



The Effectiveness of Cooperative Script Integrated with Matching Cards in Improving Fifth-Grade Expository Writing Skills

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Abstract: This study examined the effectiveness of the Cooperative Script instructional model combined with Matching Card media in developing fifth-grade students' expository writing competence. Employing a quantitative approach with a quasi-experimental non-equivalent control group design, 50 fifth-grade participants were distributed equally between an experimental and a control class of 25 students each. Writing performance was measured through performance-based tests and analyzed using the Shapiro-Wilk normality test, Levene's homogeneity test, paired-sample t-test, independent-sample t-test, N-Gain score analysis, and Cohen's d effect size. Results demonstrated a statistically significant enhancement in students' expository writing performance following application of the Cooperative Script-Matching Card model. The experimental class recorded a superior posttest score, a moderate N-Gain of 61.45%, and a very large effect size relative to the control class. These outcomes suggest that combining Cooperative Script with Matching Card media effectively fosters active engagement, collaborative knowledge construction, and substantive gains in elementary students' expository writing ability.

Abstrak: Penelitian ini bertujuan menganalisis efektivitas model pembelajaran *Cooperative Script* yang terintegrasi dengan media *Matching Card* dalam meningkatkan keterampilan menulis teks eksposisi siswa kelas V sekolah dasar. Penelitian menggunakan pendekatan kuantitatif dengan desain kuasi eksperimen *non-equivalent control group*. Subjek penelitian berjumlah 50 siswa yang dibagi ke dalam kelas eksperimen dan kelas kontrol, masing-masing terdiri atas 25 siswa. Data dikumpulkan melalui tes unjuk kerja menulis dan dianalisis menggunakan uji normalitas Shapiro-Wilk, uji homogenitas Levene, *paired sample t-test*, *independent sample t-test*, analisis N-Gain, dan ukuran efek Cohen's *d*. Hasil penelitian menunjukkan bahwa penerapan model *Cooperative Script* berbantuan media *Matching Card* memberikan peningkatan yang signifikan terhadap keterampilan menulis teks eksposisi. Kelas eksperimen memperoleh skor postes yang lebih tinggi, nilai N-Gain kategori sedang sebesar 61,45%, serta ukuran efek yang sangat besar dibandingkan kelas kontrol. Temuan ini menunjukkan bahwa integrasi model *Cooperative Script* dan media *Matching Card* efektif meningkatkan partisipasi aktif, kolaborasi, serta keterampilan menulis teks eksposisi siswa sekolah dasar.

A. Introduction

Among the foundational competencies that elementary school students are expected to master, writing stands out as one of the most intellectually demanding, since it requires learners to formulate relevant ideas, arrange information into a coherent structure, and convey meaning effectively through written language (Tarigan, 2021). Under the framework of the Kurikulum Merdeka, Indonesian language education is directed toward nurturing students' literacy capacities through purposeful, student-centered, and contextually grounded learning experiences. Writing instruction thereby serves a dual function: strengthening students' linguistic abilities and cultivating critical thinking, creativity, and authentic communicative competence. Despite these broad aspirations, effective writing education at the elementary level remains a formidable challenge, as a substantial proportion of students continue to encounter difficulties in articulating their thoughts systematically, particularly when producing expository texts that demand logical structure, factual substantiation, and appropriate linguistic conventions.

The urgency of advancing students' writing competence receives additional support from international literacy benchmarks. Survey data from the OECD PISA 2022 cycle indicate that Indonesia obtained a reading literacy score of 359, positioning the country below the OECD average and highlighting the continuing need for targeted literacy development (Organisation for Economic Co-operation and Development, 2023). At the same time, UNESCO (2022) has affirmed that literacy constitutes a core competency to be cultivated from early childhood as part of equipping learners for lifelong participation in society. Despite these imperatives, instructional practice in many classrooms continues to be predominantly teacher-directed, affording limited opportunities for students to take an active role in generating ideas and engaging collaboratively in writing tasks. This pattern frequently leaves students ill-equipped to develop ideas independently, organize paragraph content, and apply appropriate textual conventions when composing expository writing (Mustari, 2024).

