

DEVELOPMENT OF A PICTURE AND PICTURE-BASED FABLE BOOK TO IMPROVE ELEMENTARY SCHOOL STUDENTS' READING COMPREHENSION

¹ *Risya Faiza Rizqi Wildan, ²Panca Dewi Purwati

¹Pendidikan Guru Sekolah Dasar, Faculty of Education and Psychology, Universitas Negeri Semarang, Central Java, Indonesia

*Corresponding Author Email: risyafaiza@students.unnes.ac.id

Article Info	Abstract
Article History Received: January 2026 Revised: March 2026 Accepted: June 2026 Published: July 2026	<i>This study aimed to develop, validate, and examine the effectiveness of the Bintang Fauna fable book based on the Picture and Picture learning model in improving the reading comprehension skills of second-grade students at Semarang. The research employed a Research and Development (R&D) design using the Borg and Gall development model, which includes stages of needs analysis, product design, expert validation, revision, product trial, and effectiveness testing. The participants were second-grade elementary school students who were involved in the product trial. Data were collected through observation, interviews, questionnaires, expert validation sheets, and reading comprehension tests administered as pretests and posttests. The validation results showed that the developed fable book was highly feasible for classroom use, with material expert validation reaching 91.25% and media expert validation reaching 95%. These results indicate that the content, language, presentation, and visual design of the book were appropriate for young learners. The effectiveness test demonstrated a significant improvement in students' reading comprehension after using the Bintang Fauna fable book, as shown by the paired sample t-test results and moderate N-Gain scores. Therefore, the Bintang Fauna fable book is feasible and effective as instructional material for improving elementary students' reading comprehension.</i>
Keywords Bintang Fauna fable book; Picture-Picture learning model; Reading comprehension; Fable texts;	
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INTRODUCTION

Education is a conscious and deliberate endeavor to preserve and transmit culture from one generation to the next through learning environments and processes that enable students to develop spiritual and religious strength, self-regulation, intelligence, moral character, and the skills required by society and for personal growth. Education functions not merely as a medium for the transfer of knowledge but also plays a central role in shaping character, values, and cultural identity in line with contemporary developments. Lenta and Mustika (2023) explain that school culture plays a significant role in fostering students' character education, as through school cultural practices, learners are able to internalize moral values, social skills, and positive behaviors aligned with societal norms. Therefore, educational processes, both formal and non-formal, must be designed holistically to address global challenges without neglecting the moral and cultural foundations of the nation. In this context, teachers hold a strategic role as learning facilitators who not only deliver instructional content but also embody and transmit values that contribute to the development of students' personality and independence in accordance with

national education goals, namely producing individuals who are faithful, pious, morally upright, intelligent, creative, independent, and democratic.

Indonesian language learning plays a crucial role in character education as it encompasses four fundamental language skills: listening, speaking, reading, and writing (Santika & Sudiana, 2021). Each of these skills contributes to the development of students' character traits, including accuracy, creativity, responsibility, discipline, and honesty. Among the four skills, reading is regarded as one of the most essential, as reading literacy is a fundamental human right that supports lifelong learning. Reading enables students to comprehend, apply, and further develop the knowledge acquired in school. However, students' reading literacy levels remain relatively low, despite the fact that reading is a complex process involving the acquisition of knowledge and the interpretation of written messages, which requires appropriate and engaging instructional strategies to support effective learning.

Permanik (2024) states that reading is a receptive written language skill that enables children or students to receive, comprehend, and interpret new information, while also strengthening their thinking abilities and broadening their perspectives in the process of language learning. In addition, reading helps ensure that the values embedded in stories remain meaningful for both educational and entertainment purposes (Purwati, 2024). Therefore, the development of instructional reading materials is a crucial component of reading instruction, as it not only teaches reading skills but also actively engages students in activities such as predicting text content, responding to reading materials, and retelling stories either orally or in written form. Field observations conducted in Grade II at SDN Pandeanlamper 03 revealed several issues, including teachers' reliance solely on thematic textbooks without supporting materials, the continued use of conventional teaching methods, limited utilization of illustrated fables, and the absence of specifically developed fable-based instructional materials.

