

Enhancing Social Literacy Through Interactive Digital Media in Secondary School Social Studies

Lailaitul Qodriyah¹, Siti Fadiyah²

¹Pamulang University, Indonesia

²Ibn Khaldun University, Indonesia

Article Info

Corresponding Author:

Lailaitul Qodriyah

✉ lailatulqod05@gmail.com

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Abstract

Indonesia currently faces a critical educational paradox characterized by high institutional access yet alarming deficits in functional literacy, particularly within Secondary Social Studies. This study investigates the utilization of interactive digital media to resolve this "literacy emergency" and enhance students' social competencies. Employing a systematic qualitative methodology grounded in the ADDIE model and Johnston's Digital Engagement Theory, the research analyzes the integration of digital platforms with indigenous local wisdom. The findings demonstrate that transforming static instruction into immersive experiences using tools like Augmented Reality and interactive modules raises student engagement from a moderate 60% to a significant 93%. This pedagogical shift effectively bridges the disconnect between abstract curricular concepts and students' sociocultural realities. Ultimately, the research concludes that culturally responsive digital environments are indispensable for fostering critical thinking and civic responsibility, thereby equipping the "digital native" generation with the necessary skills to navigate complex societal dynamics in the 21st century.

Abstrak

Indonesia saat ini menghadapi paradoks pendidikan kritis yang ditandai oleh tingginya akses institusional namun terdapat defisit mengkhawatirkan dalam literasi fungsional, khususnya dalam mata pelajaran Ilmu Pengetahuan Sosial (IPS) tingkat menengah. Studi ini menyelidiki pemanfaatan media digital interaktif untuk mengatasi "darurat literasi" ini serta meningkatkan kompetensi sosial siswa secara menyeluruh. Dengan menggunakan metodologi kualitatif sistematis yang didasarkan pada model ADDIE dan Teori Keterlibatan Digital Johnston, penelitian ini menganalisis integrasi platform digital dengan kearifan lokal pribumi. Temuan menunjukkan bahwa transformasi instruksi statis menjadi pengalaman imersif menggunakan alat seperti *Augmented Reality* dan modul interaktif secara signifikan meningkatkan keterlibatan siswa dari 60% menjadi 93%. Pergeseran pedagogis ini secara efektif menjembatani kesenjangan antara konsep kurikulum abstrak dan realitas sosiokultural siswa. Pada akhirnya, penelitian menyimpulkan bahwa lingkungan digital responsif budaya sangat diperlukan untuk menumbuhkan pemikiran kritis dan tanggung jawab sipil, membekali generasi "native digital" dengan keterampilan vital untuk menavigasi dinamika sosial kompleks abad ke-21.



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A. INTRODUCTION

1. Background

The condition of education in Indonesia as the nation enters the 2024–2025 academic period is defined by a paradox of high institutional access and low functional competency. While government data from the 2024 National Socio-Economic Survey (Susenas) demonstrates that the School Enrollment Rate (APS) for children aged 7–12 has reached 99.19% and 96.17% for those aged 13–15, the qualitative reality of literacy remains in a state of "emergency".¹ Minister of Primary and Secondary Education (Mendikdasmen) Abdul Mu'ti has publicly characterized this crisis not as a failure to recognize alphabetic characters, but as a failure of "functional reading" the ability to process, analyze, and logically synthesize text to solve problems or understand complex social phenomena.² This systemic deficit is particularly pronounced in the field of Social Studies (IPS), where the transition to a digital-first society has exposed a significant gap in "social literacy," which encompasses the intellectual, social, and cooperative skills necessary for effective citizenship in a democratic and technologically integrated society.³

The urgency of this research is underscored by recent reports from regions such as Buleleng and Pangandaran, where hundreds of secondary school students were found to be unable to read or write fluently despite having advanced through the grades via "automatic promotion" policies.⁴ This phenomenon is compounded by a digital paradox: while the "Zileneal" generation (Gen Z and Alpha) is highly proficient in navigating social media interfaces, they often lack the critical literacy to distinguish between "noise" and "voice," or between verified facts and fabricated hoaxes.⁵ Social media, which has become the primary informal learning environment for Indonesian youth, frequently serves as a breeding ground for cyberbullying and misinformation, reflecting a decline in "keadaban

¹ Badan Pusat Statistik, "Education Indicator, 1994-2025," 2025, <https://www.bps.go.id/en/statistics-table/1/MTUyNSMx/education-indicator--1994-2024.html>.

