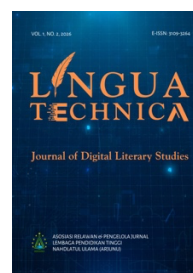




List of contents available at [Lingua Technica](https://journal.arjunu.org/index.php/lingtech)

## Lingua Technica: Journal of Digital Literary Studies

homepage: <https://journal.arjunu.org/index.php/lingtech>



# Digital reading platforms in literary learning: cultural understanding and engagement in Indonesian and Malay texts

Mohd Roslan Mohd Nor <sup>1</sup>, Ahmad Zubaidi <sup>2\*</sup>

<sup>1</sup> Universiti Malaya, Malaysia

<sup>2</sup> UIN Kiai Haji Achmad Siddiq Jember, Indonesia

\* Corresponding author: [ediyen8@gmail.com](mailto:ediyen8@gmail.com)

## ABSTRACT

Received  
25 December 2025;

Revised  
21 January 2026;

Accepted  
26 January 2026;

Available online  
30 January 2026

**Background:** The increasing use of digital reading platforms in humanities education has transformed how readers interact with texts, yet their impact on literary engagement, cultural understanding, and interpretive depth in Southeast Asian literary learning remains underexplored. **Objective:** This study investigates how digital reading platforms shape engagement, cultural meaning-making, and interpretive depth in the reading of Indonesian and Malay texts. **Method:** Employing a mixed-methods design, the study analyzes digitally mediated interactions—annotations, discussions, and reflective responses—across a curated corpus of canonical Indonesian and Malay works (published between the 1970s and 2010s) accessed through institutional digital reading platforms. **Results:** The findings reveal distinct patterns of digital engagement, with Indonesian texts eliciting stronger annotation-based interaction and Malay texts fostering more dialogic discussion. Cultural understanding emerges in differentiated forms, combining historical-political contextualization and ethical-communal interpretation. Furthermore, digital mediation supports advanced literary interpretation, including thematic synthesis, ideological critique, and intertextual reasoning. **Implication:** These results indicate that digital reading platforms function as cultural and interpretive mediation spaces rather than neutral technologies. **Novelty:** This study integrates literature-specific interpretive indicators with platform-based empirical data, offering a culturally grounded model of digital literary learning.

Keywords: *cultural understanding; digital reading platforms; Indonesian literature; literary engagement; Malay literature*

DOI: <https://doi.org/10.64595/lingtech.v2i1.131>

\*) Copyright © 2026 Mohd Roslan Mohd Nor and Ahmad Zubaidi

This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)

## INTRODUCTION

The development of digital reading platforms has fundamentally reshaped how literary texts are accessed, interpreted, and taught across educational contexts worldwide. UNESCO reports that over 65% of university students globally now engage with course readings primarily through digital platforms (UNESCO, 2023), while Southeast Asia has experienced one of the fastest growth rates in mobile-based reading applications, exceeding 20% annually over the last decade (Agustina et al., 2022). In Indonesia and Malaysia, national literacy surveys indicate a steady rise in digital reading participation alongside persistent challenges in deep reading, literary engagement, and cultural comprehension. These trends raise urgent questions about how digital environments mediate students' encounters with national literatures. Indonesian and Malay literary works, which carry dense cultural, historical, and ideological meanings, are increasingly consumed through screens rather than print. Understanding how digital reading platforms shape literary engagement and cultural understanding is therefore crucial, not only for pedagogical effectiveness but also for sustaining the cultural transmission embedded in national literary traditions.

Existing scholarship has extensively examined digital reading technologies in language learning, literacy development, and general education, with strong evidence that digital platforms can enhance accessibility, motivation, and learner autonomy. Studies on e-books (Fang et al., 2025; Lim et al., 2021), learning management systems (Fernando et al., 2023; Prasetya et al., 2020) and interactive reading applications (Day et al., 2025; Kontio, 2025) have shown positive effects on reading frequency and surface-level comprehension. Research in literature education has also explored student engagement, reader response, and critical interpretation, particularly within Western literary canons (Bist & Kandel, 2024; Ilyas et al., 2025; Widayanti et al., 2025). However, relatively limited attention has been given to how digital reading platforms operate within the learning of national literatures in non-Western contexts, especially those shaped by shared linguistic roots and intertwined cultural histories such as Indonesian and Malay literature. Moreover, prior studies often emphasize technical affordances or reading efficiency (Silva et al., 2025), leaving underexplored how digital environments influence cultural understanding, interpretive depth, and literary meaning-making. This gap becomes more pronounced when digital reading is positioned not merely as a medium, but as a cultural and pedagogical space that reshapes readers' relationships with literary texts.

Responding to these gaps, this study aims to examine how digital reading platforms are integrated into literature learning and how such integration relates to students' cultural understanding and literary engagement in Indonesian and Malay literature. Specifically, the study addresses the following guiding questions: How do digital reading platforms shape students' engagement with Indonesian and Malay literary texts? To what extent do these platforms support or constrain students' understanding of cultural meanings embedded in national literatures? What patterns emerge in students' interpretive practices, motivation, and participation when literary learning is mediated through digital platforms? By focusing on these questions, the research positions digital reading not as a neutral technological tool, but as an active pedagogical environment that interacts with literary content, reader agency, and cultural knowledge construction.

This study advances the argument that digital reading platforms have the potential to enhance literary engagement and cultural understanding when pedagogically structured to support interpretive depth, dialogic reading, and contextual exploration. It is hypothesized that features such as annotation tools, multimodal resources, and collaborative discussion spaces can foster more active engagement with Indonesian and Malay literary texts, enabling students to negotiate cultural meanings more critically. At the same time, the study acknowledges the

possibility that unstructured or purely consumption-oriented digital reading may encourage fragmented attention and superficial interpretation. By empirically examining these tensions, the research seeks to contribute a nuanced understanding of digital literary learning, offering theoretical and practical insights for literature education in culturally rich, digitally evolving contexts.

## LITERATURE REVIEW

### Digital reading platforms

Digital reading platforms constitute a central concept in contemporary literature learning, referring to technologically mediated environments that enable readers to access, interact with, and interpret texts through digital interfaces. Scholars define digital reading platforms variously as e-book systems, web-based reading environments, or integrated platforms combining texts with annotation, multimedia, and social interaction features. Some researchers conceptualize them primarily as tools that enhance accessibility and efficiency in reading, emphasizing convenience, portability, and immediacy of access (Guan & Meng, 2025; Hamouda et al., 2025; Pelumi & Gordon, 2025). Others adopt a more critical perspective, viewing digital reading platforms as socio-technical spaces that reshape cognitive processes, reading habits, and interpretive practices (Liao et al., 2024; Liu & Yuan, 2023). This divergence reflects broader debates between instrumental and cultural approaches to digital literacy. While the former stresses functional benefits, the latter highlights how digital mediation transforms meaning-making and reader-text relationships. In literature education, this conceptual tension is particularly salient, as literary reading requires sustained attention, interpretive depth, and contextual sensitivity. Consequently, digital reading platforms are increasingly understood not merely as delivery mechanisms, but as pedagogical environments that actively influence literary cognition and engagement.