To address this issue, it is necessary to develop reading instructional materials that are aligned with students' learning characteristics and needs. Magdalena et al. (2020) state that teaching materials are systematically and specifically designed learning resources intended to achieve particular competencies. Teaching materials are developed not only to meet formal curriculum demands but also to facilitate teachers' instructional tasks and assist students in understanding and relating learning content to contemporary contextual needs (Ramadhani et al., 2024). In this regard, the selection of an appropriate instructional model is also crucial. The Picture and Picture learning model is an innovative approach that utilizes images as the primary stimulus to enhance students' interest and comprehension. This model is considered effective because it encourages students to think more actively, systematically, and logically through the use of sequenced visual representations (Uno & Iskandar, 2020).

The development of reading instructional materials based on the Picture and Picture learning model was realized in the form of a fable storybook entitled *Bintang Fauna*. Chaerunnisa et al. (2024) argue that the systematic development of fable-based instructional materials can enhance students' reading interest and reading skills. Fables were selected due to their strong appeal to elementary school students and their capacity to convey moral values. The *Bintang Fauna* book was designed to improve reading literacy among second-grade students through engaging, educational, and contextually relevant illustrated fable stories that integrate local content from the city of Semarang, such as Goa Kreo and the Semarang Zoo. Furthermore, the book incorporates the Picture and Picture approach to support students' comprehension through visual scaffolding while fostering active participation, critical thinking, and collaboration.

Based on the identified research problems, this study aims to (1) describe the design of the *Bintang Fauna* fable book developed using the Picture and Picture learning model as an effort to enhance the reading comprehension of second-grade students at SDN Pandeanlamper 03 Semarang; (2) describe the results of the validation testing of the *Bintang Fauna* fable book

based on the Picture and Picture learning model in improving students' reading comprehension; and (3) describe the results of the effectiveness testing of the implementation of the Bintang Fauna fable book based on the Picture and Picture learning model in improving the reading comprehension of second-grade students at SDN Pandeanlamper 03 Semarang.

The novelty of this study lies in the development of early reading instructional materials based on the Picture and Picture learning model for second-grade elementary school students to enhance their comprehension of fable texts. This visual-based learning model has received limited attention in studies at the lower elementary level, despite its strong alignment with students' concrete thinking characteristics and their interest in illustrated stories. This research not only systematically designs instructional materials but also integrates them with an appropriate learning model and the actual learning needs of students at SDN Pandeanlamper 03 Semarang. The use of illustrated fables as integrated thematic teaching materials constitutes a key strength of the study, resulting in the development of an applicative and innovative companion book with the potential to serve as a prototype for literacy instructional material development. Furthermore, the integration of local cultural content from the city of Semarang within the fable narratives contributes to strengthening students' reading comprehension while simultaneously fostering an early appreciation of local culture.

RESEARCH METHOD

Research Design

This study employed a Research and Development (R&D) method oriented toward the systematic development and evaluation of instructional products, as this approach is considered appropriate for producing learning materials that are valid, practical, and effective through needs-based, staged development processes (Nurrohman et al., 2025). The development model adopted in this study was based on the Borg and Gall framework, which was modified to suit the context of elementary education research, with particular emphasis on needs analysis, product design, expert validation, and iterative product trials to ensure the quality of the instructional product (Sugiyono, 2020). The focus of this research was directed toward the development of a fable book entitled Bintang Fauna based on the Picture and Picture learning model as an innovative reading instructional material aligned with the concrete operational thinking characteristics of elementary school students (Purwati, 2024). The use of digital media to enhance students' reading skills is supported by previous studies indicating that digital-based learning media are effective in improving reading comprehension among elementary school students (Sari & Mahendra, 2025). The effectiveness of the developed product was evaluated by comparing students' learning outcomes before and after the implementation of the instructional material as an indicator of improvement in elementary students' reading comprehension skills.

A mixed methods approach with a Research and Development (R&D) design was employed, as the research focused not only on the development of an instructional product but also on the empirical examination of its feasibility and effectiveness. The mixed methods approach was selected because it enables the systematic integration of qualitative and quantitative data to obtain a comprehensive understanding of both the research process and outcomes in educational research (Weil, 2025). The Research and Development design was applied because it is appropriate for producing instructional products through stages of needs analysis, design, evaluation, and revision based on authentic learning contexts (Wulandari et al., 2024). A qualitative approach was implemented during the needs analysis and expert validation stages, while a quantitative approach was applied during the product trial phase to measure the effectiveness of the instructional product. The quantitative design adopted was a pre-experimental one-group pretest–posttest design, in which students' abilities before and after the use of the product were compared as the basis for determining instructional effectiveness (Arikunto, 2021). The measurement of effectiveness was conducted by comparing students'

learning outcomes as indicators of improvement in elementary school students' reading comprehension (Siregar et al., 2023).

