

Development of Digital Learning Media Based on Folktales in Indonesian Language Learning for Fifth-Grade Students at UPT SD Negeri 2 Timoreng Panua

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ABSTRACT

This research aims to develop and test the effectiveness of digital learning media based on folklore in teaching Indonesian language to fifth-grade students at UPT SD Negeri 2 Timoreng Panua. The background of this study lies in the pedagogical gap between conventional, passive teaching methods and the characteristics of students who are predominantly audio-visual and kinesthetic learners. Therefore, an interactive and context-based medium grounded in local wisdom is needed to enhance students' engagement and literacy skills. The study employed a Research and Development (R&D) approach using the ADDIE model, consisting of analysis, design, development, implementation, and evaluation stages. The product produced is an Interactive Learning Multimedia (ILM) based on local folklore, which was systematically developed and validated by experts. The validation results indicate a very high level of feasibility: material expert 92%, media expert 80%, and instructional expert 90%, with an overall category of "very feasible." A limited trial involving 10 students showed an average gain score of 0.45, categorized as moderate effectiveness according to Hake's criteria. Of these, 1 student had a low gain score (≤ 0.30), 9 students achieved moderate gain scores ($0.30 - 0.70$), and none were in the high category (> 0.70). In the broader trial involving 30 students, the average gain score was 0.44, also categorized as moderate effectiveness. Among them, 7 students fell into the low category ($g \leq 0.30$), 22 in the moderate category ($0.30 < g \leq 0.70$), and 1 student (S-25) in the high category ($g > 0.70$). This indicates that most students experienced significant improvement after using the developed media. The student response questionnaire also showed high levels of attractiveness (4.6) and ease of use (4.2) on a 5-point scale. These findings demonstrate that the developed digital learning media based on folklore is valid, engaging, and effective in improving students' literacy. Theoretically, this research reinforces the application of Mayer's Multimedia Learning Theory and Bruner's Constructivist Theory in primary education, while practically, it serves as an innovative model for integrating local wisdom into

digital learning. Thus, this study contributes to the development of contextual, interactive, and culturally relevant learning media.

Keywords: Digital Media; Language Learning; Folktales

INTRODUCTION

In the era of rapid digital transformation, education is required to adapt dynamically to meet the demands of the 21st century. One key change in this era is the integration of technology into the learning process. Digital learning media are no longer supplementary tools; they have become essential in facilitating meaningful, engaging, and interactive learning experiences. For elementary school students who are growing up in a technology-driven environment, the use of digital media in the classroom is not only beneficial but necessary. Teachers are challenged to design learning activities that capture students' attention and foster enthusiasm for learning, especially in Indonesian language lessons, which are sometimes perceived as less engaging.

Language learning, particularly Indonesian language education, has a vital role in developing literacy skills, critical thinking, and cultural awareness. Literacy today is not limited to reading and writing but also includes the ability to understand and use information in various forms, including digital texts (Widodo, 2022). Folktales, or *dongeng*, serve as a culturally rich resource for language instruction because they contain moral values and stimulate imagination. However, the conventional delivery of folktales through printed texts or oral storytelling often struggles to attract students' interest in today's digital era.

Preliminary observations at UPT SD Negeri 2 Timoreng Panua indicate that many fifth-grade students have difficulty understanding narrative texts, particularly folktales. This issue is largely due to the limited use of interactive media suited to students' learning styles. Teaching is still dominated by lectures and printed materials, which can cause students to lose focus. This aligns with the findings of Rahmawati (2021), who noted that elementary students show higher motivation and engagement when digital, visual, and interactive media are used.

To address these challenges, the development of digital learning media based on folktales is proposed. Such media are expected to improve literacy skills and engagement, while also preserving cultural elements embedded in local stories. The learning media development process in this study uses the ADDIE model, covering analysis, design, development, implementation, and evaluation. The final product is expected to support students in understanding narrative texts, increase their interest in Indonesian language learning, and encourage appreciation of local culture.

LITERATURE REVIEW

Folktales, as a form of oral literature, offer strong pedagogical potential. They contain moral lessons, cultural identity, and imaginative elements that can shape character and cognitive development. Suherman (2023) explains that folktales can guide students' behavior and introduce them to local cultural heritage. However, without engaging delivery methods, this potential is often underutilized. The shift to digital learning provides an opportunity to present folktales in more appealing and interactive formats.