² Tempo News, "Darurat Literasi 2025: Ketika Generasi Digital Tak Mampu Membaca," TEMPO News, 2025, <https://temponews.web.id/darurat-literasi-2025-ketika-generasi-digital-tak-mampu-membaca/>.

³ Nawalinsi Nawalinsi et al., "Social Literacy in Social Studies Learning for Junior High School Students in Lahat City," *JETL (Journal of Education, Teaching and Learning)* 9, no. 1 (February 29, 2024): 21–27, <https://doi.org/10.26737/jetl.v9i1.4855>.

⁴ Tempo News, "Darurat Literasi 2025: Ketika Generasi Digital Tak Mampu Membaca."

⁵ Safitri Yosita Ratri and Lina Aviyanti, "Unlocking Digital Literacy in Indonesia: Insights from the Use of Social Media Platforms," *Jurnal Prima Edukasia* 13, no. 1 (March 27, 2025): 191–200, <https://doi.org/10.21831/jpe.v13i1.83433>.

berbahasa" or linguistic civility.⁶ Consequently, there is a profound need to move beyond traditional, rote-based social studies pedagogy toward an interactive digital framework that fosters deep comprehension and social engagement.⁷

Theoretically, this study is grounded in Vygotsky's Sociocultural Theory, which posits that learning is a social process facilitated by interaction within the "Zone of Proximal Development" (ZPD), and Johnston's Digital Engagement Theory (2023), which emphasizes the role of "digital environment structuring" in shaping how users interact with information.⁸ Previous research has explored various facets of this transition. Studies by Alakrash and Razak (2021)⁹ and Fransisca and Ningsih (2023)¹⁰ highlight the paradox of digital natives possessing limited digital knowledge, while research by Fadli et al (2025)¹¹ and Da Milano et al (2023)¹² demonstrates the effectiveness of digital storytelling and simulations in enhancing conceptual understanding. However, much of the existing literature focuses on the technical affordances of these tools without adequately addressing the "local wisdom" and "culturally responsive" nuances specific to the Indonesian context.

The novelty of this research lies in its integrative approach to developing interactive digital media that bridges the gap between abstract curricular requirements and students' lived sociocultural experiences. Unlike prior studies that treat technology as a standalone intervention, this work explores the synergy between local narratives such as the indigenous conservation practices of *hutan larangan* and high-interactivity platforms like

⁶ Despian Nurhidayat, "Indonesia Masih Miliki Masalah Kemampuan Literasi Yang Rendah," *Media Indonesia*, 2025, <https://mediaindonesia.com/humaniora/785288/indonesia-masih-miliki-masalah-kemampuan-literasi-yang-rendah>.

⁷ Yuliantoro Yuliantoro et al., "Developing Digital Media Based on Local Wisdom to Increase Student Engagement in Social Studies Learning," *AL-ISHLAH: Jurnal Pendidikan* 17, no. 3 (September 29, 2025): 4742–53, <https://doi.org/10.35445/alishlah.v17i3.8385>.

⁸ Ace Suryadi and Restu Adi Nugraha, "Influences on Critical Thinking Skills Among Indonesian Secondary Students: An Empirical Analysis," in *The Barcelona Conference on Education 2024*, 2025, 571–80, <https://doi.org/10.22492/issn.2435-9467.2024.49>.

⁹ Hussien Mohamad Alakrash and Norizan Abdul Razak, "Technology-Based Language Learning: Investigation of Digital Technology and Digital Literacy," *Sustainability* 13, no. 21 (November 8, 2021): 12304, <https://doi.org/10.3390/su132112304>.

¹⁰ Vika Fransisca and Widia Ningsih, "The Advancement of Technology and Its Impact on Social Life in Indonesia," *Devotion: Journal of Research and Community Service* 4, no. 3 (March 30, 2023): 860–64, <https://doi.org/10.36418/devotion.v4i3.445>.

¹¹ Muhammad Rijal Fadli et al., "Exploration of the Use of Digital Storytelling in Social Studies Learning: ABibliometric Analysis Study," *JURNAL EDUSCIENCE* 12, no. 4 (August 30, 2025): 1029–41, <https://doi.org/10.36987/jes.v12i4.7078>.

¹² Cristina Da Milano et al., "Digital Storytelling, Cultural Heritage, and Social Inclusion: The MEMEX Project," in *Digital Approaches to Inclusion and Participation in Cultural Heritage* (London: Routledge, 2023), 8–26, <https://doi.org/10.4324/9781003277606-2>.