This study employed the Borg and Gall research and development model, which fundamentally consists of ten systematic development stages, ranging from the identification of potential and problems to mass production. However, in the development of the Bintang Fauna fable book based on the Picture and Picture learning model, the implementation of the Borg and Gall model was limited to the eighth stage, as the study focused on evaluating the feasibility and effectiveness of the product as a learning medium for improving reading comprehension, while also considering constraints of time and cost. The eight stages conducted in this study included: (1) identification of potential and problems, (2) data collection, (3) fable book product design, (4) expert validation of the design, (5) design revision, (6) product trial, (7) product revision, and (8) field testing. The Borg and Gall model was selected due to its strengths in needs analysis and its comprehensive, iterative development procedures, which enable the production of learning materials with higher levels of validity and reliability through systematic, staged testing.

Research Participants or Population and Sample

The population of this study comprised all second-grade students at SDN Pandeanlamper 03 Semarang, selected due to their relevance to the research objectives. In educational research, a population refers to the entire group of elements or subjects that share specific characteristics to be analyzed so that the research findings can be appropriately generalized (Ramadani et al., 2025). The research sample was determined using a saturated sampling technique (total sampling), in which all members of the population were included as research subjects without exception. This technique is commonly applied when the population size is relatively small, allowing comprehensive data collection from all population members (Batara et al., 2025). The research implementation was conducted in two stages of trials. The small-scale trial involved nine second-grade students from class II A, selected based on variations in reading ability levels—low, medium, and high—to provide an initial representation of product use. Subsequently, the large-scale trial involved 28 second-grade students from class II B as the primary group to examine the effectiveness of the Bintang Fauna fable book based on the Picture and Picture learning model. This two-stage approach was employed to evaluate the feasibility and effectiveness of the product progressively before broader implementation (Mardhiyah, 2025).

Instruments

Research instruments play a crucial role in collecting valid and reliable data, thereby ensuring that the research findings can be scientifically justified. Instrument validity is required to ensure that the instruments measure what they are intended to measure, while reliability is necessary to guarantee that the measurement results are consistent and stable when repeated under the same conditions. In this study, the data collection instruments consisted of observation sheets, interview guidelines, questionnaires, and a reading comprehension test. Observation sheets and interview guidelines were employed at the preliminary stage to obtain descriptive data regarding the conditions of reading instruction and the needs of teachers and students through direct investigation. Observation and interview methods are essential qualitative instruments in educational research for revealing classroom realities and respondents' behaviors (Arfizeah et al., 2025). Questionnaires were used as validation instruments administered to content experts and media experts to evaluate the feasibility of the Bintang Fauna fable book, as well as response questionnaires distributed to teachers and students to identify the practicality and attractiveness of the developed product. Prior to broader implementation, the questionnaires were first tested to establish content validity through expert judgment and to examine their reliability in order to ensure instrument consistency (Astiwi et

al., 2020). The reading comprehension test was developed in the form of pretests and posttests to measure students' reading comprehension abilities before and after the implementation of the product. The test instrument was initially piloted during the small-scale trial to refine item wording and ensure alignment with the cognitive abilities of second-grade students, and subsequently applied in the large-scale trial as the primary measurement tool. Testing instruments such as pretests and posttests is essential for ensuring the validity and reliability of students' ability measurements (Saputra et al., 2024). All instruments were systematically developed and administered in a chronological sequence following the planned Research and Development (R&D) stages to ensure that the instruments generated accurate data and adequately supported comprehensive research analysis.

