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Strengthening Responsible Journalism Through Self-Efficacious Learning-Oriented Media Literacy Interventions

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Abstract

This article investigates the challenges journalism professionals face in a rapidly changing digital media environment, proposing that a "processual" and human-centered perspective might offer valuable insights into developing resilient professionalism. The article builds its argument on theories of transmediality and hybridization in digital media ecosystems and the socio-psychological development toward accountable communication and responsible professionalism. It specifically looks at future journalists as active learners to whom media literacy interventions may offer new insights into the mental processes in professional decision-making. It tests these ideas in an experimental study with journalism students, where the lateral reading approach was applied within the framework of learning skills for information verification. Results from the thematic analysis of students' reflexive assessments of their practice reveal norms illustrative of a self-efficacious learning process: Students' answers demonstrate empowering and perseverance-directed approaches. As argued, these norms are geared toward imposing a higher media awareness and self-regulatory capacity, which is critical for accountable decision-making in transmedial and highly interactive digital information environments.

Keywords

digital media; disinformation; information verification; journalism education; lateral reading; media literacy; self-efficacy; resilience

1. Introduction and Background

Rapidly evolving digital media ecosystems with increased information abundance and greater accessibility require appropriate responses from media education methods. Despite the growth of various analyses,

there is a lack of understanding as to how informed media use and information verification take place, which specific factors influence people's decision-making, and the particular norms that guide information processing and self-efficacious learning progress. Some research-informed analyses advocate for taking a macro-focused approach, particularly a communication rights perspective framed by a digital innovations context, and exploring the implications of increased accessibility to and greater pluralization of all available information (Ala-Fossi et al., 2019; Horowitz et al., 2024). Other analyses look into individual characteristics, such as cognitive biases and reasoning failures influenced by various motivations that determine information selections and choices, shaping the opinions of individuals and groups (Poier & Suchanek, 2024). Still, as suggested by most recent insights (see, for example, Bolin, 2023), there is a lack of combined approaches that would, in their analyses, retain a technological focus and digital media affordances perspective, while also considering socio-psychological features of information selection, making of meanings, and opinion formation.

Media literacy-focused interventions are often seen as a significant means of assisting users in informed media use. There are initiatives that evaluate programs to improve media literacy and digital skills. These studies investigate interventions centered around media literacy to assist users in responsible consumption of digital content (Paciello et al., 2023; van Zoonen et al., 2024). However, evidence that links interventions around different types of media literacy and digital skills for different types of outcomes is severely underdeveloped. In other words, there is a lack of analyses of interventions to provide specific skills to various groups, including information verification strategies aimed at fostering greater media awareness among media professionals (editors, journalists, fact-checkers) themselves.

Media professionals are a unique group of lifelong learners among all digital media users. Professional journalists and editors are well-equipped with skills belonging to the profession, and yet they must continuously acquire new skills to adapt to changing technologies and media context developments, as well as respond to changing audience needs. Despite the increasing demand, there is a scarcity of theorization on how, for example, journalism education should address the rising challenges in the profession to become more attentive and responsive to audience needs and whether media literacy methodologies can be applied in educational settings for training future journalists.

This article takes a "processual" approach and discusses the experimental study in which the responses of journalism students were gathered within a specific learning context, focusing on their development as future professionals and lifelong learners. Though equipped with strategic professional functions and roles, journalists must also be seen as media users who must understand and have adequate capabilities to deal with their own biases and uncertainties. The working hypothesis was formulated in such a way that the more journalists are aware of their self-conscious thinking during the working process, the better they will be able to meet the needs of other media users. Hence, it is crucial to explore whether and how journalism education can include media literacy strategies to prepare future media professionals in response to new calls for the profession to become more attentive, inclusive, and collaborative.

The article starts by establishing a theoretical basis for journalism education by grounding it in a normative and socio-constructive strategy, which adopts a journalistic capabilities enhancement approach combined with recent theorizing on hybridization and transmediality in digital media ecologies and socio-psychological backing of self-efficacious development of responsible and resilient professionalism. This grounding, which

later refers to a pilot experiment where media literacy-focused interventions on enhancing self-efficacious learning were tested with 60 third-year journalism students, identifies avenues for extending ideas of responsible communication to be explored empirically in other educational settings.

2. Theoretical Framework

The theoretical framework utilized here combines specific strands, namely the perspective on hybridity and the circulation of digital content as well as the socio-psychological view on decision-making in contemporary digitally mediated ecosystems.