Canva, Heyzine, and Augmented Reality (AR). By applying the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model of instructional design, this study seeks to create a scalable blueprint for revitalizing social literacy in diverse regional settings. Preliminary findings from this research indicate that interactive media based on local wisdom can increase student engagement scores from a moderate 60% to a "very high" 93%, effectively bridging the conceptual disconnect that characterizes conventional Social Studies classrooms.

Indicator	Value/Status	Context/Source
APS Age 7–12 (2024)	99.19%	National High
APS Age 13–15 (2024)	96.17%	National High
Functional Literacy Gap	75%	Mendikdasmen Finding
Historical Literacy Failure	60%	Central Java Study
PISA Reading Rank (2022)	68th of 81	Global Standing

2. Research Questions

Based on the critical landscape of Indonesian education described above, this research addresses the following questions to guide the analysis and discussion:

- a. How does the structuring of the digital environment, as defined by Johnston's Digital Engagement Theory, influence the depth of student interaction and social literacy in secondary school Social Studies?
- b. What is the impact of integrating local wisdom and culturally grounded narratives into interactive digital media on student engagement and conceptual understanding in diverse Indonesian regions?
- c. To what extent can immersive technologies such as Augmented Reality (AR) and Virtual Reality (VR) mitigate the systemic "learning loss" and regional literacy disparities observed in the 2024-2025 academic period?
- d. What pedagogical strategies and instructional design models are most effective for transforming Social Studies from a lecture-based subject into a meaningful, interactive experience for "digital native" students?

3. Research Methods

This research utilizes a systematic qualitative approach combined with a

comprehensive literature review of high-impact studies indexed in the Scopus, Web of Science, and ERIC databases between 2020 and 2025.¹³ The methodology follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure that the selection and synthesis of evidence are rigorous, transparent, and reproducible.¹⁴ The search strategy employed keywords such as "social literacy," "interactive digital media," "secondary social studies," and "Indonesia," focusing on empirical evidence and policy reports from the 2024–2025 period.

Data collection was further enriched by analyzing recent Indonesian educational statistics from the Central Bureau of Statistics (BPS) and policy documents from the Ministry of Primary and Secondary Education, including the Strategic Plan (Renstra) 2025–2029. The analysis follows the Miles and Huberman technique, which involves data reduction, data display, and conclusion drawing.¹⁵ Specifically, the effectiveness of interactive media was evaluated through the lens of the ADDIE model, drawing on case studies that implemented digital modules using platforms like Canva, Heyzine, and Scratch in Indonesian junior high schools. The "digital environment" was analyzed using Johnston's Digital Engagement Theory, examining dimensions such as system design, user attributes, and interaction quality.

B. DISCUSSION

1. The Structural Crisis of Literacy and Social Studies in Indonesia

The first core challenge in Indonesian secondary education is the "literacy emergency" that has persisted into 2025. Despite achieving near-universal school enrollment, the quality of educational output is hindered by a failure in "disciplinary literacy" the ability to read and think like a historian, geographer, or sociologist. Statistics from the 2022 PISA survey, released in late 2023, show that Indonesian students' scores in reading, mathematics, and science have continued to decline, ranking the nation 68th

¹³ Carmen del Rosario Navas-Bonilla et al., "Inclusive Education through Technology: A Systematic Review of Types, Tools and Characteristics," *Frontiers in Education* 10 (February 12, 2025), <https://doi.org/10.3389/feduc.2025.1527851>.

¹⁴ Orit Avidov-Ungar, "Empowering Teacher Professionalism Through Personalized Continuing Professional Learning: A Systematic Literature Review Using a Multidimensional Approach to Self-Assessment and Growth," *Education Sciences* 15, no. 12 (December 15, 2025): 1686, <https://doi.org/10.3390/educsci15121686>.

¹⁵ Matthew B Miles and A. Michael Huberman, "Drawing Valid Meaning from Qualitative Data: Toward a Shared Craft," *Educational Researcher* 13, no. 5 (May 1, 1984): 20–30, <https://doi.org/10.3102/0013189X013005020>.

out of 81 participating countries.¹⁶ This decline is not merely a post-pandemic artifact but a reflection of deep-seated "rote learning" paradigms where students memorized historical dates and definitions without developing the "historical thinking skills" required to analyze cause and effect or evaluate different perspectives.¹⁷

