Curricula: Journal of Teaching and Learning
http://dx.doi.org/10.22216/jcc.2026.v11.i1-3473

Published by Lembaga Layanan Pendidikan Tinggi (LLDIKTI) Wilayah X

LITERATURE REVIEW

OPEN ACCESS

DIGITAL READING IN EDUCATIONAL CONTEXTS: A PRISMA-GUIDED SYSTEMATIC REVIEW OF MODE EFFECTS, METACOGNITION, AND SOCIAL JUSTICE IMPLICATIONS

Muh. Bahli Basri[1], Sultan[2], Usman[3], Iin Nur Yasinta[4]
[1,2,3,4]Universitas Negeri Makassar, Makasaar, South Sulawesi, Indonesia

Article History
Received 07 January 2026
Revised 30 March 2026
Accepted 21 April 2026

Keywords
Digital Reading, Literacy Environment, Online Texts, Reading Comprehension

ABSTRACT
Digital reading has become ubiquitous in educational settings, yet its impact on learning outcomes remains complex and context-dependent. This systematic literature review synthesizes evidence from nine open-access articles published by Taylor & Francis between 2021 and 2025, focusing on digital reading within the education subject area. Adhering to PRISMA 2020 guidelines, the study employed a rigorous screening process to identify relevant research, followed by thematic synthesis to extract key characteristics, outcomes, and implications. The analysis reveals four predominant themes shaping current discourse. First, mode effects highlight inequality-sensitive patterns in large-scale assessments, suggesting that digital formats may exacerbate existing achievement gaps if not carefully managed. Second, metacognitive navigation and strategic processing emerge as critical determinants of comprehension, emphasizing the need for learners to actively regulate their engagement with digital texts. Third, the review examines digital early-literacy ecosystems, underscoring the importance of home literacy supports, shared digital storybook reading, and established quality principles for children's digital picture books in fostering foundational skills. Fourth, critical–ecological perspectives reframe digital reading through lenses of attention, curriculum design, and social justice, advocating for a holistic approach to future literacy practices. The findings indicate that benefits of digital reading are most pronounced when instructional scaffolds, high-quality design, and equitable access are explicitly prioritized. Conversely, risks such as superficial processing arise when efficiency-driven logics dominate without adequate support for deep comprehension. Consequently, this study proposes targeted implications for pedagogy, interface design, assessment frameworks, and future research directions. By integrating these insights, educators and policymakers can better navigate the challenges of digital literacy, ensuring that technological integration supports rather than hinders equitable and profound learning experiences in diverse educational contexts.

Introduction
The development of digital technology has fundamentally changed the literacy ecosystem. In schools, homes, and universities, reading activities are increasingly carried out through screens, whether in the form of digital books, modules in the learning management system, web articles, or multimodal texts that combine writing, images, audio, and links. This shift raises crucial educational issues, namely whether digital reading produces comprehension equivalent to paper-based reading, and what conditions make digital reading support or hinder deep understanding. Globally, meta-analytic studies show a tendency that reading on paper provides a small but consistent advantage in comprehension compared to reading on screens, especially in informational or expository texts (Delgado et al., 2018; Kong et al., 2018). This finding is increasingly relevant because schools often adopt digital devices as the main medium of learning, while the assumption children are used to gadgets, then they are automatically skilled in digital reading is not necessarily true.

Corresponding Author: Muh. Bahli Basri, Email: bahlybasri@student.unm.ac.id
Universitas Negeri Makassar, Makassar, South Sulawesi, Indonesia.

© 2026 Basri, et al., This is an open-access article distributed under the terms of the Creative Commons Attribution (CC BY) license, allowing unrestricted use, distribution, and reproduction in any medium, provided proper credit is given to the original authors.