The proposed approach considers journalists working in digital media ecosystems as "mediatized" actors (Bolin, 2023; Kantola, 2014; Papacharissi, 2014), whose decision-making is pressured by infrastructural powers central to digital platform economics (Helberger, 2020; Mansell, 2023; van Dijck, 2020, 2021). These technological powers also shape hybridity and transmedial production (Chadwick, 2013; Jenkins, 2006; Papacharissi, 2014), and they act in tandem with the socio-psychological factors of individuals influencing meaning-making and the development of professional roles.

Following such an approach, in the digital media ecosystem, applying standard journalistic professional techniques, such as verifying information and reporting, does not simply equate to the sum of applied digital practices and included facts. Instead, as vividly suggested by a number of analysts for some time now, among them Jenkins (2006) and Papacharissi (2014), the concepts of transmedia production and emerging "affective news streams" are connected to multilayered features of digital information that include subjective experiences, opinions, and emotions. In other words, in digital environments, the outcomes of journalistic production must also be analyzed as stemming from internal negotiations between the assessment of digital media affordances and the ideals of responsible professionalism, combined with strategies required to verify and manage digitally sustained, opinionated discourse and ongoing self-assessment.

2.1. The Digital Media Ecosystem as a Polyvocal Scene: The Search for Journalism's Place

Digital communication infrastructures and expanding technological solutions, such as algorithmically managed data streams and AI-supported programming opportunities, create robust prospects for public expressionism in mediated discourses. However, despite the increasing trend of accessibility and content plurality, there are significant uncertainties regarding the credibility of circulating information and formed opinions. The marked increase of unverified and manipulative content, as well as the rise of dysfunctional communication forms, such as conflicts, discourse radicalization, and hate speech, are among the most evident ills of contemporary life in social media (Van Aelst et al., 2017; Yarchi et al., 2021).

For these reasons, I suggest that considering the complexity of the digital environment is critically significant in finding applicable solutions in media education. Digitally sustained media ecosystems should no longer be conceived as static systems but as fluid technological infrastructures that sustain socio-cultural networks of mediatized actors engaged in complex decision-making relationships. In most cases, these relationships are not well developed, nor are they based on clear structures and well-understood principles. Conversely, the exchanges between the content in the media, personal decision-making processes, and opinion formation are based on the interplay among several interactive systems, each of which has its own internal logic. On the

one hand, there is a system of digital media discourse that frames events and presents information in some contextual meaning. On the other hand, there are individuals who interact and actively use media to construct their own personal meanings about public events and issues. There is also a third layer, the algorithmic logic of attention management and information circulations, but in the current analysis, this digital-technological aspect of the political economy of global platforms will be less weighty.

Not only media professionals but all information users have been experiencing a consistent feeling of information overload and information exhaustion in recent years, popularly known as "knowledge resistance" (Strömbäck et al., 2022). The demand for information has dramatically increased, and information supply and consumption accelerated, especially during the years of the Covid-19 pandemic. During times of crisis and escalating existential threats, the importance of obtaining timely and accurate news increases. However, it also becomes susceptible to exploitation. As recent examples show, the influx of questionable content, conspiracies, strategic manipulations, and disinformation have culminated with the occurrence of Russian aggression and war in Ukraine, further increasing the need for people to "control" information in relation to growing geopolitical, economic, and environmental uncertainties. People of all age groups have begun using unmoderated platforms (such as Telegram channels) to get a sense of immediate news. These adapted media practices have made it easier for people to have access to crucial information and be confident in the content's reliability.

In a fluid information landscape, where different groups and interests compete for attention, conventional news media and journalism, along with the public's self-conscious awareness of multiple forms of dysfunctional content (such as disinformation, radicalism, and hate speech), are crucial for self-protection and for building resilience against disruptions and conflicts caused by manipulations and polarization (Boulianne et al., 2022; Tenove et al., 2018). However, in the context of political and social quarrels, journalists are increasingly faced with professional dilemmas regarding how to cover conflicting topics that bring together the positions of various groups in society. These challenges have been particularly accentuated in the wake of the Covid-19 pandemic: The surge of people into the digital media field as content consumers and content creators has posed new challenges for professional news organizations. As a result of this increase in communicating actors with diverging interests, journalists find it increasingly difficult to apply traditional journalistic principles in their coverage of polarizing issues. Furthermore, to contribute to general well-being, when many contested issues are on the agenda and attract diverging interests, journalists must also be aware that they are "mediatized actors"; they must recognize their own biases in information selection.

