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Development of Visual Literacy-Based Learning Media to Enhance Writing Skills of Second Grade Elementary Students

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A B S T R A C T

Writing is one of the essential literacy skills required in early elementary education. However, many second-grade students struggle to develop ideas, sequence events, and construct coherent sentences when writing narrative texts. Therefore, this study aimed to develop a visual literacy-based learning media to improve the writing skills of second-grade elementary school students. The research employed a Research and Development (R&D) approach using the ADDIE model, which consists of Analysis, Design, Development, Implementation, and Evaluation. The media was designed in the form of interactive sequential picture panels to help students generate ideas and structure their writing based on visual cues. Validation was conducted by media and material experts, while product trials involved teachers and students at SD Negeri Pasucen in the 2024/2025 academic year. The media received a validity score of 87.5% from media experts and 88.3% from material experts, indicating that it was highly valid. Practicality results showed scores of 89.6% from teachers and 86% from students, categorized as very practical. Effectiveness testing revealed significant improvement, with an N-Gain of 79.08% ($p < 0.05$). In conclusion, the media is valid, practical, and effective in improving students' narrative writing skills.

1. Introduction

Advances in information and communication technology in the era of globalization over the past two decades have brought rapid changes to values, attitudes, and the development of science and technology (Maturbongs, 2019). These changes significantly influence the field of education, which plays a crucial role in shaping high-quality human resources capable of competing globally (Cite, Susilo, & Isbandiyah, 2019). Education becomes a strategic instrument to create intelligent, creative, and productive individuals, so the quality of education must continually improve to enhance students' abilities and produce a superior generation (Anggraeni, 2019).

According to Mantiri (2019), the primary goal of education is to improve human quality standards and create an enjoyable learning process. Agustina et al. (2019) emphasize that a nation's progress is determined not only by natural resources but mainly by the quality of its human resources. Therefore, improving educational quality is an essential demand, including through the development of effective teaching materials and learning media that foster students' critical and logical thinking (Ramdani et al., 2021). However, challenges are still found in elementary learning. Initial observations and interviews with second-grade teachers at SD Negeri Pasucen show that students' writing skills remain low. Students find it difficult to express ideas, understand text structures, and lack motivation in writing activities. Teachers still rely on conventional lecture methods without engaging learning media, causing students to struggle in developing critical thinking and creativity in writing.

Innovative strategies are therefore needed to increase students' engagement and improve writing abilities. One solution is optimizing learning media. Media plays a vital role in supporting successful learning processes and is particularly effective in improving critical thinking and writing skills (Deminda & Ahmad, 2022). Learning media also helps teachers present material more clearly and meaningfully (Putu & Arimbawa, 2021). Halimah, Solfarina, and Langitasari (2019) argue that media stimulates learning interest and improves comprehension, while Nurrita (2018) states that attractive and innovative media increases student motivation and focus.

Learning media functions as a tool used by teachers to convey information in ways that stimulate students' thinking, feelings, and learning interest. Arsyad, as cited in Tanjung & Silalahi (2022), explains that learning media includes all tools used to assist in delivering information so that students' attention and involvement increase. The AECT perspective further views media as forms and channels used to convey messages in an educational context. Salwani & Ariani (2021) add that learning media may be technical or physical and helps teachers deliver material more effectively. Thus, media acts as a bridge between teachers and students, creating meaningful learning experiences and supporting learning objectives.

One relevant type of media for elementary students is visual literacy-based learning media. Visual literacy is the ability to recognize, interpret, and understand visual messages through shapes, lines, and colors (Nurhayati et al., 2020). Through visual literacy, children can organize visual representations of a story logically even though their reading skills are still developing, making this approach suitable for early writing development.

UNESCO views literacy as a fundamental human right and the foundation of lifelong learning. Rahayu (2016) states that literacy involves reading and writing skills related to social, cultural, and language contexts. Saomah (2017) adds that literacy is not just the ability to read and write technically, but includes critical and reflective thinking about its application. Visual literacy, which involves understanding and interpreting visual messages through images, colors, and symbols (Nurhayati et al., 2020), can be developed through books, posters, films,

and pictures relevant to children's daily lives. Rohman (2022) highlights that visual literacy helps build character and supports critical thinking. Sentoso et al. (2021) strengthen this by stating that visual literacy is essential for students to analyze and understand information in the digital era.

