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Developing a Pop-Up Book to Enhance Indonesian Narrative Text Comprehension for Fourth-Grade Elementary School Students

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Abstract

This study presents a comprehensive development of an interactive Pop-Up Book designed as an educational tool for Indonesian narrative texts, specifically tailored for fourth-grade students at the Islamic Elementary School of Bahrul Ihsan in Bandung City. Employing a rigorous Research and Development (R&D) methodology, the study utilized the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) to ensure a systematic and empirical approach. Data was gathered through a variety of methods, including interviews with classroom teachers, validation questionnaires from media and material experts, and direct feedback from both the fourth-grade teacher and students following the media's implementation. The results indicate that the learning medium possesses high validity and practicality. Validation from experts was highly positive, with media experts assigning a remarkable rating of 99% and material experts rating it at 93%, both categorized as "Very Feasible." Similarly, evaluations from the implementing teacher and students were highly encouraging, with scores of 81% and 93% respectively, also classifying the medium as "Very Feasible." Therefore, this study demonstrates that the Pop-Up Book is an effective and engaging tool for enhancing student interest and promoting active learning. It successfully addresses the limitations of traditional, monotonous textbooks and aligns seamlessly with the pedagogical characteristics of Phase B students within the Merdeka Curriculum. This research makes a significant, evidence-based contribution to the advancement of innovative educational media for Indonesian language instruction.

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INTRODUCTION

In contemporary education, specifically in the context of the Merdeka Curriculum application in Indonesia, a notable and burgeoning trend is student-centered learning, which is interactive and flexible. This move aims to transition from traditional teacher-centered models to more comfortable learning environments that encourage hands-on learning and student participation. Here, the development of engaging and novel learning media is required to facilitate curriculum objectives. Pop-up books, as visual and interactive media, can provide students with different learning experiences (Najib et al., 2023; Nisaa' & Adriyani, 2021). Its applicability in learning the Indonesian language, especially a narrative text, is also interesting because it can present a story through a three-dimensional view as if it were a real situation (Suartini, A. W. 2024). Indonesian language learning is an important lesson that not only shapes the basic understanding of language but also plays a significant role in building students' personalities, orientations, and critical thinking (Rohmatun et al., 2025).

Reading comprehension is a fundamental skill in learning Indonesian at the primary level because it can influence students' success in comprehending texts of different genres at school and helps them understand other subjects (Cain & Oakhill, 2006; Kendeou et al., 2016). However, on a national level, there are severe problems in this respect. Indonesia's position in PISA 2022 was ranked 71st out of 81 countries, which is a worse ranking compared to mathematics and science (Kemdikbudristek, 2023). This result highlights the significant gap in reading skills among students compared to their other core skills (Amelia et al., 2024).

This problem is also reflected at the micro-level of the specific study site. In this case, an interview with a fourth-grade teacher of Indonesian language at MI Bahrul Ihsan Sekepondok, Bandung City, shows that the students have difficulty in determining the main idea contained within the narrative text. The teacher reported that the current learning aid is so restrictive and unstimulating, relying mainly on ordinary textbooks and a few storybooks from the school library. The static, one-sided, and perceptual representation of such materials fails to be as entertaining as it could be and turns students' attention and understanding away from the subject. To overcome these drawbacks, a dynamic and interactive learning tool that can effectively engage postgraduate students in the learning process and promote a deeper understanding of story content is crucial (Nabila et al., 2021).

The urgency of this research stems from the immediate need to enhance learning outcomes for Indonesian narrative texts in elementary education. The lack of stimulating learning media can lead to a decline in literacy skills and detachment from the cultural narratives embedded in these texts (Faradila & Purwati, 2025). By developing a novel interactive medium, such as a Pop-Up Book, this study offers a practical solution to directly improve student engagement and comprehension. The

three-dimensional and tactile features of this book provide a unique opportunity to transform passive reading into an active multisensory experience. This innovation is not merely a supplement to existing materials but represents a fundamental shift in how students interact with narrative content. The success of this research could provide a scalable model for developing similar media across various subjects, thereby supporting the broader objectives of the Merdeka Curriculum in fostering a more creative and dynamic learning environment.