Data Analysis

Data analysis in this study was conducted on the data obtained from the previous data collection stages, including expert validation results, user response data, and students' reading comprehension test scores. The validation data from material experts and media experts were analyzed using a quantitative descriptive approach by converting the assessment scores into percentage values to determine the level of product feasibility, following instrument content analysis procedures that emphasize content validity in relation to educational evaluation objectives (Sugiharni, 2023). The responses from teachers and students were analyzed descriptively to examine the practicality and acceptability of the developed Bintang Fauna fable book, based on descriptive questionnaire analysis commonly employed in instructional product evaluation research (Subhaktiyasa, 2024). The reading comprehension test data were analyzed using a quantitative approach by comparing students' pretest and posttest scores and calculating the effectiveness of the treatment, in accordance with parametric statistical testing procedures applied in a one-group pretest–posttest design. Effectiveness analysis was also conducted using the Paired Sample t-test, which is a statistical test used to determine significant differences between two measurement points within the same group. In addition, improvements in learning outcomes were analyzed using the N-Gain calculation as a derived variable to measure the level of product effectiveness, as the N-Gain score is commonly used in educational research to indicate the magnitude of learning improvement resulting from an instructional intervention.

RESEARCH FINDINGS AND DISCUSSION

Research Findings

The initial design of the Bintang Fauna fable book, based on the Picture and Picture learning model, was developed as a reading comprehension instructional resource for second-grade elementary school students. The product presentation provides a visual overview of the book's design, the narration of the fable, and the integration of sequential illustrations that support the learning process.



Figure 3 Cover



Figure 2 fable Story Display

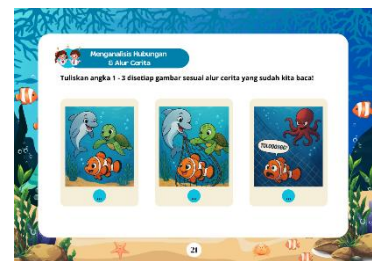


Figure 1 Practice Exercises

The product design was conducted following an analysis of teachers' and students' needs, which served as the foundation for developing the Bintang Fauna fable book based on the Picture and Picture model. The findings from this analysis informed the creation of the

prototype and the development of the book's design, including the selection of fable themes, animal characters, a simple story plot, and sequential illustrations that support the learning stages of observing, sequencing, and understanding images. The book was designed with an engaging visual presentation, language appropriate for second-grade students, and reading comprehension exercises aligned with cognitive domains C1–C6. The images presented in this section represent selected pages from the Bintang Fauna fable book, while the complete product design has been systematically organized as a supplementary teaching material for reading comprehension instruction. The feasibility of the Bintang Fauna fable book, developed using the Picture and Picture model, was assessed through validation by media experts and content experts. The results of the product feasibility validation are presented in the following table.

Table 1. Validation Results of the Feasibility of the Bintang Fauna Fable Book

Validator	Total Score	Maximum Score	Percentage	Criteria
Media Expert	76	80	95%	Highly Feasible
Content Expert	73	80	91,25%	Highly Feasible

Based on the validation results presented in Table 2, the Bintang Fauna fable book developed using the Picture and Picture model is considered highly feasible for instructional use. Validation by the media expert yielded a feasibility percentage of 95%, while validation by the content expert resulted in a feasibility percentage of 91.25%. These results indicate that the developed fable book meets the criteria for visual presentation, design, language, and content suitability in accordance with the characteristics of second-grade elementary school students. Nevertheless, several suggestions for improvement were provided by the validators and subsequently addressed during the product revision stage prior to the instructional trial. Based on the validation feedback, revisions were made to the fable book's design in accordance with expert recommendations. Media-related revisions included the addition of the UNNES logo on the book cover, while content-related revisions involved changing the names of human characters to animal characters consistent with fable conventions. These revisions aimed to enhance the quality and feasibility of the Bintang Fauna fable book before proceeding to the product trial stage as a reading comprehension learning media for second-grade elementary students.

The effectiveness of the Bintang Fauna fable book, developed based on the Picture and Picture model, was evaluated through a two-stage trial: a small-scale trial and a large-scale trial. This evaluation aimed to determine the extent to which the use of the developed fable book could enhance reading comprehension among second-grade elementary school students. The assessment of effectiveness was based on comparisons between pretest and posttest scores, learning completeness, and N-Gain values. The small-scale trial involved nine students, while the large-scale trial included twenty-eight second-grade students at SDN Pandean Lamper 03 Semarang. In both trial stages, students first completed a pretest to assess their initial reading comprehension abilities. Subsequently, they participated in learning activities using the Bintang Fauna fable book based on the Picture and Picture model, followed by a posttest to evaluate learning outcomes.