All of this suggests that the role of the media also needs to be reconsidered in times of polarization, with the suggestion that there should be a greater focus on the "views synthesizing" function. Such an approach, however, is not without consequences. Reporting and exposure to conflict-prone issues in traditional news media generates growing distrust among certain groups, further eroding their trust in conventional institutions. Journalists must implement new strategies to reduce the proliferation of alternative interpretations in peripheral and radical channels. For example, to rebuild trust in the media, a stronger emphasis must be put on journalism's communicative and even dialogic aspects (Harambam, 2021; Wasserman, 2015). This involves implementing structural changes and internal reorganizations in newsrooms by engaging with audience groups, explaining the specifics of journalistic work, and discussing journalism's role through fact-checking and information verification operations.

The literature on training strategies assisting journalists with reaching out to the public and dealing with complex, profoundly polarizing issues is gradually gaining visibility. In all such cases, a traditional understanding of newsworthiness guides journalists; however, specialized knowledge is needed on topics where different value propositions clash to avoid superficiality and the automatic delegitimization of the topic (Robbins & Wheatley, 2021). Furthermore, in response to the need for journalism to become more attentive, various forms of socially accountable journalism are also on the rise, including finding alternative solutions to current journalistic practices, such as focusing on solutions and engagement to strengthen communities (Robinson, 2017; Wenzel & Nelson, 2020) or promoting reorientations of journalism toward being more conciliatory, which means engaging in conflict mediation and online moderation (Hautakangas & Ahva, 2018). In all those cases, the professional self-understanding of the social responsibility of journalism plays a crucial role, which, from an educational perspective, is challenging to train.

One of the proposals addressed in this article is that, in various complex situations, media literacy interventions can be beneficial in assisting learners (current students and future journalists) in meeting the profession's needs. One area where advancement is evident is using media literacy interventions to combat disinformation and misinformation. The analyses that explore the outcomes and changed behaviors are especially revealing (Vraga et al., 2021). Still, what appears to be missing is the explanatory framework of advancement from one's point of view, and in such cases, "self-efficacious" learning could be seen as providing the needed mental framework to resist the potentially detrimental effects of information selection.

While a great deal of research has explored an individual's media literacy as a factor that determines their vulnerability to disruptive content (Graham, 2021; Hoggan-Kloubert et al., 2023; Tække & Paulsen, 2021), one often overlooked aspect involves the connection between epistemic factors of the learning process, such as acquired knowledge, and socio-psychological elements, including individual, agency-related aspects like self-efficacy, intentionality, and trust (Hendrickx, 2022; Paciello et al., 2023; van Zoonen et al., 2024). As will be shown in the following sections, these latter capacities are vital in the development of digital civics features among all media users (Dahlgren, 2006; Mihailidis & Viotty, 2017) and in promoting self-conscious reasoning among journalists (Eldridge & Steel, 2016), ultimately contributing to accountable and resilient professionalism.

2.2. Towards Informed Media Use: Focusing on Self-Aware Development

One of the main questions media educators are exploring in digital media ecosystems is how "informed media use" takes place and how resilience is developed.

To address all the specificities of informed media use, a process-oriented approach—defined here as "processual"—based on decision-making and self-conscious awareness development, must be considered.

As revealed, with information choices increasing in digital information environments, people must become highly selective when deciding on what media and content to focus (Strömbäck et al., 2022). The more selective they have to be, the more critical their abilities, motivations, and capacities to act and self-regulate those actions (and to sustain their self-efficacy development) will become. The more significant people's motivations and skills become, the greater the differences in media choice and information use will become.

The above process directly illustrates the complexity of socio-psychological dependencies in highly accessible and inclusive digital media environments. Individual reactions based on various factors, such as available prior knowledge and likely motivations, directly influence media access and response variations. Indeed, media literacy analysts have spent long hours testing various theoretical models to give media users greater control over complex information selections. One such scholar is James W. Potter, whose approach employing the "locus of control" framework seems to align with the self-efficacious approach (Potter, 2004). While "locus of control" directs attention to the media user's needs, "self-efficacious learning" provides an explanatory framework for developing strategically focused regulatory capacities, such as an active internal dialogue, when the received information is critically weighed, as well as the significance of developing (moral) awareness of choices in the decision-making process.

All of the above discussion suggests that resilience development must prioritize cultivating the capacity to respond to potential threats and harms by fostering critical thinking and cognitive skills, as well as a self-conscious understanding of the processes of knowledge acquisition and interpretation (Tenove et al., 2018). In digital environments, accessing information requires a user's input (Bolin, 2023), which means that people's digital actions and information choices are determined not only by their background knowledge but also by their cognitive biases and beliefs. When confronted with conflicting information or opinions, individuals experience psychological discomfort or dissonance (Sheffer et al., 2022). To reduce this dissonance and avoid being constrained by existing thought patterns, they may adjust their views or seek information that aligns with their prior beliefs. Journalists must also be aware of these challenges. For example, fact-checkers must be mindful of their immediate selections to prioritize tracking specific information in certain sources while disregarding other harmful content.