Existing literature has explored the effectiveness of various learning media in language education, including digital applications and comic books (Nurlaila et al., 2025). For instance, studies have shown that Pop-Up Books are effective in improving reading comprehension (Maulidah, 2022). Research by Tetin Suartini, Anggia Suci Pratiwi, and Meiliana Nurfitriani (2024) also focuses on the development of a Pop-Up Comic Book for second-grade students. However, a notable gap remains in the research, specifically concerning the development and validation of an interactive Pop-Up Book as a standalone medium for Indonesian narrative text within the specific context of fourth-grade students at an Islamic elementary school.

The novelty of this research lies in its specific application of the R&D ADDIE model to a physical, interactive learning tool with culturally relevant content, in this case, a narrative titled "Dikenal karena Menari." This study also distinguishes itself by focusing on a different target learner group (fourth-grade students) and a more advanced set of reading skills, including the ability to identify the main idea, summarize text content, and answer comprehension questions, than previous studies. The primary contributions of this research are twofold: first, the validated Pop-Up Book itself, which can be directly adopted and adapted by educators; and second, a robust, data-driven framework for developing effective, concrete, and interactive learning materials.

This research is grounded in several key pedagogical and developmental theories that collectively inform the design and analysis of pop-up books. It draws heavily on constructivist theory, which posits that learners actively construct their knowledge and understanding through direct experience and interaction with their environment (Mattar, 2018). The tangible and interactive nature of pop-up books directly supports this theory by enabling students to physically engage with the narrative, thereby building a deeper cognitive connection with the material (Saleem et al., 2021).

Furthermore, this study is guided by Howard Gardner's theory of multiple intelligences, particularly addressing kinesthetic and spatial intelligence through the book's three-dimensional and tactile design (Greenberg et al., 2020). This approach ensures that the learning medium caters to diverse learning styles, moving beyond purely linguistic or logical-mathematical methods(Chai et al., 2025; Ferrero

et al., 2021). The ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) serves as the overarching systematic framework for the entire research process, providing a structured and rigorous methodology for the development and validation of the learning medium (Branch, 2009). This model ensures that each stage of the development process is evidence-based and responsive to the needs of the target audience.

The primary objective of this research was to develop a valid, practical, and effective Pop-Up Book learning medium for Indonesian narrative texts. This study aimed to evaluate the effectiveness of the developed medium in improving students' reading comprehension, critical thinking, and creativity skills. Ultimately, the goal is to provide a functional and evidence-based learning tool that can enrich the Indonesian-language curriculum for fourth-grade students, contributing to a more effective and engaging educational experience.

METHODS

This study adopted a Research and Development (R&D) approach, which was highly appropriate given the objective of creating and validating a new educational product (Okpatrioka, 2023). The R&D model is a systematic process used to develop and test the effectiveness of educational products, ensuring their validity and practicality before widespread implementation (Sugiyono, 2013). The specific R&D framework utilized was the ADDIE model (Branch, 2009). This model was chosen for its logical, step-by-step structure, which provided a clear roadmap for the entire research process, from identifying the initial need to evaluating the effectiveness of the final product. This study followed the systematic stages of the ADDIE model.

1. **Analysis:** The initial stage involved a needs assessment to identify the existing challenges in learning Indonesian narrative texts. This process included a thorough literature review and interviews with the fourth-grade teacher at Madrasah Ibtidaiyah (MI or Islamic Elementary School) Bahrul Ihsan, aimed at uncovering the difficulties faced by students and the shortcomings of the current teaching media.
2. **Design:** Following the analysis, a preliminary design for the Pop-Up Book was developed. This phase focused on planning the narrative content, visual elements, interactive features, and overall layout. The design was crafted specifically to meet the identified educational needs.
3. **Development**: In this stage, the prototype of the Pop-Up Book was physically created. It was then sent for validation by two groups of experts: a media specialist to assess the design and technical aspects, and a content expert to review the accuracy and relevance of the material. This validation process is vital for ensuring that the product meets quality standards before use.

4. **Implementation:** The completed Pop-Up Book was then introduced in the classroom with the fourth-grade students. This phase included both a limited-scale trial and broader application in a real learning setting. Observations were conducted to assess the students' levels of engagement and interaction with the materials. During this stage, the use of the product in teaching activities was closely monitored and analyzed, providing valuable feedback from users to evaluate the effectiveness of the product in supporting the learning process.