Table 2. Summary of Learning Outcomes from Small-Scale and Large-Scale Trials

No	Description	Small Scale Trial		Large Scale Trial	
		Pretest	Posttest	Pretest	Posttest
1.	Number of Students	9	9	28	28
2.	Mean Score	59,89	80,22	59,79	80,86
3.	Highest Score	64	85	64	88
4.	Lowest Score	55	75	55	73

5.	Number of Students Mastering the Material	1	9	6	28
6.	Learning Completeness (%)	11,11%	100%	21,42%	100%

Based on the results of both the small-scale and large-scale trials, the use of the Bintang Fauna fable book developed with the Picture and Picture model was shown to significantly improve students' reading comprehension. In both trials, the mean posttest scores and learning mastery increased compared to the pretest results, achieving 100% learning completeness. Effectiveness analysis conducted using the Paired Samples t-Test and gain analysis with SPSS Statistics version 25.0 confirmed that the implementation of the Bintang Fauna fable book enhanced the reading comprehension of second-grade students at SDN Pandean Lamper 03 Semarang.

Table 3. N-gain Test Results

Subject	Average		N-gain	Description
	Pretest	Posttest		
Small scale	59,89	80,22	0,5099	moderate
Large scale	59,79	80,86	0,5286	moderate

Based on the N-gain test results presented in the table above, the N-gain value obtained from the small-scale product trial was 0.5099, which falls into the moderate category. Meanwhile, the large-scale product trial produced an N-gain value of 0.5286, also categorized as moderate. These results indicate an improvement in the average reading comprehension scores of students in both the small- and large-scale trials. It can be concluded that the use of the Bintang Fauna fable book, designed based on the Picture and Picture learning model, is sufficiently effective for implementation in classroom activities, particularly in enhancing the reading comprehension of second-grade students at SDN Pandeanlamper 03 Semarang. This conclusion is supported by the increase in pretest and posttest scores as well as the N-gain values, which are classified as moderate in both small- and large-scale trials.

Discussion

The development of the Bintang Fauna fable book based on the Picture and Picture model was conducted using a Research and Development (R&D) approach, adapting the Borg and Gall model, which was considered relevant for producing instructional materials that are feasible and effective in enhancing elementary students' reading comprehension. The development stages included potential and problem identification, data collection, product design, design validation, revision, small-scale product trials, and large-scale implementation trials. Preliminary studies revealed that reading instruction in Grade II at SDN Pandeanlamper 03 Semarang still faces challenges, particularly the limited availability of engaging and varied instructional materials. This limitation results in low student motivation and difficulty in understanding the sequence of stories and moral messages in fable texts. These conditions indicate the need for alternative instructional materials that are contextual, engaging, and aligned with the characteristics of lower-grade students.

The Bintang Fauna fable book was developed as a printed and illustrated instructional resource containing fable stories presented through sequential images aligned with the narrative, simple reading texts, colorful illustrations, moral messages, and reading comprehension exercises. The book's structure was systematically organized, including the cover, table of contents, user guidelines, learning sections, evaluation, glossary, and author profile, to ensure usability and appeal for Grade II students. The material development was based on an analysis of teachers' and students' needs and referred to the crucial role of instructional materials as both a teaching guide for teachers and a learning resource for students.

Instructional materials that integrate visual elements in the form of images and visual information can enhance student engagement, comprehension, and information retention in reading, thereby supporting the effectiveness of visual-based learning models such as Picture and Picture in improving students' reading comprehension and learning motivation (Asilestari et al., 2025).

The product validation stage involved content and media experts to assess the suitability of content, language, presentation, and visual design before implementing the book with students, consistent with the findings of Suhaelah et al. (2021), who emphasized the importance of expert validation in instructional material development. Following revisions based on expert feedback, the Bintang Fauna fable book was tested in a small-scale trial using a one-group pretest-posttest design to gather responses from teachers and students, followed by a large-scale implementation trial involving 28 Grade II students. By comparing pretest and posttest results, the large-scale trial aimed to determine the effectiveness of the Bintang Fauna fable book based on the Picture and Picture model in improving reading comprehension among Grade II students at SDN Pandeanlamper 03 Semarang.

