



National Integration Literacy in Digital Space: A Study of Students at HKBP Nommensen University Pematangsiantar

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Abstract

This study aims to map digital media consumption patterns and evaluate national integration literacy among students at HKBP Nommensen University Pematangsiantar. Utilizing a quantitative approach with a composite index design, this study involved 32 student respondents from various academic disciplines. Descriptive analysis reveals that the internet has become the primary information infrastructure, with 84.4% of students relying on social media to consume national news (Accessibility Index score of 4.26). Affectively, technology functions as a reinforcement for national values, as evidenced by an exceptionally high Affective Integration Index score (4.38) and high appreciation for ethnic, religious, racial, and intergroup (SARA) diversity (93.8%). However, this study identifies an analytical gap in the Critical Capacity Index (3.92), indicating symptoms of cognitive overconfidence; students feel highly confident in their ability to verify hoaxes, whereas their actual literacy skills remain at a pragmatic-academic stage. This study concludes that higher education institutions must institutionalize critical digital literacy frameworks into curriculum policies to prevent disinformation and cultivate social harmony in the cybersphere.

Keywords: *Literacy; National Integration; Composite Index.*

Abstrak: Penelitian ini bertujuan untuk memetakan pola konsumsi media digital dan mengevaluasi Literasi Integrasi Nasional di kalangan mahasiswa Universitas HKBP Nommensen Pematangsiantar. Melalui pendekatan kuantitatif dengan desain indeks komposit, penelitian ini melibatkan 32 responden mahasiswa dari berbagai disiplin ilmu. Hasil analisis deskriptif menunjukkan bahwa internet telah menjadi infrastruktur informasi primer, di mana 84,4% mahasiswa beralih ke media sosial untuk mengonsumsi berita nasional (skor Indeks Aksesibilitas 4,26). Secara afektif, teknologi bertindak sebagai penguat (reinforcement) nilai kebangsaan, dibuktikan dengan skor Indeks Integrasi Afektif yang sangat tinggi (4,38) serta tingginya penghargaan terhadap keberagaman SARA (93,8%). Namun, studi ini menemukan celah analitis pada Indeks Kapasitas Kritis (3,92) yang mengindikasikan gejala Cognitive Overconfidence; mahasiswa merasa yakin mampu memverifikasi hoaks, padahal kecakapan literasinya masih di tahap pragmatis-akademis. Penelitian ini menyimpulkan bahwa perguruan tinggi perlu melembagakan kerangka kerja literasi digital kritis ke dalam kebijakan kurikulum guna mencegah disinformasi dan merawat harmoni sosial di ruang siber.

Kata Kunci: *Literasi; Integrasi Nasional; Indeks Komposit*

INTRODUCTION

The digital transformation and the massive penetration of social media in Indonesia have brought fundamental shifts in the public communication ecosystem and higher education (Akour & Alenezi, 2022). The future sustainability of democracy and national integration in a heterogeneous nation depends heavily on the extent to which its citizens—particularly the youth within the productive age group—can manage, verify, and absorb information amidst the fast-paced sea of digital data (Akour & Alenezi, 2022). Students, as intellectual entities and digital natives, stand at the forefront of the contestation of ideas, ideologies, and sociopolitical discourses circulating in the cybersphere (Saputro & Shovmayanti, 2024).

This ease of access to information does not always correlate linearly with civic maturity. Sociopolitical dynamics post-general elections, the contestation of primordial identities, and the widespread circulation of political hoaxes, hate speech, and disinformation have severely tested the resilience of national unity (Karakatsani & Pliogou, 2026). The digital media, initially expected to serve as an inclusive democratic public sphere, often falls trap to echo chambers and filter bubbles, where algorithms reinforce group prejudices and potentially erode tolerance among diverse national elements (Hanum et al., 2024). Within the context of national integration—the process of uniting various social and cultural groups into a unified territory and national identity—the greatest threat in the cyber era is no longer merely physical confrontation, but cognitive and affective disintegration triggered by information manipulation.