Data were collected using several techniques, including interviews and questionnaires. Interviews were conducted with teachers and students to explore their experiences regarding the use of learning media. Researchers used this questionnaire in R&D to gather insights from experts and potential users regarding the feasibility and validity of products, which were then used to inform product improvements. Through a questionnaire, the researcher improved this R&D product, and then, after it was perfected, the product was ready for dissemination and implementation at the school where the trial was conducted, namely Madrasah Ibtidaiyah (MI) Bahrul Ihsan. The questionnaires used were validation questionnaires for media experts, material experts, Indonesian teachers in the fourth grade, Madrasah Ibtidaiyah Bahrul Ihsan, and responses from fourth-grade students of MI Bahrul Ihsan. In accordance with ethical research practices, written consent was obtained from all participants prior to data collection. They were informed of the study's purpose, their right to withdraw at any time, and the confidentiality of their responses.

Expert validators in this research were selected based on professional and relevant criteria, having at least a master's degree in Education and Learning Media, a minimum of five years of experience as a teacher or researcher, a deep understanding of the curriculum and materials for fourth-grade Indonesian language, and a track record of academic or publication in the development of learning media. The researchers proceeded by conducting an implementation, which was a limited-scale trial. This trial was conducted on 10 students with varying abilities. After the limited trial was completed, the researchers continued with implementation on a larger scale, namely, for all students in the fourth grade of MI Bahrul Ihsan. This questionnaire used a Likert scale to measure responses by assigning a numerical value to each response to determine the percentage of its match.

Table 1. Likert Scale Score Assessment Guidelines

Qualitative Data	Score
Very Feasible	5
Feasible	4
Fairly Feasible	3
Not Feasible	2
Very unfeasible	1

Source:(Nurmalina, 2020)

The formula for calculating the average score of the questionnaire is as follows:

$$p = \frac{\Sigma x}{\Sigma xi} x100\%$$

Source: (Marlinda & Hanim, 2023)

Information:

p = Percentage Searched
Σx = Total Respondent Answer Score
Σxi = Sum of Ideal Values

Quality feasibility criteria were used to strengthen the validation results, using the average value analysis presented in Table 2.

Table 2. Criteria for the level of validity and revision of the product

Percentage (%)	Validation Criteria
81% - 100%	Very Feasible
61% - 80%	Feasible
41% - 60%	Fairly Feasible
21%-40%	Not Feasible
0% - 20%	Very unfeasible

Source: (Puti et al., 2023)

The collected data were analyzed qualitatively. The presentation analysis process involves data, data reduction, and drawing conclusions. Data reduction was performed by filtering relevant data, which were presented in the form of a descriptive narrative or table. Conclusions were drawn based on the results of an analysis that referred to the purpose of the study, namely, to evaluate the effectiveness of Pop-Up Book learning media.

RESULTS

1. Analysis

In the Analysis stage, the researcher conducts an in-depth analysis that includes the curriculum, Learning Outcomes (CP), teaching materials, and the characteristics of the students. Data at this stage were obtained through direct observation and in-depth interviews with fourth-grade teachers and several students at MI Bahrul Ihsan, Bandung City. This stage begins with identifying the problems faced by the school as a basis for designing targeted learning media development. The first step taken by the researcher was to interview the fourth-grade teacher to gain an understanding of the challenges in the teaching and learning processes.

The interview results indicate that the curriculum used in the madrasah is the *Merdeka* Curriculum, with a focus on competency development and differentiated learning. Based on the results of observations and interviews, it was found that the

students' reading abilities could be categorized as fairly good technically; however, they showed hesitation when answering questions related to the reading content, especially when determining answers based on text comprehension. One of the main challenges faced by students is difficulty in identifying the main idea, grasping the meaning of words or phrases in the reading, understanding both explicit and implicit meanings, and drawing conclusions from the content of a story. The learning media used so far have been limited to textbooks and some story collections from the school library, which are deemed less interesting and not contextual enough. The learning atmosphere tends to be monotonous, which leads to students being less enthusiastic about participating in lessons.

The researcher analyzed the text material of the story "*Dikenal karena Menari*," chapter IV of *"Meliuk dan Menerjang*" in the Indonesian Language textbook for the fourth grade from the Ministry of Education and Culture. Therefore, the researcher plans to develop a learning medium, a Pop-Up Book, based on the textbook and learning objectives derived from the CP Indonesian Language Phase B formulation. Thus, based on this needs analysis, there is a need for innovative learning media that can actively engage students and help them understand reading content more effectively.

