



Development of interactive digital media to improve descriptive writing learning outcomes

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ABSTRACT

The transformation of education in the digital era requires teachers to develop interactive and contextual media to enhance students' literacy skills, particularly in descriptive writing. This study aims to develop digital interactive learning materials for descriptive text writing that are valid, practical, and effective for fourth-grade students at SD Negeri 010037 Perk. Sei Dadap. The research is motivated by the low learning outcomes of students and the limited use of media suited to the needs and characteristics of elementary school children. The method employed is Research and Development (R&D) using a modified ADDIE model, consisting of analysis, design, and development stages. Validation was conducted by subject matter, media, and language experts; practicality was assessed by classroom teachers; and effectiveness was tested through pretest and posttest comparison using N-Gain calculations. Results indicate that the developed media is highly valid with an average expert validation score of 84.3%, highly practical with a teacher practicality score of 93%, and highly effective in improving learning outcomes with an N-Gain score of 0.81. This research contributes to writing literacy development through the integration of interactive digital media in elementary language instruction.

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ABSTRAK

Transformasi pembelajaran di era digital menuntut guru untuk mampu mengembangkan media yang interaktif dan kontekstual guna meningkatkan keterampilan literasi peserta didik, termasuk dalam menulis teks deskripsi. Penelitian ini bertujuan untuk mengembangkan materi ajar menulis teks deskripsi berbantuan media pembelajaran interaktif digital yang layak, praktis, dan efektif digunakan dalam pembelajaran Bahasa Indonesia di kelas IV SD Negeri 010037 Perk. Sei Dadap. Penelitian ini dilatarbelakangi oleh rendahnya hasil belajar peserta didik serta kurangnya penggunaan media pembelajaran yang relevan dengan kebutuhan dan karakteristik anak usia sekolah dasar. Metode penelitian yang digunakan adalah Research and Development (R&D) dengan model pengembangan ADDIE yang dimodifikasi menjadi tiga tahap, yaitu analisis, desain, dan pengembangan. Validasi dilakukan oleh ahli materi, media, dan bahasa, serta uji kepraktisan dilakukan oleh guru kelas, dan uji efektivitas melalui perbandingan pretest dan posttest menggunakan perhitungan N-Gain. Hasil penelitian menunjukkan bahwa media pembelajaran interaktif digital ini tergolong sangat layak dengan rata-rata skor 84.3%, sangat praktis dengan skor kepraktisan guru sebesar 93%, dan sangat efektif meningkatkan hasil belajar dengan nilai N-Gain sebesar 0.81. Penelitian ini memberikan kontribusi dalam pengembangan literasi menulis peserta didik melalui pendekatan berbasis digital.

Kata Kunci: hasil belajar; media pembelajaran; menulis; teks deskripsi

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INTRODUCTION

Education in the 21st century requires students to master literacy skills, one of which is the ability to write descriptive texts effectively and meaningfully. This ability is an important part of supporting optimal learning outcomes at various levels of education, including elementary school (Adib *et al.*, 2024; Latifah, 2023). Good learning outcomes reflect the success of students in understanding, processing, and communicating information in writing in accordance with the context and learning objectives (Trisnawati & Fauziya, 2024). The demands of 21st-century literacy need to be responded to by Indonesian language learning through a more active, meaningful, and adaptive approach to technological advances (Setiawan *et al.*, 2024). This approach requires the integration of interactive digital learning media that can encourage active student participation in the learning process, especially in descriptive writing skills. Interactive digital media is believed to be able to increase student engagement and strengthen visual, auditory, and kinesthetic learning experiences (Sudrajat *et al.*, 2023).

The use of interactive digital learning media based on applications such as Canva and Quizizz provides a strategic alternative to effectively improve descriptive writing skills. The integration of technology in learning has been proven to strengthen visualization, increase student participation, and create a contextual and enjoyable learning atmosphere (Hidayati & Aslam, 2021; Nurjanah & Faznur, 2022). Interactively designed digital learning media allow students to access materials, exercises, and feedback directly, making the learning process more adaptive and meaningful (Rahmawati *et al.*, 2022; Tarigan *et al.*, 2023). The active involvement of students in the use of digital media is believed to strengthen their motivation and confidence in writing, especially when they face the challenge of systematically structuring descriptive texts. The effectiveness of these media needs to be continuously reviewed and developed so that they can become concrete solutions to the low learning achievements of students in writing skills.

The teaching of the Indonesian language in elementary schools continues to face various structural and pedagogical challenges. The teaching process at SD Negeri 010037 Perk. Sei Dadap is typically delivered through teacher-centered lectures, which provide insufficient space for active student participation. This practice results in minimal cognitive involvement of students in independently developing written ideas. Teachers' limited understanding of technology use also limits innovation in designing adaptive and contextual learning media. The lack of variety in learning resources, especially in descriptive writing materials, makes textbooks the sole reference, which are often incomplete and lack systematic writing guidelines. This situation makes it difficult for students to choose appropriate diction and to form logical, coherent ideas. These obstacles directly contribute to low writing learning outcomes. The complexity of this problem reinforces the urgency of implementing a more interactive digital-based learning approach to encourage the achievement of learning objectives more optimally.

Strengthening writing skills requires an approach that can optimize student participation through enjoyable and meaningful learning experiences. The use of interactive digital learning media is a relevant conceptual solution to overcome the limitations of conventional methods that still dominate classrooms (Mayoza *et al.*, 2024). Digital media has the potential to present material visually, dynamically, and responsively to students' learning needs. Features such as hyperlinks, audio, animations, and interactive quizzes encourage students to explore content independently and increase cognitive engagement during the learning process (Asy'arie *et al.*, 2025; Ifrida & Pratiwi, 2024). The presence of interactive digital learning media is considered capable of creating a contextual learning environment and encouraging students to develop creative and expressive thinking skills. The integration of this media is in line with the principles of 21st-century learning, which demand digital literacy and independent learning. Previous studies have shown that systematically designed digital media can improve learning quality and strengthen learning outcomes, particularly in writing. The urgency of developing digital media becomes even stronger when

linked to the needs of elementary school students who require visual and interactive support in effectively building writing skills (Rinawati *et al.*, 2020; Rohmaniyah *et al.*, 2021).