The feasibility of the fable book Bintang Fauna based on the Picture and Picture learning model in enhancing the reading comprehension of second-grade students at SDN Pandeanlamper 03 Semarang was determined through a validation process conducted by media and content experts. This validation aimed to evaluate the appropriateness of the fable book as instructional reading material prior to its implementation in the learning process. Assessment was carried out using a questionnaire on a 1–4 scale, covering aspects of media feasibility and content feasibility, ensuring that the developed book aligns with the learning objectives and the characteristics of second-grade students. Through this process, the researchers also obtained various suggestions and feedback, which served as a basis for refining the Bintang Fauna fable book. The expert validation evaluated aspects such as curriculum alignment, educational value, design, language, presentation techniques, and media practicality. The results indicated that most aspects fell into the “highly feasible” category, particularly curriculum alignment, educational value, language, and presentation techniques, while some indicators in the design and practicality aspects were categorized as “feasible.” Overall, the Bintang Fauna fable book achieved a score of 76 out of a maximum of 80, resulting in a feasibility percentage of 95%, which falls into the “highly feasible” category as an instructional reading medium for second-grade students.

Content validation assessed curriculum alignment, material suitability, learning aspects, and language appropriateness. The results demonstrated that the material presented in the Bintang Fauna fable book aligns with the learning objectives, the students' developmental stages, and is supported by appropriate illustrations and easily understandable language. The book received a score of 73 out of a maximum of 80, corresponding to a feasibility percentage of 91.25%, placing it in the “highly feasible” category. Based on the results of both media and content expert validations, the Bintang Fauna fable book, developed according to the Picture and Picture learning model, is considered highly suitable for use as teaching material to support the enhancement of reading comprehension in second-grade students at SDN Pandeanlamper 03 Semarang.

The effectiveness of the Bintang Fauna fable book based on the Picture and Picture model was analyzed through the reading comprehension learning outcomes of second-grade students at SDN Pandeanlamper 03 Semarang using pretest and posttest assessments. The product trial was conducted in two stages: a small-scale trial involving 9 students and a large-scale trial involving 28 students. The results indicated a significant improvement in students' reading comprehension following the implementation of the fable book. In the small-scale trial, the average pretest score of 59.89 increased to 80.22 in the posttest, while in the large-scale trial, the average pretest score of 59.79 increased to 80.86 in the posttest. These improvements

demonstrate that the Bintang Fauna fable book effectively supports students in achieving the expected reading comprehension learning outcomes. The students' reading comprehension data were further analyzed for normality using the Shapiro-Wilk test as a prerequisite for statistical analysis. In the small-scale trial, the normality test results showed significance values of 0.975 for the pretest and 0.758 for the posttest, whereas in the large-scale trial, the significance values were 0.186 for the pretest and 0.575 for the posttest. All significance values were greater than 0.05, indicating that the data were normally distributed. Consequently, the analysis proceeded using the parametric Paired Samples t-Test to determine differences in students' reading comprehension before and after using the Bintang Fauna fable book based on the Picture and Picture model.

The Paired Samples t-Test results revealed a significant difference in students' reading comprehension before and after using the fable book. In the small-scale trial, the significance value was < 0.001 , with a t-value of -46.112 and a mean difference of -20.33 , while in the large-scale trial, the significance value was $0.000 (< 0.05)$, with a t-value of -74.885 and a mean difference of -21.071 , leading to the rejection of H_0 and acceptance of H_a . Additionally, the N-gain analysis indicated values of 0.5099 in the small-scale trial and 0.5286 in the large-scale trial, both categorized as moderate. Based on these findings, it can be concluded that the Bintang Fauna fable book, developed according to the Picture and Picture learning model, has a positive and effective impact on improving reading comprehension among second-grade students at SDN Pandeanlamper 03 Semarang and is suitable as an alternative teaching medium for reading in elementary schools.