Oktariani and Ekadiansyah (2020) further explain that visual literacy helps individuals not only gain knowledge but also use it reflectively to solve problems. Rohman (2022) states that visual literacy encourages imagination and creativity, while Fitriani and Aziz (2019) emphasize that literacy in the Industrial Revolution 4.0 era includes communication, collaboration, critical thinking, creativity, and innovation. Therefore, visual literacy media serves as an essential bridge to enhance critical thinking and writing skills among elementary students.

Writing is one of the essential language skills in education. Tarigan defines writing as a language skill used to communicate indirectly (Ramadhani, 2020). Dalman, cited in Nurlatifah et al. (2020), emphasizes that writing is a creative process of expressing ideas for informative, persuasive, or aesthetic purposes. In elementary schools, writing becomes a foundation for developing logical and communicative thinking. Chandra et al. (2018) state that writing in lower grades focuses on mechanical skills such as forming letters, words, and simple sentences. Hidayah (2018) highlights that writing skills influence students' cognitive and psychomotor development. However, Pratama et al. (2017) note that writing instruction in schools often emphasizes grammar rules without providing space for students to express ideas. Thus, innovative learning that allows students to write creatively through engaging media is necessary.

Research supports the importance of visual media in writing instruction. Sentoso et al. (2021) emphasize that visual literacy enables students to analyze information more effectively. Buchori et al. (2023) found that visual-based learning media improves children's writing and critical thinking abilities. Aulia & Munajah (2024) and Lailah & Muthi (2025) also confirm the effectiveness of audiovisual media in improving descriptive writing skills. These findings reinforce that visual-based learning media is crucial to enhance writing skills. In conclusion, improving elementary students' writing skills requires learning media that is engaging, contextual, and suited to children's characteristics. Therefore, this study focuses on developing visual literacy-based learning media to improve second-grade elementary students' writing skills. The results of this study are expected to contribute to the development of innovative and effective media to enhance writing instruction quality in elementary schools.

2. Methodology

This study employed a quantitative approach using the Research and Development (R&D) method. A quantitative approach was chosen because it produces findings obtained through statistical procedures and standardized measurements (Sujarweni, 2017). Research and development aim to produce new learning products and test their feasibility, practicality, and effectiveness. According to Sugiyono (2017),

development research is a systematic process to create new products or improve existing ones to enhance their effectiveness in learning activities.

The development model applied in this study was the ADDIE model, which consists of five main stages: Analysis, Design, Development, Implementation, and Evaluation (Fransisca & Putri, 2019; Sugiyono, 2020). This model was selected for its systematic, structured, and flexible nature, facilitating the researcher in guiding the development of high-quality learning media. The primary objective of this study was to produce visual literacy-based learning media that are feasible, engaging, and effective in improving the writing skills of second-grade elementary school students. The research was conducted at SD Negeri Pasucen during the even semester of the 2024/2025 academic year. The research site was purposively selected based on the need for innovative media development to enhance students' writing skills. The study took place from April to June 2025, covering planning, product development, limited trials, and field trials (Sujarweni, 2017). Site selection considered student characteristics and the readiness of the learning environment to implement visual literacy-based media.

The research procedure followed the five stages of the ADDIE model: (1) Analysis, which included analyzing learning needs, student characteristics, learning materials, and the condition of school facilities. (2) Design, which involved designing the concept of visual literacy-based learning media aligned with the curriculum and elementary students' basic competencies. (3) Development, which included producing the learning media and validating it with media and content experts to obtain feedback regarding content, appearance, and pedagogical suitability. (4) Implementation, which involved trialing the product with the experimental class to collect data on media practicality and effectiveness. (5) Evaluation, which entailed assessing implementation outcomes and revising the product based on formative and summative evaluation results (Sa'adah & Wahyu, 2020; Sugiyono, 2020). According to Fransisca and Putri (2019), the ADDIE model allows for continuous development by considering evaluation results from each previous stage.

The research subjects were second-grade students at SD Negeri Pasucen, divided into two groups: an experimental class (22 students) using visual literacy-based media and a control class (19 students) following conventional learning. The sample was selected using a simple random sampling technique, which involves randomly selecting participants without considering specific strata (Sugiyono, 2017). The trial stages included: (1) Limited trials to assess the initial feasibility of the media. (2) Field trials to evaluate the effectiveness of the media in a broader context. (3) Operational trials to examine the application of media in actual learning situations.

