including students' initial literacy levels and their adaptation to cognitively demanding learning strategies. In addition, the impact of post-pandemic learning loss may also contribute to this moderate improvement, as previous studies have shown that students' basic literacy skills experienced a decline during the COVID-19 period (Donnelly & Patrinos, 2022). Therefore, the findings of this study should be interpreted as part of an ongoing process of learning recovery and adaptation.

Importantly, this study offers a distinct contribution compared to previous research, which generally examined the SQ3R strategy or interactive multimedia separately. By integrating both within a structured learning framework, this study demonstrates that combining cognitive strategies with multimedia support can create more effective and meaningful learning experiences. This integration not only enhances students' comprehension but also supports deep learning processes that emphasize understanding, reflection, and contextualization (Azizah, 2021).

Therefore, this study contributes to the advancement of reading comprehension research by providing empirical evidence that the integration of structured strategies and interactive multimedia can foster higher-order thinking and meaningful learning in elementary education. These findings also offer practical implications for designing more innovative, engaging, and effective reading instruction in primary education settings (Sulastri et al., 2024).

E. Implication

Theoretically, this study reinforces the view that reading comprehension is an active and constructive cognitive process requiring gradual and reflective engagement, where the integration of the SQ3R strategy and interactive multimedia supports a deep learning framework that enables students to organize, interpret, evaluate, and connect text meaning with prior knowledge and experiences, thereby facilitating higher-order thinking. Practically, the findings provide a concrete reference for elementary school teachers to design more systematic, student-centered, and meaningful Indonesian language learning through the integration of SQ3R into lesson plans, teaching modules, worksheets, and multimedia-based activities that enhance engagement and comprehension. From a policy perspective, this study supports the strengthening of reading literacy within the Independent Curriculum by offering an empirical basis for developing learning frameworks, literacy programs, and teacher professional development focused on innovative, technology-supported reading instruction that promotes critical thinking and sustainable meaningful learning.

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F. Limitation and Suggestion for Further Research

This study has several limitations that should be considered when interpreting the findings. The sample size was relatively small and limited to a single elementary school, which may restrict the generalizability of the results. In addition, the use of non-random group assignment potentially introduces sampling bias that could affect the strength of statistical inference. This study also focused primarily on significance testing and effect size without fully examining the influence of covariate variables, such as students' initial literacy skills. Furthermore, the relatively short duration of the treatment may not fully capture the long-term impact of the SQ3R strategy assisted by interactive multimedia. The teacher effect was also not strictly controlled, as the same teacher implemented the learning process, which may have influenced student outcomes. Moreover, the implementation of interactive multimedia was constrained by the availability of devices and technological access, thus not fully representing its optimal potential.

Based on these limitations, future research is recommended to involve larger and more diverse samples with random assignment to improve the generalizability and validity of findings. Longitudinal research designs are also needed to examine the sustainability of learning outcomes over time. In addition, further studies may explore the application of the SQ3R strategy assisted by interactive multimedia across various text types, such as informative, explanatory, and argumentative texts. Future research is also encouraged to employ mixed methods approaches to gain deeper insights into students' cognitive processes, motivation, and engagement, thereby providing a more comprehensive understanding of reading comprehension learning.

G. Conclusion

This study concludes that the implementation of the SQ3R strategy assisted by interactive multimedia has a significant and positive effect on improving fifth-grade students' reading comprehension skills, particularly in understanding, interpreting, and relating short story texts to real-life contexts. The findings also reveal a significant difference between students who learned using the SQ3R strategy supported by interactive multimedia and those who received conventional instruction, with the experimental group demonstrating higher learning outcomes. These results indicate that structured reading strategies combined with multimedia support can effectively facilitate active cognitive engagement and meaningful learning processes in elementary education.

From a theoretical perspective, this study contributes to the development of deep learning-based reading comprehension by demonstrating that the integration of structured cognitive strategies and interactive multimedia promotes higher-order thinking and reflective understanding. Practically, the findings provide an empirical basis for teachers to design more innovative, student-centered, and effective reading instruction. Therefore, the SQ3R strategy assisted by interactive multimedia can be considered a relevant and

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sustainable alternative for strengthening literacy skills and improving the quality of reading comprehension learning in elementary schools.