CONCLUSION

Based on the results of the research and discussions conducted, it can be concluded that the development of the Bintang Fauna fable book, based on the Picture and Picture model, has been designed in accordance with the characteristics of second-grade elementary school students and the needs of reading instruction. The book's design integrates fable texts, engaging illustrations, and steps of the Picture and Picture model to assist students in understanding reading material gradually and contextually. Validation results conducted by content and media experts indicate that the Bintang Fauna fable book falls into the "highly valid" category and is suitable for use as reading instructional material. Effectiveness testing demonstrated that the use of the Bintang Fauna fable book, based on the Picture and Picture learning model, can improve reading comprehension skills of second-grade students at Semarang. Therefore, the Bintang Fauna fable book can be utilized as an effective supplementary teaching material in Indonesian language learning, particularly for enhancing elementary students' reading comprehension.

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INFORMED CONSENT STATEMENT

Participation in this study was entirely voluntary. Before taking part in the research, all participants were informed about the purpose, procedures, potential risks, and benefits of the study. Participants were assured that their identities would remain confidential and that all information provided would be used solely for research purposes. They were also informed of

their right to withdraw from the study at any time without penalty or loss of benefits to which they were otherwise entitled. By agreeing to participate, the participants provided informed consent under the conditions described.

DATA AVAILABILITY STATEMENT

The data used in this study cannot be made publicly available due to privacy concerns and ethical obligations to protect participant confidentiality. This restriction ensures compliance with ethical research standards and applicable data protection regulations. However, access to the dataset may be granted upon reasonable request for validation or further scholarly analysis. Such requests will be reviewed on a case-by-case basis and must obtain approval from the appropriate institutional ethics review board before any data can be shared. This procedure ensures that any proposed use of the data aligns with ethical guidelines and the consent provided by the participants.

REFERENCES

- Arfizeah, N. H., Risnawati, Rizqa, M., Novita, V., & Hamdani, M. F. (2025). Measuring the validity and reliability of a research instrument on junior high school students' learning interest in Islamic religious education. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(04), 279–291. <https://doi.org/10.23969/jp.v10i04.37104>
- Arikunto, S. (2016). *Research procedures: A practical approach*. Rineka Cipta. DOI not applicable.
- Arman, A. (2018). *The effect of capital, production value, and wage level on labor absorption in small industries in Padang City: A case study of rendang production in Padang City* [D3 thesis, Universitas Andalas].
- Asilestari, P., Henjilito, R., & Hardi, V. A. (2025). Enhancing reading comprehension through visual information: A longitudinal study in higher education. *AL-ISHLAH: Jurnal Pendidikan*, 17(2), 2415–2434. <https://doi.org/10.35445/alishlah.v17i2.7490>
- Astiwi, K. P. T., Antara, P. A., & Agustiana, I. G. A. T. (2020). Development of an assessment instrument for elementary school students' critical thinking skills in Pancasila and Civic Education. *Jurnal Ilmiah Pendidikan Profesi Guru*, 3(3), 459–467. <https://doi.org/10.23887/jippg.v3i3.29457>
- Batara, D. R., Ardiansyah, R., Yanwas, Y. B. B., Naumi, N., Slamet, R. A., & Ahman, A. (2025). Steps to determine the appropriate population and sample in research. *Jurnal Penelitian Ilmu Pendidikan Indonesia*, 4(2), 682–689. <https://doi.org/10.31004/jpion.v4i2.457>
- Chaerunnisa, S. H., Kusmana, S., & Wilsa, J. (2024). Fable text teaching materials in increasing reading interest of elementary school students. *International Journal of Elementary Education*, 13(2), 23–30. <https://doi.org/10.11648/j.ijeeedu.20241302.11>
- Lenta, V., & Mustika, D. (2023). School culture in realizing character education at SDN 115 Pekanbaru. *Mimbar Pendidikan Indonesia*, 4(2), 348–356. <https://doi.org/10.23887/mpi.v4i2.65938>
- Magdalena, I., Prabandani, R. O., Rini, E. S., Fitriani, M. A., & Putri, A. A. (2020). Analysis of teaching material development. *Nusantara*, 2(2), 180–187. <https://doi.org/10.36088/nusantara.v2i2.805>
- Mardhiyah, M., Dinilhaq, N. A., Amelia, Y., Arini, A., Hidayatullah, R., & Harmonedi. (2025). Population and sample in educational research: Understanding differences, implications, and appropriate selection strategies. *Katalis Pendidikan: Jurnal Ilmu Pendidikan dan Matematika*, 2(2), 208–218. <https://doi.org/10.62383/katalis.v2i2.1670>