The instruments used included validation sheets for media and content experts, student response questionnaires, and writing skill tests. Instrument validity was tested using Pearson Product Moment correlation to determine whether each item was valid (Hidayat, 2021). An instrument was considered valid if the calculated r-value exceeded the r-table value. Reliability testing was subsequently conducted to

measure the internal consistency of the instruments using Cronbach's Alpha coefficient with SPSS 25 software (Ghozali, 2018). Instruments were categorized as reliable if Alpha ≥ 0.60, indicating good consistency. Data were collected through: (1) Observation to obtain data on initial learning conditions, student behavior, and responses to the media. (2) Interviews with the classroom teacher to gather information about student characteristics and learning obstacles. (3) Documentation, including photographs of activities, field notes, and student work. (4) Questionnaires to assess the validity and practicality of the media by experts and students. According to Sugiyono (2020), using multiple data collection techniques helps to obtain accurate and comprehensive information.

Data analysis was conducted quantitatively and descriptively using SPSS 25 to evaluate the product's validity, practicality, and effectiveness. (1) Product validity analysis was calculated using the percentage formula: $P = X/X_1 \times 100\%$, where the product was considered valid if the percentage ≥ 75% (Sendekie, 2022). (2) Feasibility analysis was based on questionnaire results classified into categories of "very feasible," "feasible," "moderately feasible," "less feasible," and "not feasible" (Sari, 2016). (3) Practicality analysis was obtained from student responses to the media, with a minimum of 75% required to be considered practical (Sendekie, 2022). (4) Effectiveness testing was conducted through normality tests (Shapiro–Wilk), homogeneity tests, and t-tests (Independent Sample T-Test) to compare pre-test and post-test results between experimental and control groups (Sugiyono, 2020). Additionally, N-Gain analysis was used to determine the improvement in learning outcomes after treatment. Media were considered effective if a significant increase in average learning outcomes was observed after use.

Data were presented systematically and structurally to facilitate understanding and reflect the comprehensive development process of the media. Quantitative data obtained from expert validation, student response questionnaires, and trials were presented in tables and percentages, while qualitative data from observations, interviews, and documentation were presented descriptively to provide context to the numerical results. Visual presentation was used to clarify patterns and relationships among variables, while descriptive narration interpreted the data meaning in line with the research objectives (Afnita et al., 2023).

To ensure data validity, the study applied method triangulation, comparing results from observation, interviews, documentation, and questionnaires (Nurrita, 2018). This approach ensured the consistency and accuracy of information obtained from various sources. Furthermore, expert validation (expert judgment) was conducted at each development stage to assess the suitability of content, presentation, and pedagogical aspects of the learning media (Sendekie, 2022). Through the combination of triangulation and expert validation, the data obtained in this study were deemed credible, reliable, and representative of the objectives of developing learning media.

3. Results and Discussion

The results of this study produced a visual literacy-based learning media designed to improve the writing skills of second-grade elementary school students. The media was developed to be engaging and interactive while considering students' developmental characteristics to prevent boredom and maintain learning motivation. The product consists of a sequence of illustrated story panels arranged logically to guide students in constructing narrative texts based on visual cues. The development process followed the ADDIE model, which includes the stages of Analysis, Design, Development, Implementation, and Evaluation. Through this systematic process, the media was developed, refined, and tested to ensure that it is feasible, practical, and effective for use in writing instruction.

Analysis (Needs Assesment)

The analysis stage was carried out to identify students' needs related to narrative writing skills in the second grade. Based on classroom observations and teacher interviews, students were found to struggle with generating ideas, sequencing events, and transforming sentences into coherent paragraphs. The learning media used previously consisted only of text and static images, which did not sufficiently capture students' attention or stimulate engagement. Curriculum analysis revealed that the basic competency requires students to be able to write simple sentences based on a series of pictures. The initial pre-test results showed that most students were not yet able to construct a narrative sequence in a logical and coherent manner.

Design (Product Design Stage)

Based on the results of the needs analysis, the researcher designed a visual literacy–based learning media in the form of *illustrated story panels*, namely a sequence of interconnected images similar to a simple comic strip. Each panel represents a story sequence (beginning, middle, ending), serving as a visual stimulus to help students generate ideas for writing. The design stage included determining page layout, color selection, font size, and the placement of text and instructional cues. The media was intentionally designed with simple layouts, bright colors, and interactive elements that align with the developmental characteristics of lower-grade elementary students. Based on the design results, the key components and features of the developed media are summarized in Table 1.