In the realm of journalism education, the development of self-efficacious learning must be foreseen as a socio-constructivist process that progresses by enhancing an individual's awareness of their own learning and the principles of professional communication. Professional thinking and (ethical) decision-making cannot be prescribed or predicted. Journalism students should develop these capabilities during (ethical and moral) deliberation and value clarification moments when performing regular information selection tasks, just as individual citizens do. The difference for journalists is that they follow professional routines, but they still may be influenced by their existing beliefs, especially if they are unaware of them.

The feature of "self-efficacy" is particularly significant here, as it determines human agency characteristics as defined by Bandura (1991, 2006). It refers to an individual's belief in their ability to make informed and ethical decisions based on the available information. A related concept—often referred to as "epistemic agency"—talks about individual capabilities that primarily relate to the critical assessment of received facts. Hence, the process of information verification (and fact-checking as a specific genre to counter disinformation) must be seen as a cognitive, motivational, and emotional practice that involves verifying, judging, and decision-making based on the received information and recognized learning features. Once again, this reminds us that information processing is a multisided, personal, and emancipation-framed process. Moreover, interacting with information is a socially defined process that fosters feelings of attachment and security, which can also be defined in a professional context. Overall, the agentive features serve as foundational elements in developing professional resilience.

All in all, human agency is constituted by one's capacity and responsiveness to reality by adjusting one's behavior considering the evaluative judgments made by one's practical reasoning. If we contend that agency is the capacity to make decisions based on one's personal judgments (knowledge), beliefs, and values and to respond to digitally mediated situations, then it is critically significant to assess how people reflect on such a capacity. In other words, the question is whether people feel empowered by the surrounding media-rich reality and motivated to participate and act responsibly (not only responsively!) in mediated circumstances, or, on the contrary, they feel deprived.

What appears crucial to understand is that attentiveness to the self-aware development of professional media actors—editors, journalists, fact-checkers—is essential in all discussions about an informed citizenship. Apart from personal engagement with content and understanding digital threats, media professionals need to consider the overall circumstances and digital information ecosystem, including the sustainability and credibility of news media and groups of professionals (editors, journalists, fact-checkers) as playing a significant role in determining the quality of people's digital interactions. To ensure quality, journalists must see themselves as self-conscious agents. Self-conscious progress runs on "self-efficacy," which, in social psychology and learning situations, refers to confidence and the ability to "control" one's motivation, behavior, performance, and responses to the social environment (Bandura, 1991). In news production scenarios, controlling individual responses refers to a self-regulatory capacity that grows within high-quality learning settings (Bandura, 2006) and has the potential to be applied to real-life professional situations later on. These capacities play a vital role in journalistic decision-making, particularly in new and challenging situations in social media, when decisions must be made based on previous experiences and acquired knowledge on whom and what to trust.

3. Case Study and Methods

Journalistic professional development and daily practices are framed within specific politico-economic and social contexts determined by structural and cultural features. Likewise, journalistic culture resembles the values and norms of a general societal culture, and its professional features are shaped by a particular country's media governance, media research traditions, public awareness, and trust in the media and education institutions (Gross, 2023). The dominant media culture also shapes the responses and views of people. Available research analyses also reveal that country-specific political, economic, and media settings significantly impact citizens' capabilities to deal with and resist information disruptions, specifically disinformation. Increasing societal polarization and rising populism, as well as low confidence in news media, limit citizens' resilience to manipulative content and disinformation. Furthermore, a weak public service broadcaster and fragmented audiences exacerbate the issue (Humprecht et al., 2020, 2021).

In this section, I will provide the practical ideas testing model by giving a brief overview of the general situation of combatting disinformation in Lithuania. I will address a few significant features of general policymaking, news media responses to disinformation, and audience awareness of the issue. After that, I will proceed with explaining how the actual training sessions with journalism students were organized to test and reflect on selected media literacy interventions.