Writing skills are an essential element in Indonesian language learning that directly contributes to student learning outcomes. This skill reflects students' mastery in organizing ideas, structuring texts, and using linguistic rules appropriately (Khalid, 2021). Writing descriptive texts requires precision in word choice, clarity in describing objects, and cohesion between sentences so that the information can be understood concretely by the reader (Budiani *et al.*, 2023; Yoso *et al.*, 2024). These competencies show that writing is not just a mechanical activity, but a higher-order thinking activity that involves cognitive, affective, and linguistic elements simultaneously (Ayu *et al.*, 2023; Hidayat *et al.*, 2025). The success of students in writing descriptive texts is an indicator of the extent to which the learning process has been able to internalize the concepts and structures of the language being taught. Poor writing skills are often directly proportional to poor learning outcomes, mainly because writing is a complex form of productive expression (Muliya, 2022; Wahyudi *et al.*, 2024). The close relationship between writing skills and learning outcomes reinforces the urgency of strengthening writing instruction as a strategy to improve the quality of Indonesian language education at the elementary level.

Previous studies on writing skills in elementary school generally focus on learning strategies, text types, or supporting media without specifically evaluating the direct relationship between descriptive writing skills and learning outcomes. This limited focus creates an important gap in empirical studies, especially since descriptive writing is a complex form of representation of understanding, requiring students to independently compose detailed and logical descriptions. Conceptual evidence has indeed shown that improved writing skills have an impact on academic outcomes in general, but the causal relationship between these two variables has rarely been explored measurably in descriptive text material at the elementary school level (Ningrum *et al.*, 2023; Wahyudi *et al.*, 2024). The lack of studies that explicitly evaluate the impact of descriptive writing skills on learning outcomes underscores the need for more focused research, particularly in the context of Indonesian language learning, which supports productive literacy skills from an early age. This scientific justification emphasizes the importance of developing interactive digital learning media that not only improve the quality of the learning process but also contribute directly to concrete improvements in student learning outcomes.

This study specifically aims to develop interactive digital learning media that can be used in teaching descriptive writing to fourth-grade students at SD Negeri 010037 Perk. Sei Dadap. The main objective is to determine the form of digital media developed and to assess the feasibility, practicality, and effectiveness of the media in improving students' writing skills. This effort is expected to provide a learning solution that is not only pedagogically relevant but also contextual to the demands of 21st-century literacy through the use of adaptive and interactive technology.

LITERATURE REVIEW

Writing Skills

Writing ability represents a productive skill that involves language mastery, idea organization, and systematic application of text structure. This activity requires students to express their thoughts through coherent, logical, and communicative graphic symbols (Mumpuni & Afifah, 2022; Musdolifah *et al.*, 2023). At the elementary school level, writing skills play a strategic role in forming the foundation of literacy, as they are a means for students to develop conceptual understanding and reflective thinking (Nurazizah & Darmayanti, 2024). Writing is a cognitive activity that not only relies on language skills but also involves information processing and idea synthesis (Setyaningsih *et al.*, 2022). This skill is crucial in Indonesian language learning, especially when students are asked to compose various types of texts, including descriptive texts, which require precise diction and an organized structure.

Descriptive Writing Skills

Descriptive texts are a form of writing that aims to describe objects, places, events, or atmospheres in detail and factually so that readers can almost see, feel, or experience what the writer is conveying. Writing this type of text requires keen observation skills, precise word choice, and a coherent paragraph structure (Mondolalo & Mulyadi, 2023). The main characteristic of descriptive text lies in the use of language that can stimulate the reader's imagination, either through visual or sensory descriptions (Qatrunnada & Purwati, 2024). The general structure of descriptive text consists of the identification of the object, a systematic description of the object's parts, and a conclusion or impression of the object being described. Its linguistic characteristics include the use of concrete nouns, adjectives, detailed sentences, and figures of speech to strengthen the descriptive effect (Asyifa *et al.*, 2024).

The skill of writing descriptive texts requires mastery of linguistic structures and elements that cannot be acquired through a one-way learning process (Widhiyanto *et al.*, 2024). The limited material and lack of examples in textbooks often make it difficult for students to compose descriptive paragraphs independently. Previous research shows that elementary school students often experience difficulties in determining topics, choosing diction, and composing coherent sentences when writing descriptive texts (Rismawati *et al.*, 2024). This problem highlights the need for visual and interactive learning media to bridge the gap between theory and practice in writing texts. Therefore, the development of contextual digital media is a strategic step to strengthen descriptive writing skills while improving students' overall learning outcomes.

Digital Learning Media

Learning media serve as intermediaries in the delivery of material from teachers to students, providing a more concrete and systematic means of instruction. The presence of appropriate media enables students to understand abstract concepts in a more tangible and meaningful way through visual, audio, or kinesthetic representations (Khoirunnisaa *et al.*, 2025). The role of media is not merely as a tool, but rather an integral part of a learning strategy designed to stimulate motivation, facilitate interaction, and improve overall information retention. The effectiveness of learning media greatly depends on the suitability between the characteristics of the media and the instructional objectives, teaching materials, as well as the psychological and sociological conditions of the students (Rahmawati *et al.*, 2022). The use of relevant media can also help teachers overcome the limitations of conventional lecture methods and encourage meaningful learning in the classroom.

