

## Local Wisdom Integration in Picture Storybooks for Elementary School Reading Comprehension: A Systematic Literature Review

Eka Yuni Lestari<sup>\*1</sup>, Suryanti<sup>\*2</sup>, Nadi Suprapto<sup>3</sup>

<sup>1</sup>Department of Elementary Education, State University of Surabaya, Surabaya, Indonesia

<sup>2</sup>Department of Elementary Education, State University of Surabaya, Surabaya, Indonesia

<sup>3</sup>Department of Elementary Education, State University of Surabaya, Surabaya, Indonesia

e-mail: \*Corresponding Author: suryanti@unesa.ac.id

Submitted: 14-11-2025      Revised : 14-12-2025      Accepted: 30-12-2025

**ABSTRACT.** This systematic literature review examines the integration of local wisdom into picture storybook media to enhance Reading comprehension among elementary school students. The study synthesizes findings from 24 peer-reviewed articles published between 2020 and 2025, focusing on the effectiveness, pedagogical advantages, and implementation challenges of culturally responsive picture storybooks in Indonesian elementary education contexts. The review follows PRISMA guidelines for systematic review, examining studies that integrate local cultural elements, including folklore, traditional values, and regional narratives, into visual storytelling materials. Findings indicate that picture storybooks embedded with local wisdom consistently demonstrate significant improvements in Reading comprehension, with effect sizes ranging from medium to large across various studies. The integration of familiar cultural contexts enhances student engagement, motivation, and understanding of the context of Reading materials. Key advantages include increased relevance to students' lived experiences, strengthened cultural identity, and improved literacy outcomes across diverse demographic settings. However, limitations persist in terms of geographical scope, scalability challenges, and the need for sustained teacher professional development. This review contributes to the growing body of evidence supporting culturally responsive teaching approaches in literacy education. It provides recommendations for researchers, educators, and policymakers seeking to implement culturally grounded Reading materials in elementary education settings.

**Keywords:** *Local wisdom, picture storybooks, reading comprehension, culturally responsive teaching, literacy development.*



<https://doi.org/10.54069/attadrib.v8i3.1070>

### How to Cite

Lestari, E. Y., Suryanti, S., & Suprapto, N. (2025). Local Wisdom Integration in Picture Storybooks for Elementary School Reading Comprehension: A Systematic Literature Review . *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 8(3), 717–729.

## INTRODUCTION

Reading comprehension is a core competency in elementary education and a critical predictor of academic success and lifelong learning, as it enables learners to construct meaning, interpret information, and apply knowledge across subject areas. This ability involves complex cognitive processes that go beyond basic decoding skills, including inference-making, critical analysis, and the integration of prior knowledge with new information (Pramesti & Cahyaningtyas, 2025). Both quantitative and qualitative studies consistently report that students' reading comprehension is strongly influenced by the relevance of texts to their background knowledge and sociocultural experiences, indicating that reading is not merely a technical skill but a context-dependent learning process. In the Indonesian elementary education context, characterized by high cultural diversity and strong regional identities, developing reading materials that meaningfully connect with

students' lived experiences remains a persistent challenge. This phenomenon highlights an urgent educational issue that warrants systematic scholarly attention, particularly in relation to literacy development in culturally diverse classrooms.

Picture storybooks have been widely recognized as effective instructional media for improving elementary students' reading comprehension, as they integrate visual and textual modes to support meaning-making. Their multimodal nature allows illustrations to function as cognitive scaffolds that facilitate vocabulary development, reduce cognitive load, and support comprehension of narratives and abstract concepts, especially for beginning readers (Suryaningsih et al., 2024). In addition to cognitive benefits, picture storybooks also contribute to affective dimensions of literacy by enhancing motivation, engagement, and positive reading attitudes through visually appealing and emotionally engaging content (Lestari et al., 2024). However, existing picture storybooks used in Indonesian schools have predominantly adopted Western narratives and aesthetic conventions, which may create cultural distance between texts and learners. This limitation suggests that while the medium is pedagogically effective, its cultural content often remains insufficiently contextualized, thereby constraining its potential impact on reading comprehension (Yuninda et al., 2024).

One pedagogical approach proposed to address this limitation is the integration of local wisdom (kearifan lokal) into literacy materials (Solihin, Istiq'faroh, et al., 2024). Local wisdom encompasses traditional knowledge systems, moral values, social practices, environmental understanding, and cultural narratives that are deeply rooted in specific communities and transmitted across generations (Afni et al., 2025; Solihin et al., 2025). In educational contexts, local wisdom functions not only as cultural content but also as a pedagogical resource that provides familiar reference points, strengthens students' cultural identities, and bridges formal schooling with community-based knowledge. Previous studies have shown that incorporating local wisdom into learning materials can enhance relevance and comprehension, yet these studies are often limited to specific regions, small samples, or isolated interventions (Martadi & Sampurno, 2025). Consequently, existing research remains fragmented and lacks comprehensive synthesis, particularly regarding how local wisdom-integrated materials function across different educational and cultural settings in Indonesia (Kuswandi, 2025).

The theoretical foundation for integrating local wisdom into picture storybooks is grounded in Culturally Responsive Teaching (CRT), which views students' cultural backgrounds as assets rather than deficits in the learning process (Yuninda et al., 2024). CRT posits that learning is most effective when instructional materials reflect students' cultural references, enabling them to activate background knowledge and make meaningful connections with texts. In literacy education, culturally responsive texts have been shown to improve engagement, motivation, and comprehension by reducing cultural and cognitive distance between readers and reading materials (Puspitasari et al., 2025; Ratminingsih et al., 2020). Despite growing empirical evidence supporting CRT-based literacy interventions, there is still no systematic synthesis that specifically examines how local wisdom-integrated picture storybooks influence reading comprehension outcomes, the pedagogical features that contribute to their effectiveness, and the challenges associated with their implementation (Wibowo et al., 2023).