3.1. Lithuania: Country Specificities

Lithuania is a small country on the northeastern coast of the Baltic Sea, with a population of 2.8 million. Lithuania, as well as the other two Baltic countries, Latvia and Estonia, have been targets of Russian propaganda for many decades. The Cold War ended, independence was regained, and the three Baltic countries joined the European Union, but the Kremlin disinformation machine continued to target these countries. The media policy in all three countries reveals high alertness to disinformation (Balčytienė et al., 2024). Furthermore, state institutions actively promote regional institutional cooperation, and in recent years, adequate regulatory solutions have been developed to counteract its detrimental effects (see, for example, Bleyer-Simon et al., 2024). In Lithuania, the media scene is viable, though it still faces enduring challenges in ensuring high-quality media operations in a small state. In the linguistically restricted media market, the concentration of media ownership appears unavoidable, posing significant challenges to the autonomy and survival of predominantly small regional and community media outlets (Balčytienė & Jastramskis, 2023; Jastramskis & Balčytienė, 2024). Though the number of professional fact-checking journalists remains small, in Lithuania three media newsrooms are signatories of the International Fact-Checking Network codes and highly engaged in fact-checking operations. Many reporters also foresee that being active in media education initiatives must be considered a significant professional responsibility (Jastramskis et al., 2024). Still, despite the growing concern about the detrimental effects of disinformation, the general population's ability to spot and verify online sources yields some worries. One of the Eurostat surveys shows that only 1 out of 10 Lithuanians opted to check suspicious online information ("How many people," 2021), and this result is despite the fact that many of them are confident in their skills to identify disinformation. Eurobarometer surveys suggest that people in the Baltics are more often confronted with disinformation than in other European countries, and close to 60% of respondents boldly acknowledge that they are confident in their ability to recognize disinformation (Eurobarometer, 2022).

3.2. Journalism Training Arrangements

The research question for the study was defined broadly, focusing on creating learning conditions and practices that promote self-awareness and the responsible development of participants. The study was arranged to examine self-efficacious learning features and the norms young professionals express when working on specific tasks designed with media literacy aims. An additional aspect covered the analysis of how these could assist in developing an understanding of responsible journalism.

Sixty third-year journalism students participated in the study. Students had one three-hour session per week throughout the semester, initially structured as a mentored workshop module. The experimental study was organized as part of the four-month course that included several theoretical lectures delivered by invited speakers and experts. The lectures covered disinformation and strategic information operations, news media management, responses to disinformation with fact-checking tools, and an overview of changing journalistic functions during crises.

Media education interventions were developed as a guiding framework to connect all of these diverse actions (lectures, discussion panels with experts, practical testing, and reflective sessions) into a logical sequence. Media literacy-aimed tasks were designed to improve journalism practices of attentive information source analysis and facticity verification. One of these was a lateral reading strategy, initially

developed by Stanford University professors and experts. The concept of lateral reading, and the overall pedagogical framework, emphasizes agentic features development of personal engagement and commitment, connecting self-awareness features with the intentionality to act (Bandura, 1991, 2006). A selected session with illustrative insights was designed to explain the logic behind this particular pedagogical intervention and media literacy approach for students.

In essence, lateral reading is based on a simple strategy for verifying information (Breakstone et al., 2021, 2024; McGrew & Breakstone, 2023; Wineburg et al., 2021), which resembles the work methods of professional fact-checkers. Such a "reading" strategy is often contrasted with vertical reading—a strategy people typically use when reading texts continuously. Vertical reading is somewhat representative of the continuous browsing of newsfeeds on social media. Conversely, lateral reading is promoted as a strategy that employs higher-level cognitive processes, emblematic of questioning and other strategies that align with the cultivation of internal dialogues, resembling what cognitive psychologists have defined as "hypertextual" reading (Balčytienė, 1999), linked with associative thinking and constructivist learning (Jonassen, 1991). It is a "slow" reading technique that requires the user to continuously question, which resembles an internal dialogue, and assess perceived information by noticing and identifying "textual claims" and facts and verifying them to build trust. Essentially, the strategy is built on a simple technique of web-based reading. When encountering new, unclear information, the reader should open a new search engine window to check the validity of the source. Following the inspection, the reader returns to the original information item and continues the reading and assessment procedure. Meanwhile, all the checked web sources remain open, and sometimes it may happen that attentive information users are working with dozens of websites open in parallel. In this case, one may suggest that the number of open websites reveals quantitative features of the analysis, such as showing the depth of analysis. While an intuitive strategy, the method is less applicable to social media apps.

As mentioned, lateral reading relies on information verification and directly builds on the working practices of fact-checkers. Two additional notes must be considered in clarifying this method's essence. First, the lateral reading strategy has a didactic idea that suits the application of the approach to various transmedial contexts, not just situations involving textual information processing. Specifically, lateral reading allows for going "beyond" what is directly visible (textual or visual information); it seeks activation of internal thinking and active questioning, which reveal higher-order skills and contribute to developing accountable and resilient professionalism. A second note is that the discussed experiment primarily looked for signs of self-efficacious learning and did not aim to test the ability to discern (dis)information; hence, major attention was directed to individual advancements on that side.

