**Anniversary of IL special issue 2024**

**Navigating constant change: Exploring information literacies in the context of social media health information**

[**http://dx.doi.org/10.11645/18.1.576**](http://dx.doi.org/10.11645/18.1.576)

**Anna-Maija Multas**

Postdoctoral Researcher: Information and Communication Studies, Faculty of Humanities, University of Oulu and Faculty of Social Sciences, University of Helsinki. Email: anna-maija.multas@oulu.fi. ORCID: [0000-0002-9710-2497](https://orcid.org/0000-0002-9710-2497). X: [@ammultas](https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://twitter.com/ammultas&ved=2ahUKEwjW19eOkK6GAxUBWEEAHfTXA_8QFnoECA0QAQ&usg=AOvVaw3XliSy77IRLpFc2uRRZXJ9).

**Abstract**

The continuous change in our information environments poses critical challenges to enacting and promoting information literacies (ILs) in contemporary society. These changes are particularly challenging for those in vulnerable positions in society, such as children and young people. To fully grasp this complex issue, we need to deepen our understanding of ILs not just at a theoretical level, but also through empirical research. Drawing on the key findings of my doctoral dissertation on health-related ILs, I propose new perspectives to understand ILs through a sociocultural lens and advocate for more inclusive and sustainable approaches to studying ILs in a state of constant change.

**Keywords**

information and communication technologies (ICTs); information literacy; information practices; health information literacy; nexus analysis; social media; young people

**Introduction**

Paul Zurkowski was a visionary figure in the information landscape of the 1970s. Drawing from his insights about the information environment of that era, he developed a concept that we still work with within LIS, offering fresh perspectives for research on information literacy (IL) across various domains. Since Zurkowski coined the term information literacy in 1974 our information environment has changed radically. Emerging information and communication technologies

(ICTs), such as social media, have transformed and continue to transform our everyday information environments, enabling new kinds of information practices. For example, the release of TikTok in 2016 sparked a new type of visual media that emphasises self-making and co-production of information (Bhandari & Bimo, 2022). These information practices are here to stay: TikTok has been forecasted to reach approximately 2,35 billion users in 2027 (Statista, 2024).

However, TikTok and other social networking sites offer opportunities for both sharing multimodal content and global interaction, as well as the widespread dissemination of false information. According to Zimmerman (2022, p. 1228), social media communication is filled with “social noise” which refers to the impact of personal and relational factors on information received through social media. It is clear that the continuous change in our information environments challenges our information literacies (ILs), and it is particularly challenging for those in vulnerable positions in society, such as children and young people.

The Covid pandemic is the first pandemic in history in which social media and other communication applications were and still are used on a massive scale to keep people informed during a global crisis. This however, according to the WHO (2024), has led to an infodemic, an explosion of health information online causing the dramatic spread of dis- and misinformation all over the world. Lately, social media research related to children and young people has focused specifically on the negative effects of social media on the well-being of young people, such as the increase in mental health problems and weakened learning outcomes. Based on these studies, we know that the use of social media by young people increased during the pandemic and that mental health challenges have been observed more frequently than before (e.g. Jones et al., 2021; Lee et al., 2022).

But what do we really understand about how young people engage with social media today? Do we fully grasp the positive impacts that social media can have on their well-being, or how they use these platforms to support their own health? I contend that to genuinely recognise and understand these critical issues, we need to deepen our understanding of ILs not just theoretically, but at an empirical level as well. From the perspective of IL research, it would be important to explore what information practices, competencies and strategies are necessary to navigate information environments that are in constant flux. How can we anticipate these changes, and what methodological approaches can best address these inquiries? Exploring these issues will shed light on how we can encourage sustainable ways of dealing with information amidst constant change.

