

Article

Mapping the core dimensions of information literacy in the critical and workplace domain: A thematic analysis

<http://dx.doi.org/10.11645/19.2.768>

Dijana Šobota

Faculty of Humanities and Social Sciences, University of Zagreb. Email:
dijanasobota@gmail.com. ORCID: [0000-0002-4471-8976](https://orcid.org/0000-0002-4471-8976).

Abstract

Despite its transformative promise, information literacy (IL) remains constrained by its narrow locus and siloed nature. This study confronts this by synthesising insights from critical (CIL) and workplace information literacy (WIL) domains, thereby advancing the conceptualisation of the critical workplace information literacy (CWIL) construct. It asks: how is IL conceptualised within these domains and what are its core elements across them? A reflexive thematic analysis of 54 peer-reviewed articles retrieved from Scopus through a PRISMA-informed process was conducted, employing a hybrid deductive-inductive coding strategy, guided by a critical-theoretical framework. Five main themes—core dimensions of IL across CIL and WIL—were constructed: functional skills and competences, cognitive skills and competences, social skills and practices, critical consciousness, and critical-pedagogical approaches. Findings reveal shared and divergent elements of CIL and WIL, confirming persistent silos. Both domains share a common baseline of generic functional skills, critical thinking, and the conception of IL as a socially situated information practice and a way of knowing. They diverge in teleology, with WIL emphasising functional, utilitarian-economistic conceptions, while CIL foregrounds political, emancipatory and critical-pedagogical dimensions. The study unpacks nuanced layers of IL, such as critical action, allowing for their integration into the emerging CWIL construct. Integrating functional and critical dimensions holds potential for advancing IL theory and conceptual coherence and fosters its teleological reconceptualisation as an action literacy capable of driving real-world impact and workplace transformation.

Keywords

critical information literacy; Croatia; information literacy; workplace learning

This [Open Access](#) work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#), allowing others to share and adapt this content, even commercially, so long as the work is properly cited and applies the same license. Copyright for the article content resides with the authors, and copyright for the publication layout resides with the Chartered Institute of Library and Information Professionals, Information Literacy Group.

Šobota. 2025. *Mapping the core dimensions of information literacy in the critical and workplace domain: A thematic analysis*. *Journal of Information Literacy*, 19(2), pp. 4–33.
<http://dx.doi.org/10.11645/19.2.768>

1. Introduction

Information literacy (IL) discourse has been dominated by affirmative assumptions about its inherently positive effects (Hicks & Lloyd, 2022) and the “moral imperative” which imbues IL with various social aims (Hicks et al., 2023, p. xix). Such aims include IL as vital for workplaces, communities and education (Bruce, 2015), progressive change (Johnston et al., 2018), active citizenship (Webber & Johnston, 2017), social justice (Goldstein, 2020), and workers’ rights and decent work (Šobota, 2023, 2024; Šobota & Špiranec, 2022). These emancipatory goals have marked a “teleological turn” in IL introduced by the critical information literacy (CIL) subdomain (Bezerra & Schneider, 2023, p. 57; Šobota, 2024, p. 40).

Yet, IL’s real-life relevance and interdisciplinary recognition remain limited. It is mainly studied within librarianship and higher education and is poorly recognised outside those confines (Goldstein, 2020; Hicks et al., 2022; Secker, 2023; Webber & Johnston, 2017; Widén et al., 2021b), including in workplace settings (Cheuk, 2017; Williams et al., 2014), where it originated and holds particular relevance (Bruce, 1997). The lack of multidomain and interdisciplinary engagement has led to silos and the “ghettoization” of IL (Šobota, 2024, p. 39), constraining its (theoretical) development and reducing it to an academic abstraction (Webber & Johnston, 2017; Whitworth, 2014), with limited wider application (Hicks et al., 2022; Whitworth, 2020; cf. Onyancha, 2020).