In general, students' reading comprehension skills are relatively poor. The media available in schools is still considered less supportive, for example, in reading story texts, and only packaged books are used. The presentation of this material is often considered less interesting, and the pictures provided tend to be less clear, making it difficult for students to understand the story's content. The learning atmosphere becomes monotonous, and students become less motivated to study actively. Teachers must ensure effective learning to prevent students from feeling bored in the classroom, thereby balancing the purpose of teaching with their expectations. Therefore, educators are obliged to develop themselves so that the learning process becomes of higher quality.

The analysis showed that fourth graders tended to enjoy learning more when they were involved in play activities, working in groups, and doing hands-on practice. They feel more enthusiastic when they are allowed to learn in person. Based on the results of follow-up interviews with teachers, it was decided that the development of Pop-Up Book learning media would focus on Indonesian subject story material included in Phase B, which includes grade IV of SD/MI by referring to the Ministry of Education and Culture's *Merdeka* Curriculum book "*Dikenal karena Menari"* story text material chapter IV *"Meliuk dan Menerjang".*

2. Design

In this case, the design began by creating a Pop-Up Book design tailored to the study's subject matter. Subsequently, the indicators from the material are compiled, and the learning objectives are formulated, which will later be poured into the form

of a Pop-Up Book. The Pop-Up Book is designed to meet several criteria, including a full-color display. The content of this learning media includes a preface as an opening, CP, how to use Pop-Up Book learning media, and the content of the story *"Dikenal karena Menari."* In this process, the researcher used a laptop and the Canva application to design an attractive Pop-Up Book learning media product that suits students' needs.



Figure 2. Pop-Up Book Learning Media Cover

A book cover is the outside or cover of a book that protects the contents of the book and is the first visual attraction for the readers. The cover design uses A4 so that when the book is opened, it is A3 in size. It uses a glossy laminated hard cover and is made of 260 gsm Art Paper. The colors used on the cover are a combination of yellow, orange, blue, and green. The cover section contains information about the class (Canva sans font), subject (Hatton font), material chapter (Hatton font), story title (Funtastic font), and illustrations of pictures of dances in Indonesia, to show that this Pop-Up Book is intended for fourth-grade students in elementary school/MI subject Indonesian chapter 4 *"Meliuk dan Menerjang"* with the story title *"Dikenal karena Menari."*



Figure 3. Introduction, CP, and Media Usage Pages

The next page contained a preface to the learning media. This Pop-Up Book contains expressions of gratitude to God Almighty, enabling the author to create a Pop-Up Book based on the story *"Dikenal karena Menari."* In addition, the author's gratitude is extended to the extended family and supervisors, Mr. Dr. H. Asis Saefuddin, M.Si., and Mr. Alvin Yanuar Rahman, M.Or. In addition, the preface also contains the researcher's hope that this Pop-Up Book learning medium can be useful for its readers. There are learning outcomes (CP) for Phase B of Indonesian subjects, including the use of learning media with Canva sans fonts.



Figure 4. Story Content *"Dikenal karena Menari"*

This page contains the first paragraph of the story "Dikenal karena Menari" with Comic Sans font type and a font size of 19 cm. The 3D display employs the Pop-Up Book technique, featuring an internal stand within the dance image and a floating fold that showcases various dances in Indonesia, accompanied by a map of the country. In the second paragraph of the story, *"Dikenal karena Menari ".* The Comic Sans font type and a font size of 19 cm were used. The 3D display uses the Pop-Up Book V fold technique in the traditional house image and a parallel fold in the *Seblang* dance image. In the third paragraph of the story, *"Dikenal karena Menari"*. The Comic Sans font type and a font size of 19 cm were used. The 3D display uses the Pop-Up Book V-fold technique in the temple image and a parallel fold in the *Baris* dance image.

In the fourth paragraph of the story *"Dikenal karena Menari."* The Comic Sans font type and a font size of 19 cm were used. The 3D display uses the Pop-Up Book technique to parallel fold on the drawing of the *Baksa Kembang* dance. In the fifth paragraph of the story, *"Dikenal karena Menari."* The Comic Sans font type and a font size of 19 cm were used. The 3D display uses the Pop-Up Book V fold technique on the drawing of the traditional house of Situraja Village, West Java, and a parallel fold on the image of the *umbul* dance. In the sixth paragraph of the story, *"Dikenal karena Menari."* The Comic Sans font type and a font size of 19 cm were used. 3D display using the parallel fold technique in the *Seudati* dance image.



Figure 5. Researcher Biodata

This page contains brief biodata information on the Pop-Up Book learning media. The Canva sans font type and font size 13.9 cm were used. The 3D view used the parallel fold technique on the researcher's photograph.

