

THE ROLE OF DIGITAL MEDIA IN DEVELOPING CIVIC LITERACY AMONG HIGH SCHOOL STUDENTS IN THE ERA OF SOCIAL TRANSFORMATION

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ABSTRACT

This study aims to explore the role of digital media in fostering civic literacy among high school students in the context of ongoing social transformation. As youth increasingly engage with digital platforms, this research seeks to understand how these technologies can be pedagogically leveraged to enhance students' civic knowledge, critical thinking, and participatory skills. Employing a structured literature review as the primary method, the study systematically analyzes scholarly sources published between 2020 and 2025 to synthesize findings on the intersection of digital literacy and civic education. Results reveal that digital media—when used with intentional pedagogical design—can significantly improve civic awareness, ethical reasoning, and active engagement among students. However, disparities in access, teacher readiness, and curriculum integration remain persistent challenges. The novelty of this study lies in its integrated approach: positioning digital media not merely as a technological tool, but as a civic space that requires guided participation and critical engagement. It also contributes methodologically by offering a thematic synthesis of recent empirical findings specific to high school learners, a group often overlooked in digital citizenship discourse. The study concludes that fostering meaningful digital citizenship requires more than digital access; it demands targeted strategies that align media use with civic goals. Findings from this research are expected to inform educators, policymakers, and curriculum developers in designing inclusive and transformative civic education models suitable for 21st-century learners.

Keywords: *Digital media, civic literacy, high school students, digital citizenship, social transformation*

INTRODUCTION

In the era of rapid digital transformation, digital media has emerged as a central conduit through which adolescents engage with public discourse, civic institutions, and societal change. By virtue of their ubiquitous presence in students' lives, platforms such as social media, blogs, and online forums serve not only as channels for information exchange, but also as arenas for practicing citizenship in a digitally mediated society. This intersection of technology and civic life underscores the importance of digital literacy that is, the ability to access, evaluate, create, and act upon digital information as a prerequisite for active civic engagement among youths. According to Japar et al. (2023), digital literacy forms the bedrock for students to internalize inclusive values and multicultural civic awareness via digital media. Emerging from the convergence of media theory and citizenship education is the notion of civic literacy, which encompasses

knowledge of civic institutions, skills of participation, and dispositions of democratic engagement. Puspaningtyas (2024) identifies that students' civic literacy is strongly conditioned by the media-rich environments in which they are immersed, highlighting how digital media can both enable and complicate their understanding of civic life. Thus, investigating the role of digital media in developing civic literacy among high school students becomes imperative, especially as social transformation accelerates and the boundary between offline and online civic spaces blurs.

As societies undergo broad social and technological shifts, young citizens must be equipped not only with factual civic knowledge, but also with the critical skills to navigate the digital dimensions of public life, such as discerning reliable sources, engaging respectfully online, and mobilising digital tools for collective action. The concept of digital civic competence, as articulated in recent research, implies that students should be able to translate digital-media engagement into meaningful civic participation and reflection. For instance, "From awareness to action: rethinking high school civic education for the digital generation" (2025) argues that digital citizenship includes media-analysis, ethical behavior, and critical civic thinking. In tandem, the study by Nuryadi and Widiatmaka (2023) demonstrates that strengthening digital literacy among students in the "Society 5.0" paradigm supports more active and informed civic engagement. From a theoretical vantage, we can thus frame digital media as both a pedagogical tool and a civic space one that challenge educators to design learning environments that foster not just consumption but production, critique, and participation. This theoretical grounding sets the stage for analysing how digital media can specifically foster civic literacy in high school settings amid broader social transformation.

In recent investigations of high-school and vocational students, a critical issue that emerges is the gap between students' access to digital media and their ability to utilise it for meaningful civic engagement. For instance, Digital literacy and its effect on learners' civic engagement in adult and vocational education found that while digital literacy exposure increased civic engagement scores, the baseline digital competencies in developing-country settings remained low and inconsistent, limiting outcomes. Similarly, in the study Civic Literacy in the information age: a survey of vocational high school (SMKN) students in Indonesia, students exhibited weak civic-literacy linkages even when immersed in digital contexts, suggesting that media access alone does not guarantee deeper civic understanding or participation. Moreover, despite increasing usage of social networking and online platforms, the research Social networking use, digital literacy and engagement of senior high school students reports that students' digital literacy skills often lack the critical evaluation and participatory dimensions required for civic agency. Thus, the principal problem lies not only in access to digital media, but in how effectively students are supported to transform digital-media fluency into informed, reflective and active citizenship. This deficiency is particularly salient in the era of social transformation, where civic spaces increasingly shift online, and students must navigate both opportunities and risks in digital civic terrain.

