

Global Adolescent Cultural Barriers and Modern Challenges for Social Science Education Development

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Article Info

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History:

Submitted: 01-09-2025

Revised: 27-09-2025

Accepted: 27-10-2025

Keyword:

Adolescent Cultural Barriers; Digital Resilience; Merdeka Curriculum; Social Science Education; Society 5.0.

Kata Kunci:

Hambatan Budaya Remaja; Ilmu Pengetahuan Sosial; Kurikulum Merdeka; Resiliensi Digital; Society 5.0.

Abstract

This study explores the disconnect between rapid adolescent digitalization and static educational systems in Indonesia's Society 5.0 era. Employing a multi-dimensional systematic review and narrative synthesis of Scopus-indexed literature (2019–2025), it analyzes how collectivist "guyub" cultural dynamics and digital risks, such as cyberbullying and misinformation, hinder social science education development. Results reveal a significant "digital vulnerability gap" characterized by 45 percent cyberbullying prevalence and low digital competitiveness. Furthermore, while the Merdeka Curriculum offers transformative potential through project-based learning, its implementation faces systemic barriers, including teacher competency gaps and infrastructure disparities. The findings emphasize that educators must serve as cultural mediators to bridge global technological trends with local values. Ultimately, this research underscores the urgent necessity for a holistic social science model that integrates digital resilience, social-emotional learning, and active civic identity to equip youth for informed democratic participation in an increasingly complex, hyperconnected, and precarious global landscape today.

Abstrak

Penelitian ini mengeksplorasi keterputusan antara digitalisasi remaja yang pesat dan sistem pendidikan statis di era Society 5.0 Indonesia. Menggunakan tinjauan sistematis multidimensi dan sintesis naratif literatur terindeks Scopus (2019–2025), studi ini menganalisis bagaimana dinamika budaya kolektifis "guyub" dan risiko digital, seperti perundungan siber dan disinformasi, menghambat pengembangan pendidikan ilmu pengetahuan sosial. Hasil penelitian menunjukkan "celah kerentanan digital" signifikan yang ditandai oleh prevalensi perundungan siber sebesar 45 persen dan daya saing digital yang rendah. Selanjutnya, meskipun Kurikulum Merdeka menawarkan potensi transformatif melalui pembelajaran berbasis proyek, implementasinya menghadapi hambatan sistemik, termasuk kesenjangan kompetensi guru dan ketimpangan infrastruktur. Temuan ini menekankan bahwa pendidik harus berperan sebagai mediator budaya untuk menjembatani tren teknologi global dengan nilai-nilai lokal. Akhirnya, penelitian ini menggarisbawahi urgensi model pendidikan IPS holistik yang mengintegrasikan resiliensi digital, pembelajaran sosial-emosional, dan identitas kewarganegaraan aktif untuk membekali pemuda dalam partisipasi demokratis yang terinformasi di lanskap global yang semakin kompleks, terkoneksi, dan juga rentan ini.



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 <https://doi.org/10.65101/spedu.v1i2.193>

A. INTRODUCTION

1. Background

The intersection of digital hyperconnectivity, shifting cultural identities, and systemic educational reform has created a complex landscape for adolescent development in the third decade of the twenty-first century. As societies transition toward the ideals of Society 5.0, the role of social science education has become increasingly critical in mediating the tensions between global technological trends and local cultural values. In Indonesia, this phenomenon is particularly acute, characterized by a rapid digital adoption that frequently outpaces the nation's institutional and regulatory maturity.¹ By late 2025, Indonesia's digital engagement reached a staggering scale, with 230 million internet users and 180 million social media identities, reflecting a penetration rate of 62.9 percent. However, this quantitative growth is accompanied by a qualitative decline in digital competitiveness, with Indonesia ranking 51st out of 69 economies in the 2025 IMD World Digital Competitiveness Ranking.² This discrepancy underscores a fundamental challenge for social science education: the necessity of equipping youth with the critical literacy required to navigate an ecosystem where digital participation is ubiquitous but digital protection remains nascent.