3. Development

In the development phase, researchers begin to develop learning media based on the initial design prepared previously. This stage aimed to produce a learning medium in the form of a Pop-Up Book. The steps taken by researchers in developing the Pop-Up Book media included creating learning media that was assessed from design and content aspects, differing from the typical learning media used in

schools. The goal is for this media to help students understand and remember the material presented by the teacher more easily. In this initial stage, researchers designed the Pop-Up Book media by following the steps outlined in the storyboard during the design stage. These steps include arranging the initial design and printing illustrations that will be used in the Pop-Up Book learning media.

The next step in creating a Pop-Up Book learning medium involved printing the front and back cover designs, as well as designing the visual background using the Canva application. Next, the background is printed to align with the 3D illustrations displayed on each page of the Pop-Up Book. These 3D illustrations are then assembled and combined with other elements, such as the cover and background, containing explanations of the learning material. Various pop-up techniques were employed in creating this book, including V-folding, internal stand, floating fold, and parallel fold. Once the assembly process is complete, the Pop-Up Book medium undergoes a validation stage by experts, namely media experts from UIN Sunan Gunung Djati Bandung and fourth-grade Indonesian language teachers at MI Bahrul Ihsan in Bandung.

The validation test results are an important step in the development process. The purpose of this validation was to ensure that the resulting product complied with the targeted feasibility and quality standards. At this stage, the validation process involved two expert lecturers who were experts in their fields and Indonesian language teachers in the fourth grade of MI Bahrul Ihsan. The details of the implementation of this validation are described in the following sections.

Table 3. Recapitulation of the Results of Validation of Media Experts

No	Assessment Indicators	Assessment Aspect	Score
1.	Cover Design	1. Attractive media cover display	5
		2. The attractiveness of image placement and illustrations	5
		3. The color of the media title contrasts with the background color	5
		4. The appearance of layout elements on the front cover and the back cover harmoniously has rhythm and unity, and is consistent	5
2.	Media Size	5. Media size conformance to the ISO A4 standard	5
		6. Size fits with the content	5
		7. Tablep Book media thickness	4
3.	Content Design	8. Clarity of Pop-Up Book usage instructions	5
		9. Typeface used in Pop-Up Book	5
		10. The use of font variations (bold, italic, all capital, small capital) is not excessive	5
		11. Spacing between normal text arrangements	5
		12. Normal letter spacing	5

	13. Shape, color, size, proportion of objects/images according to reality	5
	14. 3D image quality on Pop-Up Book	5
	15. Consistent placement of layout elements	5
	16. Illustration placement does not interfere with understanding	5
	17. The arrangement of paragraphs in the media has been correct	5
	18. Media suitability to the needs of students	5
	19. Media depicts content/teaching materials that are in accordance with illustrations of daily life	5
	20. Pop-Up Books can be an interesting medium for students	5
	Total Score	99
	Percentage of Assessment	99%
	Category	**Very Feasible**

Table 4. Recapitulation of the Results of Validation of Material Experts

No	Assessment Indicators	Assessment Aspect	Score
1.	Content Validity	1. The materials presented are in accordance with the CP	4
		2. The material presented is complete and clear	4
		3. The concepts explained are concise and easy to understand	5
		4. The arrangement of the indicator layout elements is appropriate/harmonious so that it gives the impression of a good rhythm	5
		5. Suitability of the material with the purpose of the research	5
		6. The material presented is in accordance with what should be received by students	5
2.	Presentation Validity	7. Writing material is organized, interesting, and not excessive	5
		8. Color selection to distinguish important material information	5
		9. Compatibility of images and illustrations with the material	5
3.	Language Aspects	10. Effective use of language and correct enhanced spelling (EYD)	4
		11. Grammatical accuracy used in Pop-Up Book learning media	4
		12. Spelling accuracy used in Pop-Up Book learning media	4
		13. The effectiveness of sentences used in Pop-Up Book learning media	5

14. Sentence structure accuracy	5
15. Ability to motivate students	5
Total Score	70
Percentage of Assessment	93%
Category	**Very Feasible**

Table 5. Recapitulation of the Results of Validation of Indonesian Language Teachers of the fourth grade at MI Bahrul Ihsan