In a study of high schools in Sukoharjo Regency, Central Java, 60% of students failed to achieve basic historical literacy; they could read the narrative but lacked the critical capacity to understand the social changes or the "why" behind the events.¹⁸ This failure in functional comprehension is what Mendikdasmen Abdul Mu'ti identifies as the "75% problem" the percentage of children who can read characters but cannot digest the meaning.¹⁹ This leads to a society that is vulnerable to misinformation, as students who lack social science logic are more likely to accept "fake news" as "fact".²⁰

PISA Domain	2018 Score	2022 Score	Trend
Reading	371	359	Decrease
Mathematics	379	366	Decrease
Science	396	383	Decrease
Global Rank	74th	68th	Rank Improved (but scores fell)

2. Digital Environment Structuring and Student Engagement Theory

According to Johnston’s Digital Engagement Theory (2023), the structuring of a digital environment is the primary determinant of whether a student will engage passively or participate actively in the learning process.²¹ A well-structured digital environment in a Social Studies classroom is not defined by the presence of technology

¹⁶ Esti Setiawati et al., "What Are the Social Science Literacy Abilities of Junior High School Students After the Pandemic?," *Journal of Lifestyle and SDGs Review* 5, no. 1 (January 10, 2025): e02759, <https://doi.org/10.47172/2965-730X.SDGsReview.v5.n01.pe02759>.

¹⁷ Suryadi and Nugraha, "Influences on Critical Thinking Skills Among Indonesian Secondary Students: An Empirical Analysis."

¹⁸ Hieronymus Purwanta, "Indonesian Secondary History Literacy Skills Level: Case Study of Public and Private High Schools in Sukoharjo Regency, Central Java," *Multidisciplinary Science Journal* 5 (July 21, 2023): 2023050, <https://doi.org/10.31893/multiscience.2023050>.

¹⁹ Dinda Shabrina, "Menteri Abdul Mu'ti: 75 Persen Anak Indonesia Bisa Baca, Tapi Tak Paham Yang Dibaca," *Tempo*, 2025, <https://www.tempo.co/politik/menteri-abdul-mu-ti-75-persen-anak-indonesia-bisa-baca-tapi-tak-paham-yang-dibaca-1284724>.

²⁰ Setiawati et al., "What Are the Social Science Literacy Abilities of Junior High School Students After the Pandemic?"

²¹ Nur Atnan and Windhiadi Yoga Sembada, "An Analysis of Digital Environment Structuring and Its Impact on Engagement: A Case Study of the Bandung City Government’s Social Media Accounts, Indonesia," *Frontiers in Communication* 10 (July 8, 2025), <https://doi.org/10.3389/fcomm.2025.1628346>.

alone, but by the integration of "system design" and "technical features" that are user-friendly, interactive, and functionally beneficial. In Indonesia, institutions like the Municipal Government of Bandung have found that visually appealing content and interactive features significantly drive user interaction, whereas simple account configurations do not.

In the educational context, this means that an interactive digital module must move beyond the "one-way" communication of a traditional PowerPoint.²² Platforms like Kahoot! and Interactive Flat Panel Displays (IFPD) have shown success in Indonesian schools because they incorporate "game-based" mechanics and "real-time" interaction, allowing for a "two-way" dialogue between the student and the content.²³ This structuring shifts the user experience from passive observation to active exploration, which is essential for developing "social participation" skills. When students are required to respond to digital stimuli, analyze maps, or participate in online quizzes, they are practicing the "response skills" and "habits of learning" necessary for lifelong literacy.²⁴

3. The Synergy of Local Wisdom and Interactive Media

A significant breakthrough in addressing the "abstractness" of Social Studies in Indonesia is the development of digital media based on local wisdom. Conventional Social Studies instruction often relies on examples that are "distant" from students' daily realities, leading to a perception that the subject is "boring". To counter this, researchers have used the Research and Development (R&D) approach, specifically the ADDIE model, to create interactive materials rooted in the cultural narratives familiar to students.²⁵

In one trial involving 132 students, interactive media focused on the indigenous conservation practices of *hutan larangan* (forbidden forests) was developed using Canva and Heyzine. This media allowed students to explore local environmental laws and social governance through a digital interface accessible via QR codes and smartphones.¹¹ The experts rated this media at 94-95% feasibility, and the impact on engagement was

²² Yuliantoro et al., "Developing Digital Media Based on Local Wisdom to Increase Student Engagement in Social Studies Learning."

²³ Rachman Riyadi and Tutuk Ningsih, "Pemanfaatan Media Interactive Flat Panel Display (IFPD) Dalam Pembelajaran Ips Bagi Siswa Madrasah," *ELSE (Elementary School Education Journal): Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar* 8, no. 3 (February 7, 2025): 329-41, <https://doi.org/10.30651/else.v8i3.24401>.