However, the international literature also reminds that the effect of the medium is not singular and mechanistic. Research on inattentive on-screen reading shows that under certain conditions such as when there is time pressure, on-screen readers tend to experience a decrease in attention to tasks followed by lower comprehension, so the main issue is not just the screen, but the relationship between medium, task demands, and attention management (Delgado & Salmerón, 2021). In addition, meta-analysis in early childhood showed that digital reading outcomes were influenced by the quality of digital book design and adult support. Digitizing simply moving books to a screen tends to risk lowering comprehension, but features relevant to adult stories and mediation can improve learning outcomes (Furenes et al., 2021). Thus, digital reading needs to be understood as a literacy practice that is influenced by the interaction between readers, texts, devices, and learning contexts.

Furthermore, digital reading in education is not only a matter of reading linear on a screen, but also reading to find, evaluate, and synthesize information from many sources. The study of online research and comprehension confirms that online reading has a different competency structure than offline reading because it involves processes such as searching, source selection, credibility evaluation, and cross-document information integration (Kiili et al., 2018). In line with that, the need for a more precise and multifaceted conceptualization of digital reading since the term digital reading encompasses a wide spectrum of practices, from reading static text on a screen to complex reading based on inquiry and synthesis (Coiro, 2021). The researchers' statement in the Stavanger Declaration also emphasizes that a hybrid reading environment (paper and screen) demands strategies to facilitate deep reading and understanding of long texts in digital contexts (Tsvetkova, 2019).

However, there is a significant research gap. First, many screen-vs. paper comparative studies focus on *the end result* (comprehension score), but lack to integrate *process mechanisms* (e.g., attention regulation, navigation strategies, and comprehension monitoring) into operational learning recommendations. In fact, the findings across studies show that digital reading results are greatly influenced by the conditions of readers' tasks and strategies. Second, the study of digital reading is often fragmented: early childhood studies (digital book quality and mediation), adolescent/adult studies (understanding of informational texts), and "online reading" studies (multi-source reading) are not always synthesized in a single framework that maps the relationships between these dimensions. Third, there is still limited systematic review that deliberately photographs the corpus with open access to the field of education with a very replicative search strategy. In fact, access to open access articles is important for researchers and education practitioners in many contexts, including developing countries.

Based on this gap, the novelty of this research is to present a systematic literature review that deliberately synthesizes nine *open access articles* on the topic of "digital reading" on Taylor & Francis (subject area: education) with a strict and replicative filter. By limiting sources to a single publisher but maintaining traceability of the selection process, this study aims to produce a "contextually sharp" map of findings on how digital reading is discussed in educational studies: ranging from the issue of comparative fashion, strategy/metacognition, to the ecology of literacy (home-school) and social implications. In addition, this study uses the PRISMA 2020 guidelines to ensure transparency of SLR reporting (Page et al., 2021).

Thus, the objectives of this study are: (1) mapping the characteristics of the study in the selected corpus (context, participants, design, and focus of digital reading); (2) identify the main themes of findings related to learning outcomes and digital reading mechanisms (e.g. understanding, attention, strategy, quality of digital texts, and environmental support); and (3) formulate pedagogical implications and research agendas for the development of reading literacy in the digital era that balances evidence of the medium effect with the need for more strategic, contextual, and equitable digital reading learning.

Materials and Methods

This study employed a Systematic Literature Review (SLR) approach to identify, screen, appraise, and synthesize scholarly evidence on digital reading in educational contexts. The review process was reported in accordance with the PRISMA 2020 (Page et al., 2021) guideline to ensure transparent reporting of study identification, screening, eligibility assessment, and inclusion. The literature search is sourced from the Taylor & Francis Online database. The literature search used the phrase "digital reading" filter in article titles,

education as a subject area, and open access availability, and publication period January 2021 to October 2025. A filtered search yields nine articles. All notes pass title-abstract screening, are assessed through a full-text review, and are included in the synthesis. Data were extracted using structured extraction sheets that contained study identification, research design, digital reading focus, and research contributions. The synthesis is proceeded through descriptive mapping to summarize the characteristics of the study and thematic synthesis to integrate the findings across the article into an analytical theme that aligns with the objectives of the review.