Research further identifies several key dimensions of digital reading platforms that shape learning outcomes in literature education. One prominent aspect is interactivity, including features such as digital annotation, highlighting, hyperlinking, and embedded discussion tools, which allow readers to actively engage with texts (Gârdan & Modoc, 2022). Another important dimension is multimodality, where literary texts are accompanied by audio, visual, or contextual materials that support comprehension and interpretation. Scholars also emphasize personalization, as digital platforms often enable adjustable font sizes, reading speeds, and individualized learning paths (Bell & Ensslin, 2024; Kouta, 2021; Liu & Yuan, 2023). Additionally, connectivity and collaboration constitute critical indicators, allowing readers to share interpretations, respond to peers, and participate in collective meaning-making. However, studies caution that excessive interactivity or fragmented navigation may disrupt deep reading processes. Thus, the effectiveness of digital reading platforms in literature learning depends on how these dimensions are pedagogically orchestrated to balance accessibility, engagement, and interpretive depth rather than merely increasing technological exposure.

### Literary engagement

Literary engagement represents the second core concept, commonly defined as the degree of cognitive, emotional, and behavioral involvement readers demonstrate when interacting with literary texts. In literary studies and education, engagement has been conceptualized through multiple lenses. Cognitive-oriented scholars associate literary engagement with close reading, inferential reasoning, and critical interpretation (Claravall, 2021; Donnelly, 2019; Ellis & Coddington, 2013), whereas affective perspectives emphasize emotional resonance, empathy, and aesthetic appreciation (Eekhof et al., 2023; Johns et al., 2016). Behavioral definitions focus

on observable participation, such as discussion, reflection, and sustained reading practices (Zhang et al., 2024; Zhu et al., 2023). These varying definitions reveal that literary engagement is not a singular construct but a multidimensional phenomenon shaped by readers, texts, and contexts. In digital environments, literary engagement becomes even more complex, as readers negotiate between literary immersion and the affordances or distractions of digital media. Consequently, understanding literary engagement in digitally mediated literature learning requires integrating cognitive, affective, and social dimensions rather than privileging one interpretive framework.

Scholars commonly operationalize literary engagement through several interrelated indicators. Cognitive engagement is reflected in students' analytical depth, interpretive strategies, and ability to connect textual elements with broader themes (Antonenko & Niederhauser, 2010; Liu & Yuan, 2023). Affective engagement is indicated by interest, enjoyment, emotional identification with characters, and personal relevance. Behavioral engagement includes participation in discussions, annotation practices, frequency of reading, and persistence in completing literary tasks. In digital literature learning, additional indicators have emerged, such as interactive participation, collaborative interpretation, and reflective responses facilitated by platform features. Empirical studies suggest that digital reading environments can enhance behavioral and affective engagement, yet their impact on cognitive engagement remains contested (Ellis & Coddington, 2013; Guo, 2025). Some findings indicate improved interpretive collaboration, while others report surface-level engagement driven by convenience rather than depth. These mixed results underscore the need to examine how literary engagement is shaped by specific digital reading practices rather than by technology use alone.

### Cultural understanding

The third central concept, cultural understanding, refers to readers' ability to comprehend, interpret, and critically engage with the cultural meanings embedded in literary texts. Cultural understanding in literature learning has been defined both as knowledge acquisition—such as familiarity with historical, social, and ideological contexts—and as interpretive competence, involving the ability to negotiate values, identities, and worldviews represented in texts. Some scholars emphasize a transmission-oriented view, where literature serves as a vehicle for conveying national or cultural heritage (Porto, 2010; Shen, 2025; Short et al., 2023). Others adopt a constructivist perspective, arguing that cultural understanding emerges through dialogic interpretation between readers' experiences and textual representations (Aslam et al., 2025; Blue, 2012; Kalo, 2024; Kholodniak, 2023). In the context of Indonesian and Malay literature, cultural understanding is particularly significant due to shared linguistic roots alongside distinct national, religious, and historical trajectories. Digital mediation introduces new dynamics into this process, potentially expanding access to contextual resources while also altering how cultural meanings are encountered and interpreted.

Studies identify several dimensions of cultural understanding in literature learning that are relevant to digital reading contexts. One key dimension is contextual comprehension, including awareness of historical background, social norms, and cultural symbols represented in literary texts. Another dimension involves critical cultural interpretation, where readers assess power relations, identities, and ideological positions embedded in narratives. Empathy and perspective-taking are also considered essential indicators, reflecting readers' capacity to engage with culturally diverse experiences (Fawaid et al., 2025; Fawaid & Huda, 2024; Khafaga & Shaalan, 2020). In digital environments, cultural understanding may be supported through hyperlinks, multimedia explanations, and collaborative discussions that situate texts within broader cultural frames. However, scholars warn that fragmented digital reading may reduce opportunities for reflective engagement with cultural complexity.

## METHOD

The unit of analysis in this study consists of digitally mediated literary learning activities involving Indonesian and Malay literary texts accessed through digital reading platforms. The material objects include selected prose and poetic works that are widely recognized within national literary canons and commonly used in higher education literature courses. To ensure representativeness and balance, the corpus was constructed based on three criteria: canonical status, thematic richness in cultural representation, and availability in digital formats. The corpus comprises twelve literary works—six from Indonesian literature and six from Malay literature—published between the 1970s and 2010s. These texts were accessed through institutional e-libraries, national digital repositories, and licensed reading platforms used in coursework. The unit of analysis focuses not only on the texts themselves but also on students' interactions with these texts through digital annotations, discussion features, and reflective tasks. This approach allows the study to capture literary engagement and cultural understanding as situated practices rather than isolated textual properties.

**Table 1.** Literary corpus used in the study

No	Literary Tradition	Author	Title	Genre	Year	Digital Source
1	Indonesian	Pramoedya Ananta Toer	<i>Bumi Manusia</i>	Novel	1980	National e-library
2	Indonesian	Ahmad Tohari	<i>Ronggeng Dukuh Paruk</i>	Novel	1982	University LMS
3	Indonesian	Ayu Utami	<i>Saman</i>	Novel	1998	Licensed e-book
4	Indonesian	Sapardi Djoko Damono	Selected Poems	Poetry	1989	Digital poetry archive
5	Indonesian	Eka Kurniawan	<i>Cantik Itu Luka</i>	Novel	2002	Institutional e-library
6	Indonesian	Leila S. Chudori	<i>Pulang</i>	Novel	2012	Digital reading platform
7	Malay	Shahnon Ahmad	<i>Ranjau Sepanjang Jalan</i>	Novel	1966	National e-library
8	Malay	A. Samad Said	<i>Salina</i>	Novel	1961	Licensed e-book
9	Malay	Fatimah Busu	Selected Short Stories	Short stories	1995	University LMS
10	Malay	Zurinah Hassan	Selected Poems	Poetry	2004	Digital poetry archive
11	Malay	Faisal Tehrani	<i>1515</i>	Novel	2002	Institutional e-library
12	Malay	Anwar Ridhwan	<i>Hari-hari Terakhir Seorang Seniman</i>	Novel	1979	Digital reading platform

The research design adopts a mixed-methods approach with a dominant qualitative orientation, integrating corpus-based textual analysis and learner-response data. This design is appropriate because the study investigates interpretive engagement and cultural understanding, which require both systematic textual examination and empirical evidence of reader interaction. The qualitative component focuses on identifying patterns of literary engagement and cultural meaning-making across digital reading environments, while the quantitative component supports the analysis through frequency counts of annotations, discussion contributions, and engagement indicators. The design aligns with recent methodological trends in digital literary studies and literature education, which emphasize triangulation between texts, readers, and platforms. By situating literary interpretation within digitally mediated learning contexts, the design enables a holistic examination of how digital reading platforms function as pedagogical spaces rather than neutral delivery tools.