**Engaging the phenomenon**

I build my argument on my doctoral dissertation (Multas, 2022) in which I aimed to find new ways to understand ILs as sociocultural phenomena in the context of social media health information. I started by asking what is going on here right now. What do we researchers need to know and understand right now, especially regarding our digital environments and their constant change, and what kind of empirical research do we need to understand these issues? Following the steps of nexus analysis, a research strategy developed by Ron and Suzie Scollon (2004), I started my work by engaging in the phenomenon. As I dug deeper into health literacy research and discourses, I constantly encountered the fact that research on health literacy seems to be years, if not decades, behind what is happening in our society at any given moment. For example, the most used definition describes health literacy merely as skills in information acquisition and use (Ratzan & Parker, 2000; see also Huhta et al., 2018), ignoring aspects related to information seeking and evaluation, for example. Moreover, this research has traditionally been centralized around perspectives describing health literacy as a tool for healthcare services and benefiting public health (see e.g. Chinn, 2011) or focused on understanding health as an absence of disease (see e.g. Quennerstedt, 2018). Additionally, I found that although the concept has been somewhat developed, a large part of health literacy research still relies on original functional competencies, such as definitions based on reading comprehension or numerical skills (Huhta et al., 2018). It seemed that the internationally well-researched concept of health literacy and related research did not fully answer my questions about what kind of information practices, competencies, or strategies would benefit us when operating in today's complex and usually digital health information environments.

In online contexts, such as social media, people often have an active role not only as consumers but as creators of information. Therefore, I chose to pay particular attention to information creation, defined as “the way people create messages, cues, and informative content that can be used to meet the existing or potential information needs of the creator or other users” regardless of the format of this content, for example (Koh, 2013, p. 1827). However, within IL research, information creation has yet to be fully acknowledged as a part of ILs (Huvila et al., 2020) although information practices, such as remixing, visualising, and presenting information, can be considered crucial aspects of IL competencies in our everyday information environments (see e.g. Hicks, 2020; Koh, 2013). Although I grounded the main theoretical basis in the sociocultural understanding of literacies as socially enacted practices (e.g. Lloyd, 2012), I also chose to seek inspiration from literacy research conducted in other fields. Specifically, the new literacies research that emerged in educational sciences (e.g. Lankshear & Knobel, 2011) offered new insights into understanding the role of technology in our information environments: information practices are developed within and transformed through new technologies. Moreover, attaching the notion of plurality to literacy addresses the multiplicity of information practices and how they “shift with contexts, texts, and the identities of people using literacy” (Rowsell & Walsh, 2011, p. 55).

**Navigating through practices**

To answer the overarching question of what is truly happening here — how young people navigate through and with health information in their current social environments — I opted to investigate the everyday discourses and IL practices of young people creating information on social media. In nexus analysis this phase can be described as navigating the nexus of practice, in other words mapping the central information practices identified as part of the phenomenon (Scollon & Scollon, 2004). I collected different kinds of data (interviews, video diaries, YouTube videos) from young video bloggers who were interested in health topics and were creating health-related content on their social media accounts. This enabled me to explore the information practices of young individuals from different perspectives. For example, through nexus analysis, I found out that the discourses related to the credibility and authenticity of information, interactions with family, friends, and their social media followers, and past experiences with information, such as video blogging, influenced the information practices of these young people when creating new content on social media (Multas & Hirvonen, 2022).

The findings informed my investigation of contemporary ILs by emphasising the essence of information practices as interconnected, social, material, and embodied and by exemplifying the complexity and centrality of information creation, specifically in social media contexts. In particular, IL practices appeared as constructed and enacted through embodied knowledge. Moreover, the authenticity of the presentation of information and the self were highlighted. The findings add to existing sociocultural IL research by emphasising the importance of previously adopted practices when creating information on social media and suggesting that authoritative voices can be constructed for different audiences through different IL practices and grounding in both experience-based and second-hand information. Here, it is important to understand how authority is constructed, not just from an objective authority evaluation perspective, but also by considering people’s own authoritative positions (Multas, 2022).