Despite growing interest in how digital media supports civic education, there remains a notable gap in context-specific empirical studies focusing on secondary school students in rapidly transforming societies. While research such as Civic Literacy in the Information Age: A Survey of Vocational High School (SMKN) Students in Indonesia documents civic literacy among vocational school students in Indonesia, it does not

sufficiently address how digital media (beyond mere access) is operationalised in high school settings and how it relates to active citizenship behaviours. Furthermore, systematic reviews like Mapping Civic Literacy Research: An Integrated Systematic Review highlight that the intersection of digital/media competencies with civic literacy has been under-explored, especially for high school students in non-Western contexts. As a result, there is limited understanding of how high school students meaningfully engage with digital media as civic actors, rather than simply as consumers of information. Also, many studies stop at measuring digital literacy or civic knowledge separately, without examining the mediating role of digital media practices in transforming knowledge into civic action. Accordingly, empirical work remains scant on how digital-media literacies and civic literacies combine in the school context amid social transformation.

In addition, there is an implementation gap in how educational programmes integrate digital media for civic literacy development; many interventions focus on access and technical competence but overlook pedagogical design and contextual relevance. For example, Digital Media and Information Literacy: A Way to Paperless Society underscores broad digital-media literacy issues but does not tie them specifically to civic outcomes in high school education. Another study, Assessing Digital Literacy Levels and Challenges among Junior High School Students, reveals digital literacy challenges among students, yet it stops short of linking those challenges to their civic participation or engagement. Therefore, schools and educators lack empirically grounded guidance on how to scaffold student participation in digital civic spaces, particularly in times of social transformation where digital and offline civic practices converge. This gap signals a need for research not just on student competencies, but also on how learning environments, pedagogies and digital media contexts shape the development of civic literacy among high school students.

This study introduces a novel perspective by focusing specifically on the synergistic role of digital media *as both* a tool and a civic space in enhancing civic literacy among high school students in a context of rapid social transformation. While prior research has examined digital literacy (e.g., Students' Digital Literacy Skill in Senior High School, 2024) and civic literacy separately, few studies have empirically explored how digital-media practices mediate the transition from civic knowledge to civic action in secondary school settings. In addition, this research plans to investigate the interactive dynamics between students' digital media engagement, their civic dispositions, and actual participation in civic behaviours a linkage seldom addressed in the literature. Also, the study will explore how social transformation (e.g., increasing digitalisation, changing societal norms) reshapes the civic literacies and media habits of high school students an area under-researched to date. By doing this, the research offers both theoretical innovation (integrating digital-media theory and civic-education theory) and empirical contribution (contextualised data from high schools). Moreover, the novelty lies in its dual focus: (a) the mediated role of digital media, and (b) the specific high school student population amid societal change thereby filling a gap in both digital-media/civic literacies literature and high-school civic education. Finally, the findings are positioned to inform practical pedagogical design and media-rich civic education programmes, thus bridging scholarship and practice.

The primary objective of this research is to investigate how digital media usage contributes to the development of civic literacy among high school students in the era of

social transformation, by analysing not only students' digital access and usage patterns but also their civic knowledge, skills, attitudes, and behaviours in civic contexts. Further, the study aims to examine the mediating mechanisms by which digital media practices (such as social-media discussion, online civic information processing, and digital creation) influence the translation of civic knowledge into civic action among adolescents. Moreover, the research seeks to identify key factors and conditions within the school environment, including pedagogical design, teacher support, and media-rich learning experiences, that enhance or inhibit the effective use of digital media for civic literacy development. Additionally, the study intends to provide context-specific insights into how high-school students respond to civic opportunities in digital spaces amid social change thus informing curricular and instructional strategies. Ultimately, the goal is to propose a model of digital-media-integrated civic education tailored for the high-school context in a transforming society, which can guide educators and policymakers in designing effective interventions.

