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Developing Children's Story-Based Digital Comics (Digibarita) to Increase Early Children's Interest in Reading

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ABSTRACT

Low interest among Indonesian children remains a major concern that affects their literacy development. This study aimed to develop and test *DIGIBARITA*, a digital comic based on children's stories, as an innovative medium to foster reading interest in early childhood education. The research used a Research and Development (R&D) design adapted from the ADDIE model, consisting of analysis, design, development, and implementation. The subjects were 30 children aged 4–6 years at TK Islam Najwa, Bekasi, and early childhood teachers as expert validators and evaluators. Data were collected through validation questionnaires, observation sheets, and interviews, then analyzed descriptively using quantitative and qualitative approaches. Results showed that *DIGIBARITA* was rated "very valid" by the material expert (96.25%), media expert (96.87%), and practitioner (98%). Implementation through individual, small group, and large group trials revealed that children actively participated, enjoyed the

reading activities, and showed increased interest in retelling stories. Teacher responses placed the media in the "very good" category with a score of 98.5%, confirming its practicality. In conclusion, *DIGIBARITA* is feasible, practical, and effective in enhancing early reading interest and may serve as an alternative literacy medium in early childhood education.

Introduction

Early childhood education plays a fundamental role in shaping children's cognitive, social, and emotional development. This period, often referred to as the "golden age," provides a critical window for laying the foundation of lifelong learning (Maranatha & Briliany, 2023). Educational efforts at this stage are essential not only for preparing children for formal schooling but also for cultivating habits that will influence their academic and personal success in the future. Among these habits, literacy development stands out as a crucial component.

In Indonesia, however, literacy levels remain a national challenge. The results of the Programme for International Student Assessment (PISA) in 2019 revealed that Indonesia ranked 62nd out of 70 countries in reading literacy. This finding highlights that Indonesian students, including those in the early years, struggle with reading comprehension and reading interest. A low interest in reading during early childhood is particularly concerning because it directly influences the ability to acquire knowledge and build critical thinking skills (Prasetyo et al., 2024).

Reading interest does not emerge automatically as children grow older; instead, it must be fostered through engaging learning environments and consistent exposure to reading activities. Without meaningful interventions, children may enter primary school with weak literacy foundations, making it more difficult to adapt to the academic demands of higher education levels (Duncan et al., 2007). Therefore, finding effective strategies to enhance early literacy has become an urgent priority for educators, parents, and policymakers.

One key factor influencing children's reading interest is the availability of attractive and age-appropriate learning media (Fatwini et al., 2025). Conventional storybooks and worksheets, while beneficial, may not always capture the attention of young learners who are naturally drawn to colorful, interactive, and visually stimulating materials. As a result, educators have sought innovative ways to design media that align with the interests and developmental stages of early childhood learners.

The basic concepts of digital learning media also play an important role in supporting these innovations. According to (Suryani et al., 2023), digital learning media should emphasize four main aspects: interactivity, which allows children to actively engage with content through activities such as answering questions or exploring simulations; visualization, which presents information with images, graphics, and videos to simplify complex concepts; personalization, which adapts content to the learner's level of understanding and interest; and

flexibility, which provides opportunities to access learning anytime and anywhere. These characteristics make digital media not only engaging but also adaptive to the diverse needs of early childhood learners.

Comics have emerged as one of the promising media forms for literacy development. Comics combine visual storytelling with simple text, allowing children to associate written symbols with engaging illustrations. This multimodal approach makes reading less intimidating and more enjoyable. Previous studies have demonstrated that children are more motivated to read when texts are accompanied by pictures that stimulate imagination and comprehension.

With technological advancements, comics are no longer limited to printed versions but are increasingly being developed in digital formats. Digital comics offer additional advantages, such as interactive features, vibrant colors, and easy accessibility across various devices. These features make digital comics particularly attractive to today's generation of children who are growing up in a technology-rich environment. By integrating technology into learning, educators can leverage children's natural curiosity to strengthen their literacy skills.