Table 1. Media Components and Features

No	Component	Description
1	Story panel display	Shows a sequence of illustrated panels to support story development.
2	Writing instruction box	Provides writing prompts and vocabulary support.
3	Navigation button	Allows students to move between story panels easily.

Table 1 shows that the designed media includes three key components that support the writing process. The story panel display functions as the main visual stimulus, helping students understand narrative flow. The writing instruction box guides

students in producing written sentences by supplying prompts and relevant vocabulary. Meanwhile, the navigation button ensures that students can move between panels easily and independently. These components demonstrate that the media was designed not only to support visual comprehension but also to enhance guided writing and user interaction.

Development (Product Development and Validation)

After completing the design stage, the developed media underwent expert validation to assess content feasibility and instructional relevance. The content expert evaluated several aspects, including alignment with curriculum standards, clarity of learning objectives, coherence between text and images, language appropriateness, and the media's ability to support students' writing skills. The purpose of this validation was to ensure that the media not only meets visual requirements but also provides accurate and pedagogically sound content. The detailed results of the content expert evaluation are presented in Table 2.

Table 2. Media Expert Validation Results

No	Assessment Aspect	Score Obtained	Max Score	%	Category
1	Visual design	8	9	88.9	Very valid
2	Color & graphics combination	9	10	90.0	Very valid
3	Readability & typography	8	9	88.9	Very valid
4	Ease of navigation	9	10	90.0	Very valid
5	Suitability with student characteristics	8	10	80.0	Valid
Average score		**42**	**48**	**87.5%**	**Very valid**

Table 2 shows that the media obtained an average score of 88.3%, categorized as very valid according to expert judgment. The highest scores were found in alignment with basic competencies, clarity of learning objectives, and coherence between images and text, each reaching 90%. These results indicate that the media content is curriculum-appropriate and effective in helping students understand narrative flow through visual support. Meanwhile, the aspect of writing skill support also reached a high score, confirming the media's instructional relevance.

Based on feedback from both the media expert and the content expert, several improvements were made to enhance the final product. The font size was increased to improve readability, and the contrast between the background colors and illustrations was adjusted to ensure visual clarity. Additional vocabulary prompts were integrated into the writing instruction box to provide students with richer word choices when composing sentences. As a result of these revisions, the final version of the media became more visually appealing, pedagogically effective, and ready for classroom implementation without the need for major modifications.The detailed results of the media expert evaluation are presented in Table 3.

Table 3. Content Expert Validation Results

No	Assessment Aspect	Score Obtained	Max Score	%	Category
1	Alignment with competencies	9	10	90.0	Very valid
2	Learning objectives clarity	9	10	90.0	Very valid
3	Coherence of visual literacy	8	9	88.9	Very valid
4	Language appropriateness	8	9	88.9	Very valid
5	Coherence image–text	9	10	90.0	Very valid
6	Support for writing skills	10	12	83.3	Valid
Average score		**53**	**60**	**88.3%**	**Very valid**

Following the expert validation process and revisions, the media reached its final form and was ready for classroom implementation. Improvements were made based on expert feedback, including enlarging the font size for better readability, increasing color contrast to improve visual clarity, and adding vocabulary prompts to support guided writing. These enhancements ensured that the media was not only visually appealing but also pedagogically effective in supporting narrative writing. The final appearance of the media after revision can be seen in Figure 1

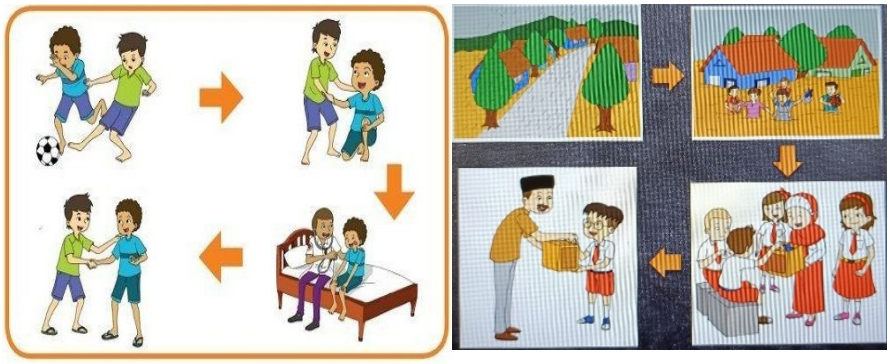


Figure 1. Final Media After Revision

Implementation (Field Trial / Media Application)