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References

Afriyanti, A., Julia, & Syahid, A. A. (2023). Perbandingan Efektifitas Penggunaan Media Pembelajaran Audio Visual dan Teks untuk Meningkatkan Pemahaman Isi Dongeng Siswa Sekolah Dasar. *Jurnal Elementaria Edukasia*, *6*(4), 1719–1729. https://doi.org/10.31949/jee.v6i4.6930

Aghisni, Jannah, W. N., & Yulianawati, D. (2025). Exploring Students' Reading Comprehension Through Cooperative Learning-Based Digital Interactive Media. *Dinamika: Jurnal Ilmiah Pendidikan Dasar*, *17*(2), 9–20. https://doi.org/10.30595/dinamika.v17i2.27231

Ahmad, S. H., Latuconsina, A., & Marda, N. (2022). Peningkatan Hasil Belajar IPA Siswa MTs Al-Anshor Ambon melalui Penggunaan Media Pembelajaran Digital Interaktif Berbasis Audio Visual. *Al-Alam: Islamic Natural Science Education Journal*, *1*(2), 59–68. https://doi.org/10.33477/al-alam.v1i2.3157

Aisah, R. P., Unaenah, E., & Nurfadhillah, S. (2024). Pengaruh Model SQ3R terhadap Kemampuan Membaca Pemahaman Teks Cerpen Siswa Sekolah Dasar. *Kolektif*, *1*(2), 103–112. https://doi.org/10.70078/kolektif.v1i2.33

Akhiruddin, H. R., et al. (2024). Pemanfaatan Cerita Interaktif Digital sebagai Media Pembelajaran Bahasa yang Inovatif. *Judika*, *12*(2), 193–208. https://doi.org/10.35706/judika.v12i2.11574

Ambarita, R. S., Wulan, N. S., & Wahyudin, D. (2021). Analisis Kemampuan Membaca Pemahaman pada Siswa Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, *3*(5), 2336–2344. https://doi.org/10.31004/edukatif.v3i5.836

Antari, N. K. T. D., Ganing, N. N., & Kristiantari, M. G. R. (2024). Model Pembelajaran SQ3R Berbantuan Media Visual terhadap Kemampuan Membaca Pemahaman dalam Pembelajaran Bahasa Indonesia. *Journal of Education Action Research*, *8*(2), 292–299. https://doi.org/10.23887/jear.v8i2.77999

Assyifa, S. N., Sularti, S., & Solihati. (2025). Strategi Meningkatkan Kemampuan Membaca Pemahaman melalui Metode SQ3R di MIS Al Hikmah Masangan Bungah Gresik.

https://doi.org/10.51276/edu.v7i2.1709

EduSpirit: Jurnal Pendidikan Kolaboratif, *2*(1), 173–176. https://journal.makwafoundation.org/index.php/eduspirit

Azizah, A. N. (2021). Keefektifan Metode SQ3R terhadap Kemampuan Membaca Pemahaman Peserta Didik Kelas IV SD Negeri Karanglo. *Autentik: Jurnal Pengembangan Pendidikan Dasar*, *5*(1), 47–60. https://doi.org/10.36379/autentik.v5i1.102

Basuki, A. P. (2024). *Penerapan Model Pembelajaran SQ3R dalam Upaya Meningkatkan Kemampuan Memahami Isi Bacaan Cerpen di Kelas V SDN III Tumpakpelem* [Undergraduate thesis, IAIN Ponorogo].

Christiananda, F., et al. (2024). Implementasi Kurikulum Merdeka dalam Meningkatkan Potensi Peserta Didik di Sekolah Dasar. *Jurnal Pendidikan, Sains dan Teknologi*, *3*(3), 420–423. https://doi.org/10.47233/jpst.v3i3.1815

Damayanti, S. (2024). Analisis Nilai Moral dalam Cerita Anak Nusantara sebagai Media Pembelajaran Bahasa di Sekolah Dasar. *Didaktika: Jurnal Ilmiah PGSD STKIP Subang*, *3*(2), 28–32.