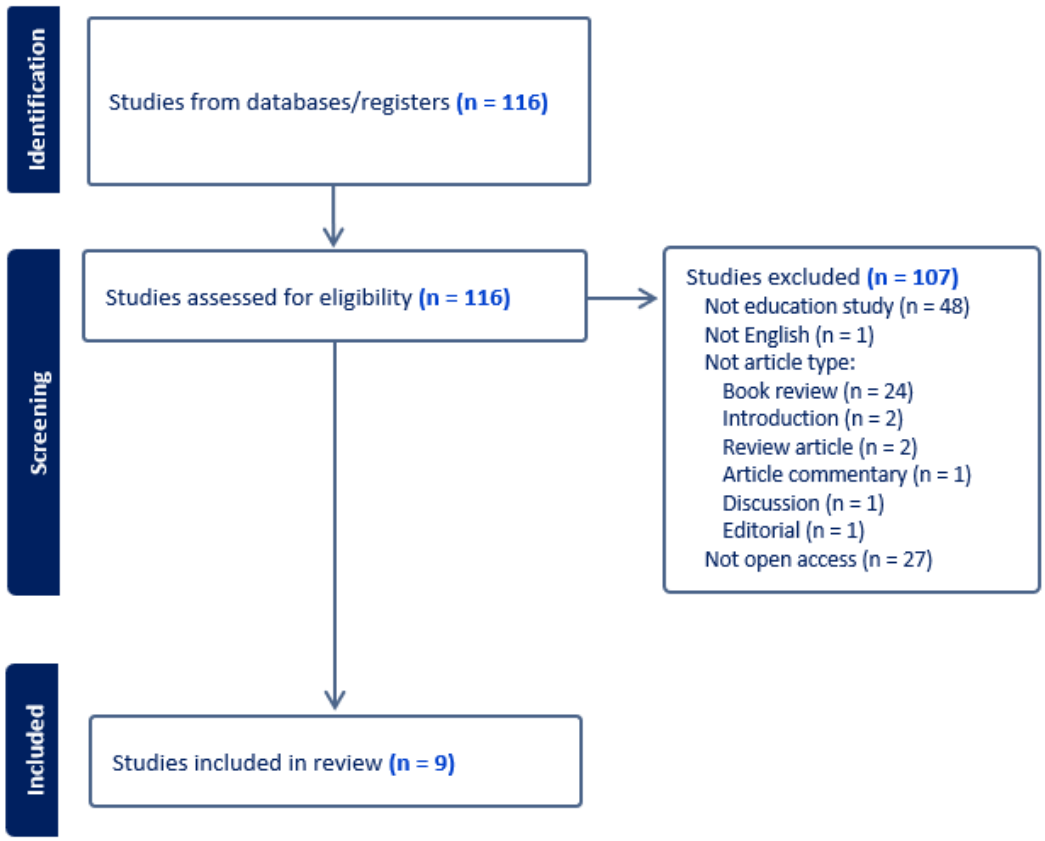

Figure 1. PRISMA Diagram

This systematic literature review followed a rigorous and transparent process guided by the PRISMA 2020 framework to ensure methodological quality and reproducibility. The review process consisted of four distinct phases: identification, screening, eligibility assessment, and inclusion. In the identification phase, an initial search was conducted in the Taylor & Francis Online database using the search phrase "digital reading" within article titles. The search was limited to the education subject area, open access publications, and articles published between January 2021 and October 2025. This initial search yielded 116 potential studies. During the screening phase, all 116 identified studies were assessed for eligibility based on predetermined inclusion and exclusion criteria. A total of 107 studies were excluded for various reasons: 48 were not education-related studies, 1 was not in English, 31 were inappropriate article types (including 24 book reviews, 2 introductions, 2 review articles, 1 article commentary, 1 discussion piece, and 1 editorial), and 27 were not open access publications.

In the eligibility and inclusion phase, the remaining 9 studies underwent full-text review and were subsequently included in the final synthesis. All nine studies met the inclusion criteria and passed both title-abstract screening and full-text assessment. For data extraction and synthesis, structured extraction sheets were employed to systematically capture key information from each study, including study identification details, research design, specific focus on digital reading, and research contributions. The synthesis process

involved two complementary approaches: (1) descriptive mapping to summarize the characteristics and features of the included studies, and (2) thematic synthesis to integrate findings across articles into coherent analytical themes aligned with the review objectives. This dual approach ensured both comprehensive documentation of study characteristics and meaningful integration of research findings.