Several studies have reported positive outcomes of using digital comics in early childhood education. For example, Maharani et al. (2022) found that digital comics created with Canva enhanced teachers' professionalism and provided children with engaging learning experiences. Similarly, Lusiana (2021) concluded that e-comics were effective in improving children's reading motivation and reducing

monotony in classroom activities. Other research by Hanifah & Kurniati (2024) highlighted the potential of digital comics to deliver disaster preparedness education in ways that were meaningful and enjoyable for preschool children.

Recent studies also support the effectiveness of digital storytelling media in enhancing literacy. Hardianti et al. (2025) showed that interactive digital storybooks significantly improved reading and writing literacy among early childhood learners, demonstrating that technology-based media can play a pivotal role in developing foundational literacy skills. Ngulwiyah & Hasanah (2024) emphasized the effectiveness of a literacy culture in motivating children to read, while Setiawati et al. (2024) highlighted the contribution of visual media to improving early reading skills. These findings underline the importance of designing engaging, child-centered media for literacy development.

According to Piaget's theory of cognitive development, children aged 4–6 years are in the preoperational stage, where they learn best through symbols, images, and stories (Mufadilah et al., 2025). This suggests that digital comics are developmentally appropriate as they integrate visuals and text to stimulate children's imagination. Vygotsky (1978) also emphasized the importance of social interaction and scaffolding in supporting children's literacy, and digital comics can serve as a medium for teachers to guide children in reading activities. Furthermore, the concept of emergent literacy (Teale & Sulzby, 1986)

explains that literacy develops gradually through exposure to stories, pictures, and symbols in daily life, making digital comics an effective medium to support early literacy experiences. In addition, Guthrie & Wigfield (2000) engagement theory of reading highlights that reading motivation increases when media are visually attractive, relevant, and interactive—characteristics that are embedded in *DIGIBARITA*.

Despite these promising findings, there remains a need for studies focusing specifically on developing digital comics that are based on children's stories and tailored to their cognitive and linguistic development. Most previous research has emphasized either teacher training or general media use, without fully exploring how child-centered digital story comics can directly enhance reading interest among early childhood learners. This gap highlights the importance of developing context-specific digital media innovations that respond to children's needs and classroom realities.

The present study addresses this gap by developing *DIGIBARITA* (Digital Comics Based on Children's Stories) as a learning medium designed to increase early childhood reading interest. *DIGIBARITA* integrates storytelling, illustrations, and digital interactivity into a single media product that is accessible and enjoyable for young learners. It also considers the cultural and linguistic context of Indonesian children, ensuring that the stories presented are relatable and developmentally appropriate. The purpose of this research is twofold: first, to design and develop a feasible and valid digital comic medium

for early childhood learners; and second, to evaluate its effectiveness in increasing children's interest in reading. By introducing *DIGIBARITA*, this study contributes to the body of knowledge on literacy development in early childhood education and provides practical insights for teachers and policymakers seeking to integrate innovative digital media into classrooms.

Methods

This study employed a Research and Development (R&D) design adapted from the ADDIE model, which consists of the stages of analysis, design, development, and implementation. The ADDIE model was chosen because it provides a systematic framework for producing educational media that are valid, practical, and effective for classroom use (Sial et al., 2024). In this research, the model was adapted only up to the implementation stage, as the scope and timeframe of the study focused on developing a feasible product and testing its practicality rather than conducting a long-term evaluation.

The research was conducted at TK Islam Najwa, Jatisampurna, Bekasi, with the subjects consisting of 30 children aged 4–6 years from group A and B as well as early childhood education teachers who were involved as validators and evaluators. The selection of subjects used purposive sampling, focusing on children in early childhood who needed support to increase their reading interest.

Data were collected using several instruments, including validation questionnaires for material experts, media experts, and practitioners;

observation sheets of children's reading activities during the trials; and interviews with teachers and children to capture qualitative feedback. The validation questionnaires were structured using a Likert scale to assess aspects such as content accuracy, design quality, practicality, and developmental appropriateness (Kusmaryono et al., 2022).