The concept of digital literacy is central to 21st-century education. Warsito (2021) defines digital literacy as the ability to access, understand, and use information through digital technology. In Indonesian language education, digital literacy does not only relate to comprehension of text but also to developing independent learning skills. Fitriana (2022) found that digital learning media can help enhance students' critical and creative thinking by promoting active and independent learning. Therefore, digital folktale-based media can support students' linguistic, cognitive, and digital competence simultaneously.

Digital storytelling media also contribute to cultural preservation. Traditional storytelling practices are diminishing as entertainment shifts toward modern digital content. Integrating local folktales into digital learning can help maintain cultural continuity while making the stories more accessible to younger generations. Wijayanti (2022) notes that embedding folktales in education helps strengthen moral and ethical foundations in students.

In addition, research supports the effectiveness of technology-based learning in improving language learning outcomes. Prasetyo (2023) reported that the use of digital media increased comprehension levels compared to conventional methods. Fitriani (2023) also found increased motivation and enjoyment among students when interactive digital media were used. These outcomes align with the Deep Learning approach promoted by the Merdeka Curriculum, which highlights meaningful engagement and critical reflection.

Furthermore, the use of digital folktale media aligns with the Capaian Pembelajaran for Phase C of Indonesian language learning (Regulation No. 046/H/KR/2025), which requires students to analyze information from literary and non-literary texts presented in digital formats. Fifth-grade students are expected to identify key elements of fictional texts when presented through audiovisual media, making folktale-based digital multimedia highly relevant to curriculum goals.

METHOD

Design and Sample

This study used a Research and Development (R&D) approach to create and validate a Digital Learning Media Based on Folktales for fifth-grade students at UPT SD Negeri 2 Timoreng Panua. The study followed the ADDIE model, which consists of Analysis, Design, Development, Implementation, and Evaluation. During the analysis stage, observations and interviews were conducted to identify students' needs in learning narrative texts. The findings showed that most students struggled to understand the structure and moral values of folktales due to limited digital learning resources and lecture-based teaching. About 80% of the students were identified as audio-visual learners, while the remaining 20% were kinesthetic learners. These findings guided the design of media that combined visual, auditory, and interactive elements. The sample for product implementation included fifth-grade students. The limited classroom trial involved 10 students, while the extended classroom trial involved 30 students. These trials were carried out to test the practicality and effectiveness of the digital media during real classroom instruction.

Instrument and Procedures

The instruments used in this study included observation sheets, interview guides, expert validation sheets, student questionnaires, and pre-test and post-test assessments. The development procedure began with the design stage, where storyboards, learning activities, and interface layouts were created based on the Indonesian language curriculum. The media content included local folktales enriched with narration, illustration, animation, and interactive tasks such as quizzes and drag-and-drop activities, following principles from Mayer's Multimedia Learning Theory.

In the development stage, the prototype was produced by digitizing folktales, recording narration, creating animations, and integrating components into a multimedia format. The product was validated by material experts, media design experts, and instructional experts. Revisions addressed visual clarity, audio quality, and navigation. Implementation was conducted in two phases: a limited trial with 10 students and an extended trial with 30 students. During both trials, students used the media during Indonesian language lessons. Teachers observed engagement, and students completed questionnaires to assess attractiveness and usability. The evaluation stage consisted of formative evaluation throughout product development and summative evaluation after classroom implementation. The criteria assessed were validity, practicality, and effectiveness.

Data Analysis

Data analysis involved both qualitative and quantitative techniques. Qualitative data from observations, interviews, and expert feedback were analyzed to refine the

media content and format. Quantitative data included expert validation scores, pre-test and post-test results, and student questionnaire responses. Expert validation yielded feasibility scores of 92% from material experts, 80% from media experts, and 90% from instructional design experts, all categorized as very valid. Learning outcomes were analyzed using gain scores based on Hake's formula. The limited trial produced an average gain of 0.45, while the extended trial resulted in a gain of 0.44, both categorized as moderate improvement. Questionnaire results showed an attractiveness score of 4.6 and an ease-of-use score of 4.2 on a 5-point scale, indicating positive student reception. Together, these results support the conclusion that the digital folktale media is valid, practical, and effective for improving students' understanding of narrative texts and increasing engagement in Indonesian language learning.

RESULT AND DISCUSSION

The development of the Digital Learning Media Based on Folktales followed the ADDIE model and resulted in a validated, interactive multimedia product designed for fifth-grade Indonesian language instruction. The product, named Interactive Multimedia Learning (IML), incorporated local folktales as the main learning material and combined text, narration, animations, and interactive exercises. The media aimed to improve students' comprehension of narrative texts and their appreciation of local culture. The development process began with an analysis of students' needs, which revealed low engagement and limited access to engaging learning materials. Based on these findings, the researcher created a prototype that was systematically tested and evaluated through expert validation and classroom trials.