Results and Discussion

In descriptive terms, the nine studies included in this SLR display clear variation in research designs, educational levels, and geographical scope. Regarding design types, the corpus comprises one large-scale assessment analysis, two experiments/field studies, two mixed or quantitative descriptive studies, and four conceptual/theoretical analyses. In terms of educational levels and contexts, the studies span early childhood and primary settings (home literacy, shared reading practices, and children's digital picture books), secondary or teacher education contexts (mind mapping and digital futures), as well as cross-cutting conceptual work addressing an attention ecology of reading and the relationship between texts and curriculum in the digital age. Geographically, the evidence base combines a multi-country PIRLS/ePIRLS study across 14 countries with several single-country or single-context studies, offering a multi-layered view of digital reading across diverse educational settings. The following table summarises the nine included studies, outlining their research designs, the focus of the digital reading inquiry, and the key findings that underpin the thematic synthesis in the subsequent section.

Study	Design	Focus	Core Contribution
Paper-based & digital reading in 14 countries (Educational Review)	Large-scale PIRLS/ePIRLS, N≈73,597	Mode effects & cross-country variation	Mode effect patterns were broadly stable; contextual factors (e.g., resources/time) matter (Grammatikopoulou et al., 2025).
Strategic backtracking in digital informational text	Experiment, n=68	Navigation strategy → understanding	Backtracking related to better comprehension and productivity paths (Haverkamp & Bråten, 2024).
Reading for digital futures (social justice lens)	Survey, Year 3 students, n=318	Digital futures & justice	Digital reading futures tied to inequities and student lived experiences (Adam et al., 2025).
Digital boost of home literacy environment	Longitudinal/field study	Digital HLE → early reading/vocab	Digital home literacy supports linked to early literacy development (Hoel & Jernes, 2024).
Shared reading of digital storybooks (parents' perspectives)	Parent perspectives study	Family practices	Parents described benefits and challenges in shared digital storybook reading (Nicholas & Paatsch, 2024).
Quality in children's digital picture books (seven strands)	Conceptual framework	Quality design principles	Proposes 7 quality strands to guide evaluation and design (Scholes, 2024).
Negotiating attention: ecology of reading	Conceptual/theoretical	Attention ecology	Reframes attention as dynamic and socio-material, not simply

			"lost" in digital reading (Brady, 2025).
Schema strategy training with digital mind mapping	Small-scale study, n=12	Strategy instruction	Mind-mapping + schema training improved comprehension indicators (Yan & Kim, 2023).
How texts teach what readers learn in a digital age	Conceptual/theoretical	Texts/curriculum	Argues texts actively shape learning/reading in digital contexts (Taylor, 2022).

Table 1. Included Studies Summary

Based on the thematic coding and synthesis process of the nine selected articles, the research are organized into four main themes which are outlined in the following table.

Theme	Description
Mode effect	The PIRLS/ePIRLS cross-national study shows that the "mode effect" (performance differences between paper and digital media) cannot be reduced to a universal technological deficit; the patterns are examined across 14 countries and are associated with contextual factors such as household resources and time-use variables. This is in line with broader international evidence: meta-analyses find small average losses for screen comprehension but prioritize moderators (task type, reader goals, and constraints).
Digital comprehension	In digital informational texts, comprehension is closely linked to navigation. Studies of strategic backtracking demonstrate a relationship between backtracking behavior, comprehension, and productivity-related pathways. Similarly, strategy schema training using digital mind mapping demonstrates that explicit strategy instruction can strengthen reading comprehension outcomes, even in small-scale implementations.
Early digital literacy	Early literacy in the digital age is not just an individual cognitive issue but also an ecosystem issue. Home literacy studies link environmental factors of digital literacy at home to early reading and comprehension development. Parents' perspectives on shared digital storybook reading reveal how families negotiate benefits (access, engagement) alongside concerns (screen time, distractions, quality of interaction).
Beyond distraction	Reading has always involved dynamic and deeply socio-material forms of attention. The digital age makes this even more visible. Reading for a Digital Future situates digital reading within social justice, emphasizing how students' literacy experiences and imagined futures are shaped by injustice and cultural-economic realities.