These difficulties were directly documented during preliminary field observations at SD Negeri Bulustalan, Semarang, where many fifth-grade students demonstrated persistent challenges in formulating thesis statements, elaborating supporting arguments, and producing cohesive expository compositions. Records from routine classroom assessments indicated that only 15 out of 25 students achieved the established minimum mastery criterion, while the remainder showed weaknesses in idea development, vocabulary selection, and adherence to the required text structures. Classroom teachers further observed that students tended to rely heavily on teacher-provided examples and exhibited limited confidence in expressing their own perspectives. These observations underscore the need for instructional strategies that actively involve students in collaborative learning processes while providing meaningful scaffolding for idea generation and text organization.

One approach with considerable potential for addressing these challenges is the Cooperative Script learning model, which organizes students' learning by having them

work collaboratively in pairs while taking turns as speaker and listener. Through this reciprocal structure, students explain concepts, exchange viewpoints, offer peer feedback, and build understanding through social interaction (Yuliana et al., 2022). Such structured dialogue is expected to strengthen students' grasp of text organization and simultaneously build their written self-expression. To further augment the learning experience, Cooperative Script can be combined with Matching Card media, which present key concepts, vocabulary, and text organizational frameworks in an interactive format that encourages students to match, discuss, and collaboratively elaborate on information (Sahabuddin, 2024). The integration of these two elements aims to transform writing instruction into a more engaging, conceptually meaningful, and student-driven learning experience.

Earlier empirical investigations have consistently documented the effectiveness of both approaches in supporting student learning outcomes. Narulita (2020) demonstrated that Cooperative Script yielded significant improvements in students' expository writing performance and classroom participation, and Hasmi & Pohan (2021) corroborated its positive influence on writing achievement. In the domain of interactive instructional media, Aryanti (2023), Mustari (2024), and Sahabuddin (2024) found that Matching Card media effectively advanced students' conceptual understanding, learning motivation, and writing performance across various educational contexts. Furthermore, Jannah (2024) confirmed the positive impact of the Cooperative Script model on expository writing performance in elementary school students. Collectively, these studies furnish substantial empirical grounds for pursuing the combined application of both approaches in writing instruction.

Nevertheless, certain important gaps remain in the existing literature. Earlier investigations have largely assessed Cooperative Script and Matching Card media as independent interventions, with limited attention directed toward their combined application in expository writing instruction. Moreover, prior studies predominantly concentrated on measuring learning achievement outcomes while neglecting a comprehensive examination of instructional effectiveness through multiple statistical lenses, such as learning gain, effect size, and between-group comparative analyses. As a result, empirical evidence regarding the integrated effectiveness of these two instructional approaches for developing elementary students' expository writing skills remains limited.

The distinctive contribution of this study lies in integrating the Cooperative Script learning model with Matching Card media as a collaborative instructional framework specifically tailored to develop fifth-grade students' expository writing skills. Unlike prior studies that examined each strategy in isolation, this research investigates their joint implementation through a quasi-experimental design and evaluates learning effectiveness using a set of complementary statistical analyses, including paired-sample *t*-test, independent-sample *t*-test, N-Gain score analysis, and Cohen's *d* effect size. This multifaceted approach yields a more thorough account of the instructional effectiveness of collaborative learning and interactive media in elementary writing education.

Grounded in these considerations, this study addresses three principal research questions: (1) Does the integrated application of Cooperative Script and Matching Card

media produce a statistically significant improvement in fifth-grade students' expository writing skills? (2) To what extent does the intervention enhance students' writing performance? and (3) Is there a meaningful difference in expository writing outcomes between students receiving the Cooperative Script-Matching Card intervention and those undergoing conventional instruction? By addressing these questions, this study enriches the body of evidence on collaborative literacy instruction and furnishes practical guidance for elementary school teachers seeking effective strategies to cultivate students' expository writing skills through active, interactive, and meaningful learning.

B. Method

A quantitative research framework grounded in a quasi-experimental design was adopted to assess the effectiveness of the Cooperative Script learning model integrated with Matching Card media in advancing fifth-grade students' expository writing competence. Quantitative methodology emphasizes the systematic collection and statistical analysis of measurable data to draw evidence-based conclusions about the effectiveness of educational interventions (Sugiyono, 2019). A non-equivalent control group configuration was employed because the existing classroom arrangements within the school did not permit the random allocation of students to treatment conditions. Under this structure, one class received the Cooperative Script-Matching Card intervention while the other continued with conventional teacher-directed instruction. This design enabled systematic examination of changes in students' writing performance before and after the intervention while permitting comparison of learning outcomes between the two groups.

