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EDITORIAL

Media Literacy in a Digital Age: Taking Stock and Empowering Action

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Abstract

This thematic issue presents 12 articles that explore the transformative potential of media literacy, digital skills, and ICT interventions in diverse contexts and populations, ranging from adolescents and youth with disabilities to university staff and vocational educators. It provides a comprehensive overview of research, including systematic and scoping reviews, empirical studies, and innovative measurement frameworks, highlighting both the opportunities and challenges in fostering media literacy and digital skills. The studies examine positive outcomes, barriers, and enablers of intervention programs, emphasizing the importance of tailoring approaches to specific contexts, addressing systemic inequities, and fostering interdisciplinary and international collaboration. Together, all contributing authors underscore the critical role of media literacy and digital skills in promoting empowerment, equity, and resilience in navigating the complexities of today's digital age.

1. Media Literacy, Digital Skills, and Digital Literacy: Two Review Studies

D'Haenens et al. (2025) systematically review 119 studies on media literacy and digital skills interventions, revealing mixed outcomes and emphasizing the need for tailored, evidence-based approaches. While frequently examined outcomes include media literacy, digital skills, psychological well-being, and education, only a fraction of interventions show significant positive effects, especially for older age groups. Children benefit most from these programs, with stronger impacts on educational outcomes, likely due to cognitive

development and intervention design. However, the study highlights gaps in areas like civic engagement and socio-cultural impacts, advocating for broader outcome measures to capture the multifaceted effects of media literacy and digital skills programs. The authors call for long-term studies, exploration of mediators and moderators, and interdisciplinary collaboration to address challenges in the digital age. These recommendations aim to refine intervention strategies and expand their impact across diverse populations.

In their scoping review, Vermeire et al. (2025) highlight data literacy as an evolving skill essential for navigating a datafied society. Their review traces its expansion from technical and statistical skills to a broader framework encompassing critical thinking, algorithmic awareness, and ethical engagement, positioning it as vital for informed citizenship and equity. Educational efforts increasingly integrate societal implications, though gaps remain in addressing vulnerable communities and ethical challenges in AI. The review calls for adaptable, socially aware approaches to ensure data literacy empowers individuals across diverse contexts and demographics. Overall, data literacy is framed as a dynamic and inclusive competency, crucial for responsibly engaging with a data-driven world.

2. Bridging Social Contexts

Tercova and Smahel (2025) explore the complex role of digital skills in adolescents' exposure to harmful online content, emphasizing that digital skills alone do not guarantee protection. Higher technical skills can increase unintentional exposure, while knowledge skills may fail to mitigate risks without active application. This highlights a bidirectional relationship where exposure raises awareness but also vulnerability. Family support is protective against intentional exposure, while peer influence may encourage riskier behaviors. Personality traits, such as sensation-seeking, and low life satisfaction also contribute to greater exposure, with risky online behaviors potentially reinforcing diminished well-being. The study advocates for comprehensive digital literacy programs that combine technical skills with resilience-building strategies and responsible online behavior. The authors call for further research into protective mechanisms, parental mediation, and targeted interventions to help adolescents navigate online risks safely.

Addressing gaps in culture, training, and resources, Koch and Fehlmann (2025) explore the factors shaping digital literacy and performance in academic settings, identifying six key dimensions: digital practice, attitude, knowledge and skills, culture, framework conditions, and service and empowerment. Their study highlights that while digital tools are widely used, engagement often remains basic, hindered by technical challenges, data security concerns, and a lack of tailored training. A supportive digital culture and institutional resources are essential for fostering innovation and reducing barriers. Customized training, accessible support, and mindfulness practices were identified as effective strategies to enhance digital performance and mitigate stress. The study emphasizes the need for institutional commitment to creating environments that encourage experimentation and align digital tools with academic needs. The authors introduce a self-assessment tool to identify gaps and improve digital engagement across teaching, research, and communication.

Šušterič et al. (2025) investigate the development of media literacy and digital skills among youth, emphasizing the interplay of family, school, and peer networks. Families provide the foundation for media guidance, particularly in socio-economically advantaged households where parental competence is higher. Schools, however, focus on basic technical skills and internet safety, missing opportunities to promote advanced digital competences and bridge the digital divide. Peer networks play a significant role, offering

spaces for social and digital capital development. Young people leverage media to enhance relationships, access cultural resources, and engage with online communities. However, the quality of shared information and critical evaluation within these networks remains a concern. The study highlights the need for future research on the intersection of media literacy with social positions and evolving media practices, aiming to equip young people for critical engagement in complex digital environments.

3. Critical Media Literacy: Empowering Journalists and the Public for Ethical Engagement

Emphasizing a shift from technical skills to fostering critical thinking, moral awareness, and intrinsic motivation, Balčytienė (2025) advocates for media literacy interventions that address deeper socio-psychological and ethical dimensions, enabling individuals to engage thoughtfully with media and navigate manipulation in complex digital environments. Central to the study is the role of journalists as both practitioners and educators in media literacy. Recognizing the interplay between technology, individual agency, and community dynamics, the study calls for innovative pedagogical strategies to enhance ethical decision-making and professional responsibility. By adopting this human-centered approach, journalism education can equip professionals to model critical engagement and uphold democratic values. This holistic approach positions media literacy as a cornerstone for fostering societal resilience, combating misinformation, and promoting a culture of informed and ethical media practices.