Table 2. Thematic Categories

Discussion

A synthesis of Taylor & Francis' nine open-access articles on education shows that digital reading cannot be understood simply as reading on a screen, but rather as a literacy practice influenced by (a) modes or mediums and assessment design, (b) the demands of metacognitive navigation and regulation, (c) the ecology of home literacy and the quality of digital texts, and (d) the social-critical dimensions (attention ecology and social justice). These findings reinforce the direction of the international literature that differences in reading attainment between paper and screen tend to be small but consistent and more

importantly, highly moderated by reading objectives, text type, time conditions, and readers' strategies (Delgado et al., 2018; Clinton, 2019; Kong et al., 2018).

A cross-country study (PIRLS/ePIRLS) in this corpus shows cross-contextual variation and a strong correlation between paper and digital literacy, while confirming that structural predictors such as socioeconomic status and language at home remain major in digital reading attainment (Grammatikopoulou et al., 2025). These findings are important because the meta-analytic literature is often misunderstood as if screens are universally worse. Although the meta-analysis showed an average effect that tended to favor the paper, it also emphasized the presence of moderators (expository vs. narrative texts, time pressure, and learning context) that explained why the results between studies varied (Delgado et al., 2018; Clinton, 2019; Kong et al., 2018). In other words, the results of PIRLS/ePIRLS reinforce the argument that the main issue is not just a medium, but equality of learning opportunities, digital literacy experiences, and how digital reading tasks are designed.

The practical implication of the confluence of these two types of evidence (large-scale assessment and meta-analysis) is the need to distinguish between two policy agendas: (1) the evaluation agenda (whether digital assessments measure equal and fair constructs), and (2) the pedagogical agenda (what strategies need to be taught in order for students to achieve in-depth understanding on screen). This corpus study is more strongly in support of the second agenda: effective digital reading requires explicit teaching of strategies, not just the migration of reading materials to devices.

The second theme of the synthesis shows that digital reading emphasizes the demands of navigation and self-regulation. Haverkamp and Bråten (2024) found that strategic backtracking (returning to the previous section in a directional manner) is related to understanding digital informational texts, asserting that readers who are able to manage scrolling/returning and examine content coherence tend to build better understanding. These findings are consistent with international evidence that screen reading is prone to encourage superficial processing when readers are chasing efficiency or are under time pressure—a condition that can decrease attention to content and impact comprehension (Delgado & Salmerón, 2021). Therefore, successful digital reading appears to depend on self-regulated reading: readers monitor comprehension, test consistency of meaning, and correct misconceptions through navigation strategies such as backtracking.

The results of Yan and Kim (2023) on schema strategy training with digital mind mapping also confirm that strategies do not automatically increase comprehension scores; strategy benefits tend to emerge when strategy tools and procedures are aligned with task objectives, cognitive load, and reader competence. Conceptually, this is in line with the call to understand digital reading as a multifaceted construct that includes cognitive, metacognitive, and interaction processes with digital features (Coiro, 2021). Thus, the findings of this corpus suggest that strategic interventions in digital reading should be designed not only as an additional tool (mind maps), but as an instructional routine that teaches when, why, and how strategies are used to support the inference and integration of ideas (Delgado et al., 2018; Coiro, 2021).

The third theme emphasizes that in early childhood, digital reading is largely determined by the ecology of literacy especially the quality of digital texts and adult mediation. Nicholas and Paatsch (2024) show how the practice of shared reading digital storybooks is influenced by parents' views (screen time concerns, distractions, and mentoring needs). The quality framework from Hoel and Jernes (2024) expands on this issue by emphasizing that the quality of digital picture books is not just an interactive display or feature, but an integration of elements (verbal text, illustrations, language games, dialogue opportunities, medium flexibility, and interactivity) that can support dialogical reading.