Based on previous studies, Paterson (2019) argues that the social media ecosystem can accelerate the circulation of political hoaxes and disinformation. Aligning with this view, Judijanto et al. (2024) state that high intensity of internet utilization does not guarantee a corresponding capacity to filter information. Conversely, research by Voinea et al. (2020) demonstrates that digital political news literacy positively enhances healthy sociopolitical engagement among the younger generation. Echoing these findings, Selpi et al. (2026) show that the digital space can exert a positive impact as a reinforcing tool for pluralism values capable of minimizing ethnic, religious, racial, and intergroup divides. While studies on political news literacy have begun to develop at the secondary school level, pedagogical interventions and empirical mapping regarding how digital media consumption influences the perception of national integration within higher education environments remain highly limited (Nurhayati & Musa, 2020).

This gap leaves a crucial question: to what extent do the intensity of internet and social media use empirically influence perceptions, hoax verification efficacy, and national integration commitment among students in a diverse campus environment? Based on this background, this study fills the

literature void by focusing specifically on the dynamics of "national integration literacy" among students at HKBP Nommensen University (UHN) Pematangsiantar. As an educational institution, UHN Pematangsiantar possesses a rich diversity of student backgrounds in terms of ethnicity (including Toba Batak, Simalungun, Karo, Mandailing, Nias, Chinese, and Javanese), religion, and regional origin. This demographic condition renders UHN Pematangsiantar an ideal microcosm of Indonesian pluralism to examine how the penetration of digital technology interacts with national values. This diverse academic environment demands that students possess not only academic competence but also digital literacy resilience to maintain social harmony and act as agents against divisive narratives in the cybersphere.

This study aims to map the digital media consumption patterns of UHN Pematangsiantar students regarding the internet to acquire national information. This research is projected to serve as an empirical baseline data for formulating curriculum transformation policies in higher education, particularly in revitalizing the pedagogical approach of compulsory university courses (*Mata Kuliah Wajib Kurikulum*/MKWK) in Civic Education to be more adaptive toward the challenges of the Society 5.0 era.

METHOD

This study employs a quantitative approach with a composite index design to comprehensively measure and evaluate students' perceptions of the raised issue. In contrast to qualitative exploratory studies, this approach focuses on the quantification of responses to objectively observe aggregate trends. The composite index design was selected because it enables researchers to combine various indicators of complex variables into a single score, thereby generating a more systematic and statistically interpretable benchmark.

Data collection was conducted within the environment of HKBP Nommensen University Pematangsiantar. The research sample involved 32 students selected to represent various study programs. Although the sample size is relatively limited, the participant structure was purposively designed to ensure cross-disciplinary thematic representation and variation in semester levels. This diversity of participants—which encompasses students from exact sciences education, social sciences, and engineering clusters—serves to enrich the dataset, ensuring that the obtained results are not biased toward a single academic background but rather reflect a broader perspective of university students.

Table 1. Respondent Profile

Characteristics	Frequency	Percentage
Study Program		
Biology Education	18	56.3%

Civic Education	4	12.5%
Computer Science	2	6.3%
Christian Religious Education	2	6.3%
Mechanical Engineering	2	6.3%
Elementary School Teacher Education (PGSD)	1	3.1%
Economic Education	1	3.1%
Mathematics Education	1	3.1%
German Language Education	1	3.1%
Semester Level		
Semester II	7	21.9%
Semester IV	23	71.9%
Semester VI	1	3.1%
Semester VIII	1	3.1%

The primary data collection instrument used in this study was a structured closed-ended questionnaire. This questionnaire measured the students' level of agreement using a five-point Likert scale, ranging from Strongly Agree to Strongly Disagree.

To analyze the data, this study applied descriptive statistical analysis techniques focusing on the construction of a composite index. The analytical process initiated by assigning numerical weights to each item statement on the Likert scale. The data were then tabulated to obtain the total score for each respondent. Subsequently, these raw scores were transformed into percentages and categorized into specific index score ranges. Through these stages, the researchers comprehensively described the distribution of responses and drew valid conclusions regarding the aggregate position of student perceptions, rather than merely focusing on inferential generalization.