The cultural barriers facing Indonesian adolescents are deeply rooted in the country's collectivist social fabric. Traditional concepts such as "guyub" (togetherness) have transitioned into the digital realm, creating unique patterns of information flow and social response that diverge significantly from the individualist frameworks prevalent in Western societies.³ Recent scholarship emphasizes that in these collectivist environments, community endorsement serves as a primary mechanism for legitimizing social discourse, often leading to information cascades where emotional resonance overrides factual verification.⁴ This cultural dynamic complicates the task of social science education, which must now account for how traditional respect for authority and communal harmony can transform into nuanced digital critiques or, conversely,

¹ Sidarta Prasetyo, "Protecting Children Online Requires More Than Social Media Restrictions," *Jakarta Globe*, 2025, https://jakartaglobe.id/opinion/protecting-children-online-requires-more-than-social-media-restrictions#goog_rewarded.

² Prasetyo.

³ Irwanto Irwanto, Tuti Bahfiarti, and Andi Alimuddin Unde, "Digital Transformation of Youth Violence in Indonesia: New Responsibilities and Social Negotiations in the Digital Age," *Frontiers in Communication* 10 (April 2025), <https://doi.org/10.3389/fcomm.2025.1576389>.

⁴ Irwanto, Bahfiarti, and Unde.

exacerbate the spread of misinformation and social polarization.⁵

Theoretical frameworks such as the Uses and Gratifications Theory and Social Learning Theory provide a lens through which to understand why young Indonesians are so deeply embedded in these platforms. Social media serves as a vital space for belonging, identity formation, and self-expression, yet it also exposes adolescents to influencers who model aggressive communication, unrealistic lifestyles, and risky viral challenges.⁶ The psychological toll of this hyperconnectivity is evident in the rising prevalence of cyberbullying experienced by 45 percent of Indonesians aged 14–24 and the increasing incidents of online sexual exploitation and cybercrime.¹ These challenges are further compounded by economic pressures and a perceived detachment between political elites and the youth demographic, as seen in the leaderless, digitally-mediated protests that swept Indonesian cities in 2025.⁷ These demonstrations, driven by Gen Z citizens and gig economy workers, reflect a growing subculture of resistance that uses social media to forge an oppositional identity against systemic injustice and economic hardship.⁸

In response to these multifaceted challenges, Indonesia has implemented the Merdeka Curriculum (Kurikulum Merdeka), which prioritizes flexibility, student-centered learning, and the integration of local wisdom through the Pancasila Student Profile (Profil Pelajar Pancasila).⁹ However, the transition to this new pedagogical model is hindered by significant barriers, including limited teacher competencies in project-based learning, inadequate digital infrastructure, and disparities in curriculum quality across regions.¹⁰ Scopus-indexed research highlights that while the curriculum shows potential for enhancing critical thinking and independent learning, its success depends heavily on the ability of educators to serve as cultural mediators who can bridge the gap between academic theory and real-world social complexities.¹¹

⁵ Irwanto, Bahfiarti, and Unde.

⁶ Prasetyo, "Protecting Children Online Requires More Than Social Media Restrictions."

⁷ Wahyu Prasetyawan, "A Birdlike Flock Moving Without a Leader: Social Networks and Economic Pressures in the 2025 Indonesia Demonstrations," *Kyoto Review*, 2025.

⁸ Prasetyawan.

⁹ Usman Jayadi, Arman Harahap, and Aslan Aslan, "Educational Landscape in Indonesia in 2023: Challenges and Opportunities," *International Journal of Education and Digital Learning (IJEDL)* 2, no. 2 (December 2024): 49–58, <https://doi.org/10.47353/ijedl.v2i2.266>.

¹⁰ Mujiburrahman Mujiburrahman et al., "Evaluation of the Merdeka Curriculum in Educational Institutions: A Systematic Literature Review of Strategies, Challenges, and Student Learning Outcomes," *Jurnal Paedagogy* 12, no. 4 (October 2025): 1255–68, <https://doi.org/10.33394/jp.v12i4.17078>.

¹¹ Loso Judijanto, "Exploring the Role of Teachers in Multicultural and Interdisciplinary Education: A Review," in *Educational Sciences: Perspectives and Interdisciplinary Practices* (Seven Editoria, 2025), <https://doi.org/10.56238/sevened2025.019-023>.