The investigation was conducted at SD Negeri Bulustalan, Semarang City, during January 2026. All 50 fifth-grade students constituted the research population, organized into two intact classroom units. Class V B (comprising 25 students) was designated as the experimental group, while Class V A (25 students) served as the control group. A purposive sampling strategy was applied since the study worked with pre-formed classroom groups rather than randomly assigned cohorts, which accords with the characteristics of quasi-experimental research methodology (Sugiyono, 2019).

Assessment data were gathered through both performance-based and non-test channels. The primary data collection instrument was a writing performance task administered as pretest and posttest, in which participants were required to produce an expository text. The written outputs were evaluated against eight dimensions of expository writing quality, encompassing content development, organizational structure, linguistic accuracy, idea elaboration, sentence effectiveness, paragraph coherence, spelling and mechanics, and vocabulary appropriateness. Supplementary data were gathered through classroom observation, teacher interviews, and document review to contextualize learning conditions before and throughout the intervention period.

The instructional intervention was carried out across four class sessions. In the experimental setting, students engaged in the Cooperative Script model integrated with Matching Card media, working in pairs while alternately taking on speaker and listener

roles. Activities encompassed concept discussion, card matching, peer feedback exchange, and independent expository text composition. The control group, by contrast, followed conventional teacher-centered instructional approaches that covered the same learning content and objectives. At the completion of the intervention period, all participants were administered the posttest using the same rubric applied during the pretest.

Data analysis was performed using IBM SPSS Statistics 27. Instrument validity was determined through expert panel review, and reliability was assessed using Cronbach's Alpha coefficient. Prior to hypothesis testing, prerequisite assumption checks were conducted. The Shapiro-Wilk test was applied to assess the normality of score distributions, a method widely recognized as suitable for small to moderate sample sizes, while Levene's test evaluated variance equality across groups. The first research question was addressed through a paired-sample *t*-test comparing experimental group pretest and posttest scores. The second question, concerning the magnitude of instructional gains, was examined using N-Gain score analysis and Cohen's *d* effect size, which together provide evidence of practical significance. The third question was addressed through an independent-sample *t*-test comparing posttest outcomes between the two groups. A significance threshold of 0.05 was applied throughout all analyses.

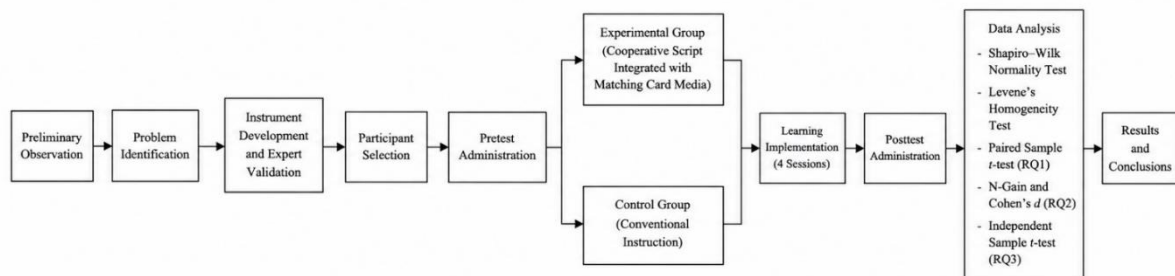


Figure 1. Research Flow

C. Result

Preliminary Data Analysis

Prior to the main hypothesis testing, prerequisite statistical assumptions were verified to confirm the suitability of parametric testing procedures. Normality was evaluated using the Shapiro-Wilk test, while the comparability of score variances between groups was assessed via Levene's test.