The sources of information include three primary categories. First, textual data are drawn from the selected literary corpus in their digital formats, including embedded metadata and paratextual features provided by the platforms. Second, learner-generated data consist of digital annotations, discussion posts, reflective journals, and reading logs produced by undergraduate literature students enrolled in Indonesian and Malay literature courses. Third, instructional data are obtained from course syllabi, reading guidelines, and platform usage analytics provided by lecturers. These sources are complemented by secondary scholarly literature on digital reading, literary engagement, and cultural literacy, which informs the analytical framework. The combination of textual, learner, and instructional data ensures that the study captures multiple perspectives on digital literary learning, enhancing both the validity and depth of interpretation.

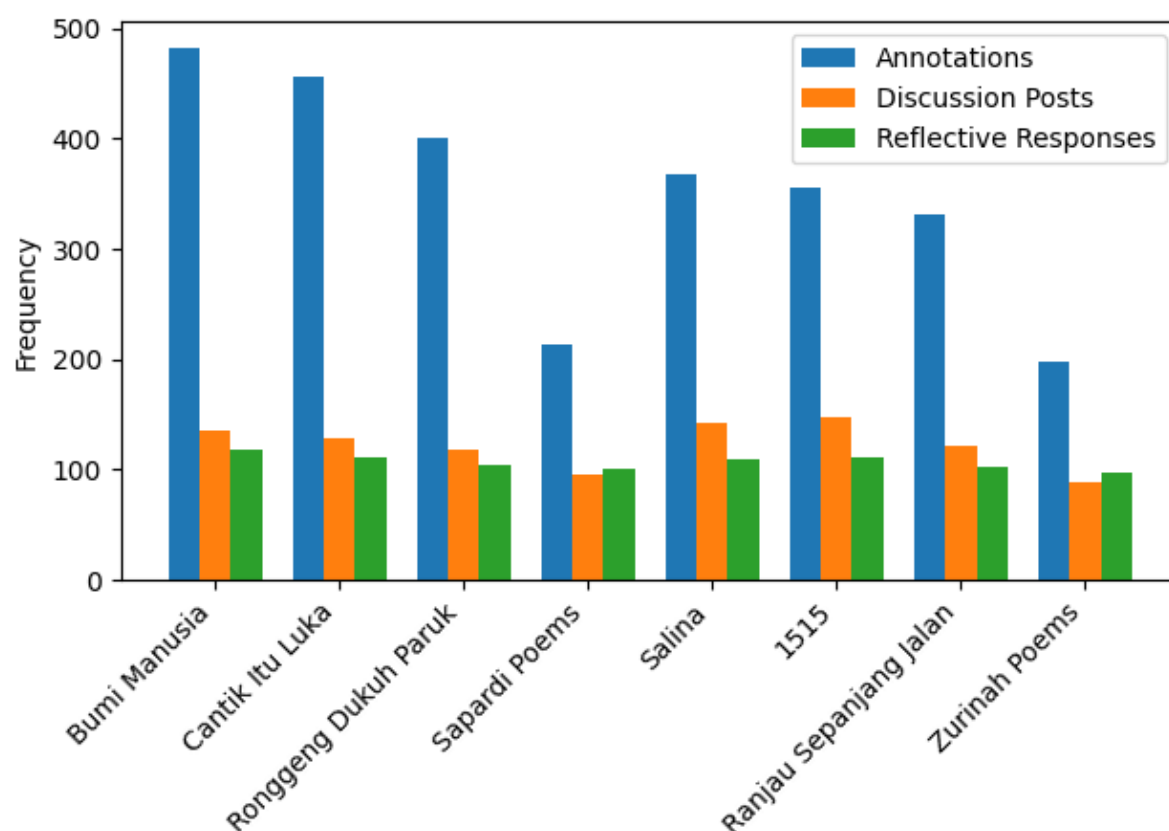
The data collection process was conducted in four stages over one academic semester. First, the literary corpus was finalized and uploaded or accessed through designated digital reading platforms used in the courses. Second, students were oriented to platform features, particularly annotation and discussion tools, to ensure consistent participation. Third, data were collected continuously as students interacted with the texts, generating annotations, comments, and reflective responses tied to specific literary passages. Fourth, supplementary data were gathered through end-of-module reflective questionnaires focusing on students' perceived engagement and cultural understanding. All data were anonymized, and ethical clearance was obtained prior to collection. This systematic process ensured that the data reflected authentic learning practices rather than artificial research tasks.

The data analysis followed a multi-stage procedure. First, corpus-based textual analysis was conducted to identify dominant cultural themes, symbols, and narrative structures within the selected works. Second, learner interaction data were coded thematically using qualitative content analysis to capture dimensions of literary engagement (cognitive, affective, and behavioral) and cultural understanding. Third, quantitative summaries were generated from annotation frequencies and discussion participation to identify engagement patterns across texts and platforms. Finally, findings from textual and learner analyses were triangulated to examine how digital reading platforms mediated literary interpretation and cultural meaning-making. This layered analytical approach allows the study to link digital practices with literary outcomes in a methodologically rigorous and conceptually coherent manner.

## RESULTS

### Patterns of digital literary engagement across Indonesian and Malay texts

This subsection presents empirical evidence of students' digital literary engagement as observed through their interactions with Indonesian and Malay literary texts on digital reading platforms. Engagement was operationalized through three measurable indicators: frequency of digital annotations, participation in discussion threads, and submission of reflective responses. Figure 1 presents patterns of digital literary engagement across Indonesian and Malay texts (sampling 8 texts, including 4 Indonesian and 4 Malay texts) by comparing three core indicators: digital annotations, discussion posts, and reflective responses. By consolidating platform-generated interaction data into a single comparative visualization, the figure enables a direct examination of how engagement intensity and mode vary across genres and literary traditions. The grouped bar format allows each literary work to be read as an engagement profile rather than as isolated numerical values, foregrounding relational differences between annotation-based, dialogic, and reflective interactions. As the primary empirical visualization in this section, Figure 1 functions as the central analytical reference for interpreting how students interact with literary texts in digitally mediated reading environments, making visible structural patterns that would be less apparent through narrative description alone.



**Figure 1.** Composition of digital literary engagement indicators of Indonesian and Malay texts (N = 8)

As shown in Figure 1, novels consistently elicit substantially higher annotation activity than poetry across both Indonesian and Malay corpora, indicating that extended narrative forms foster more intensive text-centered engagement in digital contexts. Indonesian novels such as *Bumi Manusia* and *Cantik Itu Luka* display the most pronounced annotation dominance, reflecting



sustained close reading practices oriented toward narrative development and ideological interpretation. In contrast, Malay novels, including *Salina* and *1515*, demonstrate relatively stronger participation in discussion threads compared to their annotation levels, suggesting a greater emphasis on dialogic and peer-oriented engagement. Poetry texts in both traditions exhibit noticeably lower annotation frequencies while maintaining comparatively stable reflective responses, implying that reflective engagement is less genre-dependent and more strongly shaped by pedagogical design embedded within the platform. Collectively, these visual patterns reveal that digital literary engagement is structured not only by textual form but also by cultural orientation and instructional framing.

The engagement patterns can be analytically explained through the interaction between textual characteristics, cultural proximity, and platform affordances. High annotation frequencies in Indonesian novels may reflect students' stronger cultural familiarity and linguistic immediacy, enabling more confident micro-level textual engagement. In contrast, the higher discussion participation associated with Malay texts suggests that students relied more on collaborative interpretation when encountering culturally proximate yet nationally distinct narratives. This aligns with recent literature emphasizing that digital reading platforms amplify social meaning-making in literature learning, particularly when texts invite negotiation of shared yet differentiated cultural identities. Furthermore, the lower annotation rates in poetry can be attributed to the condensed and symbolic nature of poetic language, which often prompts holistic interpretation rather than segmented textual marking. Overall, these findings indicate that digital platforms do not merely increase engagement quantitatively but reconfigure *how* literary engagement is enacted—shifting between individual textual interaction and collective interpretive dialogue depending on genre and cultural context.