Moreover, the theoretical progress and the transformative agenda and potential of (critical) IL are constrained by a disconnect between aspirational rhetoric and “the prevailing hegemonic and economistic narrative” (Šobota, 2023, p. 151) that favours corporate over human interests (Jackson & Slade, 2008, p. 38). Such perspectives neglect sociopolitical dimensions of information (Cope, 2010; Gregory & Higgins, 2013; Mehra et al., 2006; Šobota, 2024), as well as the silenced and marginalised voices, including those of workers and trade unions (Giroux, 2001; Šobota & Špiranec, 2022; Yasukawa & Black, 2016).

This tension is most evident in two IL domains which have developed along divergent trajectories but are both crucial for social justice in the workplace: workplace information literacy (WIL) and CIL. WIL integrates critical dimensions in a limited fashion (Šobota & Špiranec, 2022), typically adopting a functionalist lens focused on information practices in support of organisational performance and employer-centred aspects (Šobota, 2023; Widén et al., 2021b). Its scope is bounded by the professional focus (Hicks, 2021) and physical and conceptual space of the workplace (Milosheva et al., 2021), with little attention to sociopolitical context or worker agency (XXX, 2023). CIL, conversely, maintains a transformative agenda but remains focused on epistemic and pedagogic issues, failing to fully evolve into what Zurkowski termed as “action literacy” (as cited in Kelly, 2023) with a clear purpose to effect positive change (Šobota, 2024). In different ways, both domains leave IL under-conceptualised in terms of its real-world value and transformative potential in the workplace.

Overcoming these gaps calls for an integrative approach that synthesises existing theories and research (Bruce, 2016), ensures conceptual coherence (Todd, 2017), and situates research in real-life context, that is in “politics”, outside the “neutral” academic setting (Critten, 2016, pp. 5–6). This includes deeper engagement with ontological issues, critical-social theories, and concepts such as decent work (Šobota, 2024), through multisectoral, multidomain research and stronger relations with the actors outside the academia (Crawford, 2020; Irving, 2020).

This attempt has been undertaken by the introduction of the critical workplace information literacy (CWIL) construct, proposed by Šobota and Špiranec (2022) and further explored in Šobota (2023). CWIL situates research in the context of workers' rights and explores the construct's relevance to decent work. It sits at the intersection of CIL and WIL and aims to integrate their strengths while addressing their blind spots by carving out the currently missing critical dimensions and perspectives.

To advance this agenda and contribute to the ongoing conceptualisation of CWIL, this study maps how IL is understood within both CIL and WIL domains. Specifically, it asks: *How is IL conceptualised and operationalised within these two domains, and what are its core elements across them.* Exploring the overlaps and the divergences between CIL and WIL is essential for a fuller understanding of IL. Their points of convergence reveal shared conceptual ground, while divergences expose unaddressed critical dimensions and highlight the respective blind spots of each domain. Moreover, exploring this in-between space is key to conceptualising a more holistic and ethically aware form of literacy for the modern worker—one who is both effective in their role and critically conscious of their impact. Clarifying these dynamics contributes to IL's theoretical and conceptual coherence and consistency (see Šobota, 2024) and identifies the potential for mutual reinforcement between the two domains. By integrating the constitutive dimensions embedded in the two domains, the findings provide a stronger foundation and inform a conceptual framework for CWIL.

This analysis proceeds from the understanding of "critical" grounded in critical theory and pedagogy: a (self-)reflexive engagement with power structures and ideological formations, coupled with a transformative orientation toward emancipation and social justice. This interpretative lens shapes how the study examines CIL and WIL, particularly regarding their treatment of power, agency and social change.