The novelty of this study lies in its comprehensive synthesis of contemporary Indonesian news data with high-impact Scopus-indexed research to analyze the specific cultural moderators of digital risk and the institutional barriers to social science reform in a post-pandemic, Society 5.0 context. Unlike previous studies that focus narrowly on either digital literacy or curriculum policy, this report examines the interplay between platform governance, collectivist cultural dynamics, and socio-political activism.¹² By evaluating the 2025 Indonesian protest subcultures alongside the pedagogical challenges of the Merdeka Curriculum, this research identifies a critical need for a holistic social science education model that integrates social-emotional learning, digital resilience, and social sustainability.¹³ This report finds that while technological adoption provides new avenues for civic engagement, the lack of institutional readiness and teacher training creates a "digital vulnerability gap" that social science education must urgently address to ensure stable national development and informed democratic participation.¹⁴

2. Research Questions

The development of social science education in the modern era is confronted by a series of interconnected challenges that reflect the shifting realities of global adolescent life. The primary problem addressed in this study is the disconnect between the rapid digitalization of the adolescent experience and the static nature of institutional education systems, which struggle to mitigate the resulting cultural and psychological barriers. This overarching issue is analyzed through the following specific research questions:

- a. In what ways do the unique collectivist cultural characteristics of Indonesian society, such as the "guyub" ethos and high power distance, influence the manifestation of digital risks and the patterns of information disorder among adolescents?
- b. How has the rise of digitally-mediated protest subcultures in 2025 transformed the landscape of youth civic identity, and what are the implications for the development of democratic citizenship education within the social science curriculum?
- c. What are the primary systemic and pedagogical barriers including teacher

¹² Irwanto, Bahfiarti, and Unde, "Digital Transformation of Youth Violence in Indonesia: New Responsibilities and Social Negotiations in the Digital Age."

¹³ Åsa Nilsson Dahlström, "Challenges and Opportunities for Social Sustainability in Education: A Scoping Review," *Cogent Social Sciences* 11, no. 1 (December 2025), <https://doi.org/10.1080/23311886.2025.2491706>.

¹⁴ Prasetyo, "Protecting Children Online Requires More Than Social Media Restrictions."

competency gaps, infrastructure disparities, and curricular rigidity that hinder the effective implementation of the Merdeka Curriculum and its integration of social sustainability?

- d. To what extent do modern digital threats, such as predatory online lending and social-media-induced mental health disorders, necessitate a shift in social science education toward a model that prioritizes digital resilience and financial-literacy-integrated civic education?

These questions serve as the framework for the subsequent analysis, providing a structured approach to understanding how social science education can evolve to meet the needs of a generation defined by hyperconnectivity and socio-economic uncertainty.

3. Research Methods

This study employs a multi-dimensional analytical approach, integrating a systematic review of Scopus-indexed literature with a narrative synthesis of contemporary news reports and policy documents from the 2024–2025 period. The methodology is designed to capture the dynamic nature of adolescent cultural challenges in Indonesia while grounding the analysis in robust academic frameworks.

The primary data for this research was collected from several key streams:

- a. **Scopus and Web of Science Databases:** A systematic search was conducted for publications between 2019 and 2025, using keywords such as "social science education," "adolescent cultural barriers," "Merdeka Curriculum," and "platform governance".¹⁵ This provided the theoretical and empirical foundation for the study, including trends in information disorder and social sustainability.¹⁶
- b. **Contemporary News and Investigative Reports:** Current reporting from sources such as the *Jakarta Globe*, *New Mandala*, and *Kyoto Review of Southeast Asia* provided real-time context for the 2025 Indonesian protests and the socio-economic impacts of digitalization.¹⁷
- c. **Institutional Reports and Surveys:** Data from the Indonesian Child Protection Commission (KPAI), UNICEF, and Meta/Ipsos surveys were utilized

¹⁵ Sitti Noriana Abdul Hasim and Kamariah Abu Bakar, "Challenges and Impacts of Technology Adoption in Education: A Systematic Literature Review," *International Journal of Research and Innovation in Social Science* IX, no. IIIS (September 2025): 7536–48, <https://doi.org/10.47772/IJRIS.2025.903SEDU0558>.

¹⁶ Nilsson Dahlström, "Challenges and Opportunities for Social Sustainability in Education: A Scoping Review."