Technological transformation in the digital age has given rise to innovations in digital learning media that are more dynamic, flexible, and adaptive to the needs of learners. Digital learning media offer various interactive features such as moving text, animations, sounds, videos, and digital quizzes that can increase learner engagement in the learning process (Rajagukguk *et al.*, 2025; Salahuddin *et al.*, 2025). The advantage of digital media lies in its ability to provide a multisensory learning experience and real-time content personalization (Meliyani & Tirtayani, 2022). Recent research confirms that interactive digital media can improve the quality of learning through the presentation of material that is more interesting, flexible, and easily accessible at any time (Tarigan *et al.*, 2023). The role of digital media is not limited to conveying information, but also serves as a means of strengthening essential 21st-century competencies, such as critical thinking, creativity, and digital literacy. Therefore, the use of digital learning media is highly relevant to be applied in the context of teaching descriptive writing in elementary schools.

Constructivism Learning Theory

Constructivist learning theory is based on the view that the learning process involves the construction of meaning by individuals through direct experience, rather than passive acceptance from external sources. Knowledge is formed through active interaction between learners and the environment, taking into account prior knowledge, reflection, and interpretation of new information (Suoth *et al.*, 2022). This approach places learners at the center of the learning process, playing an active role in gradually developing their understanding of concepts. Learning activities are designed to enable exploration, experimentation, and contextual discovery of meaning (Huda & Djono, 2025). This structure provides ample space for the development of critical and creative thinking skills, as well as the ability to connect information logically and deeply.

Digital interactive learning media offer characteristics that are very much in line with the principles of constructivism. The interactivity presented through multimedia features such as hyperlinks, audio-visuals, and simulations provides a multisensory learning experience that encourages maximum cognitive engagement of learners. Flexibility in content navigation and direct feedback allows learners to evaluate their understanding reflectively and independently. The concept of active learning based on constructivism in digital platforms has been proven to improve conceptual understanding and learning motivation, especially in productive literacy skills such as writing (Noveliana & Ghani, 2022). The integration of constructivist theory in digital learning media provides a solid pedagogical basis for the development of meaningful teaching materials that have a direct impact on learning outcomes.

Canva and Quizizz Interactive Media

The use of platform-based digital media such as Canva and Quizizz is growing in the context of basic education. Canva is known as an online graphic design tool that allows for the systematic and attractive preparation of visual teaching materials, while Quizizz is an interactive quiz-based evaluation application that can be used online or offline. Previous studies have shown that the use of Canva in learning can increase student motivation and visual appeal, as well as support a more concrete understanding of the material (Cahyani & Hindun, 2023; Mega *et al.*, 2023). Quizizz, on the other hand, has been proven to increase student activity, provide instant feedback, and create a fun learning atmosphere (Fajriati *et al.*, 2024; Muliya, 2022). Both are considered effective in building technology-based learning that is adaptive to the characteristics of the digital generation.

However, most studies examining Canva and Quizizz still focus on their separate uses or in the context of general learning, with few integrating the two simultaneously in the development of teaching materials for writing, particularly descriptive writing in elementary schools. This gap creates a need for research that

not only tests the technical effectiveness of using these two media but also examines how they can be integrated into instructional design based on a constructivist approach. The integrated use of Canva and Quizizz is believed to create a learning flow that presents concept visualization and technology-based formative assessment, both of which are highly relevant to improving students' writing skills. Therefore, this study was conducted to address this gap and provide conceptual and practical contributions to the development of interactive digital teaching media.

METHODS

This study used a Research and Development (R&D) approach with the ADDIE development model modified into three main stages, namely analysis, design, and development. The research was conducted at SD Negeri 010037 Perk. Sei Dadap, Asahan Regency, North Sumatra Province, during the even semester of the 2023/2024 academic year. The research subjects included fourth-grade students as the target population, with a main sample of 24 students involved in the media development trial process. The sample was selected purposively based on the students' active involvement in Indonesian language learning and their suitability for the descriptive text writing material that was the focus of this study.

The procedure for developing interactive digital learning media in this study followed the ADDIE model, which has been simplified into three main stages, namely analysis, design, and development. The analysis stage began with identifying learning needs based on observations of the Indonesian language learning process in fourth grade and interviews with teachers regarding the problems faced by students in writing descriptive texts. The design stage was carried out by designing the material structure, storyboard, and navigation flow of the learning media in line with the learning indicators and expected learning outcomes. The development stage involved the creation of media products using the Canva and Quizizz applications, which were then validated by subject matter experts, media experts, and classroom teachers to obtain input before being tested for practicality and effectiveness in the field.

The research instruments used in developing this media include a validation sheet to assess the feasibility of the media, a response questionnaire to measure the practicality of its use in the classroom, and a learning outcome test to evaluate the effectiveness of the media in improving descriptive writing skills. The validation sheet consists of assessment indicators based on the content, visual appearance, interactivity, and suitability of the media for learning objectives. Validation was carried out by subject matter experts, media experts, and classroom teachers as field practitioners. Data collection techniques were carried out through observation, interviews, questionnaire distribution, and the implementation of pre- and post-tests on students. Data analysis was conducted descriptively and quantitatively using a percentage formula to interpret the results of validation, practicality, and effectiveness based on the increase in student learning scores. Effectiveness was assessed using the N-Gain Score test to determine the increase in students' writing skills after using the developed interactive digital learning media.

RESULTS AND DISCUSSION

Media Suitability Test Results

The assessment of the suitability of teaching materials for writing descriptive texts using interactive digital learning media was carried out by three validators consisting of subject matter experts, media experts, and language experts. The validation was conducted in two stages, namely the first stage and the second stage, to ensure that the materials met the aspects of content accuracy, material integration, and language that were in accordance with the learning needs of elementary school students.