**Change as an opportunity for development**

By engaging with the current research, theories, and conceptualisations on health literacies, ILs, and new literacies and navigating through the current information practices of young people on social media, I offer new suggestions towards understanding ILs as sociocultural phenomena unfolding in our constantly changing information environments. I follow Annemaree Lloyd’s thoughts on IL as a way of knowing (see e.g. 2017). In the context of my research, “knowing” refers to knowing about health and well-being, but, in a broad sense, it can be any kind of knowledge relevant to the context (Lloyd, 2017). ILs as sociocultural phenomena then consist of sets of information practices, such as seeking, finding, evaluating, understanding, and creating information, which are enacted in the social settings and everyday environments of people, including online contexts (Multas, 2022). Moreover, ILs are composed of several interconnected social, material, and embodied IL practices that are socially created, constructed, and enacted within people’s everyday actions (Multas, 2022) and influenced by historical, discursive, and interactive elements circulating through these actions. What challenges us the most is the fact that these information practices are continually transformed by new technologies and simultaneously transforming the ways technologies are designed causing the emergence of new applications in a steady stream.

In addition to theoretical and conceptual development, I suggest that health literacy as well as IL research should also be developed at an empirical level. But how do we study a phenomenon that is in constant change? Investigation of contemporary phenomena can be challenging due to the time constraints involved in empirical inquiry and scientific publishing, for example. Time-consuming data collection methods, such as ethnography, require resources that are monitored by the research funder. However, there is a need to bring in more qualitative approaches to research, aiming at a comprehensive understanding of the phenomenon under study. For example, health literacy research, and to some extent IL research as well, has traditionally been mainly quantitative and focused on educational or health care settings (see e.g. Chinn, 2011). I propose that in addition to quantitative, qualitative approaches should also be encouraged as they might draw attention to the aspects of ILs with which people actually interact in real-life situations (Chinn, 2011; Samerski, 2019). There is a trend toward mixing methods, although, especially in health literacy research, quantitative methods, such as questionnaire surveys are still most used (Huhta et al., 2018). In recent IL research more focus has been placed on the sociocultural understanding of literacies and the perspectives of embodiment and information creation (see e.g. Hicks, 2020) which has contributed to the increased use of qualitative methods within the field.

**Rethinking IL research**

To keep up with the constant change within our information environment, IL researchers may consider employing qualitative approaches such as ethnography, and participatory strategies, including co-research, which provide a closer look at and a potentially more inclusive perspective into the actual information practices emerging among, for example, young people. A key aspect of co-research is to regard the individuals involved in the study as experts on their own lives and as equal research partners alongside the professional researchers. Although destabilising power hierarchies is always a challenge, it should be the ultimate goal of participatory research strategies. (See e.g. Kulmala et al., 2024 and especially from the perspective of youth participation Honkatukia & Rättilä, 2023.) Furthermore, co-research and other participatory approaches offer the participants in the research a voice and a platform to promote their own agendas in society. By employing participatory methods and other collaborative strategies to co-create scientific knowledge, researchers adopt a sustainable and responsible approach to scientific work, actively engaging in the actions being studied rather than merely observing from afar. This not only facilitates a deeper understanding of our participants’ information environments but also fosters a sense of trust and openness, enabling them to share their thoughts and experiences in a safe and timely manner.

An example of a research project employing mixed methodology and aiming to investigate the current state of an important issue within our society is the interdisciplinary research project "YouTubers as Peer Mental Health Educators in Adolescents’ Social Environments" (TUBEDU) funded by the Research Council of Finland. TUBEDU utilizes multiple methods, such as a systematic review, a survey questionnaire, multimodal analysis of YouTube videos, data mining, and a co-research strategy to study the positive effects of social media on adolescents' mental health. With my colleagues in a TUBEDU sub-study at the University of Helsinki, we aim to investigate this issue together with young people through co- and peer-research approaches. From the perspective of ILs, we can ask for example what information practices young people have developed to act responsibly and sustainably, and to support their well-being, on different social media platforms, or what kind of connection social media peer support may have had on the development of IL practices, strategies, and competencies in the everyday environments of young people. An overarching question we seek to answer is how co- and peer-research strategies may benefit the sense of agency and meaningfulness as well as the mental well-being of the participating young people.