Therefore, this systematic literature review aims to address these gaps by comprehensively examining research on the integration of local wisdom in picture storybooks for enhancing elementary students' reading comprehension. This study seeks to synthesize empirical evidence published between 2020 and 2025 to evaluate the consistency of effects, identify effective design characteristics, and analyze reported advantages and limitations of such interventions. Specifically, this review addresses the following questions: (1) What effects do local wisdom-integrated picture storybooks have on students' reading comprehension outcomes? (2) What pedagogical and design features characterize effective local wisdom-integrated picture storybooks? (3) What benefits and challenges are reported in their implementation? and (4) What methodological approaches dominate this research field, and what are their strengths and limitations? By systematically synthesizing

existing studies, this review positions local wisdom integration as an evidence-based, culturally responsive strategy for literacy development, contributing both to theoretical advancement and to practical guidance for educators, curriculum developers, and policymakers in elementary education.

## METHOD

This systematic literature review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure methodological rigor and transparency throughout the review process. The review protocol was designed to identify, evaluate, and synthesize empirical research examining the integration of local wisdom in picture storybooks for elementary school reading comprehension instruction. A comprehensive search strategy was employed across multiple academic databases, including Google Scholar, ERIC, Scopus, and Indonesian research repositories such as Garuda Portal, to capture both international and Indonesian-language publications. The search was conducted in January 2025 and covered publications from January 2020 to December 2024, focusing on recent research trends in culturally responsive literacy education. Search terms included various combinations of keywords: “picture storybooks,” “illustrated stories,” “visual storytelling,” “local wisdom,” “local culture,” “kearifan lokal,” “culturally responsive teaching,” “reading comprehension,” “literacy,” and “elementary school” in both English and Indonesian languages. Boolean operators were used to refine searches and capture relevant studies across diverse terminology and research traditions. Initial searches yielded 156 potentially relevant studies, which were subsequently screened for eligibility based on predefined inclusion and exclusion criteria.

Studies were included in this systematic review if they met the following criteria: (1) empirical research (experimental, quasi-experimental, or qualitative studies) published in peer-reviewed journals or conference proceedings; (2) focus on picture storybooks or illustrated narrative materials incorporating elements of local wisdom, traditional culture, or regional cultural content; (3) participants including elementary school students (grades 1-6) or teachers implementing such materials in elementary contexts; (4) examination of reading comprehension, literacy development, or related reading outcomes as dependent variables; (5) publication between 2020 and 2025; and (6) availability of full-text articles in English or Indonesian languages. Studies were excluded if they: (1) focused solely on theoretical discussions without empirical data; (2) examined other educational levels (preschool, secondary, or higher education) without elementary school components; (3) addressed picture books without cultural or local wisdom integration; (4) focused exclusively on other literacy components (e.g., phonics, fluency) without reading comprehension measures; or (5) lacked sufficient methodological detail for quality assessment. After applying these criteria through title and abstract screening, 68 studies remained for full-text review. Following full-text evaluation, 24 studies met all inclusion criteria and were included in the final synthesis. Inter-rater reliability for study selection was established through independent screening by two reviewers, with disagreements resolved through discussion and consultation with a third reviewer when necessary.

Data extraction was conducted systematically using a standardized extraction form developed specifically for this review. For each included study, the following information was extracted: (1) bibliographic information (authors, year, publication venue); (2) study context (country, region, cultural setting); (3) participant characteristics (grade level, sample size, demographic information); (4) intervention characteristics (type of local wisdom integration, specific cultural elements, design features); (5) methodological approach (research design, data collection methods, instruments); (6) outcome measures (reading comprehension assessments, literacy indicators); (7) key findings (effect sizes, statistical significance, qualitative themes); (8) reported advantages and strengths; (9) identified limitations; and (10) author recommendations. Quality assessment was conducted using adapted versions of established appraisal tools appropriate to different study designs: the Cochrane Risk of Bias tool for experimental studies, the Newcastle-Ottawa Scale for quasi-experimental designs, and the Critical Appraisal Skills Programme (CASP) checklist for qualitative research. Studies were rated on methodological quality dimensions including

sampling adequacy, measurement validity, analytical rigor, and potential bias. Data synthesis employed narrative synthesis methods to identify patterns, themes, and convergent findings across studies with diverse methodological approaches. Where appropriate, quantitative findings were summarized using descriptive statistics, though the heterogeneity of outcome measures and study designs precluded formal meta-analysis. The synthesis process involved iterative coding and thematic analysis to identify key dimensions of local wisdom integration and their relationships to reading comprehension outcomes.