The media was implemented in Indonesian language learning for second-grade students at SD Negeri Pasucen, involving one classroom teacher and 22 students. At this stage, students observed the illustrated story panels in the media and wrote narrative texts based on the sequence of images. The teacher acted as a facilitator, guiding students to focus on story structure while allowing them to generate their own sentences independently. To determine the practicality of the media, both the teacher and students completed a practicality questionnaire. The teacher evaluated the media based on ease of use, clarity of instructions, curriculum alignment, and its ability to increase student motivation. The recorded assessment results are shown in Table 4 below.

Table 4. Teacher Practicality Evaluation Results

Aspect	%	Category
Ease of use	90.0%	Very practical
Clarity of instruction	90.0%	Very practical
Curriculum alignment	88.9%	Very practical
Student motivation	90.0%	Very practical
Average score	**89.6%**	**Very practical**

Table 4 indicates that the media is classified as *very practical* from the teacher's perspective. The highest scores were obtained in ease of use, clarity of instruction, and student motivation (90.0%), demonstrating that the media is simple to operate, provides clear guidance, and effectively encourages student engagement during writing activities. Curriculum alignment also received a high score (88.9%), showing that the media is consistent with instructional objectives and appropriate for classroom use without requiring complex preparation from the teacher. In addition to teacher evaluation, students assessed the media in terms of visual appeal, ease of understanding, language suitability, and support for idea development. Their responses are summarized in Table 5.

Table 5. Student Practicality Evaluation Results

Aspect	%
Visual & illustration appeal	90.0%
Ease of understanding	85.0%
Language suitability	80.0%
Idea development support	85.0%
Average score	**86% (Practical)**

Table 5 shows that students rated the media as *practical*, with an overall average score of 86%. The highest score (90.0%) was found in visual and illustration appeal, indicating that the media successfully captured students' attention and maintained their interest during learning. The media also helped students generate ideas (85.0%), which demonstrates its effectiveness in supporting narrative writing. Although the score for language suitability was slightly lower (80.0%), it still falls within the practical category, suggesting that the instructions were understandable for second-grade students. Overall, the student responses confirm that the media is engaging, easy to use, and supportive of the writing process.

Evaluation (Media Effectiveness)

The effectiveness of the developed media was measured using pre-test and post-test assessments, followed by N-Gain analysis and a t-test to determine whether the improvement in students' writing skills was statistically significant. The pre-test was administered before the media was implemented, while the post-test was given after students completed the learning activities using the visual literacy–based media. The comparison of the mean scores between the experimental and control classes is presented in Table 6.

Table 6. Pre-Test and Post-Test Result Comparison

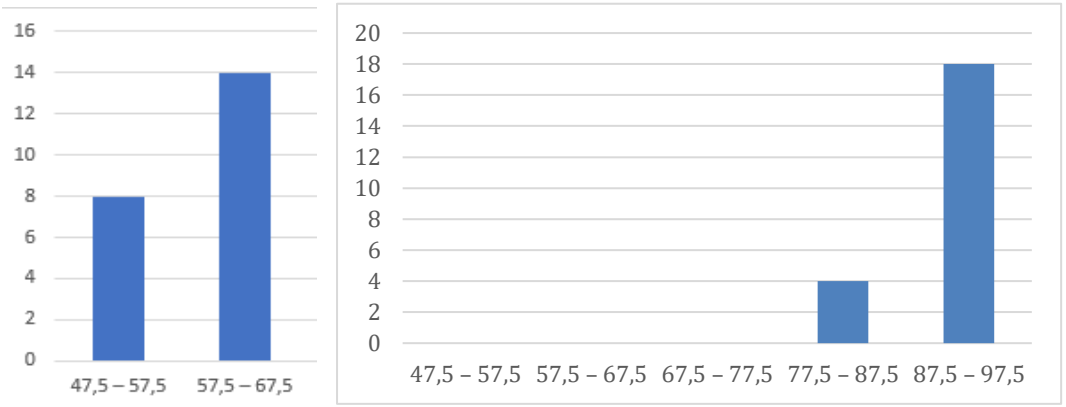
Class	Pre-test Mean	Post-test Mean
Experimental	66.18	89.27
Control	67.05	77.25