RESEARCH METHOD

This study employs a library-based research method, specifically a structured literature review, to explore how digital media supports the development of civic literacy among high school students in the era of social transformation. The literature review method involves systematically searching for, selecting, analysing, and synthesising published academic work such as journal articles, books, and conference papers—to build a comprehensive overview of existing knowledge and to identify gaps for further investigation. Through this approach, the researcher will collect and examine recent empirical studies, conceptual papers and theoretical frameworks related to digital media, civic literacy, youth engagement and social change. The process includes defining specific keywords, applying inclusion and exclusion criteria, critically reviewing sources, and organising findings into thematic categories to reflect patterns and divergences across different works. This method is particularly suited to contexts where primary data collection may be limited and where the objective is to synthesise and build upon existing research rather than gather new field-data. Moreover, by using a library-based approach, the study offers a rigorous and replicable foundation for framing the research problem, contextualising the research gap, and informing the theoretical and methodological design of the investigation.

The data in this study were collected using a structured literature search focused on identifying scholarly sources related to digital media, civic literacy, and high school students within the last five years (2020–2025). The researcher utilised academic databases such as Google Scholar, Scopus, DOAJ, and Taylor & Francis, employing keywords including “*digital media and civic literacy*”, “*high school civic engagement*”, and “*digital citizenship education*.” Studies were selected using inclusion criteria: peer-reviewed publications, relevance to the topic, and publication dates within the last five years. Exclusion criteria included outdated studies and those unrelated to the high school or youth context. Additionally, grey literature such as conference proceedings and educational reports was included to support contextual interpretation. A PRISMA-based selection flow was used to ensure transparency and replicability. The collected data consisted of theoretical frameworks, findings, and methodologies from relevant studies, which were then organised into thematic groups for deeper analysis.

The analysis process followed a qualitative content analysis approach, wherein selected literature was reviewed systematically and coded thematically to identify patterns, similarities, and research gaps. First, all sources were categorised based on major themes such as digital media use, civic engagement practices, digital literacy, and educational contexts. Each document was analysed to extract findings, concepts, and methodologies relevant to the research questions. Then, these themes were compared and synthesised to construct an integrative understanding of how digital media supports or limits civic literacy among high school students. To ensure reliability, the coding and synthesis process adopted steps outlined by Mayring (2021) in qualitative content analysis, including inductive categorisation and cross-source validation. The result of the analysis formed a foundation to articulate a conceptual model and recommend future research directions. This structured analytical method enhanced the academic rigour of the literature-based study and ensured its relevance for both scholarly and practical audiences.

RESULTS AND DISCUSSION

The first key finding from the reviewed literature indicates that digital media significantly contributes to the development of civic literacy among high school students when integrated intentionally into educational contexts. As seen in Table 1, studies from Indonesia and beyond reveal a consistent pattern: platforms like social media and online forums support civic engagement, critical thinking, and participatory behaviors when educators mediate their use. For example, Japar et al. (2023) found that students engaged in digital multicultural content showed increased civic awareness. Similarly, Nuryadi and Widiatmaka (2023) documented how online discussion forums enhanced students' capacity for democratic participation. However, Bessong (2024) emphasized the need for stronger institutional support in developing ethical and critical digital literacy skills among youth. The variety of digital tools used from integrated platforms to mobile technologies points to the importance of aligning digital formats with specific civic outcomes. While these tools have shown promising outcomes, their success heavily relies on how they are used within the school framework. This highlights that technology alone is insufficient without strategic pedagogical guidance.

Table 1. Digital Media and Civic Literacy Outcomes

Study Author	Country	Digital Media Type	Civic Literacy Focus	Key Findings
Japar et al. (2023)	Indonesia	Social Media	Engagement	Positive correlation
Puspaningtyas (2024)	Indonesia	Multimedia Learning	Awareness	Moderate impact
Nuryadi & Widiatmaka (2023)	Indonesia	Online Forums	Participation	Enhanced outcomes
Andriani (2024)	Indonesia	Web Platforms	Critical Thinking	Skill improvement
Bessong (2024)	Nigeria	Mobile Devices	Ethical Use	Needs support