Table 1. Results of Shapiro-Wilk Normality Test

Group	Test	Statistic	df	Sig.	Decision
Control	Pretest	0.954	25	0.309	Normal
Control	Posttest	0.932	25	0.099	Normal
Experimental	Pretest	0.956	25	0.343	Normal
Experimental	Posttest	0.974	25	0.750	Normal

As indicated in Table 1, all Shapiro–Wilk significance values across the four data sets surpassed the 0.05 threshold, confirming that pretest and posttest scores in both the experimental and control groups conformed to a normal distribution. The normality assumption was therefore met, permitting the application of parametric statistical methods in subsequent analyses.

Variance homogeneity across the two groups was subsequently examined to determine whether the classes exhibited statistically equivalent score dispersion.

Table 2. Results of Levene's Homogeneity Test

Test	Levene Statistic	df1	df2	Sig.	Decision
Based on Mean	0.921	1	48	0.342	Homogeneous

The Levene's test returned a significance value of 0.342, which exceeded the 0.05 criterion. This result confirms that the score variances of the experimental and control groups were statistically homogeneous. With both parametric assumptions satisfied, the data were deemed appropriate for subsequent inferential statistical analyses.

Does the integration of Cooperative Script and Matching Card media significantly improve fifth-grade students' expository writing skills?

To address the first research question, a paired-sample t-test was applied to compare students' expository writing performance in the experimental group before and after participation in the Cooperative Script–Matching Card learning experience.

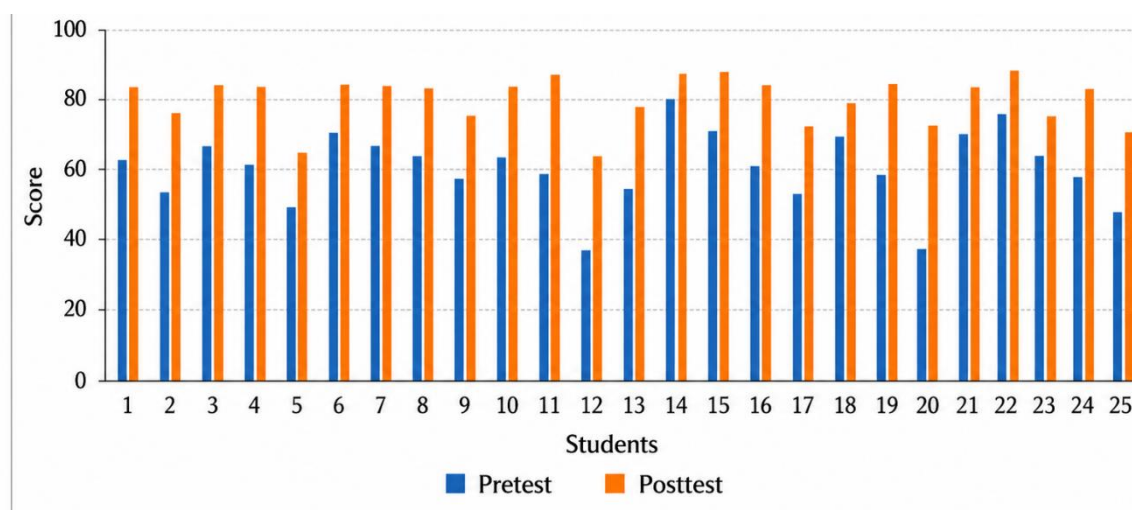


Figure 2. Comparison of Students' Pretest and Posttest Scores in the Experimental Group

Figure 2 presents a clear pattern of improvement across nearly all students in the experimental group, with posttest scores consistently exceeding pretest scores. This pattern reflects a systematic increase in expository writing achievement attributable to the Cooperative Script–Matching Card instructional experience.

A paired-sample *t*-test was then performed to determine whether this observed improvement reached statistical significance.

Table 3. Results of Paired-Sample *t*-Test

Variable	Mean Difference	SD	<i>t</i>	df	<i>p</i>
Pretest – Posttest	-32.440	13.339	-12.160	24	<0.001

The paired-sample *t*-test revealed a statistically significant difference between students' pretest and posttest scores ($t(24) = -12.160, p < .001$). The mean difference of -32.440 indicates that students' posttest scores were substantially higher than their pretest scores after receiving the instructional intervention. These findings demonstrate that the integration of the Cooperative Script learning model with Matching Card media significantly improved fifth-grade students' expository writing skills.

To what extent does the intervention improve students' writing performance?