The analysis stage identified that 80% of students preferred audio-visual learning modes, while 20% had kinesthetic learning preferences. Teachers reported that conventional teaching methods such as reading printed texts aloud were ineffective in maintaining student attention. Most students found traditional materials monotonous and struggled to identify story elements like characters, settings, and moral values. These findings confirmed the necessity for interactive, digital-based media capable of supporting multimodal learning. The needs analysis thus became the foundation for designing media that would respond to students' cognitive and emotional characteristics.

In the design and development stages, the researcher created a storyboard integrating narrative content, illustrations, voice narration, and interactive exercises. The digital folktale media included three core modules: (1) the folktale text with animated visuals and voiceover narration, (2) comprehension activities such as matching, drag-and-drop, and multiple-choice quizzes, and (3) an automatic feedback system displaying immediate results. The interface was developed using Canva, Wordwall, and Quizizz, ensuring accessibility and user-friendly navigation. The product was intended for both classroom and independent learning contexts, allowing students to engage with stories through digital devices.

The validation process involved three experts: a material expert, a media expert, and an instructional design expert. Each provided feedback on the accuracy, clarity, and usability of the media. The material expert rated the product at 92%, emphasizing the relevance and cultural appropriateness of the selected folktales. The media expert gave a score of 80%, suggesting minor improvements in font size, layout consistency, and animation speed. The instructional expert rated the product 90%, noting that it aligned effectively with the learning objectives of the Indonesian language curriculum for Grade V. The average validation score across experts was 87.3%, classified as very feasible. This indicated that the product met both pedagogical and technical standards for classroom application.

After revisions based on expert feedback, the media underwent a limited trial involving 10 fifth-grade students. During this phase, students were introduced to one folktale module and completed pre-test and post-test assessments. The results showed a mean gain score of 0.45, categorized as moderate effectiveness according to Hake's (1999) criteria. One student (10%) achieved a low gain (≤ 0.30), while nine students (90%) achieved moderate gains ($0.30-0.70$). Observations indicated that students were enthusiastic and actively engaged throughout the learning session. They particularly enjoyed the animated storytelling and interactive exercises that provided immediate feedback.

The expanded trial was conducted with 30 fifth-grade students to evaluate the broader applicability of the media. The pre-test and post-test results demonstrated an average normalized gain (g) of 0.44, also indicating moderate effectiveness. Among the participants, 7 students (23%) fell into the low category ($g \leq 0.30$), 22 students (73%) were in the moderate category ($0.30 < g \leq 0.70$), and 1 student (4%) achieved a high gain ($g > 0.70$). These findings suggest that the majority of students showed measurable improvement in comprehension and vocabulary after using the digital folktale media. This improvement reflected not only increased understanding of story structure but also enhanced engagement and motivation.

In addition to quantitative results, qualitative data were gathered through student response questionnaires and teacher observations. The questionnaire consisted of indicators measuring attractiveness, clarity, interactivity, and ease of use. The overall student response yielded an average attractiveness score of 4.6 and an ease-of-use score of 4.2 on a 5-point Likert scale. Students commented that they felt more motivated to read and analyze stories presented with audio-visual features than those printed in textbooks. Teachers reported that students demonstrated more focus and enthusiasm, particularly during comprehension exercises and group discussions. These results confirmed the media's practicality and user satisfaction.

Overall, the validation and implementation results indicate that the digital learning media based on folktales is a feasible, engaging, and moderately effective tool for improving students' narrative comprehension. It successfully integrates technological, cultural, and pedagogical dimensions into a cohesive learning

experience. The combination of local storytelling, multimedia presentation, and interactive evaluation effectively increased students' participation and understanding. The results also suggest that incorporating digital media rooted in local culture can enhance not only literacy outcomes but also character development and cultural appreciation among elementary learners.

The findings of this study highlight that digital folktale media effectively enhance students' comprehension and engagement in Indonesian language learning. The moderate gain scores achieved in both trials (0.45 and 0.44) indicate that the integration of interactive multimedia contributes to learning improvement, particularly in understanding narrative structures. This aligns with Mayer's Multimedia Learning Theory (2020), which posits that learners process information more effectively when verbal and visual channels are combined. The use of animation, narration, and text simultaneously allowed students to connect auditory and visual stimuli, leading to deeper cognitive processing.