These findings are in line with a meta-analysis that concluded that children's reading on screens can produce lower results than paper when digital features are distracting, but can be equal/better when features support comprehension and there is adult support to guide (Furenes et al., 2021). This means that digital literacy policies for young children should shift from a limit the screen narrative to optimize quality and interaction: selecting digital reading materials with pedagogical quality and strengthening collaborative reading practices that encourage conversation, inferences, and vocabulary.

The findings of RCTs in the Indonesian context also enrich international discussions: Adam et al. (2025) showed that a digital boost in the home literacy environment through digital storybooks and reading games

can improve the development of early reading and vocabulary in at-risk grade 1 students. These results provide evidence that digital reading can also be an equity strategy when designed as an intervention for access and home literacy practices not just a substitution of medium.

The fourth theme shows that digital reading is not only a matter of comprehension scores, but also concerns how attention is shaped by digital ecology and how literacy is related to the social future. Brady (2025) rejects the simple dichotomy of digital spoils attention, and offers an attention ecology lens that views attention as something negotiated in social-material networks (platforms, classroom norms, multitasking habits, and curriculum demands). This perspective helps explain why the screen effect can seem negative in certain studies: not because screens are intrinsically bad, but because task configurations and digital environments can encourage fast/fragmented reading habits, especially when there is time pressure (Delgado & Salmerón, 2021).

Scholes (2024) places digital reading within the horizon of digital futures and social justice showing that students' literacy experiences are related to access, opportunity, and social position. This perspective is important to avoid policy biases that blame individuals (lack of focus) and ignore structural factors. These findings are met with large-scale evidence that the home/SES factor plays a strong role in digital reading attainment (Grammatikopoulou et al., 2025). Meanwhile, Taylor (2022) emphasizes that texts (especially digital and multimodal texts) teach readers a certain way of constructing meaning, so education needs to teach critical literacy of forms, mediums, and discourses. Combined, these three articles suggest that a mature digital reading agenda should combine: cognitive strategies (understanding), regulatory strategies (mindfulness), and critical literacy (how texts/platforms shape knowledge and participation).

Overall, this discussion leads to four implications that can be directly derived to the learning design and research agenda. First, learning digital reading needs to teach explicit navigation and monitoring strategies (directional backtracking), as the demands of screens are different from paper (Haverkamp & Bråten, 2024; Delgado & Salmerón, 2021). Second, "digital tools" approaches such as mind mapping need to be treated as a pedagogical component that is supported (scaffolded routine), not just an application, so that the benefits of the strategy outweigh the cognitive load (Yan & Kim, 2023; Coiro, 2021). Third, in early childhood, policy focus should be on the quality of digital texts and adult mediation not just duration restrictions because the quality of features and interactions determines outcomes (Hoel & Jernes, 2024; Nicholas & Paatsch, 2024; Furenes et al., 2021). Fourth, digital reading must be understood as an issue of learning opportunities and social justice; device access, home literacy environment, and curriculum practices determine who benefits from the digital transition (Scholes, 2024; Adam et al., 2025; Grammatikopoulou et al., 2025).

Conclusions

Based on the four thematic categories identified, it can be concluded that digital reading is a complex, contextual, and multidimensional literacy practice. The theme of fashion effects shows that the difference in reading performance in print and digital media is not universal, but is influenced by reading goals, types of tasks, constraints, and social conditions and time use. The theme of digital understanding emphasizes the importance of navigation, backtracking, and metacognitive strategies in building understanding in a nonlinear digital text environment. The theme of early digital literacy shows that the development of digital reading from an early age is highly dependent on the home literacy ecosystem, the quality of parent-child interaction, and how families mediate the benefits and risks of using devices. The theme of transcending distraction emphasizes that attention in digital reading is shaped by social, material, and cultural-economic factors, so distraction is not solely an individual problem. Thus, the implication of this study is the need for a new orientation in digital literacy education and policies related to the explicit teaching of digital reading strategies, strengthening family mentoring, designing learning environments and platforms that minimize distractions, as well as equitable access and support for vulnerable groups, so that digital reading becomes a means of developing sustainable understanding.