Table 1 presents the results of the feasibility assessment by subject matter experts on ten assessment indicators. The score obtained in the first validation was 30 out of a maximum score of 50, which is equivalent to a percentage of 70%. The second stage of validation showed an increase in the score to 38 out of 50, or 76%. The overall average of the two stages of validation was 73%, which falls into the “feasible” category. Based on these results, the developed teaching materials are declared to have met the feasibility criteria and can be used in the field trial process after undergoing revisions in accordance with the input from the validators.

Table 1. Results of Expert Assessment

Assessment indicators	Assessment	
	Stage 1	Stage 2
The material presented in interactive digital learning media is in line with learning outcomes	4	4
The material presented in interactive digital learning media is in line with learning objectives	3	4
The material presented in interactive digital learning media is packaged in a logical sequence	4	3
The material presented in interactive digital learning media is comprehensive	3	3
The material presented with the help of interactive digital learning media is easy for students to understand	4	4
The material presented in interactive digital learning media is in line with the development of students	4	4
The presentation of material with the help of interactive digital learning media is interactive	3	4
The material presented with the help of interactive learning media can increase students' knowledge and understanding of descriptive text material	4	4
The material presented with the help of interactive digital learning media can support an increase in students' motivation and interest in learning descriptive text material	3	4
The quiz questions selected are in accordance with the learning material	3	4
The score obtained	30	38

Source: Research 2025

The assessment of the suitability of digital interactive learning media was carried out by learning media experts. Validation was carried out in one stage and resulted in several improvement notes, including the addition of five examples of descriptive texts according to context, accompanied by images, and the addition of sound elements to the explanations to improve the interactive quality of the media. Revisions have been made based on this input, and the media have been declared suitable for testing in learning.

Table 2 presents the results of media expert validation of thirteen assessment indicators covering aspects of appearance, interactivity, color, text, layout, and ease of use. The total score obtained from all indicators was 55 out of a maximum score of 65, which, when converted to a percentage, reaches 84.6%. This percentage indicates that digital interactive learning media are in the “suitable” category for use in teaching descriptive text writing.

Table 2. Media Expert Assessment Results

Assessment indicators	Assessment
	Stage 1
The design of interactive digital learning media is in line with the characteristics of students	5
Interactive digital learning media is attractive to students	4
The features on the learning media are easy for students to use	4
Interactive learning media is appropriate for the development of students	4
The use of attractive images is appropriate for students	5
The use of color combinations in the design of interactive digital learning media is appropriate	4
The suitability of text colors with the background and material	4
The text used in interactive digital learning media is appropriate	4
The text size used in interactive digital learning media is appropriate	4
A harmonious layout accelerates understanding	5
Learning media can be used easily with various devices	4
Interactive digital learning media facilitates learning	4
Interactive digital learning media is interactive and can be used in learning	4
The score obtained	30

Source: Research 2025

The linguistic aspects were assessed by linguists. Validation was carried out in two stages to ensure that the language used in the learning media was in accordance with linguistic rules, spelling, and comprehension by elementary school students. In the first stage of validation, validators provided suggestions for improvement in the description of the media examples so that the sentences would be clearer and easier for students to understand. Revisions were then made according to these suggestions, followed by the second stage of validation.

Table 3 presents the results of language experts' assessments of seven indicators covering conformity with spelling, Indonesian language rules, student ability, clarity of meaning, grammatical accuracy, ease of understanding, and communication. The score obtained in the first stage was 32 out of 35, equivalent to 91%. The second stage of validation showed an increase in the score to 35 out of 35, equivalent to 100%. The average assessment score from the two stages of validation was 95.5%, which falls into the "highly acceptable" category. These results indicate that the language used in digital interactive learning media has met the language acceptability criteria and is suitable for use in learning.

Table 3. Results of Language Expert Assessment

Assessment indicators	Assesment	
	Stage 1	Stage 2
Language in accordance with refined spelling rules	5	5
Compliance with the rules of proper and correct Indonesian language	4	5
Language used is appropriate for the abilities of elementary school students	4	5
No double meanings of words used	4	5
Accurate grammar	5	5

Assessment indicators	Assesment	
	Stage 1	Stage 2
The language used in the interactive learning materials is easy for elementary school students to understand	5	5
The language used is communicative	5	5
The score obtained	32	35

Source: Research 2025

A summary of the results of the assessment of the suitability of teaching materials for writing descriptive texts using interactive digital learning media, based on validation by three experts, namely subject matter experts, media experts, and language experts, is presented in **Table 4**. The validation process was carried out in one to two stages according to the characteristics of the input from each validator.

Table 4. Summary of Expert Assessment

Feasibility Assessment	Percentage	Category
Material	73	Feasible
Media	84.6	Highly feasible
Language	95.5	Highly feasible
Average	84.3	Highly feasible

Source: Research 2025

Based on the assessment results provided by the three validators, an average percentage score of 84.3% was obtained, which falls into the “highly feasible” category. This achievement shows that the teaching materials developed have met the standards of content, appearance, language, and media usability for teaching descriptive writing at the elementary school level. Therefore, the interactive digital learning media designed is declared highly feasible for use in the learning process to improve the learning outcomes of fourth-grade students at SD Negeri 010037 Perk. Sei Dadap.