Pristiani et al. (2023)	Indonesia	Integrated Tools	Conflict Resolution	Integrated growth
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A second key insight relates to how educational strategies and system-level efforts influence the effectiveness of digital media in shaping civic learning. As shown in Table 2, studies examined diverse strategies from curriculum integration and gamification to privacy training and inclusion models. Hendrizal (2025) demonstrated that blending civic education with digital learning leads to increased student participation in both online and offline civic life. In contrast, Khoiriyah et al. (2025) uncovered significant gaps in students' digital-civic understanding, despite high exposure to technology. Retnasari et al. (2025) highlighted the pivotal role of teachers in designing media-rich, participatory civic learning experiences. Meanwhile, Iskandar (2025) found low digital-privacy awareness among youth, which impedes their readiness to engage meaningfully in digital civic spaces. Zahra (2023) also warned of a widening digital divide that limits civic access for marginalized groups. These findings suggest that school leadership, teacher readiness, and equitable digital infrastructure are all key to the success of civic literacy programs.

Table 2. Strategic Approaches and Results in Civic Digital Education

Study Author	Context	Method	Digital Strategy	Result Summary
Hendrizal (2025)	Curriculum Integration	Qualitative	Blended Learning	Effective engagement
Khoiriyah et al. (2025)	Perception Survey	Quantitative	Gamification	Gaps identified
Retnasari et al. (2025)	Educator Focus	Mixed	Content Creation	Teachers' role crucial
Iskandar (2025)	Digital Citizenship	Survey	Privacy Training	Low awareness
Zahra (2023)	National Survey	Policy Review	Inclusion Design	Digital divide
Puspitasari (2024)	Literature Synthesis	Literature Review	Framework Review	Model refinement

The findings presented in the two tables reveal that while digital media offers diverse platforms—such as social media, forums, and mobile tools—to foster civic engagement, its effectiveness is highly contingent upon pedagogical design, institutional support, and students’ digital competencies. Emerging studies highlight that civic learning is most impactful when students are not only consumers of digital content but also active producers and critical evaluators in civic digital spaces (Setiani & Nugroho, 2022). Moreover, innovative approaches such as gamification and blended learning have shown potential to boost students’ civic awareness and ethical reasoning, particularly when combined with participatory classroom practices (Rahman & Nuraini, 2023). Despite this, a recurring challenge is the unequal digital readiness among schools, where disparities in access and teacher capacity hinder the full integration of digital civic education (Halimah et al., 2023). Additionally, privacy concerns and the lack of critical literacy training continue to restrict students’ ability to safely and meaningfully participate in online civic life (Wijaya, 2024). Therefore, bridging digital and civic

literacy requires not only access to tools but also strategic curricular integration that aligns with students' real-world digital behaviors and civic responsibilities. These insights emphasize that future policy and curriculum development should prioritize inclusive, skills-based, and contextually relevant models of digital civic education to empower students in navigating the complexities of democratic life in the digital era.

In recent scholarship the notion of civic education has been fundamentally reframed by digital media's ubiquity and youth engagement in online public spheres. For example, *Civic action on social media: fostering digital media literacy and epistemic cognition in the classroom* (2023) demonstrates how high-school students become "epistemic agents" when taught to source, evaluate and produce content on social media, linking digital-media literacy with civic action. Meanwhile, a study in Indonesia on critical literacy of young citizens in the digital era found that although students scored highly on decision-making (70 %) and communication (73 %), only 33.7 % translated this into concrete civic action. These findings highlight that while digital exposure may increase knowledge and dispositions, the translation into *active civic behaviour* remains weaker. This gap between knowing and doing suggests the need for curricula that go beyond digital tool access and focus on mediation, reflection and action. Further, in an exploration of how media, school and youth negotiate citizenship meaning in Singapore, *Rethinking civic education in the digital era: How media, school and youth negotiate the meaning of citizenship* (2024) show that diverse digital voices may confuse rather than empower young people without structured educational intervention. Thus, the literature underscores that digital-media affordances alone are insufficient; pedagogical design, critical literacy and civic agency remain the pivotal levers.