To determine the magnitude of learning improvement following the intervention, N-Gain analysis was conducted to measure students' learning gains, while Cohen's *d* effect size was calculated to evaluate the practical significance of the instructional intervention.

Table 4. N-Gain Analysis of Students' Expository Writing Skills

Group	Mean N-Gain (%)	Category	Minimum	Maximum
Control	21.77	Low	-15	58
Experimental	61.45	Moderate	14	77

Table 4 reveals that the experimental group attained a markedly higher average learning gain than the control group. With a mean N-Gain of 61.45%, the experimental group's performance falls within the moderate improvement category, whereas the control group's average N-Gain of only 21.77% corresponds to the low improvement category. These figures confirm that the Cooperative Script–Matching Card integrated approach generated considerably greater learning gains than conventional classroom instruction.

The descriptive statistics offer additional evidence regarding the consistency of learning improvement observed across both instructional groups.

Table 5. Descriptive Statistics of N-Gain Scores

Group	Mean	SD	95% CI
Control	21.77	19.54	13.70–29.83
Experimental	61.45	14.33	55.53–67.36

The experimental group not only recorded a higher mean N-Gain value but also showed a narrower confidence interval, indicating greater consistency of learning improvement across individual students. The wider score variation in the control group

suggests that conventional instruction yielded comparatively uneven learning progress among students.

To supplement the N-Gain findings, the practical educational significance of the intervention was assessed through Cohen's d effect size calculation.

Table 6. Effect Size of the Instructional Intervention

Effect Size	Value	Interpretation
Cohen's d	2.040	Very Large Effect

A Cohen's d value of 2.040 demonstrates a very large practical effect of the Cooperative Script-Matching Card learning model on students' expository writing achievement. This figure substantially exceeds the 0.80 benchmark conventionally associated with a large effect, indicating that the intervention generated not only statistically reliable improvement but also educationally significant impact.

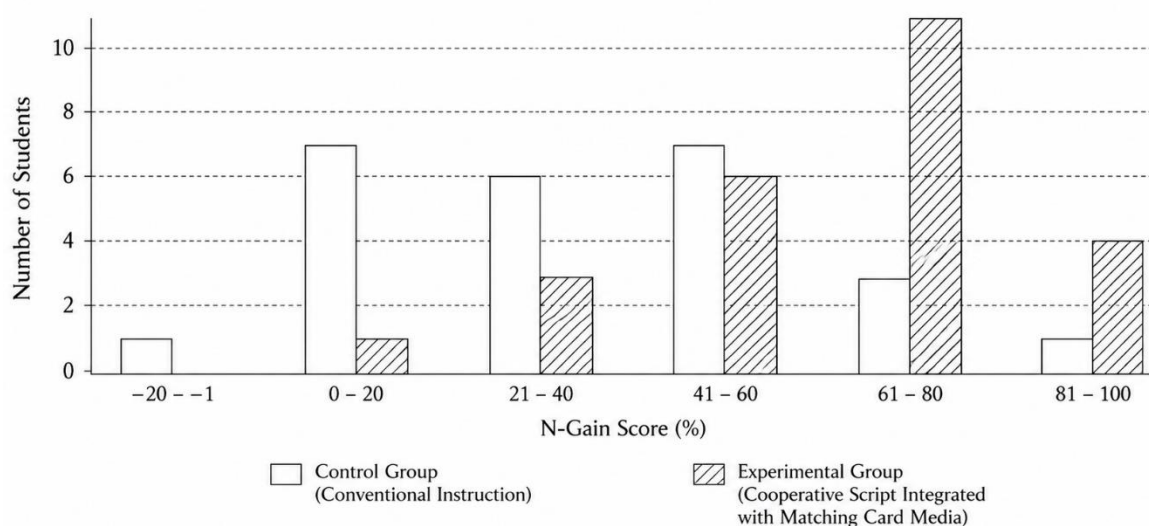


Figure 3. Distribution of N-Gain Scores Between Groups

Figure 3 provides visual confirmation of the performance differences in learning gain between the two instructional groups. N-Gain scores for the experimental group cluster at higher intervals, while those of the control group are distributed at lower and more dispersed values, graphically reinforcing the superior effectiveness of the Cooperative Script-Matching Card approach in advancing expository writing skills.