Assessment Aspect	**Score**
1. The completeness of the material in the CP is listed	5
2. Accuracy of concepts and definitions in the developed media	4
3. Accuracy of images and illustrations on developed media	4
4. Pictures and illustrations of story material	5
5. Encourage curiosity	4
6. Creating the ability to ask questions	3
7. Conceptual collapse in Pop-Up Book media	4
8. The existence of a preface in the Pop-Up Book media	4
9. Understanding of the message or information presented in the Pop-Up Book media.	4
10. Grammatical accuracy	4
11. Spelling accuracy	4
12. Sentence effectiveness.	4
13. The media used is interesting and easy to run or access	4
14. The color of the media title contrasts with the background color	3
15. The spacing between text and illustrations used in the Pop-Up Book media is appropriate	4
16. Separation between paragraphs is clear	4
17. There are ways to use media	4
18. Media presentation can increase students' interest in learning	5
Total Score	**73**
Percentage of Assessment	**81%**
Category	**Very Feasible**

Table 6. Expert Validation Results on Pop-Up Book Learning Media

Media Expert		**Material Expert**		**Teachers of the fourth grade**	
Percentage	**Category**	**Percentage**	**Category**	**Percentage**	**Category**
99%	Very Feasible	93%	Very Feasible	81%	Very Feasible

Based on the results of validation from experts, 99% of media experts rated this application as "Very Feasible," 93% of material experts rated it as "Very Feasible," and 81% of validators from Indonesian teachers in the fourth grade at

MI Bahrul Ihsan rated it as "Very Feasible." To measure its effectiveness, the application was tested on students at MI Bahrul Ihsan.

Tabel 7. Improvement Results from Material Experts and Media Experts

No.	Before the Revision	After the Revision
1.		
2.		
3.	Before the expert judgment of the material expert, there was no conclusion to the story.	

In the aspect of Content Design in point 1, the validator recommends arranging the images neatly, specifically in the first paragraph of the story, because before the revision, the placement of pictures of various dances from Indonesia was not precise, and improving the first paragraph and presentation structure to be more systematic and easier to understand. After the revision, the placement of images of various Indonesian dances was precise and consistent.

In the Content Design aspect at point 2, the validator recommends adding images to the author's biography page to make it more appealing. The photos have been arranged neatly because, before the revision, they looked less attractive on the author biography page. After adding images and decorations, the author's biography page appeared more engaging.

In terms of content, particularly at point 3, the validator from the content expert provided significant input in the form of a recommendation to add a conclusion section to the story text *"Dikenal karena Menari."* Before the revision and assessment by the content expert, the story script in the Pop-Up Book media did not include a conclusion that summarized the overall content of the story. The absence of this section is considered a shortcoming because the conclusion is an essential element in the structure of narrative texts, which functions to reaffirm the moral message or values that the author intends to convey. Therefore, based on the suggestion from the content expert, the researcher revised the text by adding a closing paragraph that summarized the story's content.

In general, the validation results indicate that the pop-up book learning media designed meets academic standards and is suitable for use in the learning process. Most of the assessed aspects fell into the highly feasible category. Meanwhile, some points that still require improvement have been addressed to ensure the effectiveness of the media in supporting the enhancement of students' learning quality.

4. Implementation

After the validation stage is completed, the next step is to conduct a limited-scale trial to evaluate the Pop-Up Book learning media. This trial was conducted in a small group of 10 students who were asked to provide feedback by filling out a student response questionnaire. The purpose of this questionnaire was to assess the practicality of Pop-Up Book learning media from the students' perspective.

Table 8. Results of Limited-Scale Student Response Questionnaire

No.	Assessment Aspect	Percentage	Criteria
1.	Display	94,25%	Very Feasible
2.	Presentation of Material	90%	Very Feasible
3.	Interest	95,33%	Very Feasible
Overall Rating		**93%**	**Very Feasible**

The results of the limited-scale trial conducted on students obtained data on the percentage of scores, namely 93%, which is included in the "Very feasible" category. This was obtained from the total responses of the 10 students. After completing the limited-scale trial stage, the next step is to conduct a large-scale trial. This stage aimed to test the effectiveness of the use and application of Pop-Up Book learning media. A large-scale trial was carried out in the fourth grade of MI Bahrul Ihsan, with a total of 20 students. The following are the results of the questionnaire on the use of Pop-Up Book learning media that students filled out.