Table 6 shows a substantial increase in the writing scores of the experimental class after using the media. The mean score rose from 66.18 to 89.27, indicating a significant improvement in students' writing skills. In contrast, the control class, which received conventional instruction, showed a smaller increase from 67.05 to 77.25. These results indicate that visual literacy–based media helps students generate ideas and construct narratives more effectively than traditional teaching methods. To further analyze the magnitude of improvement and determine whether the difference between both groups was statistically significant, N-Gain analysis and a t-test were conducted. The N-Gain score determines the level of learning improvement, while the t-test measures the significance of the difference between the two groups. The results are presented in Table 7.

Table 7. N-Gain and t-test Results

Class	N-Gain (%)	Category	Sig. (t-test)
Experimental	79.08%	High	0.000 < 0.05
Control	31.04%	Low	-

The results in Table 7 indicate that the experimental class achieved a high N-Gain score of 79.08%, while the control class obtained only 31.04%, classified as low effectiveness. The t-test value of 0.000 (< 0.05) confirms a significant difference between the two groups, meaning that the visual literacy–based learning media had a statistically significant positive impact on students' writing outcomes. These findings demonstrate that the use of illustrated story panels is effective in improving students' ability to generate ideas, sequence events, and produce coherent narrative writing. The comparison is presented in Figure 2.



(a) (b)

Figure 2. Histogram of Pre-Test (a) and Post-Test (b) Score Improvement in the Experimental Class

To visually illustrate the improvement in students' writing performance, a histogram was generated to compare the distribution of pre-test and post-test scores in the experimental class. This visualization provides a clearer representation of the score shifts after the implementation of the visual literacy–based learning media. By comparing the two graphs, the increase in the frequency of higher scores becomes more evident, showing that more students achieved scores within the upper range after using the media. The histogram also helps demonstrate how the instructional intervention influenced student achievement not only at the group level, but also in terms of changes in score distribution.

Discussion

The results of the validity test indicate that the visual literacy-based writing learning media developed in this study met the "very valid" criteria in terms of both media and content aspects. Validation by media experts obtained a score of 87.5%, while content experts' validation reached 88.3%, both classified as "very valid." These findings suggest that the media meets feasibility requirements in terms of visual design, technical aspects, and pedagogical suitability. This result indicates that integrating visual and verbal elements in learning media can enhance the quality of student learning interactions. According to Sendekie (2022), valid learning media should combine visual appeal with content accuracy to effectively stimulate students' attention and comprehension. In this study, the combination of sequential images and simple writing instructions provided strong stimuli for students to connect imagination with written forms. This finding reinforces the results of Afnita et al. (2023), who emphasized that attractive visual displays play a crucial role in enhancing students' motivation and concentration in the initial stages of learning. The high validity achieved also aligns with Levie and Lentz (1982), who argued that visual illustrations can accelerate information processing and improve memory retention. Thus, the visual literacy-based media developed in this study

The practicality aspect shows that the media is very easy for teachers and students to use. Teacher assessment yielded a score of 89.6%, categorized as "very practical," while student assessment reached 86%, categorized as "practical." The high level of practicality indicates that the media is not only easy to operate but can also be quickly integrated into teaching and learning activities without requiring specialized equipment. Teachers reported that the media facilitated content delivery and increased students' enthusiasm for writing. This finding is consistent with Nurrita (2018), who stated that the practicality of learning media is determined by ease of use and alignment with users' needs in the field. High practicality also strengthens the role of media as a teaching aid, enabling teachers to optimize instructional time and enrich teaching methods. From the students' perspective, positive responses indicate that the media effectively stimulates their emotional and cognitive engagement in writing activities. Students felt more confident writing because the images helped them generate ideas and organize storylines. This condition reinforces the findings of Lailah and Muthi (2025), who highlighted that visual and audiovisual media can enhance active student engagement through more concrete and enjoyable learning experiences. Theoretically, this relates to Paivio's (1986) dual coding theory, which posits that simultaneously processing visual and

verbal information enhances conceptual understanding and memory retention. In this study, images functioned as "visual codes" supporting the processing of verbal information while students wrote. Therefore, this visual literacy media is considered practical because it integrates technical, cognitive, and affective aspects into a unified learning process.