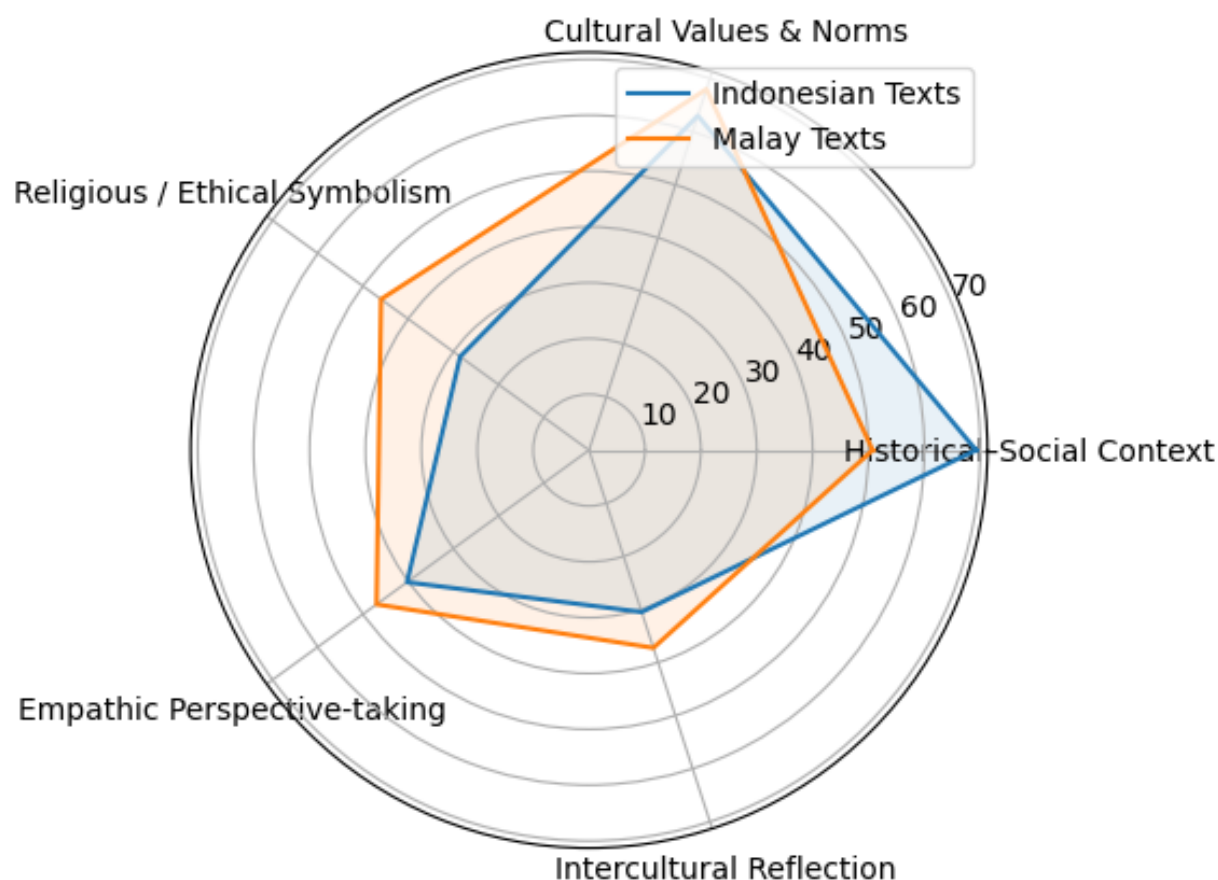
### Digital reading platforms and cultural understanding

Cultural understanding was operationalized through five text-sensitive indicators: historical–social context references, interpretation of cultural values and norms, engagement with religious or ethical symbolism, empathic perspective-taking, and intercultural reflection. The radar chart aggregates corpus-level data to display comparative cultural engagement profiles across literary traditions rather than isolated textual frequencies. As illustrated in Figure 2, Indonesian literary works such as *Bumi Manusia* and *Ronggeng Dukuh Paruk* occupy a markedly larger area along the historical–social context axis, reflecting strong engagement with colonial memory, social hierarchy, and national identity. In contrast, Malay literary texts, particularly *Salina* and *1515*, demonstrate more pronounced extensions along the cultural values and religious–ethical symbolism axes. Poetry texts in both traditions display more compressed profiles, indicating lower contextual references but sustained engagement in affective and ethical dimensions. Overall, Figure 2 provides corpus-grounded evidence that digital reading platforms facilitate culturally nuanced literary engagement rather than generalized or superficial interpretation.

Figure 2 reveals systematic differences in how cultural understanding emerges across Indonesian and Malay literary corpora within digital reading environments by highlighting distinct engagement configurations across the five indicators. Indonesian texts consistently reach higher values on the historical–social context dimension, indicating that students actively connected narratives to national history, colonial experience, and socio-political transformation during interpretation. Conversely, Malay texts display stronger extensions along the cultural values, norms, and ethical symbolism dimensions, suggesting that readers foregrounded moral reasoning, religious meaning, and communal identity. Empathic perspective-taking appears robust across both traditions, though slightly more pronounced in Malay literature, reflecting



narrative emphases on personal struggle and social responsibility. Intercultural reflection emerges as a recurring but more moderate dimension in both profiles, particularly visible in digitally mediated discussions where students juxtaposed Indonesian and Malay cultural elements. Taken together, the radar chart demonstrates that digital platforms support differentiated cultural reading trajectories shaped by literary tradition and thematic orientation, rather than homogenizing cultural interpretation.