The increase in students' motivation and participation supports the Constructivist Theory of Learning proposed by Bruner (1996). By presenting folktales in an interactive digital format, students became active participants in constructing meaning rather than passive recipients of information. The multimedia features encouraged exploration and self-paced learning, while the narrative context helped students relate content to their own experiences. As a result, the learning process became more student-centered, aligning with the principles of the Merdeka Curriculum, which emphasizes autonomy and active inquiry.

The expert validation results provide strong evidence for the product's validity and reliability. High scores from material, media, and instructional experts demonstrate that the media met pedagogical and technical standards. The feedback also underscored the importance of balancing educational content with usability and aesthetic appeal. The alignment of content with the fifth-grade Indonesian curriculum ensures that the media not only engages students but also supports the achievement of learning outcomes stated in the national standards, particularly in analyzing narrative and moral elements in literary texts.

The moderate effectiveness of the digital folktale media can be interpreted as an indicator of pedagogical suitability rather than limitation. Since the intervention was relatively short and focused on a single unit of material, sustained exposure could yield even higher learning gains. Moreover, the improvement in comprehension among 73% of students suggests that the media succeeded in addressing diverse learning styles. The combination of audio narration, animation, and text was particularly beneficial for audio-visual learners, who comprised the majority of the sample.

The high student response ratings reflect the media's success in fostering engagement and enjoyment, two essential components of meaningful learning. Students reported that the storytelling format helped them visualize characters and

events more vividly, making it easier to understand cause-effect relationships and moral messages. This finding is consistent with Ghosn (2002), who asserts that story-based instruction can create a positive emotional climate and increase motivation. The interactive quizzes and automatic feedback features further reinforced engagement by providing instant rewards and corrective guidance.

Another significant implication of this research is its contribution to digital literacy development. The use of interactive media trained students to navigate, interpret, and evaluate digital content responsibly. This aligns with Warsito (2021), who defines digital literacy as the ability to access, understand, and utilize information through technology. By interacting with multimedia folktales, students not only learned language skills but also developed technological fluency an essential competence for the 21st century. The integration of cultural content ensured that digital learning remained rooted in local values rather than being dominated by globalized content.

Culturally, the integration of folktales into digital learning contributes to cultural preservation and character education. Many local folktales contain moral values such as honesty, empathy, and perseverance, which are crucial for building students' moral reasoning. By transforming these stories into digital formats, the study ensures that traditional narratives remain accessible and relevant to younger generations. This aligns with Wijayanti (2022), who emphasizes that digital adaptation of folklore serves as both an educational and cultural tool, bridging generational and technological gaps. The discussion affirms that the development and implementation of digital learning media based on folktales successfully merge technology, pedagogy, and culture in an effective educational framework. The results validate the theoretical foundations of multimedia learning and constructivism, demonstrating that interactive storytelling enhances comprehension, engagement, and cultural appreciation. While the effectiveness level is categorized as moderate, the overall impact on students' motivation, literacy, and moral awareness is significant. The study thus contributes to the advancement of culturally responsive digital pedagogy in Indonesian primary education and offers a replicable model for future innovations in language learning.

CONCLUSION

This study concluded that the development of Digital Learning Media Based on Folktales effectively enhanced fifth-grade students' understanding and engagement in Indonesian language learning. Through the systematic application of the ADDIE model, the research produced an interactive multimedia product integrating narrative texts, animation, audio narration, and interactive exercises. The validation process from experts in material, media, and instructional design yielded excellent results, while classroom implementation showed a moderate level of effectiveness with an average gain score of 0.44. These findings indicate that the developed media is valid, practical, and suitable for use in classroom learning to improve students' comprehension of narrative texts and moral values contained in folktales.

The integration of digital storytelling within the learning process not only increased students' motivation and comprehension but also strengthened their cultural literacy and moral development. By transforming local folktales into interactive digital media, traditional narratives became more engaging and accessible to modern learners. The findings reinforce Mayer's Multimedia Learning Theory and Bruner's Constructivist Learning Theory, which emphasize that learning becomes more meaningful when students actively construct knowledge through multimodal and culturally relevant experiences. Thus, this research bridges the gap between traditional storytelling and contemporary digital pedagogy, demonstrating that technology can be a medium for both innovation and cultural preservation.

In summary, the digital folktale media developed in this study provides a valuable educational innovation that aligns with the goals of the Merdeka Curriculum to foster independent, creative, and culturally aware learners. The product offers teachers an effective, engaging tool for teaching narrative texts while nurturing students' appreciation of local wisdom. Although the level of effectiveness is categorized as moderate, the overall impact on student motivation and learning engagement is significant. Future research may explore further development using advanced digital features, a broader range of folktales, or integration with mobile applications to expand accessibility and learning outcomes.

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