¹⁷ Prasetyo, "Protecting Children Online Requires More Than Social Media Restrictions."

to provide statistical grounding for claims regarding digital risk and parental perceptions of online safety.¹⁸

The analysis was performed using the following techniques:

Technique	Description and Application
Systematic Literature Network Analysis (SLNA)	Used to map the evolution of educational models (e.g., in <i>Pesantren</i>) and identify thematic clusters in social science research. ¹⁹
Bibliometric Analysis	Applied to 227 articles to identify publication trends, leading contributors, and emerging keywords such as "TikTok" and "vaccine hesitancy". ²⁰
Narrative Synthesis	Employed to integrate heterogeneous data from digital competitiveness rankings, mental health studies, and protest observations into a cohesive argument. ²¹
Platform Governance Evaluation	Utilizing the framework proposed by van Dijck (2024) to analyze how Indonesian platforms mediate social accountability and collective negotiation. ²²

The study is grounded in several core social science theories:

- a. **Uses and Gratifications Theory:** Explaining adolescent motivations for social media engagement.²³
- b. **Social Learning Theory:** Describing the mechanisms of behavioral contagion in digital spaces.²⁴
- c. **Acculturation Theory:** Analyzing how students navigate the conflict between heritage and dominant (or digital) cultures.²⁵
- d. **Sociopolitical Turn in Science Education:** Questioning value-neutrality and

¹⁸ Prassetyo.

¹⁹ Edi Suresman et al., "From Sorogan to Digital Learning: A Systematic Literature Network Analysis of Pesantren Learning Models," *Cogent Education* 12, no. 1 (December 2025), <https://doi.org/10.1080/2331186X.2025.2580776>.

²⁰ Irwanto, Bahfiarti, and Unde, "Digital Transformation of Youth Violence in Indonesia: New Responsibilities and Social Negotiations in the Digital Age."

²¹ Prassetyo, "Protecting Children Online Requires More Than Social Media Restrictions."

²² Irwanto, Bahfiarti, and Unde, "Digital Transformation of Youth Violence in Indonesia: New Responsibilities and Social Negotiations in the Digital Age."

²³ Prassetyo, "Protecting Children Online Requires More Than Social Media Restrictions."

²⁴ Prassetyo.

²⁵ MIGUEL RODRIGUEZ et al., "Social and Cultural Barriers Reported by STEM International Graduate Students of Color," *Journal of International Students* 14, no. 3 (April 2024): 276-302, <https://doi.org/10.32674/jis.v14i3.6694>.

addressing power structures in curricula.²⁶

B. DISCUSSION

The discussion of results is structured to align with the core themes of digital risk, cultural mediation, and educational reform, specifically focusing on the Indonesian context as a reflection of global trends.

1. The Digital Paradox: Rapid Engagement vs. Institutional Lag

Indonesia represents a unique case of a "digital paradox," where high levels of social engagement coexist with low levels of systemic preparedness. This gap creates a fertile ground for adolescent cultural barriers to manifest.²⁷

Indonesia Digital Landscape 2025	Statistic / Rank
Mobile Connections	331 Million
Social Media Identities	180 Million
Digital 2025 Social Media Penetration	62.9%
World Digital Competitiveness Rank	51 / 69
APAC Digital Competitiveness Rank	12 / 14
Adolescents Experiencing Cyberbullying	45%

The psychological realities of young Indonesian users are shaped by a deep-seated need for social connection and the avoidance of "missing out" on peer developments. For adolescents, digital platforms are not merely tools but essential environments for identity formation. However, because Indonesia's digital ecosystem is maturing slower than its adoption rates, these young users are exposed to risks like cyberbullying and online sexual exploitation (OSE) without adequate institutional safeguards. The Indonesian Child Protection Commission noted an escalation in cases where minors fell victim to cybercrime in 2024, emphasizing that the problem is not just technical but political and

²⁶ Paulina Bravo González and Michael Jonathan Reiss, "Introducing Sociopolitical Approaches to Science Education: An Integrative Review of the Concept of Subjectivity in Science Curricula and Continuous Professional Development Programmes," *Studies in Science Education*, September 2025, 1–41, <https://doi.org/10.1080/03057267.2025.2563997>.

²⁷ Prasetyo, "Protecting Children Online Requires More Than Social Media Restrictions."

educational.