Sociocultural and practice-oriented IL research views literacy not from an institutionalised perspective but as a new way of thinking about how people in their everyday contexts participate in the world (Addison & Meyers, 2013). The present-day world, however, is in a state of constant change, which poses significant challenges both to people enacting these ILs as well as the researchers trying to describe these phenomena and ultimately aiming to provide solutions to make things better for all of us. For us researchers to truly understand what is happening in our changing information environments right now and how to anticipate these changes, we should turn our attention to those acting at the nexus of the phenomena we study. From a theoretical perspective, this may suggest, for example, that we need to broaden our conceptual understanding of ILs to view ILs as a set of interconnected social, material, and embodied information practices that are socially created, constructed, and enacted within people’s everyday actions and influenced by historical, discursive and interactive elements circulating through these actions (Scollon & Scollon, 2004; Multas, 2022). At an empirical level, we ought to employ methodologies such as participatory research strategies that promote sustainable and responsible ways to do scientific research and aim to offer a voice to those at the centre of the issue we are studying. Here, Zurkowski’s words in his 1974 seminal paper on IL still hold true: “as beauty is in the eye of the beholder, so information is in the mind of the user” (Zurkowski, 1974).

## Declarations

**Ethics approval**

In the doctoral study described here, ethical review was not considered necessary in alignment with University of Oulu’s guidance on the conduct of ethical research. The TUBEDU study has been reviewed by the Research Ethics Committee in the Humanities and Social and Behavioural Sciences at the University of Helsinki.

**Funding**

This work was supported by the “YouTubers as Peer Mental Health Educators in Adolescent’s Social Environments (TUBEDU) research project funded by the Research Council of Finland [grant number 348521] and the “Resistant Cities: Urban Planning as Means for Pandemic Prevention” (RECIPE) research project funded by the Strategic Research Council of Finland [grant number 345220].

**AI-generated content**

This text was translated and checked for grammar using AI tools.

**Acknowledgements**

I thank Research Director, PhD Meri Kulmala at the University of Helsinki for introducing me to co-research and for her valuable guidance and leadership in the TUBEDU project. I also express my deepest gratitude to the TUBEDU co-researchers and research assistants for their significant contributions to our study. Moreover, I extend my thanks to my colleagues at the University of Oulu for their support and our discussions on all matters related to information and research.

**References**

Addison, C., & Meyers, E. (2013). [Perspectives on information literacy: a framework for conceptual understanding](http://informationr.net/ir/18-3/colis/paperC27.html). *Information Research, 18*(3), paper C27.

Bhandari, A., & Bimo, S. (2022). [Why’s everyone on TikTok now? The algorithmized self and the future of self-making on social media](https://doi.org/10.1177/20563051221086241). *Social Media + Society, 8*(1).

Chinn, D. (2011). [Critical health literacy: A review and critical analysis](https://doi.org/10.1016/j.socscimed.2011.04.004). *Social Science & Medicine, 73*(1), 60–67.

Hicks, A. (2020). [Moving beyond the descriptive: The grounded theory of mitigating risk and the theorisation of information literacy](https://doi.org/10.1108/JD-07-2019-0126). *Journal of Documentation, 76*(1), 126–144.

Honkatukia, P., & Rättilä, T. (Eds.). (2023). *Young People as Agents of Sustainable Society*. Taylor & Francis.

Huhta, A.-M., Hirvonen, N., & Huotari, M.-L. (2018). [Health literacy in web-based health information environments: Systematic review of concepts, definitions, and operationalization for measurement](https://doi.org/10.2196/10273). *Journal of Medical Internet Research, 20*(12), e10273.