Collectively, the N-Gain and Cohen's d findings establish that the intervention produced a moderate level of learning gain alongside a very large practical effect. The experimental group's average N-Gain of 61.45% indicates a moderate improvement category, while a Cohen's d of 2.040 confirms a very large practical impact. Together, these results respond comprehensively to Research Question 2, affirming the model's capacity as

an effective instructional strategy for Indonesian language writing at the elementary school level.

Is there a significant difference in expository writing skills between students taught using the Cooperative Script integrated with Matching Card media and those receiving conventional instruction?

To address the third research question, an independent-sample t-test was performed to compare posttest scores between the experimental and control groups following the completion of the instructional intervention.

Table 7. Results of Independent-Sample t-Test

Test	<i>t</i>	df	<i>p</i>	Mean Difference
Independent-sample <i>t</i> -test	-7.212	48	<0.001	-19.48

Table 7 shows that students in the Cooperative Script–Matching Card instructional group attained substantially higher posttest scores than those who received conventional instruction. The experimental group’s mean posttest score of 81.92 contrasted markedly with the control group’s mean score of 62.44, representing a mean difference of 19.48 points.

The independent-sample t-test confirmed that this between-group difference was statistically significant ($t(48) = -7.212$, $p < .001$). Accordingly, students who participated in the Cooperative Script–Matching Card learning model demonstrated significantly stronger expository writing performance than their counterparts receiving traditional instruction, establishing that the integrated approach surpasses conventional teaching in developing fifth-grade students’ expository writing skills.

D. Discussion

The results of this study establish that integrating the Cooperative Script learning model with Matching Card media produced both statistically and educationally significant advances in fifth-grade students’ expository writing skills. Students in the experimental group not only achieved substantially higher posttest scores relative to their pretest baseline but also outperformed the control group, whose instruction followed conventional approaches. The N-Gain analysis revealed a moderate level of learning improvement in the experimental group, accompanied by a very large practical effect size, affirming the intervention’s dual significance. These outcomes provide a clear affirmative response to Research Question 1, establishing the Cooperative Script–Matching Card integration as an effective strategy for advancing expository writing skills among fifth-grade learners.

The efficacy of this instructional combination can be understood through the mutually reinforcing characteristics of its two components. Cooperative Script organizes learning through structured pair interaction in which each student alternately assumes the speaker and listener role, facilitating continuous idea articulation, immediate peer feedback, conceptual revision, and the progressive refinement of written arguments before final

composition. Simultaneously, Matching Card media offer concrete visual prompts – in the form of key terms, concepts, and text frameworks – that aid students in generating and systematically organizing ideas during the planning stage of writing. This complementary combination reduces the cognitive burden of writing preparation, promotes active engagement, expands vocabulary, and bolsters students' confidence in expressing ideas independently. Compared with conventional teacher-directed instruction, the integrated model fosters a richer, more dialogic learning environment that supports both reflective thinking and collaborative knowledge construction, ultimately producing higher-quality expository writing outcomes.

These results are consistent with the foundational tenets of social constructivism, which posits that knowledge is actively built through purposeful social interaction and collaborative learning experiences (Azizah, 2025; Anjelita & Supriyanto, 2024). Within the Cooperative Script framework, students function not as passive information recipients but as active meaning-makers who negotiate understanding through structured peer dialogue. This dialogic engagement enables learners to detect and correct misconceptions, reorganize prior knowledge, and develop deeper conceptual understanding before expressing ideas in written form. The findings further accord with constructivist theories of learning that emphasize the role of peer support in gradually enabling students to perform complex tasks independently (Handoyo & Ani, 2025; Thomann & Deutscher, 2025; Zuo, 2023). Within the Cooperative Script process, the alternating speaker-listener structure serves as reciprocal scaffolding, enabling continuous monitoring of one another's understanding, the provision of constructive responses, and the iterative improvement of written expression.