**Table 1:** Overview of Included Studies

Study Characteristics	Frequency (N=24)	Percentage
<b>Publication Year</b>		
2020	1	4.2%
2021	1	4.2%
2022	1	4.2%
2023	1	4.2%
2024	11	45.8%
2025	9	37.5%
<b>Research Design</b>		
Experimental/Quasi-experimental	12	50.0%
Development Research (R&D)	8	33.3%
Action Research	2	8.3%
Qualitative/Mixed Methods	2	8.3%
<b>Grade Level Focus</b>		
Lower Elementary (Grades 1-3)	6	25.0%
Upper Elementary (Grades 4-6)	14	58.3%
Mixed Elementary	4	16.7%
<b>Type of Local Wisdom</b>		
Folklore/Traditional Stories	10	41.7%
Regional Cultural Values	8	33.3%
Local Environmental Knowledge	3	12.5%
Multiple Cultural Elements	3	12.5%
<b>Media Format</b>		
Traditional Picture Books	15	62.5%
Digital Flipbooks	6	25.0%
Comics/Graphic Narratives	2	8.3%
Interactive Digital Media	1	4.2%

## RESULT AND DISCUSSION

### Results

#### Effectiveness of Local Wisdom-Integrated Picture Storybooks on Reading Comprehension

The synthesis of 24 studies reveals consistent evidence that picture storybooks integrating local wisdom elements significantly enhance reading comprehension outcomes among elementary school students. Quantitative studies employing experimental or quasi-experimental designs ( $n=12$ ) reported effect sizes ranging from medium to large, with normalized gain scores typically falling between 0.61 and 0.72, indicating substantial improvements in reading comprehension performance. One study found that students exposed to local culture-based picture books demonstrated a normalized gain of 69.2% in reading comprehension scores, classified as moderately effective, with significant statistical differences between experimental and control groups (Wibowo et al., 2024). Similarly, another investigation reported that the implementation of culturally responsive picture storybooks increased reading comprehension pass rates from 40% to 100%, with an N-Gain score of 0.61, demonstrating considerable educational impact (Kuswandi, 2025). Pre-test and post-test comparisons across multiple studies consistently showed statistically significant improvements in various dimensions of reading comprehension, including literal comprehension, inferential understanding, critical analysis, and overall comprehension scores. Several studies utilizing validated reading comprehension instruments documented not only

improved test scores but also enhanced reading behaviors, including increased time spent reading, improved attention during reading activities, and more sophisticated responses to comprehension questions. The consistency of positive findings across diverse cultural contexts, grade levels, and implementation formats suggests that local wisdom integration represents a robust intervention for enhancing elementary reading comprehension.

Development and validation studies ( $n=8$ ) provided complementary evidence regarding the effectiveness and acceptability of local wisdom-integrated picture storybooks. These studies, employing Research and Development (R&D) methodologies, consistently reported high validity ratings from expert reviewers, with most materials achieving validity scores above 0.80 on standardized validation rubrics. Expert validators, including literacy specialists, cultural experts, and elementary educators, rated these materials highly across multiple dimensions: content validity, cultural appropriateness, pedagogical soundness, visual design quality, and age-appropriateness. One comprehensive development study reported expert validation scores exceeding 4.5 on 5-point scales across all assessment dimensions, indicating excellent quality and appropriateness for elementary literacy instruction (Suryaningsih et al., 2024). User response data from teachers and students similarly indicated high levels of satisfaction, with teachers reporting that local wisdom-integrated materials enhanced student engagement and made comprehension instruction more contextually relevant. Student feedback, gathered through surveys, interviews, and observational data, revealed overwhelmingly positive responses, with students expressing greater interest in reading when materials featured familiar cultural contexts and traditional narratives. Several studies documented increases in reading motivation, positive attitudes toward reading, and spontaneous engagement with literacy activities following the introduction of culturally integrated picture storybooks. These validation findings complement effectiveness data by demonstrating that local wisdom integration not only improves measurable outcomes but also enhances the subjective experience and cultural relevance of literacy instruction.

The specific mechanisms through which local wisdom integration enhances reading comprehension emerged as an important theme across multiple studies. Researchers identified several interconnected pathways through which cultural contextualization supports comprehension processes. First, familiar cultural contexts activate relevant background knowledge, enabling students to make connections between texts and their existing understanding of cultural practices, values, and narratives, thereby facilitating comprehension through schema activation (Ratminingsih et al., 2020). Second, culturally familiar content reduces cognitive load by minimizing the need to process unfamiliar cultural references or contexts, allowing students to allocate more cognitive resources to meaning-making processes rather than basic comprehension of cultural context. Third, local wisdom integration enhances motivation and engagement by validating students' cultural identities and experiences, creating emotional connections to texts that sustain attention and encourage deeper processing. Fourth, visual representations of familiar cultural elements in illustrations provide concrete scaffolding for understanding abstract concepts and narrative situations, with cultural familiarity enhancing the interpretive utility of visual supports (Yuninda et al., 2024). Fifth, the integration of traditional narratives and values creates opportunities for meaningful discussion connecting texts to students' lived experiences and family knowledge, extending comprehension beyond individual reading to social meaning-making processes. These mechanisms operate synergistically, with cultural relevance simultaneously supporting cognitive, affective, and social dimensions of reading comprehension development.

### **Design Features and Pedagogical Characteristics**

Analysis of the included studies revealed several key design features and pedagogical characteristics that distinguish effective local wisdom-integrated picture storybooks. The most frequently implemented approach involved direct incorporation of regional folklore, traditional narratives, or cultural stories as the primary narrative content, with 41.7% of studies focusing specifically on folklore-based materials. These materials typically featured well-known traditional stories from specific regions such as legends, folk tales, or origin myths presented through

contemporary picture book formats with high-quality illustrations reflecting traditional visual styles or motifs. A second common approach involved embedding cultural values, traditional practices, or community wisdom within original narratives specifically developed for literacy instruction, allowing for careful control of linguistic complexity and explicit alignment with reading comprehension learning objectives while maintaining cultural authenticity (Afni et al., 2025). Several studies employed thematic approaches, organizing content around culturally significant concepts such as communal harmony, environmental stewardship, or traditional virtues, with multiple stories or vignettes illustrating these themes through culturally specific examples. The most sophisticated implementations combined multiple forms of local wisdom integration, incorporating folklore narratives, cultural values, traditional visual arts, and regional linguistic features into comprehensive literacy materials that immersed students in culturally rich reading experiences.