RESULTS AND DISCUSSION

Information Accessibility Indices

This dimension measures the extent to which the internet serves as the primary information "habitat" for students. The measurement integrates indicators of media consumption frequency and dependence levels.

Table 2. Dependence and Shift in Media Consumption

Accessibility Indicator	Percentage
Shift of national news consumption to social media	84.4%
Daily dependence on the internet	75.0%
Negative responses toward cross-regional communication	0.0%

Table 2 shows that most students (84.4%) have shifted their dependence from conventional mass media to social media platforms to consume national news. Interestingly, there were no negative responses (0.0%) regarding cross-regional communication. These data definitively demonstrate that digital technology at UHN Pematangsiantar is not merely an

optional tool but has instead become the primary infrastructure for integration.

Critical Capacity Index

This dimension employs a data-contrast technique to examine whether the students' self-efficacy (personal belief) truly aligns with their actual proficiency in verifying misinformation or hoaxes.

Table 3. Self-Efficacy in Verifying Information

Capacity Indicator	Percentage
Dominant utilization of technology for academic purposes	93.8%
Claiming the capability to distinguish hoaxes	78.1%
Expressing neutrality in hoax identification	15.6%

A highly significant analytical gap emerged within this dimension. On one hand, 78.1% of the respondents possess the confidence to detect hoaxes. However, the emergence of 15.6% of respondents in the neutral category indicates the presence of *cognitive overconfidence*. The students feel capable of verifying information even though their critical literacy tools are not yet sufficiently proficient. This is reinforced by the fact that 93.8% of technology utilization is exclusively designated for academic affairs, confirming that their current literacy stands at a pragmatic-academic stage rather than a critical-ideological one.

Affective Integration Index

This dimension utilizes descriptive association analysis to observe the correlation between high exposure to technology and students' attitudes toward nationalism and multiculturalism.

Table 4. Affective Attitudes Toward Pluralism

Social Attitude Indicator	Percentage
Appreciation for ethnic, religious, racial, and intergroup (SARA) diversity	93.8%
Willingness to engage in cross-cultural collaboration	81.3%

The data clearly represent that the presence of technology acts as a reinforcement for existing baseline national values rather than an entity that shapes new values. The high appreciation for SARA diversity (93.8%) and the willingness to collaborate across cultures (81.3%) prove that students within this pluralistic environment of North Sumatra possess a robust, inherent cultural filter.

Digital Connectivity and Information Vulnerability: Challenges for Digital Citizenship

The findings of this study demonstrate an exceptionally high level of information accessibility among UHN Pematangsiantar students, with a composite index score reaching 4.26. The dominance of the internet as the

primary information "habitat" is further substantiated by the fact that 84.4% of respondents have shifted their national news consumption from conventional media to social media platforms, and 75.0% exhibit a daily dependence on the internet. This characteristic of students as highly active digital natives aligns with the macro-digital landscape in Indonesia. However, this high digital connectivity simultaneously exposes students to a cybersphere that is highly vulnerable to politically motivated disinformation.

This shift in media consumption patterns validates concerns raised by Hadian et al. (2025) and Wahyono et al. (2020) that political hoaxes often circulate much faster than their clarifications or corrections, thereby rendering young social media users highly susceptible to ideological manipulation and identity-based provocation. Although the complete absence of negative responses (0.0%) regarding cross-regional communication indicates that technology has successfully functioned as a primary integration infrastructure, total reliance on social media algorithmic platforms still carries a persistent risk of polarization if it is not accompanied by adequate information filtering skills.

Critical Resilience Capacity: The Gap Between Digital Fluency and Critical Reasoning

Within the dimension of Critical Digital Resilience (index score of 3.92), a crucial analytical gap was identified. A substantial 78.1% of students claimed high self-efficacy in distinguishing hoaxes. However, SPSS data-contrast techniques detected that 15.6% of respondents remained neutral or hesitant. Methodologically, this uncertainty indicates symptoms of *cognitive overconfidence*, wherein students feel or believe they are capable of verifying information credibility, while objectively they have not yet mastered standard news literacy instruments.