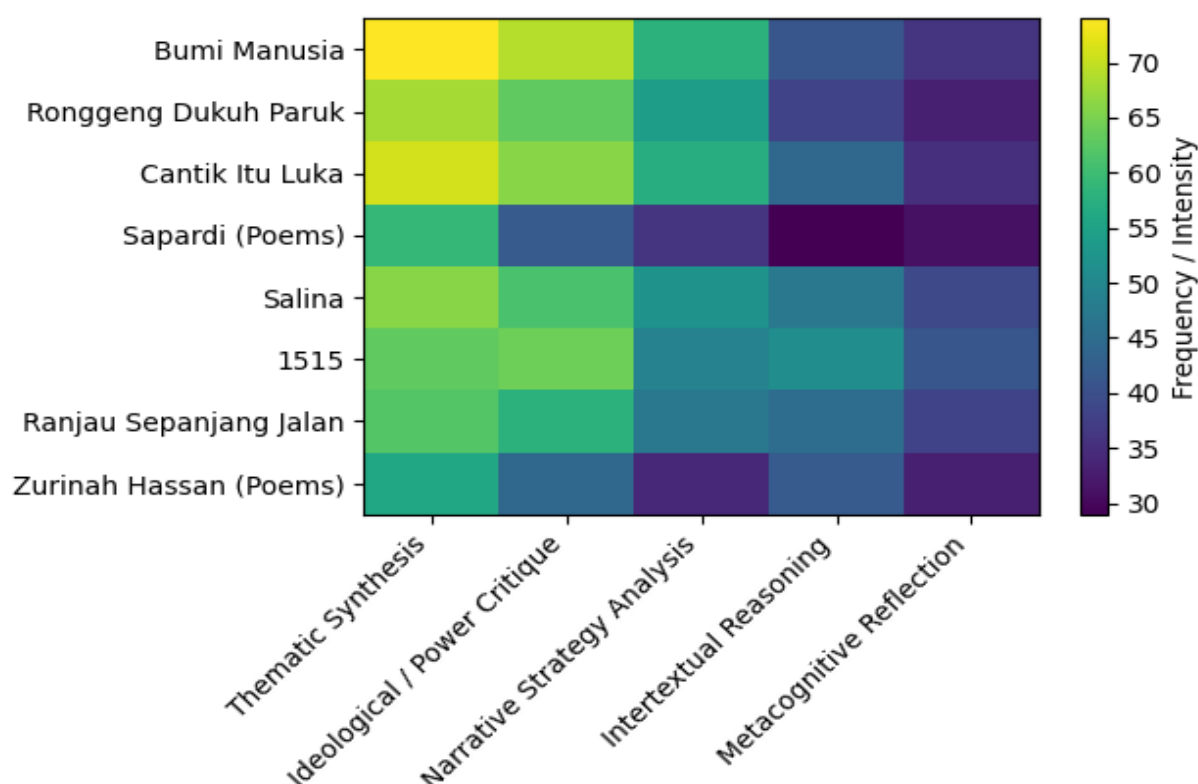


**Figure 2.** Cultural understanding profiles across Indonesian and Malay literary texts

These patterns can be analytically explained through the interaction between textual cultural density and digital platform affordances. Indonesian literary works, often embedded in explicit historical and ideological narratives, encouraged readers to activate contextual knowledge supported by hyperlinks, annotations, and shared explanatory resources. In contrast, Malay texts foregrounded ethical reflection and moral symbolism, prompting dialogic interpretation and empathic engagement within collaborative digital spaces. Digital reading platforms amplified these tendencies by facilitating immediate access to contextual materials and peer interpretations, transforming cultural understanding into a socially negotiated process. This finding aligns with recent scholarship emphasizing that digital literary environments function as cultural mediation spaces rather than neutral reading tools. Rather than fragmenting cultural comprehension, the platforms enabled students to integrate historical awareness, ethical reasoning, and intercultural reflection. Thus, digital reading platforms play a substantive role in shaping how cultural meanings in Indonesian and Malay literature are constructed, shared, and internalized.

### Digital mediation and depth of literary interpretation

This subsection presents empirical evidence concerning the depth of literary interpretation achieved through digitally mediated reading of Indonesian and Malay literary texts. Interpretive depth was operationalized through five literature-specific indicators: thematic synthesis, ideological or power critique, narrative strategy analysis, intertextual reasoning, and metacognitive reflection. The heatmap organizes corpus-level data by mapping individual literary works against these indicators, allowing patterns of interpretive intensity to be observed across genres and traditions simultaneously. Color gradation functions as an analytical device that foregrounds relative interpretive depth rather than isolated frequencies, enabling a holistic comparison of how different texts activate higher-order literary reasoning. Figure 3 serves to reveal systematic configurations of interpretive engagement that emerge from digitally mediated reading practices.



**Figure 3.** Literary interpretive depth across Indonesian and Malay texts

As illustrated in Figure 3, novelistic texts across both Indonesian and Malay corpora exhibit higher overall intensities of interpretive depth than poetry, particularly in the dimensions of thematic synthesis and ideological or power critique. Indonesian novels such as *Bumi Manusia* and *Cantik Itu Luka* display consistently high intensity across these indicators, reflecting sustained engagement with colonial discourse, social hierarchy, and narrative resistance. In contrast, Malay novels, including *Salina* and *1515*, demonstrate comparatively stronger intensities in intertextual reasoning, indicating frequent connections to religious, historical, and cultural reference frames. Poetry texts in both traditions show lower overall intensity but maintain visible engagement in metacognitive reflection, suggesting that poetic forms continue to prompt reflective awareness of interpretive processes. Taken together, the heatmap reveals differentiated yet convergent patterns of literary interpretation shaped by genre, cultural tradition, and the affordances of digital reading platforms.

Analytically, the depth of interpretation observed can be attributed to the affordances of digital reading platforms that support recursive, dialogic, and reflective literary practices. Annotation tools enabled students to anchor interpretive insights directly to textual segments, fostering close reading and thematic integration. Discussion features facilitated critical negotiation of meaning, allowing ideological critique and intertextual connections to emerge through peer interaction. Importantly, digital environments encouraged metacognitive reflection by making interpretive processes visible and revisitable. These findings align with contemporary digital literary scholarship, which argues that technology-mediated reading can enhance interpretive sophistication when aligned with pedagogical scaffolding. The results challenge assumptions that digital reading inherently leads to superficial engagement; instead, they demonstrate that digital mediation can deepen literary interpretation by supporting synthesis, critique, and reflexivity. Consequently, digital reading platforms function as interpretive infrastructures that actively shape how literary meaning is constructed, evaluated, and internalized.

## DISCUSSION

The findings related to digital literary engagement raise an important question concerning the functional role of digital reading platforms in literature learning. The evidence demonstrates that digital platforms meaningfully reconfigure how students engage with Indonesian and Malay literary texts by diversifying engagement modes—annotation, discussion, and reflection—rather than merely increasing reading frequency. Functionally, this multimodal engagement supports sustained interaction with complex literary narratives, particularly novels, which benefit from iterative reading and collaborative interpretation (Fawaid, Handayani, et al., 2024). However, a potential dysfunction also emerges: engagement may become uneven across genres, with poetry receiving less granular interaction. This suggests that while digital platforms enhance overall engagement, they may privilege narrative forms that align more easily with annotation and discussion tools (Baek & Hwang, 2024; Chalkia et al., 2024; Makimova & Begaliyeva, 2025; Modi et al., 2024). The implication is that digital literary engagement is productive but not neutral; it amplifies certain literary practices while marginalizing others. Consequently, educators must intentionally design tasks that ensure balanced engagement across genres to prevent a technologically induced hierarchy of literary forms.

These engagement patterns reveals underlying structural factors embedded in both literary form and platform design. Digital reading platforms are typically optimized for linear texts and segmented interaction, which aligns well with prose narratives but less so with poetic density and ambiguity. This structural affordance explains why Indonesian novels generated higher annotation frequencies, while Malay texts fostered dialogic discussion reflecting collaborative sense-making. Additionally, students' cultural familiarity with Indonesian texts facilitated confident micro-level engagement, whereas culturally adjacent but nationally distinct Malay texts encouraged interpretive negotiation through discussion. These patterns align with sociocultural theories of reading that emphasize interaction between textual structure, reader identity, and mediating tools (Guo, 2025; Hesselmann & Hartstein, 2025; Kenner, 2014; Tiwari & Chauhan, 2024). Thus, engagement outcomes are not solely reader-driven but emerge from the interaction between literary structure and digital infrastructure. Understanding this interaction clarifies why digital platforms both enable and constrain literary engagement depending on how textual form intersects with technological affordances.