Huvila, I., Douglas, J., Gorichanaz, T., Koh, K., & Suorsa, A. (2020). [Conceptualizing and studying information creation: From production and processes to makers and making](https://doi.org/10.1002/pra2.226). *Proceedings of the Association for Information Science and Technology, 57*(e226), 1–5.

Jones, E. A. K., Mitra, A. K., & Bhuiyan, A. R. (2021). [Impact of COVID-19 on Mental Health in Adolescents: A Systematic Review](https://doi.org/10.3390/ijerph18052470). *International journal of environmental research and public health, 18*(5), 2470.

Koh, K. (2013). [Adolescents’ information-creating behavior embedded in digital media practice using Scratch](https://doi.org/10.1002/asi.22878). *Journal of the American Society for Information Science and Technology, 64*(9), 1826–1841.

Kulmala, M., Venäläinen, S., Hietala, O., Nikula, K., & Koskivirta, I. (2024). Lived Experience as the Basis of Collaborative Knowing. Inclusivity and Resistance to Stigma in Co-Research. *International Journal of Qualitative Methods, 23*, 1–13.

Lankshear, C., & Knobel, M. (2011). *New literacies: Everyday practices and social learning*. Open University Press.

Lee, Y., Jeon, Y. J., Kang, S., Shin, J. I., Jung, Y. & Jung, S. J. (2022). [Social media use and mental health during the COVID-19 pandemic in young adults: A meta-analysis of 14 cross-sectional studies](https://doi.org/10.1186/s12889-022-13409-0). *BMC Public Health, 22*(1), 995.

Lloyd, A. (2012), [Information literacy as a socially enacted practice: Sensitising themes for an emerging perspective of people‐in‐practice](https://doi.org/10.1108/00220411211277037), *Journal of Documentation, 68*(6), pp. 772-783.

Lloyd, A. (2017). [Information literacy and literacies of information: a mid-range theory and model](https://doi.org/10.11645/11.1.2185). *Journal of Information Literacy, 11*(1), 91–105.

Multas, A.-M., 2022. [*New health information literacies: A nexus analytical study*](http://urn.fi/urn%3Aisbn%3A9789526232157). University of Oulu (Diss).

Quennerstedt, M. (2018). Social media as a resource: A salutogenic perspective. In V. A. Goodyear & K. M Armour (Eds.), *Young people, social media and health* (pp. 71–85). Routledge.

Ratzan, S., & Parker, R. (2000). National Library of Medicine current bibliographies in medicine: Health literacy. National Institutes of Health, US Department of Health and Human Services.

Rowsell, J., & Walsh, M. (2011). [Rethinking literacy education in new times: Multimodality, multiliteracies & new literacies](https://doi.org/10.26522/BROCKED.V21I1.236). *Brock Education: A Journal of Educational Research and Practice, 21*(1), 53–62.

Samerski, S. (2019). [Health literacy as a social practice: Social and empirical dimensions of knowledge on health and healthcare](https://doi.org/10.1016/j.socscimed.2019.02.024). *Social Science & Medicine, 226*, 1–8.

Scollon, R., & Scollon, S. W. (2004). *Nexus analysis: Discourse and the emerging Internet*. Routledge.

Statista. (2024). [Number of TikTok users worldwide from 2018 to 2027](https://www.statista.com/forecasts/1142687/tiktok-users-worldwide#statisticContainer).

World Health Orgnaisation (WHO). (2024). [Infodemic](https://www.who.int/health-topics/infodemic#tab=tab_1).

Zimmerman, T. (2022). [Social noise: The influence of observers on social media information behavior](https://doi.org/10.1108/JD-08-2021-0157). *Journal of Documentation, 78*(6), 1228–1248.

Zurkowski, P. G. (1974). [*The information service environment: Relationships and priorities, related paper number five*](https://files.eric.ed.gov/fulltext/ED100391.pdf). National Commission on Libraries and Information Science, ERIC document ED 100 391.