The present findings also reinforce and extend prior empirical research on collaborative learning and interactive instructional media. Earlier studies have consistently reported that Cooperative Script improves writing performance, classroom engagement, and collaborative learning (Narulita, 2020; Hasmi & Pohan, 2021; Aryanti, 2023; Jannah, 2024). Similarly, research has shown that Matching Card media enhance students' motivation, conceptual understanding, and language learning through interactive engagement (Mustari, 2024; Sahabuddin, 2024). Broader research on collaborative learning frameworks has also affirmed that cooperative and reflective learning environments meaningfully support educational development (Zhou, 2025). However, most prior studies assessed these approaches in isolation, focusing primarily on achievement outcomes without employing multiple indicators to evaluate instructional effectiveness comprehensively. The current study, by contrast, integrates Cooperative Script with Matching Card media and assesses their combined effectiveness through paired-sample t-test, independent-sample t-test, N-Gain analysis, and Cohen's d effect size. This multidimensional approach extends the existing literature by offering a more rigorous empirical account of how collaborative learning combined with interactive media advances elementary students' expository writing skills.

A second notable finding concerns the degree of learning improvement generated by the intervention. The experimental group's moderate N-Gain of 61.45%, combined with

a very large Cohen's d (2.040), indicates that the instruction produced both meaningful educational progress and an effect of considerable magnitude. The moderate learning gain confirms that students experienced genuine and sustained conceptual development throughout the intervention, while the exceptionally large effect size reflects improvements that substantially exceeded those produced through conventional instruction. These findings provide a thorough response to Research Question 2 and underscore the significant educational value of the integrated instructional approach.

The magnitude of observed improvement is partly attributable to the cognitive processes activated by Matching Card media. The cards furnish visual representations of key terms and structural frameworks that support information organization prior to writing. According to Dual Coding Theory, learning is optimized when verbal and visual information are simultaneously processed, enabling both cognitive channels to reinforce comprehension and deepen understanding (Susanti, 2025). Furthermore, the activities of matching cards, discussing answers, and explaining concepts to peers activate retrieval practice, through which students access information from memory rather than passively re-reading materials. This active retrieval mechanism is well established as a pathway for strengthening long-term retention and deepening conceptual knowledge (Xu, 2024; Yu, 2025). Through these complementary cognitive mechanisms, students develop the ability to generate ideas, select appropriate vocabulary, organize arguments logically, and compose well-structured expository texts all contributing to the considerably larger practical effect observed relative to conventional instruction.

Findings pertaining to the third research question show a significant performance disparity between the two instructional groups, with the experimental group clearly surpassing the control group following the intervention. This gap reflects the fundamentally different learning environments created by the two approaches. Conventional instruction typically positions students as knowledge recipients, restricting opportunities for peer dialogue and immediate feedback. Cooperative Script, by contrast, promotes reciprocal interaction in which every student participates actively as both speaker and listener—explaining ideas, evaluating peers' responses, correcting misconceptions, and refining understanding before committing ideas to writing. These enriched learning experiences build stronger conceptual foundations, greater writing confidence, and ultimately superior expository writing performance compared with traditional teacher-centered instruction.

When situated alongside prior research, the present study delivers a broader empirical contribution to the literature on collaborative writing instruction. Earlier work confirmed that Cooperative Script improves writing achievement and student engagement (Narulita, 2020; Hasmi & Pohan, 2021), while other investigations documented the effectiveness of Matching Card media in enhancing motivation and conceptual understanding (Mustari, 2024; Sahabuddin, 2024). Those studies, however, examined each approach independently. This study advances that body of knowledge by demonstrating that their combination generates complementary instructional benefits—enhancing both collaborative interaction and cognitive processing during writing activities. Moreover, by

employing multiple statistical indicators, the current study moves beyond single-outcome assessment toward a more comprehensive evaluation of instructional effectiveness, offering stronger empirical evidence of the educational value of integrating collaborative learning with interactive instructional media in elementary writing education.

From a theoretical perspective, the findings reinforce the argument that effective writing instruction requires the coordination of collaborative social engagement and meaningful cognitive processing. Social constructivism clarifies how students build knowledge through shared dialogue and collaborative experience (Azizah, 2025), while constructivist learning frameworks highlight the importance of peer support in enabling higher-order performance (Thomann & Deutscher, 2025; Zuo, 2023). Dual Coding Theory (Susanti, 2025) and the active recall effect (Xu, 2024) further explain how interactive visual media strengthen memory, conceptual comprehension, and information retrieval during learning. Rather than functioning independently, these theoretical perspectives complement one another in accounting for the mechanisms through which Cooperative Script integrated with Matching Card media advances students' expository writing competence – creating a learning environment that concurrently supports cognitive, linguistic, and social development.