The results concerning cultural understanding foreground another critical implication for literature education in digital contexts. The data indicate that digital reading platforms function effectively as cultural mediation spaces, enabling students to access, negotiate, and reinterpret

cultural meanings embedded in Indonesian and Malay literary texts. Functionally, the platforms support differentiated cultural engagement: Indonesian texts prompted historical–political contextualization, while Malay texts encouraged ethical and religious interpretation. This demonstrates that digital mediation does not homogenize cultural reading but instead facilitates multiple trajectories of cultural understanding (Dwyer & Larson, 2013; Unsriana et al., 2025; Vivitsou et al., 2017). Nonetheless, a potential dysfunction lies in the risk of fragmented cultural comprehension if contextual resources are consumed superficially or selectively. Without pedagogical guidance, students may rely excessively on digital explanations rather than engaging deeply with cultural complexity. The implication is that digital platforms can enhance cultural literacy, but only when embedded within interpretive frameworks that prioritize critical engagement over informational convenience.

These culturally differentiated patterns can be traced to the underlying structures of both literary tradition and digital mediation. Indonesian literary texts often foreground explicit historical and ideological narratives, which naturally invite contextual exploration supported by hyperlinks and annotations. In contrast, Malay literature's emphasis on moral discourse and communal values aligns with dialogic interpretation facilitated by discussion forums. Digital platforms amplify these textual orientations by enabling rapid movement between text, context, and peer interpretation (Fawaid, Abdullah, et al., 2024; Fawaid, Fawaid, et al., 2024). This supports constructivist models of cultural learning, where meaning emerges through interaction rather than transmission (Badie, 2015, 2016; Bennett, 2017). However, the reliance on platform-mediated resources also introduces asymmetries in cultural interpretation, privileging easily accessible contexts over nuanced cultural tensions. Thus, the correlation between digital mediation and cultural understanding is shaped by deeper structural relations among text, tradition, and technological design, rather than by technology alone.

The findings on interpretive depth address a longstanding *so-what* concern in digital reading scholarship: whether digital environments diminish or enhance deep literary interpretation. The evidence from this study suggests a functional outcome—digital mediation can support advanced interpretive practices such as thematic synthesis, ideological critique, and intertextual reasoning. Students not only analyzed literary content but also reflected on their interpretive processes, indicating metacognitive engagement (Hassan & Ahmad, 2023; Kameneva-Lyubavskaya & Borzova, 2024; Singh et al., 2022). This counters dominant narratives that equate digital reading with superficial engagement. However, a potential dysfunction arises if interpretive depth becomes unevenly distributed, favoring texts with overt ideological content while marginalizing subtle aesthetic forms. The implication is that digital platforms are capable of sustaining deep interpretation, but interpretive richness depends on the alignment between pedagogical scaffolding and platform affordances.

The digital mediation also supports interpretive depth which figures out the cognitive and social structures enabled by digital platforms. Annotation tools externalize interpretive thinking, allowing students to revisit and refine insights, while discussion spaces facilitate critical negotiation of meaning across perspectives. These features align with dialogic and metacognitive theories of literary interpretation, which emphasize reflection, critique, and synthesis (Álvarez-Bernárdez & Monereo, 2020; Bannister-Tyrrell & Clary, 2017; Kaplan et al., 2023). Importantly, digital platforms make interpretive processes visible, enabling recursive engagement that is less accessible in print-based settings. Yet this depth emerges not automatically but through structured interaction between task design, textual complexity, and technological affordances. The causal relationship between digital mediation and interpretive depth is therefore contingent, not deterministic. When pedagogically aligned, digital reading platforms operate as interpretive

infrastructures that deepen literary understanding; when misaligned, they risk reducing interpretation to fragmented commentary.

## CONCLUSION

This study demonstrates that digital reading platforms function as active pedagogical and cultural mediators in literature learning, significantly shaping students' literary engagement, cultural understanding, and depth of interpretation when interacting with Indonesian and Malay literary texts. The findings reveal that digital mediation does not merely enhance access or efficiency, but restructures interpretive practices by enabling annotation-driven close reading, dialogic meaning negotiation, and metacognitive reflection. A key contribution of this research lies in its integration of literature-specific analytical indicators with empirical digital engagement data, offering a methodological advancement beyond generic digital literacy frameworks. By foregrounding national literatures within digitally mediated environments, the study reframes digital literary learning as a culturally situated process, thereby extending theoretical perspectives in literature education, digital humanities, and cultural studies.

Despite these contributions, the study is subject to several limitations. The corpus, while diverse, remains confined to selected canonical texts and a single educational context, limiting the generalizability of the findings. Additionally, engagement and interpretation were examined primarily through platform-generated data and learner responses, which may not fully capture longitudinal changes in literary competence. Future research should expand the corpus to include non-canonical and contemporary digital-native literary works, incorporate cross-institutional or cross-national samples, and adopt longitudinal designs to trace interpretive development over time. Further studies may also integrate experimental comparisons of platform features to more precisely isolate their effects on literary interpretation and cultural understanding.

## ACKNOWLEDGMENTS

The authors acknowledge academic colleagues and educators who shared perspectives and experiences relevant to digital literature learning contexts.

## FUNDING INFORMATION

Authors state no funding involved.

## AUTHOR CONTRIBUTIONS STATEMENT

**Mohd Roslan Mohd Nor:** conceptualization (lead); pedagogical framework (lead); writing – original draft (lead). **Ahmad Zubaidi:** comparative analysis (supporting); contextual interpretation (supporting); writing – review and editing (equal).

## CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

## INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

## ETHICAL APPROVAL

The research related to human use has been complied with all the relevant national regulations and institutional policies in accordance with the tenets of the Helsinki Declaration and has been approved by the authors' institutional review board or equivalent committee.

## DATA AVAILABILITY

Data availability is not applicable to this article as no new data were created or analyzed in this study.

## REFERENCES

- Agustina, A., Saputra, A., Indranika, D., Suryoto, Kusumaningsih, O., Mamuri, J., & Pazqara, E. (2022). Increasing Digital Literacy in Realizing Golden Indonesia. *East Asian Journal of Multidisciplinary Research*, 1, 2091–2108. <https://doi.org/10.55927/eajmr.v1i10.1920>
- Álvarez-Bernárdez, P.-R., & Monereo, C. (2020). Literary interpretation as a dialogue between positions. *OCNOS*, 19(2), 7–16. [https://doi.org/10.18239/OCNOS\\_2020.19.2.2281](https://doi.org/10.18239/OCNOS_2020.19.2.2281)
- Antonenko, P. D., & Niederhauser, D. S. (2010). The influence of leads on cognitive load and learning in a hypertext environment. *Computers in Human Behavior*, 26(2), 140–150. <https://doi.org/10.1016/j.chb.2009.10.014>
- Aslam, S., Hussain, S., & Riaz, S. (2025). Crossing Cultural Borders: Language and Intercultural Communication in Contemporary Anglophone African Literature. In *African Histories and Modernities: Part F495* (pp. 167–186). [https://doi.org/10.1007/978-3-031-80614-8\\_9](https://doi.org/10.1007/978-3-031-80614-8_9)
- Badie, F. (2015). *A semantic basis for meaning construction in constructivist interactions*. 12th International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2015), 369–373. <https://files.eric.ed.gov/fulltext/ED562152.pdf>
- Badie, F. (2016). *A conceptual framework for knowledge creation based on constructed meanings within mentor-learner conversations*. 59, 167–177. [https://doi.org/10.1007/978-3-319-39690-3\\_15](https://doi.org/10.1007/978-3-319-39690-3_15)
- Baek, J., & Hwang, Y. (2024). Old tales, new tools: How AI chatbots and the metaverse are transforming premodern classical literature reading activities. *International Journal of Educational Research*, 128. <https://doi.org/10.1016/j.ijer.2024.102461>
- Bannister-Tyrrell, M., & Clary, D. (2017). Metacognition in the English classroom: Reflections of middle years teachers navigating the Australian curriculum: English. *English in Australia*, 52(3), 63–72. <https://eric.ed.gov/?id=EJ1166625>
- Bell, A., & Ensslin, A. (2024). *Reading Digital Fiction: Narrative, Cognition, Mediality* (p. 207). <https://doi.org/10.4324/9781003110194>
- Bennett, M. J. (2017). Constructivist Approach to Intercultural Communication. In *The International Encyclopedia of Intercultural Communication* (pp. 1–9). <https://doi.org/10.1002/9781118783665.ieicc0009>
- Bist, R. B., & Kandel, R. K. (2024). Reader Response Approach for Enhancing Literary Comprehension in an EFL Context. *International Journal of Educational Reform*. <https://doi.org/10.1177/10567879241226712>
- Blue, E. V. (2012). Reading and Interpretive Response to Literary Text: Drawing Upon Sociocultural Perspective. *Reading and Writing Quarterly*, 28(2), 164–178. <https://doi.org/10.1080/10573569.2012.651077>
- Chalkia, N., Douka, A. D., & Sfyridou, E. (2024). *Digital Literary Production: Transformation of Reading, Writing, and Interpretive Skills*. 4021. <https://ceur-ws.org/Vol-4021/paper19.pdf>
- Claravall, E. B. (2021). Engaging students' learning and thinking through reading. In *Developmentally Appropriate Curriculum and Instruction: Pedagogy for Knowledge, Attitudes, and Values* (pp. 58–78). <https://doi.org/10.4324/9780429353147-3>