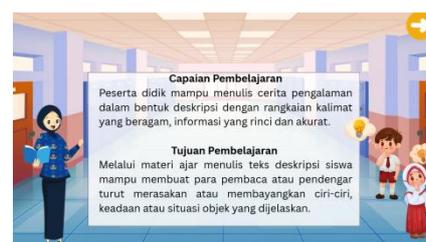
The digital interactive learning media that have been developed are not only assessed as feasible based on expert validation results, but also manifested in the form of visual products that are ready for use in the classroom. The final product is a series of interactive slides that display material designs, sample descriptive texts, and evaluation exercises integrated with the Canva and Quizizz applications. The presentation in the form of images provides a clear picture of the structure, appearance, and navigation of the media, making it easier for teachers and students to understand the flow of use and the learning content presented, see **Figure 1**.



(i) Cover page



(ii) Menu page



(iii) CP and TP page

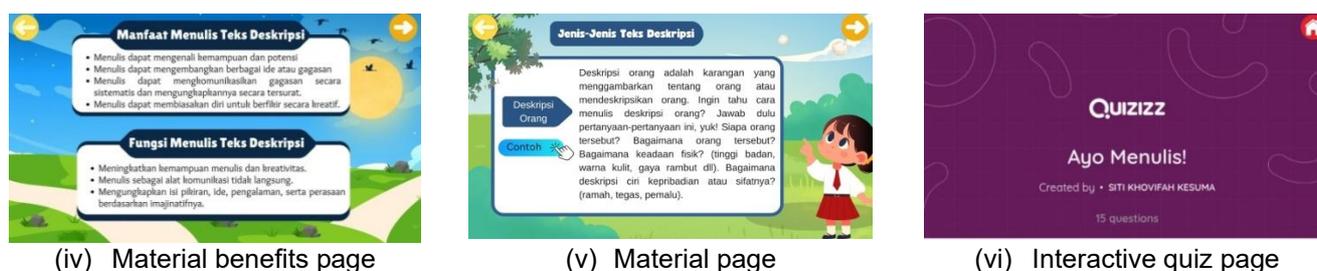


Figure 1. Results of interactive learning media development
Source: Research 2025

Media Practicality Test Results

The assessment of the practicality of teaching materials for writing descriptive texts using interactive digital learning media was conducted by three fourth-grade teachers at SD Negeri 010037 Perk. Sei Dadap. The assessment was carried out using a questionnaire to measure the ease of use, understanding of the display, and the suitability of the content to the learning needs of the students. Feedback from teachers is needed to determine the extent to which learning media can be applied efficiently in teaching and learning activities.

Table 5 presents the results of the practicality assessment by the three teachers on fifteen indicators. Teacher 1 gave a score of 69 out of 75 (92%), teacher 2 gave a score of 70 out of 75 (93.3%), and teacher 3 gave the same score of 70 out of 75 (93.3%). The average percentage of the three assessments is 92.9%, which falls into the “very practical” category. These results indicate that digital interactive learning media are perceived as highly practical and ready for direct use in the process of learning to write descriptive texts.

Table 5. Results of Practicality Tests by Teachers

Assessment indicators	Assessment scores		
	Teacher 1	Teacher 2	Teacher 3
Alignment of material with learning outcomes	5	4	5
Alignment of material with learning objectives	5	5	5
Material presented in learning media is organized sequentially	4	5	4
The material presented in the learning media is complete	5	5	5
Material presented in learning media is easy to understand	5	4	4
Clarity of material presented in learning media	5	5	5
Images clarify the material	4	5	4
Language used is in accordance with EYD	4	4	5
Appropriateness of language to the developmental level of students	4	4	4
Accuracy of punctuation	5	5	5
Ease of use of learning media	5	5	5
Use of letters/fonts in media is easy to read	4	5	4
The appearance of learning media is interactive	5	4	5
Provides learning assistance for students	4	5	5
Teaching and learning activities are more interesting	5	5	5
The score obtained	69	70	70

Source: Research 2025

Media Effectiveness Test Results

The effectiveness of teaching materials for writing descriptive texts using interactive digital learning media was tested through cognitive tests administered to 24 fourth-grade students at SD Negeri 010037 Perk, Sei Dadap. This assessment aimed to determine the impact of media use on significant improvements in student learning outcomes by comparing pretest and posttest scores. The assessment results showed a substantial increase in scores. The students' pretest scores ranged from 30 to 80, while their posttest scores increased sharply to a range of 80 to 100. Learning completeness was analyzed based on the Minimum Completeness Criteria (KKM) set by the school, which was 75. Details of the students' learning completeness before and after learning using digital interactive media are presented in **Table 6**.

Table 6. Completion of Student Learning Outcomes in Field Trials

Score	Category	Pretest		Posttest	
		Frequency	Percentage	Frequency	Percentage
75-100	Complete	8	33	24	100
0-75	Incomplete	16	67	-	-

Source: Research 2025

Based on the results in **Table 6**, it is known that during the pretest, only 8 students (33%) achieved learning completeness, while 16 students (67%) did not achieve the minimum score. After the implementation of teaching materials assisted by interactive digital learning media, all students, or 24 students (100%), successfully achieved scores above the minimum passing grade on the posttest. This improvement in learning outcomes indicates the effectiveness of using media in supporting the achievement of student competencies. Further analysis of the N-Gain scores indicates that 7 students were in the "moderate" improvement category, whereas the remaining 17 were in the "high" improvement category. This composition reflects that most students experienced optimal learning outcome improvement after interactive digital media-assisted learning was systematically implemented in class IV of SD Negeri 010037 Perk. Sei Dadap.

Discussion

The teaching materials in this study were developed using a systematic, interactive, and contextual approach. The media were compiled using Canva and Quizizz, consisting of 21 pages covering the introduction, learning outcomes, sparkers, descriptive text concepts, various examples, linguistic structures and rules, exercises, evaluative quizzes, and learning videos. This composition was intended to create a structured and enjoyable learning experience.