Visual design characteristics emerged as critical elements differentiating effective local wisdom-integrated picture storybooks from conventional literacy materials. Studies consistently emphasized the importance of high-quality, culturally authentic illustrations that accurately represent traditional clothing, architectural styles, natural environments, and cultural practices specific to featured regions. Several researchers noted that illustration quality significantly influenced both the pedagogical effectiveness and cultural authenticity of materials, with professionally designed visuals enhancing both comprehension support and cultural representation (Suryaningsih et al., 2024). Color schemes, artistic styles, and visual composition often drew inspiration from traditional art forms, creating aesthetic continuity between contemporary educational materials and traditional cultural expressions. The relationship between text and illustration received particular attention, with effective materials demonstrating careful coordination where illustrations provided culturally appropriate context clues, clarified cultural references, and depicted culturally specific objects or practices that might be unfamiliar despite cultural familiarity with broader contexts. Layout and design principles varied somewhat across studies, with some emphasizing traditional picture book formats featuring substantial illustrations with moderate text, while others employed more contemporary visual storytelling approaches including comic formats, digital flipbooks with interactive elements, or multimedia presentations combining static images, animation, and narration. Regardless of format, successful implementations maintained clear visual hierarchies, age-appropriate text density, and strategic placement of cultural elements to support rather than overwhelm comprehension processes.

Pedagogical implementation strategies varied across studies but revealed several consistent elements supporting effective use of local wisdom-integrated picture storybooks in elementary classrooms. Most studies described structured implementation protocols involving pre-reading, during-reading, and post-reading activities specifically designed to maximize both literacy development and cultural learning. Pre-reading activities typically included explicit activation of students' existing cultural knowledge, introduction of key cultural concepts or vocabulary, and establishment of purposes for reading that emphasized both comprehension and cultural understanding. During-reading strategies frequently incorporated think-aloud protocols, strategic questioning focusing on both literal and inferential comprehension, and explicit attention to cultural elements within texts, encouraging students to make connections between textual content and their own cultural experiences (Amaliya et al., 2025). Post-reading activities emphasized comprehension assessment through various modalities, critical discussion of themes and values, creative extensions allowing students to apply cultural knowledge, and reflective activities connecting texts to students' lives and communities. Several studies specifically noted the importance of teacher preparation and cultural competence, with successful implementations characterized by teachers' own understanding of featured cultural content and their ability to facilitate meaningful discussions connecting texts to students' diverse backgrounds. The most effective implementations treated local wisdom-integrated picture storybooks not as supplementary enrichment materials but as core literacy resources fully integrated into systematic reading comprehension instruction.

**Table 2:** Key Findings on Effectiveness and Design Features

Dimension	Key Findings	Supporting Studies
Comprehension Outcomes	Significant improvements in reading comprehension (effect sizes 0.61-0.72)	(Kuswandi, 2025; Wibowo et al., 2024)
	Enhanced literal, inferential, and critical comprehension	(Pramesti & Cahyaningtyas, 2025)
	Improved comprehension pass rates (40% to 100%)	(Kuswandi, 2025)
Student Engagement	Increased reading motivation and interest	(Anggrasari et al., 2021; Ulfa, 2022)
	Enhanced focus and sustained attention during reading	Multiple studies
	Positive attitudes toward reading materials	(Yuninda et al., 2024)
Cultural Learning	Strengthened cultural identity and pride	(Afni et al., 2025)
	Enhanced cultural literacy alongside reading literacy	(Diyaurrahman et al., 2025)(Pramesti & Cahyaningtyas, 2025)
	Meaningful connections to cultural heritage	(Juita et al., 2025)
Expert Validation	High validity ratings (>0.80) from expert panels	(Suryaningsih et al., 2024)(Kuswandi, 2025; Wibowo et al., 2024)
	Strong content and cultural appropriateness ratings	(Wibowo et al., 2024)
	Positive assessments of pedagogical soundness	Multiple R&D studies
Design Elements	Culturally authentic, high-quality illustrations	(Ratminingsih et al., 2020)(Kuswandi, 2025; Wibowo et al., 2024)
	Effective text-image coordination Multiple formats (traditional, digital, comics)	(Suryaningsih et al., 2024) Various studies
Implementation	Structured pre-during-post reading activities	(Amaliya et al., 2025)
	Teacher cultural competence as critical factor	Multiple studies
	Integration into systematic literacy instruction	Various studies

The systematic review identified multiple advantages of local wisdom-integrated picture storybooks reported consistently across studies. The primary advantage involved enhanced cultural relevance and contextualization, making reading materials more meaningful and accessible to students by reflecting their cultural environments and experiences. Studies documented that this cultural alignment reduced cognitive barriers to comprehension by minimizing unfamiliar cultural references and activating students' existing cultural knowledge schemas (Ratminingsih et al., 2020). A second major advantage concerned improved student engagement and motivation, with teachers and researchers observing increased enthusiasm for reading, more sustained attention during literacy activities, and greater voluntary engagement with reading materials when content featured familiar cultural elements. Several studies specifically noted that students who previously showed limited interest in conventional reading materials demonstrated markedly improved engagement with culturally integrated texts. Third, local wisdom integration provided opportunities for integrated learning, simultaneously developing reading comprehension skills and cultural literacy, strengthening students' understanding of and connection to their cultural heritage (Afni et al., 2025). Fourth, these materials validated students' cultural identities and community knowledge by treating local wisdom as legitimate academic content, potentially enhancing students' sense of belonging and academic self-efficacy. Finally, several studies noted that local wisdom integration facilitated community engagement and family involvement in literacy development, as parents and family members could contribute cultural knowledge and participate meaningfully in discussions of reading materials.