Effectiveness serves as a key indicator of the success of developing learning media. Based on statistical analysis, the use of visual literacy-based media significantly improved students' writing skills. The t-test results showed a significance value (2-tailed) of $0.000 < 0.05$, indicating a significant difference in learning outcomes between the experimental and control classes. Additionally, the mean N-Gain of 79.08% falls into the high-effectiveness category. Empirically, this improvement demonstrates that visual literacy media provides a more meaningful learning experience by combining visualization and narrative elements. Sequential image visualization helps students understand event sequences, facilitating the writing of coherent and logical narratives. This aligns with Deminda and Ahmad (2022), who reported that animation- or visualization-based media can enhance narrative writing skills because students better comprehend story contexts. Furthermore, the role of visual elements in facilitating reasoning and imaginative expression is emphasized by Rohman (2022), who stated that visual literacy plays a critical role in improving students' critical and creative thinking abilities. By observing images, students can interpret meanings, connect events, and transform visual perceptions into written language. Pedagogically, the effectiveness of this media is also attributed to increased intrinsic motivation. Visually engaging media stimulates affective engagement, which ultimately enhances concentration and learning outcomes. This aligns with Keller's ARCS model (Attention, Relevance, Confidence, Satisfaction), where visual appeal (attention) and material relevance (relevance) serve as key triggers for active student engagement.

The findings of this study have important implications for both theory and practice in elementary language education. Theoretically, this study reinforces the concept of multimodal literacy, an approach that integrates text, images, and visual symbols as primary instructional media (Fitriani & Aziz, 2019). Through visual literacy, students not only read text but also "read images" as representations of meaning. Practically, the developed media proved to be effective and efficient for teachers in daily teaching activities. The media supports the implementation of student-centered learning, where students actively observe, interpret, and write based on visual stimuli. This is in line with 21st-century education policies that emphasize critical thinking, creativity, communication, and collaboration (4C). The study also contributes to the development of elementary-level learning media. Teachers can use similar media with different themes and contexts to train students' writing skills across various text types. The use of visual literacy can also be integrated into other subjects, such as Social Studies, Science, or Pancasila Education, to foster cross-disciplinary literacy skills.

Overall, the results indicate that visual literacy-based writing learning media is valid, practical, and effective in improving the writing skills of second-grade elementary students. The media functions not only as an instructional aid but also

as a cognitive bridge connecting visual experiences with verbal expression. The combination of image visualization and writing activities allows students to fully comprehend narrative concepts, from character introduction, conflict development, to final story composition. This is consistent with previous studies (Aulia & Munajah, 2024; Lailah & Muthi, 2025), which showed that consistent use of visual-based media enhances students' language skills and imagination. Therefore, this study demonstrates that a visual literacy approach in developing learning media is an innovative, relevant, and contextual strategy for elementary education. The media provides a strategic solution to low writing skills while strengthening the implementation of creative and meaningful learning in elementary schools.

4. Conclusion

Based on the results of the research and discussion, it can be concluded that the visual literacy-based writing learning media developed in this study is valid, practical, and effective in enhancing the writing skills of second-grade elementary school students. First, regarding validity, the media received a "very valid" assessment with a percentage of 87.5% from media experts and 88.3% from content experts. This indicates that the media meets the feasibility criteria in terms of visual appearance, content suitability, language, and pedagogical relevance. The developed media successfully integrates visual and textual elements, thereby helping students understand ideas and writing structures in a more concrete and meaningful way.

Second, regarding practicality, the assessment results show that the media is very easy to use for both teachers and students, with an average score of 87.8%. Teachers reported that the media helps save instructional time and facilitates material explanations, while students found the media engaging, user-friendly, and supportive in developing writing ideas based on the images provided. This indicates that visual literacy-based media can be effectively utilized in various learning contexts, both in whole-class and individual settings.

Third, regarding effectiveness, statistical tests showed that the use of the media led to a significant improvement in students' writing skills. The mean N-Gain value of 79.08% indicates high effectiveness, with a t-test significance value of $0.000 < 0.05$, demonstrating a significant difference between the learning outcomes of the experimental and control classes. The media proved capable of enhancing students' ability to write coherent sentences, align their writing with the context of the images, and enrich their vocabulary usage.

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