Tang et al. (2025) explore the potential and limitations of a short news literacy video in combating misinformation. While the intervention increased participants' appreciation of news literacy's societal importance, it did not enhance their self-perceived ability to apply these skills. A key finding was the unintended consequence of heightened skepticism toward all media content, including accurate information. This highlights the risk of fostering cynicism, which can lead to disengagement from credible sources and weaken democratic discourse. To address this, the study advocates for balanced interventions that encourage critical thinking about dubious content while promoting trust in reliable information through practical tips and efficacy-building strategies. The authors emphasize the importance of tailoring news literacy interventions to vulnerable groups and diverse contexts, with future studies needed to assess their long-term impact and adaptability. The findings demonstrate the potential of news literacy videos to influence media engagement, reinforcing the need for well-designed media literacy strategies that foster an informed and resilient public.

4. Bridging Research and Practice

Batista et al. (2025) examine innovative approaches to fostering media literacy and digital skills among young people, focusing on bridging the gap between research and educational practice. A key contribution is the ySKILLS Education Toolkit, a research-based resource designed to enhance adolescents' digital literacy through adaptable, multidimensional activities that address both risks and opportunities in the digital space. Teachers and students alike praised the toolkit for its practicality, engagement, and versatility across disciplines, emphasizing its potential for meaningful integration into diverse educational contexts. The study highlights areas for improvement, including clarifying instructions, adopting a more experimental activity format, and incorporating content on emerging technologies like AI. Regular updates and feedback mechanisms are recommended to enhance adaptability and measure impact. Additionally, the study identifies a disconnect between research and practice, with teachers often viewing themselves as

implementers rather than active participants in research. Strengthening researcher-educator collaboration and fostering reflective practices could bridge this gap.

Dunan et al. (2025) underscore the transformative role of ICT in enhancing empowerment and inclusion for people with disabilities, focusing on skill development programs. Grounded in empowerment theory, these programs bolster autonomy, economic engagement, and social integration while addressing systemic challenges in applying ICT skills. Participation fosters self-confidence, digital literacy, and independence, aligning with global evidence of ICT's potential to reduce social isolation and improve access to education and employment. However, barriers such as limited access to assistive technologies, disparities in ICT proficiency, and a lack of adaptive materials limit the effectiveness of these programs. The study advocates for tailored, modular training platforms, inclusive infrastructure, and increased funding through public–private partnerships. Continuous evaluation and adaptive learning technologies are highlighted as critical for enhancing program impact. This research offers a holistic approach integrating technology, policies, and infrastructure to empower people with disabilities and promote equitable participation in social and economic spheres.

Gross and Balaban (2025) explore the impact of educational interventions on media literacy and disinformation. The authors highlight the program's ability to improve social media literacy and reduce conspiracy beliefs, though it did not significantly affect participants' intentions to share fake news, reflecting the complexities of combating disinformation. A key insight is the role of intellectual humility as a moderating factor. While individuals with low to moderate intellectual humility gained algorithmic awareness, those with high intellectual humility reported a decline in perceived social media literacy, emphasizing the need for tailored approaches to address individual differences. The study underscores the potential of educational programs to foster critical thinking and algorithmic awareness, but it also warns against overconfidence stemming from increased perceived literacy without corresponding skills. The findings call for media literacy initiatives that integrate cognitive and motivational dimensions, account for individual traits, and adopt multi-faceted strategies to address the challenges of the digital information environment.

Hernández-Serrano et al. (2025) introduce the FLEXI-COMP framework for integrating digital and social skills in vocational education and training, addressing the sector's need for adaptable, contextualized approaches. Piloted across five countries, FLEXI-COMP emphasizes creativity, collaboration, and professional preparation alongside digital competence to support diverse learner needs. The study highlights barriers such as workload pressures and limited access to tools, advocating for participatory, flexible training programs that blend self-assessment with practical tasks. Policy recommendations include needs-based skill assessments and project-based learning to refine vocational education and training frameworks.

By integrating digital and social competences, FLEXI-COMP aims to prepare educators and learners for the challenges of rapidly evolving educational and labor markets.

5. Innovating Measurement: A Performance-Based Framework for Assessing Children's Digital Skills

Van Laar et al. (2025) present a performance-based framework for assessing children's digital skills, focusing on information navigation, communication, and content creation. This cross-national study emphasizes

authenticity by using open internet tasks aligned with relatable themes like climate change and Covid-19, ensuring relevance across diverse cultural and educational contexts. The research highlights innovations such as standardized coding schemes and iterative design refinement, addressing cultural nuances and participant engagement. Challenges, including personalization in search results and platform variations, were mitigated by focusing on transferable skills and providing explicit instructions. Despite its strengths, the study acknowledges the labor-intensive nature of performance testing and its limitations in capturing all aspects of digital competence. It advocates for mixed-method approaches combining qualitative and quantitative assessments to ensure comprehensive and scalable measurement. This framework advances the direct assessment of digital skills, moving beyond self-assessments, and offers valuable tools for educators and policymakers to support media literacy education and policy in cross-national contexts.

The contributions in this thematic issue underscore a shared imperative: fostering nuanced, context-aware, and evidence-based approaches to media literacy and digital skills. By addressing gaps in measurement, intervention design, and societal engagement, these studies not only chart pathways for individual empowerment but also highlight systemic challenges that require collective action. Moving forward, interdisciplinary collaboration and ongoing dialogue between researchers, educators, policymakers, and communities will be essential in ensuring that digital literacy initiatives remain adaptable, inclusive, and effective.

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Conflict of Interests

The authors declare no conflict of interests.

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