3.3. Data Collection and Thematic Reflexive Analysis

To register self-efficacious learning and gain deeper insights into the process while working with the proposed schemes of information verification, students were required to maintain reflective diaries with three specifically formulated questions, recording their responses to the method's applicability, strengths, and their personal feelings regarding internal struggles. These reflections were documented as post-training assignments, answered after the training course. Responses were compiled into a corpus of student answers and subjected to qualitative analysis.

To address the research question of identifying the development and awareness of specific characteristics of the tested media literacy intervention and emergent professional norms, it was decided to apply thematic reflexive analysis (Braun & Clarke, 2006; Nowell et al., 2017). This form of analysis was chosen to uncover specific aspects of the individual knowledge development rooted in diverse experiences when study participants were required to reflect on the media literacy method and its features, as well as their progress with emerging norms (Gagrčin et al., 2022), ease of learning, and transferability of acquired knowledge to others.

Overall, the thematic analysis required a focused and structured approach. As a first step, students' responses were retrieved from self-reflection diaries, which had a predefined structure with specific guiding questions requiring students to reveal their authentic experiences about the applicability of the chosen lateral reading method. The insights provided by students for each question were limited to one paragraph. This formed the basis of the data set.

The students' answers were further subjected to thematic analysis, subsequently identifying and organizing the identified "themes" that signaled "self-efficaciousness" within the data set. This approach appeared especially useful for summarizing the dominant features of self-efficacious responses identified in the data set, such as the students' critical reflections on their learning capacities, which showed features resembling regulatory aspects, intentionality to continue working, and possibilities for "knowledge transfer" (see Table 1).

The analysis created a detailed view of specific aspects of the applied intervention. Identified themes provided detailed insights into specific, question-driven data. It was also a highly engaging analysis process: While reading students' responses, new research focuses evolved from reflective thinking, interest, and growing insights about the analyzed issue. By deductively concentrating on students' self-conscious thinking, the researcher could identify the norms that guided students' actions.

4. Results: A Brief Examination of How Meaning Is Created When Using Media Literacy Interventions

The learning journey revealed significant enhancements in students' self-efficacy assessments, particularly in terms of their overall awareness, such as critical thinking skills, knowledge of fact-checking tools, and their understanding of the national information ecosystem. Epistemic features in the learning process were revealed in panel discussions with experts and practical settings when students were assigned practical fact-checking tasks.

The acquired self-efficacy capacities enabled journalism students to reflect not only on their existing information habits and cognitive biases but also on the most effective solutions and methods for journalism training, incorporating media literacy interventions to address reasoning patterns while dealing with disruptive content. When referring to the benefits of lateral reading, students talked about the activity as a media literacy strategy. As revealed (see Figure 1), a variety of norms signifying self-efficacious learning and contributing to professional character traits were identified and grouped into strategy clusters of Empowering (Mobilizing Capital, Individual Orientation & Responsibility, Knowledge Sharing & Transferability) and those requiring Perseverance (Critical and Caring Attitude).
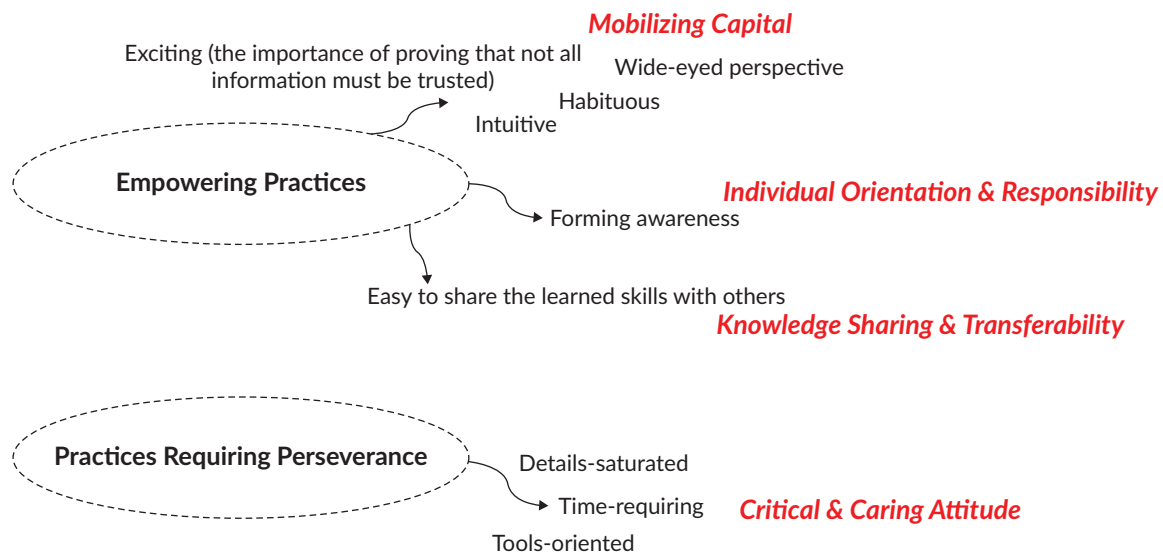
Figure 1. Self-efficacious learning norms that were derived from identified and coded assessments of progress.