- Day, S. L., Hwang, J. K., Arner, T., McNamara, D. S., & Connor, C. M. (2025). Choose Your Own Adventure: Interactive E-Books to Improve Word Knowledge and Comprehension Skills. *Journal of Computer Assisted Learning*, 41(2). <https://doi.org/10.1111/jcal.70023>
- Donnelly, M. (2019). The Cognitive Value of Literary Perspectives. *Journal of Aesthetics and Art Criticism*, 77(1), 11–22. <https://doi.org/10.1111/jaac.12621>
- Dwyer, B., & Larson, L. (2013). The writer in the reader: Building communities of response in digital environments. In *Exploring Technology for Writing and Writing Instruction* (pp. 202–220). <https://doi.org/10.4018/978-1-4666-4341-3.ch012>
- Eekhof, L. S., van Krieken, K., Sanders, J., & Willems, R. M. (2023). Engagement with narrative characters: The role of social-cognitive abilities and linguistic viewpoint. *Discourse Processes*, 60(6), 411–439. <https://doi.org/10.1080/0163853X.2023.2206773>
- Ellis, S., & Coddington, C. S. (2013). Reading Engagement Research: Issues and Challenges. In *International Handbook of Research on Children's Literacy, Learning, and Culture* (pp. 228–240). <https://doi.org/10.1002/9781118323342.ch17>
- Fang, S.-W., Hsu, H.-T., & Chen, K. T.-C. (2025). The Effects of an E-book App on Reading Motivation and Proficiency in Young EFL Learners. *TechTrends*, 69(5), 987–997. <https://doi.org/10.1007/s11528-025-01091-z>
- Fawaid, A., Abdullah, I., Baharun, H., Aimah, S., Faishol, R., & Hidayati, N. (2024). The Role of Online Game Simulation Based Interactive Textbooks to Reduce at-Risk Students' Anxiety in Indonesian Language Subject. *2024 International Conference on Decision Aid Sciences and Applications (DASA)*, 1–7. <https://doi.org/10.1109/dasa63652.2024.10836301>
- Fawaid, A., Fawaid, A., Hikmah, R., & Huda, M. (2025). Building bridges, diverging future: The role of empathy training management in preventing bullying in Islamic boarding schools. *HUMANISTIKA : Jurnal Keislaman*. <https://doi.org/10.55210/humanistika.v11i1.1960>
- Fawaid, A., Fawaid, A., Kholil, M., & Dewi, N. A. R. (2024). The role of culturally-responsive gamification to improve multiethnic students' self-engagement in Islamic education. *Al-Fikru: Jurnal Pendidikan dan Sains*, 5(2), 267–275. <https://doi.org/10.55210/al-fikru.v5i2.1868>
- Fawaid, A., Handayani, P., & Abdillah, Y. A. (2024). *E-Portofolio in Improving Critical Thinking and Self-Management through Lesson Study: A Study on Writing Pedagogy in Higher Education*. 149–154. <https://doi.org/10.1109/ICET64717.2024.10778453>
- Fawaid, A., & Huda, M. (2024). Implementing Problem-Based Learning to Improve Collaborative Writing Skills through Lesson Study in the Indonesian Language Subject. *KEMBARA Journal of Scientific Language Literature and Teaching*, 10(1), 197–212. <https://doi.org/10.22219/kembara.v10i1.29649>
- Fernando, D., Kurniadi, A. N., & Kurniadi, F. I. (2023). *STUDINUS: A Comprehensive E-Learning Platform for Academic Enthusiasts*. 661–666. <https://doi.org/10.1109/ICIMTech59029.2023.10277975>
- Gârdan, D., & Modoc, E. (2022). From Reading Books to Reading Data: Paradigm Shifts in Literary Studies after the Digital Turn. *Revista Transilvania*, 2022(10), 90–96. <https://doi.org/10.51391/trva.2022.10.11>
- Guan, H., & Meng, Y. (2025). Multiple Couplings, Game Empowerment, and Risk Regulation: The Gamification Transformation of Digital Reading Platforms. *Publishing and Printing*, 2025(5), 74–82. <https://doi.org/10.19619/j.issn.1007-1938.2025.00.049>
- Guo, Y. (2025). Integrating digital tools in literature education: Enhancing inclusivity and engagement in English and American literature courses. *International Journal of Inclusive Education*. <https://doi.org/10.1080/13603116.2025.2552930>