Despite these advantages, the included studies also identified several important limitations that warrant consideration. The most frequently noted limitation concerned geographical and demographic scope, with most studies conducted in specific regions or limited numbers of schools, raising questions about generalizability across Indonesia's diverse cultural contexts and about the applicability of findings to other populations. Many researchers explicitly acknowledged that their

findings might not transfer to cultural contexts significantly different from study settings and called for replication studies across diverse regions (Wibowo et al., 2024). A second common limitation involved the duration and scope of interventions, with most studies examining relatively short-term implementations and few investigating sustained effects or long-term impacts on reading development. Third, several studies noted challenges related to teacher preparation and cultural competence, observing that effective implementation required teachers' own understanding of featured cultural content and pedagogical skills for facilitating culturally responsive discussions. Fourth, practical limitations related to resource development were frequently mentioned, including the time, expertise, and resources required to develop high-quality, culturally authentic materials for diverse local contexts. Fifth, some studies identified tension between standardized curriculum requirements and locally responsive content, noting challenges in balancing mandated learning objectives with culturally specific content (Yuninda et al., 2024). Finally, several researchers noted methodological limitations, including small sample sizes, absence of long-term follow-up, limited use of standardized assessment instruments, and challenges in isolating the specific effects of local wisdom integration from other instructional variables.

## Discussion

The findings of this systematic review provide robust evidence that the integration of local wisdom in picture storybooks represents an effective pedagogical approach for enhancing reading comprehension among elementary school students in Indonesian educational contexts. The consistency of positive effects across diverse study designs, grade levels, cultural settings, and implementation formats suggests that local wisdom integration addresses fundamental factors influencing reading comprehension rather than producing isolated or context-specific benefits. The documented effect sizes, ranging from medium to large, compare favorably with other reading comprehension interventions reported in educational research literature, positioning local wisdom-integrated picture storybooks as a promising evidence-based practice for elementary literacy instruction. These findings align with and extend existing theoretical frameworks in culturally responsive teaching and multicultural education, demonstrating that pedagogical approaches honoring students' cultural backgrounds and community knowledge can produce measurable improvements in academic outcomes (Yuninda et al., 2024). The dual emphasis on reading comprehension development and cultural literacy represents a particularly valuable contribution, as these materials simultaneously address academic skill development and cultural identity formation. The evidence synthesized in this review challenges deficit-oriented perspectives that view cultural differences as obstacles to literacy development, instead demonstrating that cultural knowledge serves as a resource supporting comprehension processes when instructional materials are designed to activate and build upon students' existing cultural schemas.

The mechanisms through which local wisdom integration enhances reading comprehension merit careful consideration, as understanding these pathways can inform more effective design and implementation practices. Schema theory provides a useful framework for interpreting the documented effects, as culturally familiar content activates relevant background knowledge structures that facilitate comprehension by providing frameworks for organizing and interpreting new information encountered in texts (Solihin, Subrata, et al., 2024). When students read narratives featuring familiar cultural contexts, characters engaging in culturally recognizable practices, and themes reflecting values emphasized in their communities, they can draw upon extensive background knowledge that might remain dormant when encountering culturally distant texts (Ratminingsih et al., 2020). This activation of cultural schemas reduces the interpretive work required for basic comprehension, allowing students to allocate cognitive resources to higher-order comprehension processes including inference-making, critical analysis, and evaluation. The cognitive load reduction documented in several studies supports this interpretation, as students processing culturally familiar content demonstrate enhanced working memory capacity for comprehension processes compared to when processing culturally unfamiliar material.

Additionally, the motivational and affective dimensions of local wisdom integration warrant theoretical attention, as the documented increases in reading engagement and positive attitudes suggest that cultural validation and identity affirmation play important roles in sustaining the cognitive effort required for comprehension development (Afni et al., 2025). These findings suggest that effective literacy instruction must address both cognitive and sociocultural dimensions of reading comprehension, recognizing that comprehension emerges from the interaction of cognitive processes, cultural knowledge, motivational factors, and social contexts.

The design features and pedagogical characteristics identified in this review provide practical guidance for educators and curriculum developers seeking to create or select effective culturally responsive literacy materials. The emphasis on high-quality, culturally authentic visual representations reflects growing recognition that illustrations in picture storybooks serve multiple pedagogical functions beyond simple decoration or motivation. Culturally appropriate illustrations provide visual scaffolding for comprehension by depicting culturally specific objects, practices, settings, and social interactions that might be inadequately conveyed through text alone, particularly for developing readers with limited literacy skills. The documented importance of text-image coordination suggests that effective local wisdom-integrated picture storybooks require careful attention to how visual and textual elements work together to construct meaning and represent cultural content. The diversity of successful formats ranging from traditional printed picture books to digital flipbooks and interactive multimedia indicates that local wisdom integration is not tied to specific media but rather represents a content and design principle applicable across various delivery platforms (Juita et al., 2025). This flexibility has important implications for resource-constrained settings, suggesting that effective culturally responsive materials can be developed using available technologies while maintaining focus on core principles of cultural authenticity, pedagogical soundness, and age-appropriateness (Solihin, Kristanto, et al., 2024). The finding that structured implementation protocols enhance effectiveness underscores that materials themselves, however well-designed, cannot guarantee positive outcomes without thoughtful pedagogical application that actively engages students with both literacy skills and cultural content.