Open classroom sessions with students revealed lateral reading to be a specifically engaging intervention. It is easy to understand and operate within real-life situations, as its functionality is built on intuitive responses. Furthermore, it also encourages the development of "self-control" through continuous self-reflection, which is particularly important for building awareness and resilience.

The students' responses exposed varying Empowering characteristics of the strategy. One group, defined as Mobilizing Capital, identifies features of lateral reading that students described as relying on intuitive, habitual (routine) forms of professionalism, which generate excitement and require having a wide-eyed perspective on the addressed issue. The other two groups—Individual Orientation & Responsibility and Knowledge Sharing & Transferability—rely on awareness building and skills transfer to new situations. Perseverance is a character trait that runs on the norm of having a Critical & Caring Attitude, which is essential for developing resilience. A brief example of how certain features were identified in journalism students' responses is presented in Table 1.

As provided examples show (see Table 1), in digitally mediated situations, such as accessing information on social networks, the agentive aspect of mental actions is dependent on changing media conditions and the association between acquired knowledge and motivation (feelings of excitement and other expressed reactions). Knowing what information verification is and seeking to define it, understanding the pedagogic reasoning behind the strategy and how it can be used to engage readers, and developing a personal view of the practice, appear to be especially beneficial in the learning process, as revealed by the study participants. Briefly, awareness of one's knowledge structuration assists in developing greater regulatory capacities and, thus, resilience. This applies to all users, not just journalism professionals.

Table 1. Student feedback on the lateral reading strategy.

Selected examples and quotes	Explanations of groups of norms	Strategy variations towards character development
Even before studying the subject, *I used to do something similar intuitively*—when I read a news item that seemed to contain inaccurate information, I would look for alternative sources, trying to trace the authors and the sources cited. In this course, I managed to define this concept, this process, as a natural, existing anti-disinformation tool. (Andrew) I learned more about the visibility of disinformation; [lateral reading] seemed quite understandable, but I had never thought before that *there are so many ways to find the truth.* For example, programs that help to establish the credibility of a video, side-reading, and identifying manipulation, even though the information presented may be accurate. (Regina)	Mobilizing Capital (guiding development of routine forms of professionalism, which generate excitement and require having a wide-eyed perspective on the addressed issue)	Empowering
The side-reading method [lateral reading] has become my primary fact-checking tool, which *I have to use in practice when I encounter possible misinformation* on the internet or in the media....I was a bit skeptical about the method when I first became familiar with it, but once I started to put it into practice, I realized its value. With a slightly more experienced perspective, I also had to take a fresh look at the concept of media literacy. (Andrew) Lateral reading is a new term, but I have used it even before without realizing it because it was always *interesting to check different information and see if it was really true.* (Regina)	Individual Orientation & Responsibility (forming awareness)	
I have noticed that it is generally quite challenging to reprogram older people (parents, relatives) with whom I have spoken on the subject, *but it is certainly worth the effort* to make society more educated and "media literate." (Andrew) *I will certainly continue to do so* [i.e., apply lateral reading] in the future because it helps to ensure greater reliability, and, for me at least, it is the curiosity to find more and more information that drives me to do more and more. (Regina)	Knowledge Sharing & Transferability (skills transfer to new situations)	
I think that *I will have to use this method* of checking "slanted" information in my everyday life, probably for the rest of my life without exception. (Andrew) On the positive side, you can find out quite quickly many different aspects of information that are distrustful. On the negative side, *it sounds complicated until you show someone else or try it yourself.* (Regina)	Critical & Caring Attitude (essential for the development of resilience)	Perseverance-focused

5. Conclusion and Discussion: Towards Responsible and Resilient Professionalism

Discussions about improving media literacy to build societal resilience often focus on the need to develop a broad range of capacities, including digital skills and cognitive abilities, to support individual empowerment and enable individuals to cognitively respond to potential information-related threats and harms (Hall & Lamont, 2013). Practicing such capacities requires individual agency and focused engagement with

information (Hendrickx, 2022; Hofmann, 2019; Marin & Copeland, 2022), which refers to the intrinsic motivation to become informed on various (political and social) issues.