The Social Learning Theory posits that behaviors and emotions spread through social networks up to three degrees of separation.²⁸ In the digital context, this means that harmful behaviors modeled by influencers or popular peers can catalyze rapidly. Social media platforms, particularly Instagram and TikTok, serve as resonators for these behaviors, often prioritizing attention-grabbing viral challenges over responsible communication.²⁹ For social science education, the challenge is to move beyond restrictive social media bans which are difficult to enforce and often ignore the psychological needs of youth and toward building a digital environment that fosters "reflective friction," or pausing to think before sharing emotionally charged content.

2. Collectivism and Platform Governance: The "Guyub" Digitalization

One of the most profound cultural barriers in Indonesia is the unique nature of its collectivist digital interactions. While Western frameworks often emphasize individual privacy and agency, the Indonesian digital space is defined by its "guyub" culture, or a strong emphasis on togetherness and community harmony.³⁰ This collectivist orientation has several implications for social science education:

- a. Social Accountability and Negotiated Values:** Digital platforms in Indonesia have evolved into spaces for "collective negotiation" and "systemic critique". This is evident in cases where public outrage over student bullying or government official misconduct leads to institutional transparency. Van Dijck (2024) notes that this "platform-mediated social accountability" allows for a form of digital activism that maintains cultural coherence while challenging authority.
- b. Information Cascades:** Conversely, the collectivist nature of Indonesian society can exacerbate "information cascades," where community endorsement becomes more important than factual accuracy. In cases like the school arson incident in 2024, discourse patterns revealed how misinformation risks are embedded within established information networks, as community resonators such as influential figures or popular accounts

²⁸ Prasetyawan, "A Birdlike Flock Moving Without a Leader: Social Networks and Economic Pressures in the 2025 Indonesia Demonstrations."

²⁹ Prassetyo, "Protecting Children Online Requires More Than Social Media Restrictions."

³⁰ Irwanto, Bahfiarti, and Unde, "Digital Transformation of Youth Violence in Indonesia: New Responsibilities and Social Negotiations in the Digital Age."

legitimize social discourse regardless of its truth.

- c. **Power Distance and Resonators:** High power distance in Indonesia means that central resonators, such as institutions or authority figures, maintain significant influence over digital information flows. This can be used to promote social stability, but it can also be exploited to suppress dissent or manipulate public perception among the youth demographic.

Educational curricula must therefore adapt to teach "civic visual literacy" and the ability to navigate "filter bubbles" created by these collectivist algorithms.³¹ The Merdeka Curriculum offers an entry point for this through project-based learning, but many teachers still lack the theoretical clarity to operationalize these concepts in the classroom.³²

3. The 2025 Protest Subculture: A New Civic Identity

The 2025 demonstrations in Indonesia represent a critical case study in modern adolescent social-political dynamics. These "leaderless" protests, driven by students and "Gen Z" citizens, were motivated by a perceived detachment between the political elite and the broader public.³³

2025 Protest Characteristics	Manifestation and Impact
Hybrid Nature	Mobilization occurred simultaneously online and offline, creating an "intertwined" network of activists.
Sub-cultural Expression	Protesters forged an "oppositional identity" through cultural symbols and grievances shared on social media.
Rhizomic Patterns	The movement was diffuse and decentralized, making it difficult for traditional authorities to eradicate or control.
Economic Motivation	Sparked by inflation, shrinking middle-class opportunities, and elite corruption.

Edward Aspinall (2025) argues that these protests are sub-cultural expressions where youth forge an identity by challenging entrenched elite privilege. This "rhizomic"

³¹ Reza Septriawan, "Media Sosial Berpengaruh Pada Perubahan Perilaku Sosial Remaja Kota Medan Di Era Digital," *Jurnal Multidisiplin Sosial Dan Humaniora* 1, no. 2 (November 2024): 84–102, <https://doi.org/10.70585/jmsh.v1i2.47>.

³² Mellyzar et al., "The Merdeka Curriculum and P5: A Review of Teachers' Understanding and Students' Experiences," *Jurnal Wahana Pendidikan* 12 (2025): 123–40, <https://doi.org/http://dx.doi.org/10.25157/jwp.v%25vi%25i.16822>.