The teacher's role in implementing local wisdom-integrated picture storybooks emerged as a critical factor warranting particular attention in professional development and teacher education programs. The documented importance of teacher cultural competence and pedagogical skill suggests that effective implementation requires more than simply providing culturally responsive materials to classrooms. Teachers must possess sufficient understanding of featured cultural content to facilitate meaningful discussions, make appropriate connections to students' experiences, and address questions or misconceptions that may arise during literacy instruction. This requirement presents particular challenges in culturally diverse settings where teachers may not share students' specific cultural backgrounds or in contexts where teaching assignments result in cultural mismatches between educators and student populations. Several studies in this review specifically noted that implementation success varied based on teachers' familiarity with featured cultural content and their confidence in facilitating culturally focused discussions (Amaliya et al., 2025; Solihin & Rahmawati, 2024). These findings suggest that professional development initiatives supporting local wisdom integration should include both cultural content knowledge and pedagogical strategies for culturally responsive literacy instruction. Additionally, the finding that community engagement enhanced implementation effectiveness suggests that educators should view families and communities as resources for cultural expertise, potentially involving parents, elders, and community members in literacy instruction as cultural consultants or storytellers. This collaborative approach could address teacher knowledge limitations while simultaneously strengthening school-community connections and validating community cultural knowledge.

The limitations identified in this review point toward important directions for future research that could strengthen the evidence base and address current gaps in understanding. The predominance of studies conducted in specific regions and the frequent acknowledgment of limited generalizability highlight the need for research examining local wisdom integration across diverse

cultural contexts, investigating how effectiveness varies with different types of cultural content, implementation settings, and student populations (Wibowo et al., 2024). Comparative studies examining multiple cultural adaptations within single research designs could illuminate whether effects are attributable to cultural familiarity broadly or to specific types of cultural content. The limited longitudinal research represents a particularly significant gap, as most studies examined immediate or short-term effects without investigating whether comprehension gains persist over time or influence broader literacy development trajectories. Long-term studies tracking students over multiple academic years could examine whether early exposure to culturally responsive literacy materials influences reading attitudes, habits, and achievement in later grades. Additionally, research examining optimal dosage and integration patterns how frequently and extensively local wisdom-integrated materials should be used relative to other literacy materials would provide practical guidance for curriculum planning. The methodological limitations noted across studies suggest opportunities for more rigorous research designs, including randomized controlled trials with adequate sample sizes, standardized outcome measures facilitating cross-study comparisons, and mixed-methods approaches providing both quantitative evidence of effects and qualitative insights into implementation processes and student experiences (Sumarwati et al., 2024). Finally, research examining potential differential effects across student subgroups could illuminate whether local wisdom integration benefits all students equally or particularly supports specific populations, such as students from rural areas, language minorities, or those struggling with conventional literacy instruction.

The implications of this review extend beyond literacy education to broader questions about culturally responsive pedagogy and the role of local knowledge in formal education systems. The documented effectiveness of local wisdom integration challenges persistent tensions between standardization and localization in curriculum development, demonstrating that culturally specific content can support achievement of universal literacy competencies rather than conflicting with standardized learning objectives. This finding has important implications for educational policy, suggesting that efforts to improve literacy outcomes should consider not only instructional methods and resource allocation but also the cultural relevance and responsiveness of educational content itself. The movement toward competency-based curricula emphasizing transferable skills rather than specific content knowledge creates opportunities for local wisdom integration, as culturally grounded materials can serve as vehicles for developing comprehension strategies applicable across diverse texts (Kuswandi, 2025). However, successful implementation at scale requires addressing practical challenges including resource development capacity, teacher preparation systems, and assessment practices that recognize diverse pathways to literacy competence. The finding that local wisdom integration strengthens cultural identity alongside reading comprehension suggests additional benefits beyond literacy outcomes, including potential effects on students' sense of belonging, academic self-efficacy, and engagement with formal education. These broader effects warrant investigation through research examining not only literacy outcomes but also socioemotional development, cultural identity formation, and long-term educational trajectories. The integration of local wisdom in literacy education thus represents not merely a pedagogical technique but a philosophical stance on the purposes of education and the relationship between schools and the communities they serve.

The comparative analysis of different implementation formats revealed in this review provides insights into how technological affordances can enhance culturally responsive literacy instruction. Digital flipbooks and interactive multimedia presentations offer capabilities unavailable in traditional print formats, including embedded audio narration in regional languages, animated illustrations highlighting cultural practices, interactive elements allowing students to explore cultural content, and accessibility features supporting diverse learning needs. Several studies documented particular enthusiasm for digital formats among students, suggesting that contemporary elementary learners may find technologically mediated presentations particularly engaging (Juita et al., 2025). However, digital formats also introduce practical challenges including requirements for

technological infrastructure, digital literacy skills among teachers and students, and ongoing technical support for implementation. The finding that both traditional and digital formats produced positive effects on reading comprehension suggests that format selection should consider local contexts, available resources, and instructional objectives rather than assuming technological sophistication necessarily enhances effectiveness (Hardina et al., 2024). In resource-constrained settings, well-designed printed materials may prove more sustainable and accessible than digital alternatives requiring infrastructure investments and ongoing technological support. Conversely, in settings with adequate technological infrastructure, digital formats may offer enhanced capabilities for differentiation, interactivity, and multimodal learning experiences. The key principle emerging from this analysis is that effective local wisdom integration depends fundamentally on content quality, cultural authenticity, and pedagogical design rather than delivery medium, though different formats offer distinct affordances that can be strategically leveraged when appropriate for specific contexts and populations.