As discussed in the theoretical section of this article, engagement with information processing, however, relies not only on cognitive knowledge but also on other factors. Decision-making in media-rich and information-saturated environments is much more complex than mere information retrieval and facticity verification. As is known, people's information use is driven by various motivations, including epistemic, social, and existential needs (Poier & Suchanek, 2024). Nevertheless, as revealed, regardless of people's engagement, media education instructions can be particularly beneficial for promoting self-conscious information processing, leading to the development of self-regulatory capacities. The latter is specifically needed to navigate complex media ecosystems responsibly.

Digitally infused structural developments of global platforms, along with algorithmic and AI-driven data organization and information structuration, create new social implications, many of which are yet to be identified (Hicks et al., 2024). Algorithms extensively manage access to news and relevant political information. Additionally, people lack the skills and awareness capacities to communicate with others in a manner that involves dialogic features, including questioning and attentive listening. All of these requests demand closer attention to agentive aspects, such as values and beliefs, intentions, and actions.

In such situations, instructional interventions should focus not only on the epistemic side of knowledge acquisition, as people may have false prior beliefs, but also on self-efficacious performance with the necessary self-regulatory capacities required to balance one's responses. New concepts, such as lateral reading, in training future journalists appear especially valuable in supporting self-awareness, which is highly needed for professional social responsibility development. These models provide practical interventions and offer avenues for future professionals to notice and voice their concerns while seeking ways to overcome pressures.

I began this article's discussion by suggesting that the media ecosystem's complexity demands that we collectively devise new strategies for informed media use. We need to find answers to adequately respond to the influx of manipulative content and the choices that must be made.

By drawing attention to self-efficacious learning features, my intention in this article is to issue a call to action to pay more vigorous attention to information users and their learning capacities. As noted by the classics of media literacy proponents, such as Potter (2004), and contemporary analysts of countering disinformation (Balčytienė & Horowitz, 2023; Harambam, 2021), we need a stronger, human-centered voice and a paradigmatic change in how we view responsible and resilient actions in digital information environments. Specifically, in addition to explaining how media environments work, what disinformation is, and guiding media users to channels of trustworthy news, we must provide them with adequate capacities to comprehend their learning features and, ultimately, help themselves.

As proposed here, media professionals must also become active partners in such a process, and conventional professional journalistic routines, such as information verification, may be turned into inspiring strategies for ordinary citizens to adapt to their everyday information use situations. It is evident that for such a process to take place, several conditions must be satisfied. Thus, more efforts must be dedicated to finding pedagogic

approaches to lead media users (and journalists) to learn about their values and moral standing and how these factors determine decision-making.

First, it is essential to recognize that selecting and communicating information, along with the subsequent process of meaning-making, involve complex aspects of information processing. A complex interplay of technological features of digital media and information-related aspects influences digital content processing. Simply put, individual activities involved in knowledge construction, such as decision-making and assigning meaning, transcend individual cognitive functions. Meaning-making and internalization of knowledge require closer research to focus on individual socio-psychological processes and community interpersonal relations, all of which play a role in information processing and (professional) identity construction (Harambam, 2021).

Second, in digital environments, it becomes paramount to have a critical perspective on how one's information choices and learning are influenced by media context and to be aware of how individual actions can impact the responses of others. In this regard, in searching for new models of dialogic, attentive, and caring journalism (see, for example, calls expressed by Kavada, 2024; Papacharissi, 2014; Wasserman, 2015), a human-centered approach seems vitally significant in journalism education to explain individual information processing features.

Third, focused scholarly analysis is required to provide educational instructions for developing professional awareness. This involves a focus on agentive features, such as moral awareness, which underlies the meaning-making processes. Therefore, teaching modern professionalism requires focus on the journalists' decision-making actions of accessing and producing online information, recognizing that such a process includes not only the analysis and production of content—such as knowledge and facts—but also the sharing of attitudes and (moral, ethical) formations embedded within these acts and experiences. Hence, for contemporary journalism, it becomes critically important to learn how epistemic tradition and social culture become locally embedded and institutionalized, what qualitative communication principles (for example, transparency and accountability) these acquire, and how these are adopted by professionals and accepted, maintained, and shared by other groups of people.

Conflict of Interests

The author declares no conflict of interests.

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