- Hamouda, H., Ba Matraf, M. S., Hashim, N. L., Hussain, A., Ghazali, O., Habbal, A., & Alshenaifi, R. (2025). Enhancing Usability and Accessibility of Mobile E-Book Applications for the Visually Impaired: A Comprehensive Evaluation Model. *International Journal of Human-Computer Interaction*. <https://doi.org/10.1080/10447318.2025.2561775>
- Hassan, S. A. A., & Ahmad, N. (2023). Metacognitive Strategies Impact in Reading Technopreneurial Text—Narratives of a Technical University. 107–111. <https://doi.org/10.1109/ICEED59801.2023.10264035>
- Hesselmann, F., & Hartstein, J. (2025). Creating Interpretative Spaces in and with Digital Infrastructures: How Editors Select Reviewers at a Biomedical Publisher. *Science Technology and Human Values*, 50(1), 12–39. <https://doi.org/10.1177/01622439241257720>
- Ilyas, H. P., El Khuluqo, I., & Tarmini, W. (2025). Reader-Response Theory: Using Literary Works to Promote EFL Students' Critical Reading Skills. *Studies in English Language and Education*, 12(2), 961–976. <https://doi.org/10.24815/siele.v12i2.37511>
- Johns, A., Galpin, A., Meredith, J., & Glancy, M. (2016). "I kind of had an avatar switch": The role of the self in engagement with an interactive TV drama. 77–82. <https://doi.org/10.1145/2932206.2932218>
- Kalo, V. (2024). Dialogue through ballads: constructing meaning in balkan oral tradition. *Palimpsest*, 9(18), 159–169. <https://doi.org/10.46763/palim24918159k>
- Kameneva-Lyubavskaya, E. N., & Borzova, T. V. (2024). Metacognitive Engagement Skills Development through Teaching Text Comprehension Methods. *Russian Psychological Journal*, 21(3), 211–228. <https://doi.org/10.21702/rpj.2024.3.12>
- Kaplan, M., Silver, N., LaVaque-Manty, D., Meizlish, D., & Rhem, J. (2023). *Using Reflection and Metacognition to Improve Student Learning: Across the Disciplines, Across the Academy* (p. 215). <https://doi.org/10.4324/9781003448570>
- Kenner, A. (2014). Designing digital infrastructure: Four considerations for scholarly publishing projects. *Cultural Anthropology*, 29(2), 264–287. <https://doi.org/10.14506/ca29.2.05>
- Khafaga, A. F., & Shaalan, I. E.-N. A. W. (2020). Using concordance to decode the ideological weight of lexis in learning narrative literature: A computational approach. *International Journal of Advanced Computer Science and Applications*, 11(4), 246–252. <https://doi.org/10.14569/IJACSA.2020.0110433>
- Kholodniak, O. (2023). Comparative literary theory: A cross-cultural approach to English literature. *Research Journal in Advanced Humanities*, 4(4), 255–273. <https://doi.org/10.58256/rjah.v4i4.1317>
- Kontio, J. P. (2025). *From Reactive to Proactive: Leveraging Learning Management Systems for a More Accessible Learning Experience*. 1–4. <https://doi.org/10.1145/3675229.3712524>
- Kouta, A. T. M. (2021). Narrative Nonlinearity and the Birth of the Wreader: A Hypertext Critical Reading of Selected Digital Literary Texts. *Critique - Studies in Contemporary Fiction*, 62(5), 586–602. <https://doi.org/10.1080/00111619.2020.1804820>
- Liao, S., Yu, L., Kruger, J.-L., & Reichle, E. D. (2024). Dynamic reading in a digital age: New insights on cognition. *Trends in Cognitive Sciences*, 28(1), 43–55. <https://doi.org/10.1016/j.tics.2023.08.002>
- Lim, J., Whitehead, G. E. K., & Choi, Y. (2021). Interactive e-book reading vs. Paper-based reading: Comparing the effects of different mediums on middle school students' reading comprehension. *System*, 97. <https://doi.org/10.1016/j.system.2020.102434>
- Liu, Y., & Yuan, X. (2023). A Review of Research on Digital Reading Cognitive Mechanisms from the Perspective of Cognitive Neuroscience. *Documentation, Information and Knowledge*, 40(6), 129–139. <https://doi.org/10.13366/j.dik.2023.06.129>

- Makimova, G. T., & Begaliyeva, S. B. (2025). Modern Technologies in Teaching Literature: Experience and Prospects. *Journal of Siberian Federal University - Humanities and Social Sciences*, 18(7), 1395–1405. <https://elib.sfu-kras.ru/handle/2311/156660>
- Modi, S., Gupta, T., & Rahmatullah, M. (2024). Digital Storytelling as a Tool for Global Citizenship and Sustainability: Enhancing Cross-Cultural Understanding in Education. *Journal of Interdisciplinary Studies in Education*, 13(Special Issue 1), 65–104. <https://doi.org/10.32674/s817ax14>
- Pelumi, I., & Gordon, N. (2025). SmartRead: A Multimodal eReading Platform Integrating Computing and Gamification to Enhance Student Engagement and Knowledge Retention. *Multimodal Technologies and Interaction*, 9(10). <https://doi.org/10.3390/mti9100101>
- Porto, M. (2010). *Cultural understanding in EFL reading in Argentina*. New York: Nova Science Publishers Inc, 2010 (p. 91). ISBN: 978-1616683184
- Prasetya, D. D., Wibawa, A. P., Hirashima, T., & Hayashi, Y. (2020). Designing rich interactive content for blended learning: A case study from Indonesia. *Electronic Journal of E-Learning*, 18(4), 276–287. <https://doi.org/10.34190/EJEL.20.18.4.001>
- Shen, Y. (2025). *Dialogues Between Global and Local: AIGC Digital Narrative Design for Cantonese Cuisine Intangible Cultural Heritage*. 15782 LNCS, 49–65. [https://doi.org/10.1007/978-3-031-93730-9\\_4](https://doi.org/10.1007/978-3-031-93730-9_4)
- Short, K. G., Alexander, J., Edwards, A., Griffith, J., & Thomas, L. (2023). Developing Intercultural Understanding Through Global Children's Literature. In *Teaching Globally: Reading the World through Literature* (pp. 295–314). <https://doi.org/10.4324/9781032682693-22>
- Silva, L., Pimentel, B., Duarte, B., Escarpini, R., Sousa, L., Cruz, N., & Silva, R. (2025). Accessibility by Design: A Systematic Review of Inclusive E-Book Standards, Tools, and Practices. *Sustainability (Switzerland)*, 17(24). <https://doi.org/10.3390/su172411173>
- Singh, E. P., Doval, J., Kumar, S., & Khan, M. M. S. (2022). Investigating the impact of full-term experiential learning project on management graduates: An emerging economy perspective. *Review of International Business and Strategy*. <https://doi.org/10.1108/RIBS-03-2021-0049>
- Tiwari, V., & Chauhan, S. (2024). Innovative pedagogical approaches in literature education: adapting to the post-pandemic learning landscape. *MSW Management*, 34(2), 874–886. <https://doi.org/10.7492/pcz1n480>
- UNESCO. (2023). *Global education monitoring report 2023, Southeast Asia: Technology in education: A tool on whose terms? Summary* (Programme and Meeting Document ED/GEMR/MRT/2023/SA/S1/01 Rev; pp. 1–18). UNESCO. <https://doi.org/10.54676/ESLN1861>
- Unsriana, L., Perdana, B., Ariana, S., Saputra, D. R., Supyaningsih, F., & Peeter, A. (2025). *Gamified and AI-Powered Learning Systems in Japanese Literature Education in the Digital Age*. Proceeding - 2025 4th International Conference on Creative Communication and Innovative Technology: Empowering Transformative Mature Leadership: Harnessing Technological Advancement for Global Sustainability, ICCIT 2025. <https://doi.org/10.1109/ICCIT65724.2025.11167003>
- Vivitsou, M., Kallunki, V., Niemi, H., Penttilä, J., & Harju, V. (2017). Student-driven knowledge creation through digital storytelling. In *New Ways to Teach and Learn in China and Finland: Crossing Boundaries with Technology* (pp. 35–53). <https://doi.org/10.3726/978-3-631-69873-0>
- Widayanti, M. J. A., Mujiyanto, J., Rukmini, D., & Pratama, H. (2025). Optimizing the Reader Response Approach: A Strategic Framework for Improving Reading Comprehension in

- EFL Classroom. *Educational Process: International Journal*, 15. <https://doi.org/10.22521/edupij.2025.15.183>
- Zhang, L., Carter Jr, R. A., Greene, J. A., & Bernacki, M. L. (2024). Unraveling challenges with the implementation of universal design for learning: A systematic literature review. *Educational Psychology Review*, 36(1), 35. <https://doi.org/10.1007/s10648-024-09860-7>
- Zhu, A., Mofreh, S. A. M., Salem, S., Li, Z., & Yao, M. (2023). A Review of the Effect of Reading Engagement on Reading Achievement. *Encyclopaideia*, 27(67), 17–28. <https://doi.org/10.6092/issn.1825-8670/16180>