Dewi, A. V., Apriliya, S., & Nur, L. (2025). A Qualitative Needs Analysis of SQ3R-Based Digital Learning Worksheets in Primary School Reading Activities. *Jurnal Cakrawala Pendas*, *11*(3), 531–542. https://doi.org/10.31949/jcp.v11i3.13448

Donnelly, R., & Patrinos, H. A. (2022). Learning Loss During Covid-19: An Early Systematic Review. *Prospects*, *51*(4), 601–609. https://doi.org/10.1007/s11125-021-09582-6

Hamzah, N. M. (2025). Peran Strategi Pembelajaran dalam Meningkatkan Kemampuan Pemahaman Bacaan Siswa Sekolah Dasar. *Karimah Tauhid*, *4*(5), 3070–3078. https://doi.org/10.30997/karimahtauhid.v4i5.19158

Kemendikbudristek. (2022). *Dokumen Rekomendasi Kebijakan Hasil Asesmen Nasional Tahun 2021 (Kesenjangan Sosial dan Resiliensi)*. Pusat Asesmen Pendidikan, Badan Standar, Kurikulum, dan Asesmen Pendidikan.

Monalisa, I., Suntari, Y., & EW, D. E. (2024). Pengaruh Media Pembelajaran Digital terhadap Keterampilan Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Basicedu*, *8*(3), 1953–1963. https://doi.org/10.31004/basicedu.v8i3.7602

Nafi'ah, J., & Faruq, D. J. (2025). Conceptualizing Deep Learning Approach in Primary Education: Integrating Mindful, Meaningful, and Joyful. *Journal of Educational Research and Practice*, *3*(2), 225. https://doi.org/10.70376/jerp.v3i2.384

Nafisah, R., & Koeswanti, H. D. (2023). Penerapan Metode Pembelajaran SQ3R untuk Meningkatkan Membaca Pemahaman pada Siswa Kelas III SD Negeri Kalicacing 02 Salatiga. *Jurnal Genre (Bahasa, Sastra, dan Pembelajarannya)*, *5*(2), 82–92. https://doi.org/10.26555/jg.v5i2.8092

Nuryani, G. D. T., Pangestu, W. T., & Wana, P. R. (2022). Pengaruh Penggunaan Metode

https://doi.org/10.51276/edu.v7i2.1709

SQ3R (Survey, Question, Read, Recited, Review) terhadap Kemampuan Membaca Intensif Siswa Kelas 4 SDN Tambakromo 1 Geneng. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *7*(1). https://doi.org/10.23969/jp.v7i1.5383

Purwatiningsih, S., et al. (2024). Peningkatan Kemampuan Membaca Pemahaman Siswa Kelas III melalui Metode Pembelajaran SQ3R di SDN 1 Jatimulya Kab. Lebak. *EDUKASIA: Jurnal Pendidikan dan Pembelajaran*, *5*, 2685–2690. https://jurnaledukasia.org

Rahmawati, T. A., Wulan, N. S., & Fajrussalam, H. (2023). Analisis Kemampuan Membaca Pemahaman Siswa Kelas V SD Laboratorium Percontohan UPI Kampus Purwakarta. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *8*(1). https://doi.org/10.23969/jp.v8i1.7095

Rikmasari, R., Mujiani, D. S., & Aliza, N. (2025). Efektivitas Pendekatan STEM Berbasis Collaborative Learning terhadap Pemahaman Konsep Abstrak Siswa Sekolah Dasar. *Bima Journal of Elementary Education*, *3*(1), 1–9. https://doi.org/10.37630/bijee.v3i1.2645

Rosser, A., King, P., & Widoyoko, D. (2022). *The Political Economy of the Learning Crisis in Indonesia*. RISE Research on Improving Systems of Education.

Setianingsih, D., Nurmahanani, I., & Sari, N. T. A. (2024). Pengaruh Strategi SQ3R Berbantuan Media Komik Digital terhadap Peningkatan Kemampuan Membaca Pemahaman Peserta Didik di Sekolah Dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(3). https://doi.org/10.23969/jp.v9i3.14878

Siregar, N. R., Ilham, M., & M., M. (2020). The Influence of Survey, Question, Read, Recite, Review Method Toward Reading Comprehension Ability Mediated by Working Memory. *JPI (Jurnal Pendidikan Indonesia)*, *9*(1), 85. https://doi.org/10.23887/jpi-undiksha.v9i1.23101

Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Alfabeta.

Sulastri, Amprasto, & Suhandoko, A. D. J. (2024). Pengaruh Strategi DRTA dan SQ3R terhadap Kemampuan Membaca Pemahaman pada Siswa Sekolah Dasar. *Syntax Literate: Jurnal Ilmiah Indonesia*, *9*(5).

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