The study's findings carry meaningful practical implications for elementary school teachers implementing the Kurikulum Merdeka. The Cooperative Script–Matching Card model offers a feasible and evidence-supported instructional strategy that promotes active participation, collaborative learning, and authentic writing engagement. Teachers can draw on this approach to guide students in independently generating ideas, systematically organizing information, and constructing arguments more effectively through structured peer interaction. Beyond writing competence, the model cultivates communication skills, collaborative dispositions, critical reasoning, and learner autonomy – competencies that are central to the goals of contemporary elementary education in Indonesia. The integration of Cooperative Script and Matching Card media may thus be regarded as an effective alternative for strengthening Indonesian language instruction, particularly in developing students' expository writing skills through engaging and meaningful learning.

E. Implication

This study's findings carry significant implications at both theoretical and practical levels for elementary language education. Theoretically, the research extends the literature on collaborative learning by demonstrating that combining the Cooperative Script model with Matching Card media creates an integrative instructional framework that simultaneously promotes social interaction, cognitive engagement, and meaningful learning during expository writing activities. The findings provide empirical support for social constructivism, scaffolding theory, Dual Coding Theory, and the active recall effect by illuminating how structured peer interaction and interactive visual media jointly strengthen students' writing development. Practically, the proposed instructional model offers elementary teachers an evidence-based alternative for delivering student-centered learning

aligned with the principles of the Kurikulum Merdeka. Through structured pair interaction and interactive learning media, teachers can guide students in generating ideas, building arguments, expanding vocabulary, and constructing cohesive expository texts while cultivating communication, collaboration, and critical thinking capacities. Given its documented effectiveness and substantial practical impact, the Cooperative Script-Matching Card integration holds considerable potential for enriching Indonesian language instruction and may serve as a reference for future instructional innovations aimed at advancing literacy learning in elementary education.

F. Limitation and Suggestion for Further Research

This study is subject to several constraints that warrant consideration when interpreting its findings. First, the investigation was confined to a single elementary school with a relatively modest participant sample, which may limit the generalizability of results to other educational settings and contexts. Second, the intervention addressed only fifth-grade expository writing over a comparatively brief implementation window; consequently, the long-term persistence of the observed learning gains could not be established. Third, although a standardized rubric was employed, subjective judgment in writing performance assessment cannot be entirely eliminated. Finally, the study did not systematically account for other variables that may influence writing achievement, including students' prior literacy levels, reading habits, intrinsic motivation, or home learning environment.

Future investigations are therefore encouraged to engage larger and more contextually diverse samples drawn from multiple schools and regions to strengthen the generalizability of these findings. Longitudinal studies examining the retention of writing skill gains over extended periods following participation in the Cooperative Script-Matching Card model are also warranted. Additionally, future research may explore the applicability of this approach to other writing genres, develop digital-format Matching Card media, and examine the contributions of learner-related variables such as motivation, self-efficacy, literacy habits, and digital literacy toward a more comprehensive understanding of student writing development.

G. Conclusion

This study concludes that integrating the Cooperative Script learning model with Matching Card media constitutes an effective instructional approach for developing expository writing skills among fifth-grade elementary school students. The data revealed statistically significant improvements in writing performance, a moderate learning gain ($N\text{-Gain} = 61.45\%$), and a very large practical effect (Cohen's $d = 2.040$), collectively indicating that the intervention was both statistically robust and educationally meaningful. Moreover, students who participated in the integrated instructional approach demonstrated significantly superior writing performance compared with those receiving conventional instruction, underscoring the added educational value of combining collaborative learning

with interactive instructional media. Beyond confirming the intervention's effectiveness, this study contributes to the scholarly literature by providing comprehensive empirical evidence on the combined application of Cooperative Script and Matching Card media, assessed through multiple indicators of instructional effectiveness. These findings suggest that the integrated learning model represents a valuable alternative for realizing active, collaborative, and meaningful writing instruction while advancing students' literacy development in elementary education.

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