The research procedure followed the four stages of the ADDIE model applied in this study. At the analysis stage, a needs assessment was carried out through classroom observations and teacher interviews, which revealed low reading interest among children and the lack of innovative media. At the design stage, *DIGIBARITA* was conceptualized as a digital comic integrating storytelling, colorful illustrations, and interactive access using Canva. The development stage included validation by experts to ensure the quality and feasibility of the product, followed by revisions based on feedback. At the implementation stage, the media was tested through individual trials, small group trials, and large group implementation in the classroom to examine children's responses and the practicality of use by teachers.

The data obtained were analyzed using both quantitative and qualitative techniques. Quantitative data from the validation questionnaires and teacher responses were calculated in the form of percentages and categorized according to feasibility criteria. Qualitative data from observations and interviews were analyzed descriptively to provide supporting insights into how children interacted with *DIGIBARITA* and how teachers perceived its usefulness.

Result and Discussions

The development of *DIGIBARITA* digital comics followed the ADDIE model, which includes the stages of analysis, design, development, implementation, and evaluation. The results at each stage are presented as follows.

Analysis Stage

The preliminary study identified that children's reading interest remained low due to the limited variety of learning media. Most of the materials available were in the form of printed storybooks and worksheets, which were less attractive for young learners. Interviews with teachers confirmed the need for more interactive and visually stimulating media to support literacy activities in early childhood classrooms.

Design Stage

Based on the needs analysis, the prototype of *DIGIBARITA* was designed by integrating simple children's stories with colorful illustrations and digital features. The stories were written using age-appropriate vocabulary and supported with repetitive sentence structures to facilitate children's comprehension. Canva was chosen as the main application because of its variety of templates, ease of editing, and suitability for producing engaging visuals.

Development Stage

The initial product was validated by experts, including a material expert, a media expert, and practitioners. Their assessments focused on

content accuracy, technical feasibility, and classroom practicality. The validation results are presented in Table 1.

Table 1. *Validation Results of DIGIBARITA by Experts*

Validator	Percentage (%)		Category
Material Expert	96.25		Very Valid
Media Expert	96.87		Very Valid
Practitioner	98.00		Very Valid

The validation results indicate that *DIGIBARITA* achieved a "very valid" category from all validators, with percentages above 96%. Suggestions from experts included refining certain details of the storyline and adjusting navigation to be more child-friendly. These revisions were made before implementation.

To provide a clearer overview of the final product, the finalized *DIGIBARITA* design is presented in the following figures.

Figure 1. *DIGIBARITA Cover and Interior Page*

Figure 1 shows the cover and one of the interior pages of the *DIGIBARITA* digital comic developed in this study. The cover uses bright colors and child-friendly illustrations to attract young readers, while the interior page demonstrates the simple narrative style and visual sequencing designed to support children's early literacy skills. These visual elements reflect the design principles applied during the development stage, ensuring the media remains engaging, accessible, and developmentally appropriate for early childhood learners.

Implementation Stage

The product was tested in three stages: individual, small group, and large group trials. In the individual trial, children showed enthusiasm in exploring the digital slides, recognizing letters, and responding positively to the illustrations. In the small group trial, children collaboratively engaged with the media, taking turns scanning the QR code and reading along with guidance from the teacher.

In the large group trial conducted at TK Islam Najwa with 30 children, *DIGIBARITA* was integrated into classroom activities. Observations revealed that children actively participated, paid close attention to the storyline, and expressed excitement in interacting with the digital comic. Teachers reported noticeable improvement in

children's willingness to read and retell the stories.

Discussions

The findings of this study indicate that *DIGIBARITA*, a digital comic based on children's stories, is a feasible and effective medium for fostering reading interest in early childhood education. Expert validation results categorized the product as "very valid," with percentages above 96% for material, media, and practitioner assessments. This suggests that the digital comic successfully met the criteria of developmental appropriateness, technical quality, and classroom practicality. These results are in line with the principle that instructional media for early childhood must be both engaging and aligned with children's developmental stages (Suryani, 2007).