³³ Prasetyawan, "A Birdlike Flock Moving Without a Leader: Social Networks and Economic Pressures in the 2025 Indonesia Demonstrations."

quality of youth protest characterized by flexibility and participation reflects a rejection of traditional, hierarchical political structures.³⁴ For social science educators, this shift is significant. It suggests that the "moral force" of student activism remains a determinant of Indonesia's democratic trajectory, even as formal political participation (like voting) might appear low.³⁵ The curriculum must therefore shift from teaching "static facts" about government to fostering "active, informed, and reflective democratic participation" that addresses contemporary grievances like oligarchy and corruption.³⁶

4. Mental Health, FOMO, and Modern Digital Threats

The psychological well-being of adolescents is a core concern for social science development. In 2024–2025, the prevalence of mental health issues among youth reached unprecedented levels, driven by digital hyperconnectivity and social media impacts.³⁷

Adolescents are "always on," which is associated with higher rates of depression, ADHD, and technology addiction.³⁸ A survey of Indonesian parents showed that 91 percent support the creation of dedicated "Teen Accounts" with built-in protections, reflecting a widespread anxiety about the negative impacts of social media on youth.³⁹ These impacts include:

- a. **Sleep Deprivation:** Blue light from devices and late-night social media use inhibits melatonin production, leading to chronic fatigue and poor academic performance.⁴⁰
- b. **Social Comparison:** Exposure to "unrealistic lifestyles" and standards of beauty on platforms like Instagram lowers self-esteem and triggers depression.⁴¹
- c. **FOMO and Anxiety:** The "Fear of Missing Out" causes chronic stress and

³⁴ Edward Aspinall, "Mass Protest and the Two Worlds of Indonesian Politics," *New Mandala*, 2025.

³⁵ Mohammad Fajar Shodiq Ramadlan and Muhammad Faishal Aminuddin, "Student Activism in Post-Authoritarian Indonesia: Higher Education Reform, Movement Dynamics, and Shifting Political Narratives," *JWP (Jurnal Wacana Politik)* 10, no. 3 (September 2025): 313–27, <https://doi.org/10.24198/jwp.v10i3.51485>.

³⁶ Ramadlan and Aminuddin.

³⁷ Amardip Ambhore, "Gen-Z Challenges and Problems: A Research Review Study," *International Journal For Multidisciplinary Research* 7, no. 6 (November 2025), <https://doi.org/10.36948/ijfmr.2025.v07i06.61228>.

³⁸ Susanna Y Park et al., "Digital Methods for the Spiritual and Mental Health of Generation Z: Scoping Review," *Interactive Journal of Medical Research* 13 (February 2024): e48929, <https://doi.org/10.2196/48929>.

³⁹ Meta, "Indonesian Parents Support Dedicated Teen Social Media Accounts," *Meta*, 2025.

⁴⁰ MTSN 8 Sleman, "Dampak Media Sosial Terhadap Kesehatan Mental Remaja: Sebuah Kajian Mendalam," MTSN 8 Sleman, 2025.

⁴¹ Muhamad Hobiri et al., "Kritis Terhadap Dampak Media Sosial, Demi Mencegah Turunnya Kualitas Generasi Muda," *Globe: Publikasi Ilmu Teknik, Teknologi Kebumihan, Ilmu Perkapalan* 2, no. 4 (November 2024): 294–306, <https://doi.org/10.61132/globe.v2i4.674>.

irritability, leading to a "heavy user" cycle where adolescents spend over six hours a day scrolling without a specific goal.⁴²

- d. Digital Financial Risks:** In West Java, debt from online lending ("Pinjol") reached IDR 16 trillion by 2024, disproportionately affecting those with limited financial literacy.⁴³

Social science education must integrate these modern challenges into its framework. This involves moving away from purely restrictive approaches toward "collaborative support" of adolescent information literacy and digital resilience.⁴⁴ The "Building Digital Resilience" program, for instance, showed that while students from lower-income backgrounds were more passive in these interventions due to economic stress, gamification and critical engagement can empower them to recognize digital threats.⁴⁵

5. Educational Reform: The Merdeka Curriculum and its Discontents

The Merdeka Curriculum (Kurikulum Merdeka) is Indonesia's primary vehicle for addressing these challenges. By emphasizing "freedom in learning" and the "Pancasila Student Profile," it aims to produce graduates who are critically-minded and socially responsible.⁴⁶

A key development is the integration of Natural and Social Sciences into a unified subject, **IPAS**, for primary education. This integration is designed to bridge the gap between academic achievement and everyday social-environmental sustainability.⁴⁷ Furthermore, the use of "Ethnomathematics" integrating local cultural practices into mathematics is seen as a way to modernize education while preserving local identity, a crucial balance in Society 5.0. However, systematic literature reviews identify persistent barriers:

⁴² Nilot Pramudita et al., "Dampak Penggunaan Media Sosial Terhadap Tingkat Perilaku Kenakalan Remaja Di Era Digital Saat Ini," *Dialogika : Jurnal Penelitian Komunikasi Dan Sosialisasi* 1, no. 3 (July 2025): 231–44, <https://doi.org/10.62383/dialogika.v1i3.533>.