The use of interactive visual and digital media has been proven to increase student participation and engagement in learning (Islami & Dafit, 2023; Rosyiddin *et al.*, 2023). The integration of Canva in learning supports a more systematic visualization of writing concepts. Quizizz, as an evaluative medium, also encourages active engagement through interactive elements and real-time feedback (Adhwa *et al.*, 2025; Juliawan *et al.*, 2025). The preparation of materials equipped with various descriptive text examples can facilitate a concrete understanding of structure and style. The integrated use of visual and audio media has been proven to strengthen students' information absorption. The combination of technology-based

and active learning approaches also supports the strengthening of writing literacy at the elementary school level (Al Haq *et al.*, 2024; Islami & Dafit, 2023).

The validation of the feasibility of teaching materials for writing descriptive texts using interactive digital learning media shows that the developed product has met the criteria of high feasibility. The assessment results from three expert validators recorded an average feasibility of 84.3%, with details of 73% for subject matter experts, 84.6% for media experts, and 95.5% for language experts. This level of feasibility reflects that the media is in accordance with the aspects of content, appearance, language, and suitability for the characteristics of elementary school students. Learning media is declared feasible if it is able to facilitate systematic understanding of concepts, encourage active student involvement, and align learning objectives with content and presentation (Nafasya *et al.*, 2022; Nisa *et al.*, 2025). The use of digital technology in the development of teaching media has also been shown to improve product suitability when the process follows appropriate stages, beginning with needs analysis, design based on student characteristics, and expert testing. High scores from language experts indicate that the material is developed in a communicative manner and is in line with the cognitive development of students.

The relevance between teaching materials and the learning context in elementary schools also determines the suitability of media. Products that present attractive visualizations, clear navigation instructions, and concrete examples from the lives of students will be more easily accepted and understood. The suitability of digital teaching media also increases significantly when the content enables active, reflective, and in-depth learning experiences. The application of tools such as Canva and Quizizz in this development provides added value in terms of interactivity and the integration of technology-based learning evaluation (Alfatih *et al.*, 2024). Field observations show that students respond very positively when learning is delivered using Canva and Quizizz. Students appear to be more enthusiastic, active, and focused on learning. When the material is displayed through Canva, students find it easier to understand the content of the descriptive text because it is presented visually and organized. At the evaluation stage using Quizizz, students show high enthusiasm in answering questions because of the competitive quiz atmosphere and the immediate feedback from the application (Muliya, 2022). Although there have been several previous studies related to the use of Canva and Quizizz separately, the integration of the two in the context of developing descriptive text writing teaching materials in elementary schools has rarely been studied in depth (Damayanti, 2022). This opens up room for justification for conducting research that combines these two media as a single learning unit that can support writing skills while significantly improving learning outcomes.

The findings obtained in this study are reinforced by various previous studies showing that interactive digital media can meet pedagogical, technical, and psychological standards. Based on this, the media developed has met the requirements as a highly feasible learning product and can be used as a reference in the development of similar media at the elementary school level.

CONCLUSION

The results of the study indicate that the development of teaching materials for writing descriptive texts assisted by interactive digital learning media has proven to be feasible, practical, and effective in improving the learning outcomes of fourth-grade students at SD Negeri 010037 Perk. Sei Dadap. The developed media has been validated by subject-matter experts, media specialists, and language experts, with an average rating of highly feasible; it has received positive responses from user teachers and has led to a significant improvement in student learning outcomes, as indicated by N-Gain analysis. This success proves that interactive digital media can be an innovative solution to support descriptive text writing skills in elementary schools. Further research is recommended to test the application of this media on a larger scale and on other types of texts so that its benefits can be expanded continuously.

AUTHOR'S NOTE

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REFERENCES

- Adhwa, N., Faeza, N., Alwi, N. A., & Syam, S. S. (2025). Pemanfaatan teknologi digital dalam meningkatkan minat belajar bahasa Indonesia siswa di sekolah dasar. *Semantik: Jurnal Riset Ilmu Pendidikan, Bahasa dan Budaya*, 3(2), 329-339.
- Adib, M. F., Norsanti, T. R., Suriansyah, A., & Cinantya, C. (2024). Pembelajaran bahasa Indonesia di sekolah dasar dengan menggunakan model problem based learning. *Maras: Jurnal Penelitian Multidisiplin*, 2(4), 1909-1917.
- Al Haq, G. T., SB, N. S., & Purwati, P. D. (2024). Canva-based smart apps creator media to enhance comprehension skills of informational text for third-grade students. *International Journal of Elementary Education*, 8(2), 385-393.
- Alfatih, A. M., Jannah, H., & Raharjo, R. (2024). Pemanfaatan aplikasi canva sebagai media pembelajaran multimedia interaktif di madrasah ibtidaiyah. *SITTAH: Journal of Primary Education*, 5(2), 128-141.
- Asy'arie, A., Amir, A., & Suharman, A. (2025). Analisis pemanfaatan media audio-visual dan dampaknya terhadap minat belajar siswa di SDN 110 Lura. *Journal Scientific of Mandalika (JSM)*, 6(3), 517-524.
- Asyifa, N., Azizah, P., & Tania, V. (2024). Keterampilan menulis teks deskripsi dalam pembelajaran bahasa Indonesia sekolah dasar. *Semantik: Jurnal Riset Ilmu Pendidikan, Bahasa, dan Budaya*, 2(3), 244-252.
- Ayu, N., Suharno, & Chrysti Suryandari, K. (2023). Exploration: Creative thinking skills in writing essays media-based image series. *International Journal of Elementary Education*, 7(1), 1-7.
- Budiani, L. S., Sutisnawati, A., & Maula, L. H. (2023). Meningkatkan keterampilan menulis karangan deskripsi melalui penggunaan media diorama di sekolah dasar. *Jurnal Educatio FKIP UNMA*, 9(2), 1011-1016.
- Cahyani, A., & Hindun, H. (2023). Pemanfaatan media digital Canva pada pembelajaran bahasa Indonesia di kelas X SMK. *Jurnal Pendidikan dan Sastra Inggris*, 4(1), 117-125.
- Damayanti, E. (2022). Peningkatan hasil belajar bahasa Indonesia materi teks eksplanasi melalui media Canva dan aplikasi Quizizz pada pembelajaran daring. *Jurnal Ilmiah Pendidik Indonesia*, 1(2), 66-72.
- Fajriati, A. S., Humaira, M. A., & Efendi, I. (2024). Hambatan kemampuan berpikir kritis siswa dalam pembelajaran bahasa Indonesia menggunakan aplikasi Quizizz. *Karimah Tauhid*, 3(4), 5036-5047.
- Hidayat, H., Putrayasa, I. B., & Sudiana, I. N. (2025). Pendekatan keterampilan proses terhadap peningkatan kemampuan menulis teks deskripsi pada siswa sekolah dasar. *Jurnal Pendidikan dan Pembelajaran Indonesia (JPPI)*, 5(1), 245-254.
- Hidayati, I. D., & Aslam, A. (2021). Efektivitas media pembelajaran aplikasi Quizizz secara daring