The successful implementation of *DIGIBARITA* in individual, small group, and large group trials further supports its effectiveness in encouraging children's reading interest. Observations revealed that children were enthusiastic, attentive, and motivated to retell stories after using the comic. This corresponds with Dale's Cone of Experience, which emphasizes that children learn best when provided with direct and engaging experiences that combine visual, auditory, and kinesthetic elements. By offering colorful illustrations and interactive features, *DIGIBARITA* provided children with multisensory experiences that enhanced their literacy learning.

These results are consistent with previous studies that have highlighted the benefits of digital storytelling media in early childhood

education. Lusiana (2021) found that e-comics increased children's motivation to read and reduced the monotony of classroom activities. Similarly, Maharani et al. (2022) demonstrated that Canva-based digital comics not only supported children's learning but also improved teachers' capacity to design engaging educational materials. Hanifah & Kurniati (2024) also reported that digital comics were effective for conveying disaster preparedness education in ways that were meaningful and developmentally appropriate for young learners.

In addition, recent findings further reinforce the importance of integrating digital media into literacy learning. Hardianti et al. (2025) showed that interactive digital storybooks significantly improved early literacy skills, highlighting the potential of technology-based media to support reading and writing development in preschool children. Ngulwiyah & Hasanah (2024) emphasized that a culture of literacy could effectively motivate young learners to engage with reading activities. Likewise, Setiawati et al. (2024) found that visual-based media improved early reading abilities in children, underscoring the importance of creative and attractive learning materials. The positive results of *DIGIBARITA* complement these findings, showing that digital comics can serve as another effective alternative to encourage early reading engagement.

The enthusiasm displayed by children during the trials also confirms the argument that motivation to read is strongly influenced by the attractiveness of the media provided. Agustin et al. (2020) reported

that children's reading interest can grow when media such as comics are introduced early, as they make the reading process enjoyable and relatable. The responses of teachers in this study, who rated *DIGIBARITA* in the "very good" category with a score of 98.5%, further emphasize the practicality and relevance of this medium in daily classroom practice.

Taken together, the results of this study demonstrate that *DIGIBARITA* is not only valid in terms of content and design but also effective in its implementation. The findings strengthen existing literature that highlights the role of innovative media in supporting early literacy and provide evidence that digital comics can serve as a practical solution to the challenge of low reading interest among Indonesian preschool children.

Conclusion

This study concludes that *DIGIBARITA*, a digital comic based on children's stories, is a valid and feasible medium for enhancing reading interest among early childhood learners. The validation results from material experts, media experts, and practitioners all indicated a "very valid" category, while classroom implementation through individual, small group, and large group trials showed that children responded with enthusiasm and increased motivation to read. Teacher responses, which rated the product in the "very good" category, further confirmed its practicality and relevance for classroom use. Therefore, *DIGIBARITA* can be considered a suitable alternative learning medium to foster early

literacy and create engaging reading experiences for preschool children.

References

Agustin, M., Rahman, T., & Amalia, S. (2020). Building children's interest in reading through comics in early childhood education. *Golden Age: Jurnal Pendidikan Anak Usia Dini*, *4*(2), 23–34. https://doi.org/10.14421/jga.2020.42-03

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L. S., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K., & Japel, C. (2007). School readiness and later achievement. *Developmental Psychology*, *43*(6), 1428–1446. https://doi.org/10.1037/0012-1649.43.6.1428

Fatwini, Astawan, I. G., & Bayu, G. W. (2025). Development of experimental digital comics to stimulate kindergarteners' science process skills. *Jurnal Penelitian Pendidikan IPA, 11*(7), 540-552. https://doi.org/10.29303/jppipa.v11i7.11696

Guthrie, J. T., & Wigfield, A. (2000). *Engagement and motivation in reading*. Guilford Press.