⁴³ Obby Taufik Hidayat, "Building Digital Resilience in Indonesia's Vulnerable Communities," Sylff Association, 2025.

⁴⁴ Irwanto, Bahfiarti, and Unde, "Digital Transformation of Youth Violence in Indonesia: New Responsibilities and Social Negotiations in the Digital Age."

⁴⁵ Hidayat, "Building Digital Resilience in Indonesia's Vulnerable Communities."

⁴⁶ Mujiburrahman et al., "Evaluation of the Merdeka Curriculum in Educational Institutions: A Systematic Literature Review of Strategies, Challenges, and Student Learning Outcomes."

⁴⁷ Mujiburrahman et al.

Barriers to Curriculum Implementation	Evidence and Data Point
Teacher Competency Gaps	68% of studies report inadequate teacher preparation; many struggle to design "project-based learning" (P5). ⁴⁸
Infrastructure Disparities	Significant gaps in digital access and material quality between urban and rural regions. ⁴⁹
Curricular Density	Pressure to meet dense academic targets leaves little room for Social-Emotional Learning (SEL) or character building. ⁵⁰
Lack of Resource Repositories	Schools lack the materials and modules to develop contextualized, local-wisdom-based teaching. ⁵¹

The role of the teacher as a "cultural mediator" is essential.⁵² In classrooms that are increasingly heterogeneous, teachers must balance disciplinary rigor with "culturally responsive pedagogy".⁵³ Without targeted policies and continuous professional development, the Merdeka Curriculum risks becoming a "prefabricated and clichéd" exercise rather than a transformative educational experience.⁵⁴

6. Global Trends: Social Science and Sustainability

Global research from the 2023–2025 period underscores that social science education is moving toward a "sociopolitical turn".⁵⁵ This involves acknowledging that science and social studies are not value-neutral and must account for power structures, culture, and social sustainability.⁵⁶

⁴⁸ Mellyzar et al., "The Merdeka Curriculum and P5: A Review of Teachers' Understanding and Students' Experiences."

⁴⁹ Jayadi, Harahap, and Aslan, "Educational Landscape in Indonesia in 2023: Challenges and Opportunities."

⁵⁰ Olida Diah Agustina et al., "Implementation of Social Emotional Learning In Elementary Schools Within the Merdeka Curriculum," *Journal of Innovation and Research in Primary Education* 4, no. 2 (April 2025): 160–69, <https://doi.org/10.56916/jirpe.v4i2.1216>.

⁵¹ Mujiburrahman et al., "Evaluation of the Merdeka Curriculum in Educational Institutions: A Systematic Literature Review of Strategies, Challenges, and Student Learning Outcomes."

⁵² Judijanto, "Exploring the Role of Teachers in Multicultural and Interdisciplinary Education: A Review."

⁵³ Mujiburrahman et al., "Evaluation of the Merdeka Curriculum in Educational Institutions: A Systematic Literature Review of Strategies, Challenges, and Student Learning Outcomes."

⁵⁴ Hasim and Bakar, "Challenges and Impacts of Technology Adoption in Education: A Systematic Literature Review."

⁵⁵ Septriawan, "Media Sosial Berpengaruh Pada Perubahan Perilaku Sosial Remaja Kota Medan Di Era Digital."

⁵⁶ Nilsson Dahlström, "Challenges and Opportunities for Social Sustainability in Education: A Scoping Review."