- terhadap perkembangan kognitif siswa. *Jurnal Pedagogi dan Pembelajaran*, 4(2), 251-257.
- Huda, K., & Djono, D. (2025). Mengintegrasikan teori pembelajaran bermakna dan konstruktivisme dalam pembelajaran sejarah di era digital. *Jurnal Artefak*, 12(1), 137-146.
- Ifrida, F., & Pratiwi, D. R. (2024). Penerapan model pembelajaran problem based-learning berbantuan media audio visual untuk meningkatkan keterampilan menulis teks negosiasi siswa. *PTK: Jurnal Tindakan Kelas*, 4(2), 411-422.
- Islami, I., & Dafit, F. (2023). Pemanfaatan media pembelajaran berbasis teknologi informasi dan komunikasi di kelas V SDN 83 Pekanbaru. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 9(3), 1049-1059.
- Juliawan, A. D., Oasis, A. R., & Syamsiyah, N. (2025). Pemanfaatan aplikasi Quizizz pada pre-test dan post-test dalam pembelajaran bahasa Indonesia. *Kopula: Jurnal Bahasa, Sastra, dan Pendidikan*, 7(1), 206-218.
- Khalid, I. (2021). Peningkatan kemampuan menulis cerita pendek sebagai terapi ekspresif terhadap emosi pada peserta didik kelas XI MAN 3 Kota Jambi. *Jurnal Literasiologi*, 6(2), 1-13.
- Khoirunnisaa, A., Aldani, V., Alwi, N. A., & Syam, S. S. (2025). Dampak media digital dalam meningkatkan kemampuan bahasa Indonesia di SDN 10 Tiumang Kabupaten Dharmasraya. *Jurnal Pendidikan Guru Sekolah Dasar*, 2(3), 1-10.
- Latifah, D. N. (2023). Analisis gaya belajar siswa untuk pembelajaran berdiferensiasi di sekolah dasar. *LEARNING : Jurnal Inovasi Penelitian Pendidikan Dan Pembelajaran*, 3(1), 68-75.
- Mayoza, H., Harahap, T. H., & Manurung, S. A. (2024). Model pembelajaran problem based learning berbantuan media pembelajaran Articulate Storyline 3 untuk meningkatkan hasil belajar Matematika siswa. *Kognitif: Jurnal Riset HOTS Pendidikan Matematika*, 4(3), 1422-1433.
- Mega, M. D. C., Reffiane, F., Wakhyudin, H., & Suherni. (2023). Analisis penggunaan media Canva interaktif pada mata pelajaran bahasa Indonesia untuk siswa kelas IV di SDN Sendangmulyo 02 Semarang. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 9(04), 2030-2042.
- Meliyani, K., & Tirtayani, L. A. (2022). Buku digital berbasis literasi pada tema binatang untuk anak kelompok B taman kanak-kanak. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 10(1), 99-110.
- Mondolalo, D., & Mulyadi. (2023). Keterampilan menulis struktur deskripsi umum teks deskripsi dalam pembelajaran menggunakan teknik tugas menyalin pendekatan individual. *Jurnal Pembelajaran Bahasa dan Sastra*, 2(5), 693-700.
- Muliya, M. (2022). Penerapan media quizizz dalam meningkatkan hasil belajar siswa pada mata pelajaran bahasa Indonesia kelas X busana 2. *Enggang: Jurnal Pendidikan, Bahasa, Sastra, Seni, dan Budaya*, 3(1), 65-78.
- Mumpuni, A., & Afifah, N. (2022). Analisis pembelajaran membaca dan menulis permulaan siswa sekolah dasar. *Buletin Ilmiah Pendidikan*, 1(2), 73-80.
- Musdolifah, A., Istianingrum, R., Deden, D., Indriawati, P., Maulida, N., & Prasetya, K. H. (2023). Edukasi kalimat efektif sebagai upaya meningkatkan keterampilan menulis siswa kelas X BR 3 SMK Negeri 3 Balikpapan. *Abdimas Universal*, 5(2), 297-304.
- Nafasya, R. R., Jamilah, F., & Wahyuni, P. (2022). Pengembangan bahan ajar pembelajaran berbasis storyboard untuk menulis cerpen pada mata pelajaran bahasa Indonesia. *Silampari Bisa: Jurnal Penelitian Pendidikan Bahasa Indonesia, Daerah, dan Asing*, 5(1), 141-152.