²⁴ Atnan and Sembada, "An Analysis of Digital Environment Structuring and Its Impact on Engagement: A Case Study of the Bandung City Government's Social Media Accounts, Indonesia."

²⁵ Yuliantoro et al., "Developing Digital Media Based on Local Wisdom to Increase Student Engagement in Social Studies Learning."

dramatic, rising from 60% pre-treatment to over 90% post-treatment.²⁶ This "contextualized learning" bridges the gap between the national curriculum and local identity, fostering a sense of "nationalism" and "love for the country" while simultaneously developing digital competency.

Development Phase	Activity in SSE Context
Analysis	Identifying student boredom with traditional history lectures
Design	Creating storyboards for <i>hutan larangan</i> interactive modules
Development	Building modules on Canva; adding interactivity via Heyzine
Implementation	Students accessing modules via QR codes in group activities
Evaluation	Measuring a 30% jump in student engagement scores

4. Immersive Technologies: Augmented Reality (AR) and Virtual Reality (VR)

The adoption of Augmented Reality (AR) and Virtual Reality (VR) in secondary schools represents the technological frontier for Social Studies. These tools are uniquely suited for Geography and History, subjects that often require spatial visualization and historical empathy. AR overlays digital information onto the physical world, allowing students to interact with 3D models of historical artifacts or geographical phenomena such as the rotation of the Earth or the structure of a volcanic eruption within their own classroom environment.²⁷

Findings from systematic reviews indicate that AR has a "generally positive impact" on student motivation and academic achievement. It supports "situated learning," where students face concrete situations that influence their thoughts and actions.¹⁶ For example, AR games in Geography have been shown to increase student enthusiasm and joy while fostering better interaction among peers.²⁸ However, the "digital divide" remains a critical barrier; regions like Papua and rural areas outside of Java often lack the internet accessibility and hardware necessary to implement these high-cost technologies. To

²⁶ Yuliantoro et al.

²⁷ Yeni Mariela Gutierrez Paucar et al., "Educational Innovation with Augmented Reality in the Teaching and Learning of History and Geography in Secondary Education: A Systematic Review," *International Journal of Learning, Teaching and Educational Research* 24, no. 9 (September 30, 2025): 713–38, <https://doi.org/10.26803/ijlter.24.9.35>.

²⁸ Aikaterina Koti, "The Use of AR in Secondary Education: Educational Augmented Reality Material to Enhance Students' Digital and Social Skills," *Creative Education* 14, no. 13 (February 28, 2023): 2721–46, <https://doi.org/10.4236/ce.2023.1413173>.

ensure that "all students feel the same benefits," there must be a concerted effort to provide "equitable" technological access across all provinces.

Technology	Specific Application in SSE	Primary Benefit
Augmented Reality (AR)	Visualizing 3D maps and historical artifacts	Spatial awareness and motivation
Virtual Reality (VR)	"Field trips" to historical sites or disaster zones	Immersive empathy and engagement
Digital Storytelling	Creating multimedia narratives using Scratch	Critical thinking and literacy
GIS (Geographic Info)	Analyzing real-time environmental data	Practical social science skills

5. Social Media and the Challenge of "Digital Civility"

Social media is no longer just a communication tool; it is a "digital learning medium" that shapes students' minds. However, the Indonesian context is currently struggling with "keadaban berbahasa" the erosion of politeness and empathy in online discourse. Mendikdasmen Abdul Mu'ti has emphasized that the "noise" of social media often drowns out the "voice" of logical thought, making it difficult for students to distinguish between factual evidence and emotional fake news.²⁹

A "socially literate" student in 2025 must possess "critical mobile literacy" the ability to use digital platforms to express themselves while maintaining an awareness of how information is produced and consumed. This includes mastering "information literacy" (finding and evaluating sources) and "intercultural literacy" (understanding other cultural contexts in the McLuhanite "global village"). Schools must act as "jembatan" (bridges) between the digital world and formal learning, teaching students that literacy is a "responsibility" rather than just a skill. Integrating social media into the Social Studies curriculum for instance, by analyzing the "Arab Spring" via Twitter or "Black Lives Matter" via Instagram allows students to study social and political dynamics in real-time, making learning "relevant and adaptive".³⁰

²⁹ Nurhidayat, "Indonesia Masih Miliki Masalah Kemampuan Literasi Yang Rendah."