In the Nordic and Baltic contexts, "Democratic Citizenship Education" (DCE) focuses on empowering youth to recognize their capacity to shape the future. This parallels Indonesian efforts but with a stronger focus on "holistic, responsive, and ethically mindful" approaches to misinformation. Moreover, the integration of Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education) and SDG 6 (Clean Water and Sanitation), into the curriculum is a global priority.⁵⁷ Research indicates that teaching "habits of mind" such as critical thinking, perseverance, and systems thinking can make students more motivated to address environmental and social challenges.⁵⁸

However, global challenges like geopolitical conflict and the climate crisis are reshaping the "geography of education".⁵⁹ In 2024, extreme weather disrupted schooling for 242 million students, highlighting that education must also focus on "resilience" and "security".⁶⁰ For adolescents, this means that social science is no longer just about history or sociology; it is about survival in a complex, interlinked world where the digital, the social, and the environmental are inseparable.

7. The Role of Pesantren in Modern Transformation

An interesting facet of the Indonesian landscape is the evolution of **Pesantren** (Islamic boarding schools). Between 2007 and 2025, research shows a shift from "classical methods" (like Sorogan and Bandongan) toward "hybrid and digital-based models".⁶¹ While preserving their religious integrity, Pesantren increasingly integrate digital tools to address globalization.⁶² This demonstrates that even traditional institutions are navigating the modern challenges of technological literacy and character education, providing a potential model for how cultural heritage can coexist with digital innovation.⁶³

The findings suggest that the barriers to social science education are not merely technological but are deeply cultural. Adolescents are caught between the "individualist" affordances of global platforms and the "collectivist" realities of their local communities.

⁵⁷ Ella Izzatin Nada, Sajidan Sajidan, and Sri Retno Dwi Ariani, "Habits of Mind as a Catalyst for 21st Century Skills and Environmental Sustainability: A Bibliometric Analysis with a Focus on SDG 6 in Educational Research," *F1000Research* 14 (October 2025): 1191, <https://doi.org/10.12688/f1000research.170682.1>.

⁵⁸ Nada, Sajidan, and Ariani.

⁵⁹ Organisation for Economic Co-operation and Development, "Trends Shaping Education 2025," Organisation for Economic Co-operation and Development, 2025.

⁶⁰ Organisation for Economic Co-operation and Development.

⁶¹ Suresman et al., "From Sorogan to Digital Learning: A Systematic Literature Network Analysis of Pesantren Learning Models."

⁶² Suresman et al.

⁶³ Suresman et al.

The primary modern challenges mental health, socio-political alienation, and digital risks cannot be solved through bans or simple curriculum changes.

Instead, the analysis points toward several evidence-based practices for social science development:

- a. **Culturally Responsive Project-Based Learning:** Validating students' identities while critiquing societal inequities.⁶⁴
- b. **Media Literacy Integrated Across Curricula:** Moving away from standalone fact-checking to a deep understanding of information flows and emotional triggers.⁶⁵
- c. **Community-Engaged Curriculum Co-Creation:** Involving families and local communities in the educational process to ensure consistency in character development.⁶⁶

Focus on Emotional Intelligence (EI): Fostering a school culture that prioritizes mental well-being and empathy alongside academic success.⁶⁷

C. CONCLUSIONS

The development of social science education in Indonesia is currently at a critical juncture, as the nation attempts to navigate the profound cultural barriers and digital risks that define the experience of modern adolescents. The transition toward the Merdeka Curriculum and the integration of the Pancasila Student Profile represent significant steps toward a more flexible and contextualized educational model, yet these reforms are frequently hindered by systemic inequities, teacher competency gaps, and a persistent lag in institutional digital readiness. The 2025 protests and the rise of predatory digital financial threats further underscore the urgent need for a curriculum that moves beyond the transmission of static facts to the cultivation of critical digital resilience, social-emotional intelligence, and an active civic identity. Ultimately, the success of social science education in this era of hyperconnectivity depends on the ability of educators and policymakers to bridge the gap between global technological trends and

⁶⁴ Mujiburrahman et al., "Evaluation of the Merdeka Curriculum in Educational Institutions: A Systematic Literature Review of Strategies, Challenges, and Student Learning Outcomes."

⁶⁵ Irwanto, Bahfiarti, and Unde, "Digital Transformation of Youth Violence in Indonesia: New Responsibilities and Social Negotiations in the Digital Age."

⁶⁶ Judijanto, "Exploring the Role of Teachers in Multicultural and Interdisciplinary Education: A Review."

⁶⁷ Park University, "The Future of Leadership in Education: 8 Trends to Watch in 2025," Park University, 2025.

local "guyub" cultural values, ensuring that the youth are equipped not only to participate in the digital economy but also to sustain a just and democratic society.

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