Table 9. Results of Large-Scale Student Response Questionnaire

No.	Assessment Aspect	Percentage	Criteria
1.	Display	92,75%	Very Feasible
2.	Presentation of Material	92,75%	Very Feasible
3.	Interest	94,66%	Very Feasible
Overall Rating		**93%**	**Very Feasible**

The results of a large-scale trial conducted on students obtained data on the percentage of scores, namely 93%, which was included in the "Very feasible" category. This was obtained from the total responses of 20 students. This shows that the developed Pop-Up Book learning media has an important role in being academically feasible and relevant to students' preferences, needs, and levels of understanding, so that students can learn with enthusiasm and optimally. The learning materials have proven to be effective in supporting learning activities and achieving the learning goals that have been set, especially in the fourth-grade Indonesian subject, with a focus on the story *"Dikenal karena Menari."*

5. Evaluation

Evaluation was conducted at each stage of the ADDIE model to ensure the effectiveness and suitability of the Pop-Up Book learning media for Indonesian language subjects in the fourth grade of MI Bahrul Ihsan. As part of the analysis phase evaluation, the researcher conducted data triangulation through classroom observations, teacher reflections, and initial student responses to the ongoing learning process. This evaluation aims to ensure that the developed media is aligned with the learning needs of fourth-grade students and can effectively address challenges in improving their reading comprehension skills. In the Design stage, the learning media design is systematically evaluated against various aspects of learning materials, such as content structure, presentation flow, visual appearance, and interactive elements. Experts with competencies in instructional design, Indonesian language materials, and fourth-grade MI education conducted this validation.

In the Development stage, evaluation was conducted through expert validation, which involved consulting learning media experts, content material experts, two lecturers, and a classroom teacher. Revisions were made based on the feedback provided, including visual adjustments, narrative text arrangement, and content alignment with the curriculum. The media expert recommended improving the placement of images and adding a biographical illustration of the author. In contrast, the content expert suggested refining the opening paragraph of the story and adding a conclusion for clarity and appeal.

Through the validation process, the Implementation Stage was evaluated using both small- and large-scale field trials, with a feasibility percentage of 93% for each.

This media is effective in increasing the enthusiasm and understanding of fourth-grade students at MI Bahrul Ihsan regarding the story material "Famous for Dancing" in Indonesian language lessons.

DISCUSSION

1. Analysis Stage

In the analysis phase, observations and interviews with teachers and students indicated that many learners encountered difficulties in grasping and identifying the main ideas in narrative texts. They struggle to understand the meanings of particular words or phrases, comprehend both explicit and implicit messages, and draw conclusions from these texts. Overall, students' reading comprehension skills are notably lacking. Additionally, the currently available learning materials are primarily restricted to textbooks and uninspiring story collections, leading to a less stimulating learning environment. Consequently, students tend to adopt a passive role in their education. This situation underscores the urgent need for innovative learning media that align with the characteristics of Phase B students, who flourish in play-based activities, group discussions and hands-on practices. This necessity has prompted researchers to thoroughly assess the learning needs encompassing the curriculum, core competencies, and the attributes of fourth-grade students at MI Bahrul Ihsan.

The Merdeka Curriculum, which emphasizes differentiated and competency-based learning, is currently being implemented. As a result, the development of Pop-Up Book learning media grounded in the story "Dikenal karena Menari" is considered a relevant and promising solution to boost student engagement and enhance reading comprehension in a more enjoyable manner. Effective learning media are recognized for their ability to be widely integrated into the teaching and learning process, ultimately improving students' understanding and academic outcomes (Mariyah et al., 2021). This research is aligned with Vygotsky's constructivist learning theory, which posits that students learn more effectively when they are actively engaged—both physically and mentally—in the learning process. The exploration activities facilitated by Pop-Up Books promote scaffolding and social interaction, enriching the overall learning experience (Masgumelar & Mustafa, 2021).

2. Design Stage

In the Design phase, the researchers began by developing a framework for the Pop-Up Book that aligned with the story material, *"Dikenal karena Menari"* The material indicators were designed based on the Learning Outcomes (CP) of phase B of the *Merdeka* Curriculum, and the learning objectives were operationally defined to be expressed in an interactive book format. The visual design prioritized a full-color display, the use of easily readable fonts, and the integration of pop-up

elements, such as V-fold and parallel fold, that highlight illustrations of traditional dances and local cultural backgrounds. Canva was used as the design platform, facilitating layout adjustments according to students' needs (Nillofa Ende et al., 2022).