This disparity can be explained through the literacy model proposed by Gong and Yang (2024), which emphasizes that genuine literacy demands not only factual recognition but also the capacity to evaluate source credibility, detect bias, and critically reflect on media content. The majority of students (93.8%) utilize digital technology in a pragmatic-academic manner (solely for completing coursework) rather than for critical-ideological reasoning within a national integration context. This phenomenon confirms the argument by Vraga et al. (2021) that high exposure or fluency in utilizing digital media does not automatically cultivate critical thinking, unless such capacity is developed through pedagogically scaffolded frameworks (Millner, 2023).

Affective Integration and Cultural Filters: Open Space in Curriculum Policy

In contrast to the critical capacity dimension that still leaves an analytical gap, the Affective Integration dimension recorded the highest score at 4.38 (Very High). The high rate of appreciation for ethnic, religious, racial, and intergroup (SARA) diversity (93.8%) and the willingness to engage in cross-cultural collaboration (81.3%) prove the existence of a robust, inherent "cultural filter" within the students. Here, technology does not act as a shaper of new values, but rather as a reinforcement of pluralism values that are already deeply rooted in the diverse environment of North Sumatra.

Although the students' affective foundation is remarkably strong, structural challenges emerge when these national values must confront a manipulative digital ecosystem without the support of explicit, formal curriculum policies. At the national level, the *Kurikulum Merdeka* (Independent Curriculum) is indeed designed to provide contextual flexibility and focus on 21st-century competencies (creativity, collaboration, communication, and critical thinking). However, as noted by Manurung et al. (2026), the implementation of political literacy in Indonesia frequently experiences policy overload and is hindered by a lack of clear operational guidelines. Consequently, the integration of critical digital literacy into civic-oriented courses remains partial and unsystematized.

SoTL Perspective: Toward the Institutionalization of National Integration Literacy

Viewed through the lens of the Scholarship of Teaching and Learning (SoTL), the students' strong affective-cultural foundation and high digital connectivity represent extraordinary instructional modalities for higher education institutions. However, to bridge the gap of cognitive overconfidence in students' critical capacity, institutions can no longer rely on conventional learning models that focus solely on factual content delivery. SoTL emphasizes the importance of learning practices grounded in empirical investigation, participatory dialogue, and students' social engagement within the context of their academic disciplines (Godbold et al., 2024).

To optimize the students' "cultural filters," critical reasoning must be inherently embedded. In alignment with Manurung et al. (2026), news literacy and digital political literacy should ideally be integrated into courses or curricular subjects specifically dedicated to building civic virtues and deliberative engagement, such as civic education or national insights.

Finally, strengthening the critical capacity of UHN Pematangsiantar students must not be left to depend on personal student initiatives or what is criticized in SoTL literature as "pedagogical voluntarism"—a condition where innovation and critical capacity operate individually without sustainable institutional reinforcement (Hakim & Haryadi, 2025). The institutionalization of a national integration-based news literacy framework through active learning methods, such as Problem-Based Learning (PBL) and hoax

verification simulations, is imperative to transform students from pragmatic digital consumers into critical and resilient digital citizens.

CONCLUSIONS

Based on the results of the data analysis using a composite index design on a sample of students at HKBP Nommensen University Pematangsiantar, this study concludes that high digital connectivity in the cybersphere acts as a reinforcement for students' multicultural values, as reflected by increasingly open access to diverse information, cultures, perspectives, and cross-group interactions. This condition contributes to enhanced tolerance, acceptance of differences, and awareness of the importance of coexisting within a pluralistic society. However, concurrently, the high intensity of digital connectivity also induces significant vulnerability in critical reasoning. The ease of acquiring and disseminating information is not consistently balanced by the students' ability to perform verification, evaluate source credibility, and identify bias, misinformation, or disinformation circulating in the digital space. The implications of these findings suggest that strengthening digital literacy within higher education environments cannot merely focus on increasing technological access and utilization, but must also be directed toward developing critical thinking skills, information literacy, and digital ethics as core student competencies. Therefore, higher education institutions need to integrate reflective, analytical digital literacy education based on multicultural values into the learning process..

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