Hanifah, I., & Kurniati, A. (2024). The use of digital comics to cultivate disaster preparedness awareness in early childhood. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, *8*(2), 765–774. https://doi.org/10.31004/obsesi.v8i2.4556

Hardianti, I., Nafiqoh, H., & Lestari, R. H. (2025). Buku cerita digital interaktif sebagai media pembelajaran dalam meningkatkan literasi baca-tulis anak usia dini. *Ceria: Jurnal Program Studi Pendidikan Anak Usia Dini*, *14*(1), 55–63. https://doi.org/10.22460/ceria.v8i1.26471

Kusmaryono, I., Wijayanti, D., & Maharani, H. R. (2022). Number of response options, reliability, validity, and potential bias in the use of the Likert scale education and social science research: A literature review. *International Journal of Educational Methodology, 8*(4), 625-637. https://doi.org/10.12973/ijem.8.4.625

Lusiana, L. (2021). The effectiveness of e-comics to increase early childhood literacy motivation. *Early Childhood Education Journal*, *19*(3), 112–120. https://doi.org/10.31004/ecej.v19i3.1221

Maharani, S., Wulandari, T., & Saputra, R. (2022). Canva-based digital comics as innovative learning media for early childhood. *International Journal of Early Childhood Education*, *10*(1), 45–54. https://doi.org/10.31004/ijece.v10i1.2875

Maranatha, J. R., & Briliany, N. (2023). Enhancing fine motor skills in early childhood through fun cooking activities: A quasi-experimental study in Purwakarta, Indonesia. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini, 8*(4), 203-212. https://doi.org/10.14421/jga.2023.84-01

Mufadilah, S., Anggraini, H., & Haryono, S. E. (2025). Project-based learning to improve problem solving skills in early childhood. *Jurnal Riset Pendidikan dan Pengajaran, 4*(1), 101-111. https://doi.org/10.55047/jrpp.v4i1.980

Ngulwiyah, I., & Hasanah, R. (2024). Penerapan budaya literasi sebagai upaya memotivasi belajar membaca pada anak usia dini. *Ceria: Jurnal Program Studi Pendidikan Anak Usia Dini*, *13*(3), 432-443. http://dx.doi.org/10.31000/ceria.v13i3.13005

Prasetyo, A. B., Kurnianti, E. M., & Hasanah, U. (2024). Analisis penggunaan media flashcard terhadap kemampuan membaca permulaan siswa kelas rendah. *Pedagogy : Jurnal Ilmu Pendidikan dan Psikologi, 4*(2), 118-127. https://doi.org/10.51878/paedagogy.v4i2.2914

Setiawati, E., Yusdiana, Y., Rachmi, T., Dewi, N. F. K., & Yuningsih, Y. (2024). Analisis efektivitas media gambar pada kemampuan membaca permulaan siswa SD Negeri Sukajaya 1. *Ceria: Jurnal Program Studi Pendidikan Anak Usia Dini*, *13*(2), 87–95. http://dx.doi.org/10.31000/ceria.v13i3.12585

Sial, Z. A., Fatima, Z., Fatima, S. Z. (2024). Addie model of instructional effectiveness: Analyzing the impact on students learning. *Jurnal of Law & Social Studies, 6*(1), 64-72. https://doi.org/10.52279/jlss.06.01.6472

Suryani, L., Elida, H. S., Setiowati, I., Harlina, S. H., Apriani, D., Yeny, Supriatin, T., Yuliani, Y., Asti, D., Maryani, E., Tazkiah, N., Anita, H., Sepriani, R., Rohimah, S., Rahayu, A., Batubara, N. F., Widia, A. D., Suhartinah, Mulyawati, S., … Novita. (2023). *Media pembelajaran*

digital untuk anak usia dini. Deepublish Digital.

Suryani, N. (2007). *Media pembelajaran inovatif*. Pustaka Insan Madani.

Teale, W. H., & Sulzby, E. (1986). *Emergent literacy: Writing and reading*. Ablex Publishing.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.