References

Adam, P., Kleemans, T., Droop, M., Amorim, A. N., & Segers, E. (2025). A digital boost of the home literacy environment positively impacts early reading and vocabulary development of Indonesian 1st graders

at-risk. *Journal of Educational Research*, *118*(5), 425–436. https://doi.org/10.1080/00220671.2025.2490963

Brady, A. M. (2025). Negotiating attention: An ecology of reading in the digital age. *Educational Philosophy and Theory*, *57*(10), 942–955. https://doi.org/10.1080/00131857.2025.2486651

Coiro, J. (2021). Toward a Multifaceted Heuristic of Digital Reading to Inform Assessment, Research, Practice, and Policy. *Reading Research Quarterly*, *56*(1), 9–31. https://doi.org/10.1002/RRQ.302

Delgado, P., & Salmerón, L. (2021). The inattentive on-screen reading: Reading medium affects attention and reading comprehension under time pressure. *Learning and Instruction*, *71*, 101396. https://doi.org/10.1016/J.LEARNINSTRUC.2020.101396

Delgado, P., Vargas, C., Ackerman, R., & Salmerón, L. (2018). Don't throw away your printed books: A meta-analysis on the effects of reading media on reading comprehension. *Educational Research Review*, *25*, 23–38. https://doi.org/10.1016/J.EDUREV.2018.09.003

Furenes, M. I., Kucirkova, N., & Bus, A. G. (2021). A Comparison of Children's Reading on Paper Versus Screen: A Meta-Analysis. *Review of Educational Research*, *91*(4), 483–517. https://doi.org/10.3102/0034654321998074

Grammatikopoulou, E., Johansson, S., & Rosén, M. (2025). Paper-based and digital reading in 14 countries: exploring cross-country variation in mode effects. *Educational Review*. https://doi.org/10.1080/00131911.2025.2452236

Haverkamp, Y. E., & Bråten, I. (2024). The Role of Strategic Backtracking When Reading Digital Informational Text for Understanding. *Literacy Research and Instruction*, *63*(2), 176–191. https://doi.org/10.1080/19388071.2022.2155271

Hoel, T., & Jernes, M. (2024). Quality in children's digital picture books: seven key strands for educational reflections for shared dialogue-based reading in early childhood settings. *Early Years*, *44*(3–4), 480–494. https://doi.org/10.1080/09575146.2023.2172552

Kiili, C., Leu, D. J., Utriainen, J., Coiro, J., Kanniainen, L., Tolvanen, A., Lohvansuu, K., & Leppänen, P. H. T. (2018). Reading to Learn From Online Information: Modeling the Factor Structure. *Journal of Literacy Research* , *50*(3), 304–334. https://doi.org/10.1177/1086296X18784640

Kong, Y., Seo, Y. S., & Zhai, L. (2018). Comparison of reading performance on screen and on paper: A meta-analysis. *Computers & Education*, *123*, 138–149. https://doi.org/10.1016/J.COMPEDU.2018.05.005

Nicholas, M., & Paatsch, L. (2024). The shared reading of digital storybooks with young children: Parents' perspectives. *Research Papers in Education*, *39*(4), 650–667. https://doi.org/10.1080/02671522.2023.2205411

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, *372*. https://doi.org/10.1136/BMJ.N71

Scholes, L. (2024). Reading for digital futures: a lens to consider social justice issues in student literacy experiences in the digital age. *Cambridge Journal of Education*, *54*(1), 71–88. https://doi.org/10.1080/0305764X.2023.2281695

Taylor, L. (2022). How texts teach what readers learn in a digital age. *English in Education*, *56*(3), 222–234. https://doi.org/10.1080/04250494.2022.2089014

Tsvetkova, M. (2019). In Respect of Future of Reading: Stavanger Declaration. *BBIA Online: The Journal of the Bulgarian Library and Information Association*, *9*(4), 9–11. https://doi.org/10.5281/ZENODO.3533734

Yan, X., & Kim, J. (2023). The effects of schema strategy training using digital mind mapping on reading comprehension: A case study of Chinese university students in EFL context. *Cogent Education*, *10*(1). https://doi.org/10.1080/2331186X.2022.2163139