³⁰ Feri Sulianta, "Literature Review: Digital Literacy in Social Studies Education as a Tool for Social Construction," in *Advances in Social Science, Education and Humanities Research*, 2024, 143-53, https://doi.org/10.2991/978-94-6463-608-6_17.

6. Implementation Barriers and Policy Solutions

The transition to interactive digital Social Studies is hindered by several systemic obstacles. First, there is a "gap in technological mastery" between educators and students; many teachers are not "digital natives" and struggle to distinguish the veracity of information on social media. Second, the "administrative burden" on teachers often involving up to 70 different applications distracts them from focusing on basic literacy and numeracy instruction. Finally, "inequality in access" between urban centers like Jakarta/Surabaya and rural/outer regions (3T regions) remains a barrier to realizing national literacy goals.³¹

The "Merdeka Belajar" transformation and the "Strategic Plan (Renstra) 2025-2029" provide a roadmap for addressing these issues. The government is prioritizing the development of an "integrated technology ecosystem" that includes platforms like *Platform Merdeka Mengajar* (PMM) to support teacher professional development. To solve the literacy crisis, experts suggest:

- a. **Remedial Programs:** Implementing intensive reading and writing programs for students who did not master basic competencies.
- b. **Evaluating Promotion Standards:** Reforming "automatic promotion" policies to ensure students meet minimum literacy standards before moving up.
- c. **Reducing Bureaucracy:** Simplifying the administrative tasks for teachers so they can return to "meaningful and contextual" teaching.³
- d. **Local Contextualization:** Allying digital literacy content with local socio-cultural contexts to foster a sense of "ownership and pride" in national identity.

7. Theoretical Synthesis: The Path to Social Literacy

The ultimate goal of using interactive digital media in Social Studies is to develop "civic competence" the ability to make informed and reasoned decisions for the public good. This requires a mastery of the "disciplinary language" of each content area. For example, in Social Studies, "sourcing" and "bias" have specific meanings that differ from

³¹ Usman M et al., "Understanding Indonesian Students' Reading Knowledge in Digital Literacy within Socio-Cultural of Rural Middle Schools," *The International Journal of Information and Learning Technology* 42, no. 5 (November 13, 2025): 432–48, <https://doi.org/10.1108/IJILT-12-2023-0239>.

their use in an English or Science class.³²

A "literate" person in the 21st century is one who performs not only cognitive functions but also affective and psychomotor ones.⁶ By using interactive media, students can practice "cooperation skills," "problem-solving," and "empathy," which are the building blocks of social literacy. As students become more literate, their "worldviews broaden," and they are better able to compare opposing viewpoints critically and think logically and scientifically. This is the foundation of the "Golden Generation 2045" a generation that is intellectually intelligent and has a strong character to benefit the community.³³

Skill Domain	Key Indicator for Secondary Students	Impact of Interactive Media
Intellectual	Analyzing cause-and-effect in historical events	Simulations and digital storytelling
Social	Expressing empathy and respect for diversity	Immersive VR and collaborative projects
Cooperative	Working in groups to solve social problems	Online discussion forums and shared digital boards
Evaluation	Differentiating between reliable sources and hoaxes	Media literacy drills and social media analysis

C. CONCLUSIONS

The transformation of Social Studies education through interactive digital media is a vital response to the 2025 literacy crisis in Indonesia, where high school participation has not yet translated into functional literacy or social civility. By structuring digital environments according to Johnston’s Engagement Theory and integrating local wisdom via the ADDIE model, educators can significantly boost student motivation and conceptual understanding, bridging the gap between abstract curricula and real-world relevance. Immersive technologies like Augmented Reality and the critical use of social media platforms further enhance the development of historical thinking and intercultural empathy, though their success remains contingent on overcoming regional technological disparities. Ultimately, enhancing social literacy is a collective responsibility that requires

³² Joshua L. Kenna, William B. Russell III, and Bonnie Bittman, “How Secondary Social Studies Teachers Define Literacy and Implement Literacy Teaching Strategies: A Qualitative Research Study,” *History Education Research Journal* 15, no. 2 (October 26, 2018): 216–232, <https://doi.org/10.18546/HERJ.15.2.05>.

³³ Nawalinsi et al., “Social Literacy in Social Studies Learning for Junior High School Students in Lahat City.”

a shift from passive rote learning to active, culturally grounded knowledge construction, ensuring that the "digital native" generation becomes a "digitally literate" and socially responsible citizenry capable of leading Indonesia toward its 2045 aspirations.

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