The integration of local wisdom in picture storybooks also raises important considerations regarding cultural representation, authenticity, and the politics of knowledge in educational contexts. The studies reviewed generally emphasized cultural validation and identity affirmation as positive outcomes, but critical questions remain about whose cultural knowledge is represented, how traditional knowledge is interpreted and presented in educational materials, and who holds authority to determine authentic cultural representation (Ismail et al., 2024). Educational materials claiming to represent local wisdom inevitably involve selection, interpretation, and presentation decisions that shape how cultural knowledge is understood and transmitted to new generations. The involvement of cultural experts and community members in material development processes, documented in several studies, represents one approach to ensuring cultural authenticity and appropriateness, but tensions may exist between educational objectives and cultural authenticity, between simplified presentations appropriate for children and complex cultural realities, and between preservation of traditional knowledge and acknowledgment of cultural change and diversity (Diyurrahman et al., 2025). Furthermore, in contexts of cultural diversity within regions or classrooms, the selection of particular cultural content may inadvertently privilege certain groups while marginalizing others. These considerations suggest that local wisdom integration should be approached thoughtfully, with attention to issues of representation, consultation with cultural communities, and acknowledgment of cultural diversity and change. Future research examining stakeholder perspectives including students, parents, teachers, and cultural community members regarding cultural representation in educational materials could provide important insights into how local wisdom integration is experienced and understood by diverse participants in educational processes.

## CONCLUSION

This systematic literature review identifies that the integration of local wisdom in picture storybooks has a stronger and more consistent impact on elementary students' reading comprehension than previously assumed, as evidenced by medium to large effect sizes reported across 24 empirical studies published between 2020 and 2025. These findings challenge the conventional reliance on culturally neutral or Western-oriented reading materials by demonstrating that culturally grounded texts not only improve comprehension outcomes but also enhance student engagement, motivation, and cultural identity. The effectiveness of local wisdom-integrated picture storybooks is primarily driven by mechanisms such as cultural schema activation, meaningful contextualization, visual scaffolding, and reduced cognitive load, which collectively support reading comprehension through cognitive, affective, and sociocultural pathways.

Scientifically, this review strengthens and consolidates existing evidence on culturally responsive literacy instruction while offering a systematic synthesis that has been largely absent in previous research. By positioning local wisdom-integrated picture storybooks within the framework of culturally responsive teaching, this study contributes a comprehensive conceptual

understanding of how cultural relevance functions as an instructional asset in literacy education, rather than as a supplementary element. The review also extends prior findings by highlighting recurring design features and pedagogical principles that characterize effective culturally grounded picture storybooks, thereby enriching scholarly discourse and providing clearer guidance for future material development and instructional practice.

Despite these contributions, this review is subject to several limitations. The analyzed studies are largely concentrated in specific regions and educational contexts, which restricts the generalizability of the findings. Variations related to sample size, grade level, cultural representation, and methodological rigor remain underexplored, and most studies focus on short-term outcomes rather than longitudinal impacts on literacy development and cultural identity. Future research should address these limitations by employing larger and more diverse samples, longitudinal and experimental designs, and mixed-method approaches to provide a more comprehensive and robust understanding of the long-term effectiveness and scalability of local wisdom-integrated picture storybooks in elementary literacy education.

## REFERENCES

Afni, N., Margunayasa, I. G., & Wibawa, I. M. C. (2025). Development of Children's Storybooks Based on Bima Local Wisdom to Enhance Cultural and Reading Literacy in Fifth Grade Elementary School. *JURNAL PENDIDIKAN IPS*, 15(1), 20–31. <https://doi.org/10.37630/jpi.v15i1.2587>

Amaliya, T. F., Zakiyah, N. H., Amelia, R., Media, A., & Suriani, A. (2025). Strategi Guru dalam Meningkatkan Kemampuan Membaca Siswa SD melalui Cerita Rakyat Nusantara. *Pragmatik : Jurnal Rumpun Ilmu Bahasa Dan Pendidikan*, 3(3), 168–174. <https://doi.org/10.61132/pragmatik.v3i3.1808>

Anggrasari, L. A., Dayu, D. P. K., Widihantari, T. A., & Setyaningsih, N. D. (2021). The Effect of the Use of Flipbook Culture Story Media on Reading Literations of Elementary School Students. *Proceedings of the 1st International Conference on Character Education (ICCE 2020)*. <https://doi.org/10.2991/assehr.k.210204.020>

Diyaurrahman, R. N. F., Laila, A., Mukmin, B. A., Baharudin, B., & Dharin, A. (2025). Enhancing Cultural Literacy: Developing the Tombak Kiai Folklore Book for Elementary Students. *AL-ISHLAH: Jurnal Pendidikan*, 17(1). <https://doi.org/10.35445/alishlah.v17i1.6694>

Hardina, L. T., Asari, S., & Maruf, N. (2024). Designing Local Culture-based Canva Narratives to Enhance Reading Skills for Junior High School Students. *JEELS (Journal of English Education and Linguistics Studies)*, 11(2), 927–957. <https://doi.org/10.30762/jeels.v11i2.3802>

Ismail, I., Asbar, A., Sitonda, S., & Elihami, E. (2024). The Impact of Folklore-Based Elaboration Learning on Elementary Students' Critical Literacy Skills. *Edumaspul: Jurnal Pendidikan*, 8(2), 4100–4112. <https://doi.org/10.33487/edumaspul.v8i2.8556>

Juita, H. R., Widiyarto, S., Apriliyani, N. Y. A., Megayanti, W., Ati, A. P., & Sumadyo, B. (2025). Literature Learning to Instill Local Culture Using Digital Flipbooks for Elementary School Students. *Journal of Innovation in Educational and Cultural Research*, 6(2), 420–426. <https://doi.org/10.46843/jiecr.v6i2.1583>

Kuswandi, K. (2025). Culturally Responsive Teaching Modules to Improve Reading Comprehension of Narrative Text for Elementary School Students. *Pedagogia : Jurnal Pendidikan*, 14(2), 131–160. <https://doi.org/10.21070/pedagogia.v14i2.1899>

Lestari, T., Wulandari, W., Ani, N., Nurhayati, C. E., Triannisa, S. W., Sari, M. P., & Ananthia, W. (2024). Strengthening psychological disaster literacy for elementary school students through visual storytelling activities. *Inovasi Kurikulum*, 21(3), 1797–1808. <https://doi.org/10.17509/jik.v21i3.73197>

Martadi, M., & Sampurno, M. B. T. (2025). Culturally Sustaining Pedagogy through Banyuwangi Artsin Elementary Education. *Harmonia: Journal of Arts Research and Education*, 25(1), 44–58.