Building on the above, the interplay between digital media literacy and civic participation has been explored through interventions that focus on media-literacy education (MLE) as a pathway toward narrowing participation gaps. For example, the chapter *Through Media and Digital Literacy Education Towards Civic Participation of Disadvantaged Youth* (2024) illustrates how a media-literacy education intervention among disadvantaged youth in Central Europe improved media competences but left civic-participation outcomes ambiguous. In Indonesia, research on digital citizenship literacy found that students' technological literacy predicted digital-privacy awareness and participation, yet significant structural barriers persisted. Collectively these studies emphasize that interventions must link media literacy with civic contexts and real-world action, not just instrumentally treat digital media as a content delivery system. Additionally, the literature signals that inequities in digital readiness—access, educator capacity, equitable pedagogies undermine whole-school efforts to foster civic literacy via digital media. Accordingly, effective civic-education models in the digital era must integrate media-analysis, critical reflection, participatory design, and equitable access across diverse youth populations.

This study presents a significant contribution by specifically exploring the active role of digital media as a space for civic participation, rather than merely as a tool for information dissemination, among high school students. Recent research indicates that when adolescents not only consume digital content but also create, share, and engage in critical discussions on digital platforms, they begin to function as digital civic agents (Felton, 2023). Moreover, this study proposes an integrative framework linking digital literacy, civic literacy, and social transformation dynamics—a topic that has been

scarcely examined in the context of high school students in developing countries. Intervention studies on media literacy and youth participation suggest that although media competence may improve, tangible civic engagement does not significantly increase; this finding provides a foundation for more systematic and context-sensitive approaches (Römer, 2024). Another novelty lies in the focus on “high school students” within the context of rapid social transformation, where the boundaries between online and offline spaces are increasingly blurred, and students encounter new challenges and opportunities in digital civic life. Consequently, this research extends the scope of existing literature, which predominantly focuses on university students or adult citizens, to the relatively underexplored domain of secondary education.

Furthermore, this study presents both methodological and practical innovations. Methodologically, it employs an integrative literature approach that connects digital media, literacy, and civic dimensions within a single analytical framework. Practically, the findings are expected to inform the development of a digital civic literacy education model relevant to high school students in the era of social transformation. For instance, Dewi et al. (2025) assessed high school students’ digital literacy competencies and provided a detailed account of its dimensions, yet did not explicitly link them to civic literacy. This study, therefore, fills a crucial gap between technical digital literacy and substantive civic literacy that is, students’ ability to act as active, critical, and responsible digital citizens. With this focus, the research bridges empirical and practical needs in Civic Education (PPKn) that are adaptive to evolving media landscapes and social transformations.

This research contributes globally by offering a contextualised yet transferable framework for integrating digital media into civic literacy education among high school students, especially in societies undergoing social transformation. As nations increasingly embrace digital technologies in education, the study’s findings can inform curriculum design, teacher training, and policy-making across diverse education systems. In particular, the research highlights how digital media can serve not only as a learning tool but also as a civic platform for youth democratic participation, critical reflection, and social responsibility. This is crucial in combating global challenges such as misinformation, civic disengagement, and digital inequality. Countries facing similar shifts—especially in Southeast Asia, Latin America, and Africa—can adapt the findings to foster informed and active citizenship in the digital age. Furthermore, the study bridges theoretical gaps between digital literacy and civic learning, a linkage not yet widely operationalised in global education policy. Ultimately, this work supports the global agenda for Education for Sustainable Development (ESD) and digital citizenship as outlined in UNESCO frameworks.

CONCLUSION

Based on the analysis and discussion, it can be concluded that digital media plays a pivotal role in shaping civic literacy among high school students, particularly when its use is pedagogically guided and aligned with participatory civic values. The review of multiple recent studies shows that access to digital tools alone is not enough; what matters is how students engage with digital content to think critically, participate ethically, and act responsibly as citizens. Educational strategies such as blended learning, gamification,

and media content creation significantly enhance civic engagement when implemented with teacher support and curriculum integration. However, disparities in digital readiness, media literacy skills, and civic awareness remain major barriers to equitable outcomes. Therefore, digital media must be positioned not just as an educational supplement, but as an essential civic space that requires structured learning support. The synthesis also highlights the urgent need for curricula that combine digital competencies with civic reasoning, especially in countries experiencing rapid social transformation. Ultimately, fostering meaningful digital citizenship in schools will require cross-sector collaboration between educators, policymakers, and digital communities.

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