Additionally, the use of the Canva design application facilitates the creation of engaging media that is child-friendly and aligns with the cognitive development characteristics of elementary school students (Bu'ulolo & Wardani, 2025). This design evaluates the structure of the content, layout arrangement, and ease of use of media as a learning tool. The validation process involved media experts, content experts, and classroom teachers, resulting in recommendations for improving visual consistency, narrative structure, and layout tidiness. This method aligns with the ADDIE model approach, which emphasizes participatory and iterative design to produce effective learning media (Sugiyono, 2021).

3. Development Stage

During the development stage, the learning media Pop-Up Book *"Dikenal karena Menari"* was developed gradually, involving validation from experts, including media design experts, subject matter experts, and classroom teachers. This development process aims to ensure that the resulting product meets the feasibility aspects of content, visual appearance, and effectiveness in supporting the learning process. Validation yielded very positive results, with feasibility levels of 99% from media experts, 93% from subject matter experts, and 81% from classroom teachers, all falling within the "Very Feasible" category. This process aligns with the user-centered design principle, which emphasizes the importance of involving end users in product development to meet their needs and characteristics (Al-Sa'di & McPhee, 2021). Furthermore, it concludes that the Pop-Up Book media, which is developed systematically and validated, is capable of improving the quality of learning and actively engaging the students. This aligns with the statement that learning media should serve as a communication tool for delivering lesson materials. To ensure that innovation in learning media operates optimally in achieving its intended goals, it is necessary to pay attention to several key aspects, including a strong theoretical foundation, a theoretical basis for learning, and the conditions of the learning environment (Wardani et al., 2024).

4. Implementation Stage

The story-based book *"Dikenal karena Menari"* underwent limited and extensive trials to evaluate its practicality and effectiveness in learning. The limited trial was conducted on 10 students, and the results showed a response percentage of 93%, falling into the "Very Good" category. Similar results were obtained in an extensive trial involving 20 students, which also showed a positive response rate of 93%. This indicates that the developed Pop-Up Book is suitable in terms of design and content and capable of providing an engaging, relevant learning experience that meets the characteristics and needs of fourth-grade MI students. This media helps

students better understand reading material while also increasing their motivation to learn. This finding aligns with the research of Nurlaili et al. (2024), who found that Pop-Up Book media can enhance students' reading interest and comprehension owing to its visual, interactive, and contextual presentation. The study also stated that pop-up media is effectively applied in Indonesian language learning because it can stimulate active engagement.

Although the results demonstrate the effectiveness of the developed media, this study has several limitations, including the material's focus on a single story, *"Dikenal karena Menari."* The recommendations for further research are to develop more varied story text materials in the *Merdeka* Curriculum with the Pop-Up Book technique, in addition to being able to develop this media for other grade levels, especially at the lower levels, such as grades I-III, by adjusting to the needs of children's cognitive development and language.

CONCLUSION

The researcher conducted a comprehensive study examining various aspects of the curriculum, learning outcomes, teaching materials, and student characteristics at MI Bahrul Ihsan in Bandung City. Data were collected through direct interviews with both teachers and students. The findings revealed that the institution implements the Merdeka Curriculum successfully. Initial analyses indicated that students experienced challenges in grasping the main idea, understanding the meanings of words and expressions, interpreting both explicit and implicit messages, and summarizing narrative content. Overall, students' reading comprehension skills were found to be limited.

The available learning materials were mostly restricted to packaged books that lacked engaging visuals, creating a monotonous learning environment and subsequently diminishing student motivation. In response to these findings, the researcher developed specific learning indicators and established clear learning objectives to guide the media-design process. The new educational media were crafted with vibrant colors and included a foreword, clearly defined learning outcomes, instructions for use, and engaging story content.

Based on the research outcomes, it can be concluded that the Pop-Up Book learning media, centered around the story "Dikenal karena Menari," is highly suitable and effective for Indonesian language learning among Grade IV MI students. This media was developed using the ADDIE model, which includes the stages of analysis, design, development, implementation, and evaluation. It received validation from media experts, who scored it at 99%, material experts at 93%, and classroom teachers at 81%, all categorizing it as "Very Feasible."

The media underwent both limited and extensive trials, receiving overwhelmingly positive feedback from students, with an average satisfaction

rating of 93%. This innovative approach has demonstrated its effectiveness in enhancing students' interest in engaging with story content in a fun and interactive way. Additionally, it addresses the shortcomings typically associated with traditional learning media, such as monotonous textbooks, and supports teachers in delivering lessons in a more engaging and meaningful manner. This fosters an active and participatory learning environment that aligns with the characteristics of Phase B students in the Merdeka Curriculum.

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