- Ningrum, D. M. F., Ristiyani, R., & Roysa, M. (2023). Pembelajaran menulis cerita pendek menggunakan aplikasi wattpad. *Edukasiana: Jurnal Inovasi Pendidikan*, 2(1), 26-32.
- Nisa, A. C., Arismunandar, A., & Arnidah, A. (2025). Development of interactive learning media based on websites for the textile science course. *Inovasi Kurikulum*, 22(2), 985-998.
- Noveliana, J., & Ghani, A. R. (2022). Literasi membaca dan dampaknya terhadap hasil belajar bahasa Indonesia siswa sekolah dasar. *Mimbar PGSD Undiksha*, 10(3), 469-475.
- Nurazizah, S. A., & Darmayanti, M. (2024). Keterampilan menulis siswa sekolah dasar: Systematic literature review dan bibliometric analysis. *Aksara*, 36(2), 337-358.
- Nurjanah, F., & Faznur, L. S. (2022). Penerapan model pembelajaran brainstorming dalam meningkatkan keterampilan menulis teks eksplanasi berbantuan media Quizizz. *Metafora: Jurnal Pembelajaran Bahasa dan Sastra*, 9(1), 45-51.
- Qatrunnada, E., & Purwati, P. D. (2024). Penerapan e-flipbook berbantuan wordwall upaya meningkatkan pemahaman menyimak teks deskripsi siswa kelas III. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 10(4), 231-242.
- Rahmawati, F., Usman, H., & Nurhasanah, N. (2022). Pengembangan digital book dalam pembelajaran membaca pemahaman materi teks nonfiksi kelas IV SD. *Wahana Sekolah Dasar*, 13(1), 80-91.
- Rajagukguk, S., Tanjung, S., & Restu, R. (2025). Development of interactive multimedia on social studies learning outcomes of elementary school students. *Inovasi Kurikulum*, 22(2), 899-916.
- Rinawati, A., Mirnawati, L. B., & Setiawan, F. (2020). Analisis hubungan keterampilan membaca dengan keterampilan menulis siswa sekolah dasar. *Education Journal: Journal Educational Research and Development*, 4(2), 85-96.
- Rismawati, A. E., Sari, S. K. M., Asyifa, S. N., & Assidik, G. K. (2024). Peningkatkan pembelajaran menulis teks deskripsi melalui kesenian tari pada siswa kelas XII di SMKN 8 Surakarta. *Buletin Pengembangan Perangkat Pembelajaran*, 6(1), 54-63.
- Rohmaniyah, A., Haryadi, H., & Pristiwati, R. (2021). Media aplikasi kartu bergambar berbasis ARCS untuk pembelajaran materi menulis pantun dengan metode blended learning. *Jurnal Penelitian dan Pengembangan Pendidikan*, 5(3), 315-322.
- Rosyiddin, A. A. Z., Fiqih, A., Hadiapurwa, A., Nugraha, H., & Komara, D. A. (2023). The effect of interactive PowerPoint media design on student learning interests. *Edcomtech: Jurnal Kajian Teknologi Pendidikan*, 8(1), 12-24.
- Salahuddin, A., Asmara, D. N., & Angraini, F. (2025). Pengembangan media pembelajaran codibook (learning comik berbasis digital book) pada pembelajaran bahasa Indonesia materi majas kelas V SD. *Consilium: Education and Counseling Journal*, 5(1), 127-131.
- Setiawan, M. A., Sriadhi, S., & Silaban, S. (2024). Enhancing critical thinking skill by implementing electronic student worksheets based on guided inquiry in natural science subject for elementary school. *Jurnal Pendidikan Kimia*, 16(3), 225-229.
- Setyaningsih, R., Suryandari, K. C., & Tatminingsih, S. (2022). Pengaruh metode bercerita terhadap karakter dan keterampilan menulis narasi siswa kelas III Sekolah Dasar Negeri 1 Kebumen. *Dwija Cendekia: Jurnal Riset Pedagogik*, 6(3), 447-452.
- Sudrajat, A., Salsabila, F. G., & Marini, A. (2023). Digital-based flash card to increase social studies learning outcomes for elementary school students in the fourth grade. *Journal of Education Technology*, 7(2), 235-246.

- Suoth, L., Mutji, E. J., & Balamu, R. (2022). Penerapan pendekatan konstruktivisme Vygotsky terhadap pembelajaran bahasa Indonesia. *Journal for Lesson and Learning Studies*, 5(1), 48-53.
- Tarigan, F. N., Hasibuan, S. A., & Nurmayana. (2023). Pengembangan digital storytelling berbasis artificial intelligence untuk meningkatkan kemampuan literasi dan critical thinking mahasiswa. *Jurnal Dunia Pendidikan*, 4(1), 485-491.
- Trisnawati, & Fauziya, D. S. (2024). Faktor penyebab kejenuhan belajar siswa SMP kelas VIII pada pembelajaran bahasa Indonesia. *Aliansi: Jurnal Hukum, Pendidikan dan Sosial Humaniora*, 1(5), 214-226.
- Wahyudi, N. A., Amry, N. N., & Nurlaeni, B. (2024). Pembelajaran interaktif untuk meningkatkan keterampilan menulis berdasarkan perspektif siswa. *Karimah Tauhid*, 3(9), 10281-10291.
- Widhiyanto, R., Zulaeha, I., & Wagiran, W. (2024). Analisis kebutuhan modul pembelajaran keterampilan menulis teks deskripsi berwawasan kebinekaan global. *Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya*, 7(1), 151-162.
- Yosoa, V. D., Widiana, I. W., & Jayanta, I. N. L. (2024). The digital learning guidebook as a new breakthrough in improving students' reading and writing skills. *Journal of Education Technology*, 8(2), 249-256.