- Nurrohmah, F. E., Djuanda, D., & Iswara, P. D. (2025). Development of game-based early reading teaching materials in elementary schools. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(03), 256–274. <https://doi.org/10.23969/jp.v10i03.32506>
- Nuryasana, E., & Desiningrum, N. (2020). Development of teaching and learning strategy teaching materials to increase university students' learning motivation. *Jurnal Inovasi Penelitian*, 1(5), 967–974. <https://doi.org/10.47492/jip.v1i5.177>
- Permanik, I. (2024). Application of read-aloud to improve receptive language skills in early childhood in introducing English. *AL-IBANAH*, 9(1), 69–80. <https://doi.org/10.54801/ibanah.v9i1.255>
- Purwati, P. D. (2024). *Course textbook on the development of Indonesian language and literature learning*. Cahya Ghani Recovery.
- Ramadani, U. P., Muthmainnah, R., Ulhilma, N., Wazabirah, A., Hidayatullah, R., & Harmonedi. (2025). Strategies for determining population and sample in educational research: Between validity and representativeness. *QOSIM: Jurnal Pendidikan Sosial & Humaniora*, 3(2), 574–585. <https://doi.org/10.61104/jq.v3i2.1021>
- Ramadhani, N. A., Hamzah, R. A., La Kabi, M., & Matdoan, A. (2024). A literature review of the importance of teaching material development for Indonesian language learning in elementary schools. *Jurnal Ilmiah Insan Mulia*, 1(2), 57–62. <https://doi.org/10.59923/jiim.v1i2.282>
- Santika, I. G. N., & Sudiana, I. N. (2021). Inserting character education through Indonesian language learning from a theoretical perspective. *Jurnal Pendidikan Bahasa dan Sastra Indonesia Undiksha*, 11(4), 464–472. <https://doi.org/10.23887/jpbs.v11i4.42052>
- Saputra, W. T. S., Rustaman, N., & Rusyati, L. (2024). Evaluating validity and reliability of scientific literacy among Indonesian secondary students in PISA 2015 context: Rasch model analysis. *Journal of Research and Educational Research Evaluation*, 13(2), 169–179.
- Sari, M. R., & Mahendra, Y. (2025). The use of digital media to improve reading skills in Indonesian language learning in elementary schools: A literature review. *Journal for Lesson and Learning Studies*, 8(2), 232–242. <https://doi.org/10.23887/jlls.v8i2.92970>
- Siregar, N. A., Harahap, N. R., & Harahap, H. S. (2023). The relationship between pretest and posttest with the learning outcomes of class VII B students at MTs Alwashliyah Pantai Cermin. *Jurnal Ilmiah Edunomika*, 7(1), 1–13. <https://doi.org/10.29040/jie.v7i1.8307>
- Subhaktiyasa, P. G. (2024). Evaluation of the validity and reliability of quantitative research instruments: A literature study. *Journal of Education Research*, 5(4), 5599–5609. <https://doi.org/10.37985/jer.v5i4.1747>
- Sugiharni, G. A. D. (2023). Content validity of flipped learning-based statistical learning evaluation instruments at tourism colleges. *Journal of Education Research and Evaluation*, 7(2), 335–344. <https://doi.org/10.23887/jere.v7i2.61240>
- Sugiyono. (2020). *Research and development methods*. Alfabeta. DOI not applicable.
- Suhaelah, E., Nurhasanah, A., & Hakim, Z. R. (2021). Developing a handout based on Banten culture for teaching materials. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 10(1), 174–187. <https://doi.org/10.33578/10.33578/jpkip.v10i1.8039>
- Uno, N., & Iskandar, A. K. (2020). Application of the Picture and Picture cooperative learning model in improving learning outcomes. *Educator: Directory of Elementary Education Journal*, 1(2), 174–195. <https://doi.org/10.58176/edu.v1i2.83>
- Weil, J. (2025). *Research design in aging and social gerontology: Quantitative, qualitative, and mixed methods* (2nd ed.). Routledge. <https://doi.org/10.4324/9781003488323>
- Wulandari, R., Amiza, I. P. D., & Annas, F. (2024). Development of a research and development-based learning innovation model at SMP N 3 Pasaman Barat. *Journal of Educational Management and Strategy*, 3(02), 117–124.