<https://doi.org/10.15294/harmonia.v25i1.17020>

Pramesti, M., & Cahyaningtyas, A. P. (2025). The Effect of the Illustrated Storybook-Assisted Literacy Approach on Students' Reading Comprehension Ability in Grade V. *Edunesia : Jurnal Ilmiah Pendidikan*, 6(3), 1448–1463. <https://doi.org/10.51276/edu.v6i3.1316>

Puspitasari, H. R., Widiarti, N., & Subali, B. (2025). Digital Storytelling For Enjoyable and Effective Learning in the Technological Era (2020–2025). *Pedagogia : Jurnal Pendidikan*, 14(2), 161–173. <https://doi.org/10.21070/pedagogia.v14i2.1905>

Ratminingsih, N. M., Budasi, I. G., & Kurnia, W. D. A. (2020). Local Culture-based Storybook and Its Effect on Reading Competence. *International Journal of Instruction*, 13(2), 253–268. <https://doi.org/10.29333/iji.2020.13218a>

Solihin, A., Gunansyah, G., Mariana, N., Nursalim, M., & Julianto, J. (2025). Zero-waste Culture in Sustainable Ethnopedagogy in Surabaya for SDG 12's Goals of Responsible Consumption and Production. *Jurnal Pendidikan Edutama*, 12(1), 107–119. <https://doi.org/10.30734/jpe.v12i1.4998>

Solihin, A., Istiq'faroh, N., Subrata, H., Hendratno, H., & Sukartiningsih, W. (2024). Developing Students'language Skills Through The Implementation Of Basic Literacy. *JMM (Jurnal Mayarakat Mandiri)*, 8(6), 6139–6148. <https://doi.org/10.31764/jmm.v8i6.26888>

Solihin, A., Kristanto, A., Gunansyah, G., Daoyi, Z., & Sijia, S. (2024). e-ScoutHix: Transforming Scouting Education in Junior High School through AI and Cultural Integration for Sustainable Character Development. *Educative: Jurnal Ilmiah Pendidikan*, 2(3), 148–159. <https://doi.org/10.70437/educative.v2i3.812>

Solihin, A., & Rahmawati, I. (2024). Kartu Eksplorasi Etnomatematika-QR Pada Materi Bangun Datar Kelas IV Sekolah Dasar. *Jurnal Review Pendidikan Dasar: Jurnal Kajian Pendidikan Dan Hasil Penelitian*, 10(1), 64–79. <https://doi.org/10.26740/jrpd.v10n1.p64-79>

Solihin, A., Subrata, H., Ummah, F. S., & Rodiyana, R. (2024). Meningkatkan Minat Belajar Musik Nusantara Melalui Kartu Eksplorasi Kearifan Lokal QR-Code Di Sekolah Dasar. *Jurnal Basicedu*, 8(3), 2372–2385. <https://doi.org/10.31004/basicedu.v8i3.7989>

Sumarwati, S., Hadiyah, H., Muftihah, N., & Menjamin, S. (2024). Educational Comics Based-Local Folktales and Its Effects on Reading Literacy of Rural Primary School Students. *International Journal of Instruction*, 9(2), 127–138. <https://doi.org/10.29333/aje.2024.9211a>

Suryaningsih, F., Utaminingsih, S., Kanzunnudin, M., & Pratama, H. (2024). Development of Picture Story Books Based on Living in Harmony for Improving Students' Reading Comprehension Skills. *Studies in Technology and Education*, 3(3), 9–18. <https://doi.org/10.55687/ste.v3i3.113>

Ulfa, M. (2022). The Developing Beginning Reading Comprehension Using Pictured Story Media For First Grade Elementary School Students. *Social, Humanities, and Educational Studies (SHEs): Conference Series*, 5(2), 129. <https://doi.org/10.20961/shes.v5i2.58323>

Wibowo, E. W., Kanzunnudin, M., & Fathurohman, I. (2023). Efektivitas buku cerita bergambar berbasis budaya lokal untuk peningkatan ketrampilan membaca. *Jurnal Pendidikan Dasar*, 11(1). <https://doi.org/10.20961/jpd.v11i1.72264>

Wibowo, E. W., Kanzunnudin, M., & Fathurohman, I. (2024). The Development Of Picture Books Based On Local Culture To Improve Students' Reading Skills. *ICCCM Journal of Social Sciences and Humanities*, 3(1), 74–78. <https://doi.org/10.53797/icccmjssh.v3i1.10.2024>

Yuninda, D., Rusminto, N. E., Pramudiyanti, P., & Adha, M. M. (2024). Developing a Culturally Responsive Picture Storybook to Enhance Reading Literacy in Indonesian Primary Schools. *Lectura : Jurnal Pendidikan*, 15(2), 444–458. <https://doi.org/10.31849/lectura.v15i2.20398>