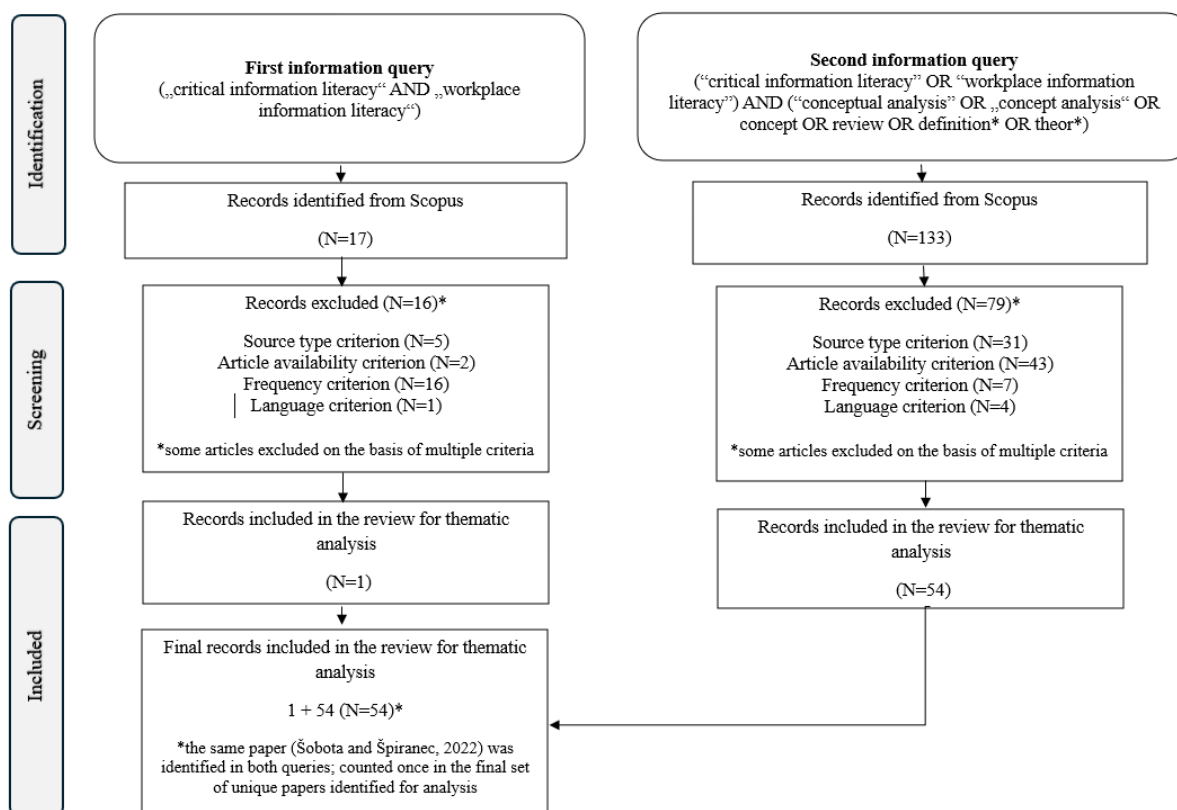
2. Methodological approach

This study employed reflexive qualitative thematic analysis (Braun & Clarke, 2006, 2019, 2022; Braun et al., 2019; Clarke & Braun, 2021; Hayes, 2000; Terry et al., 2017) to review literature from CIL and WIL. A PRISMA-informed approach (Moher et al., 2009) was used to construct the sample, following Robinson's (2014) guidelines for qualitative sampling.

A total of 150 records were identified through two Scopus queries conducted on 28 June 2023. The first query was exploratory, designed to identify publications that explicitly mention both domains, thereby providing an indicative sense of how often CIL and WIL are directly cross-referenced in the literature. It used the search string ("critical information literacy" AND "workplace information literacy") and returned 17 records. The second query served as the main strategy and sought to identify the conceptual core of IL. It used the string (("critical information literacy" OR "workplace information literacy") AND ("conceptual analysis" OR "concept analysis" OR concept OR review OR definition* OR theor*)) and returned 133 records. Both searches were limited to title, abstract, and keywords, covering the period 2006–2022. The inclusion criteria were a) peer-reviewed scientific articles published in indexed scientific journals; b) written in English; c) mentioned at least one search term in the title, abstract or keywords; and d) full text was available. After applying the criteria, 54 articles were retained, only one of which came from the first query. Of the remaining articles, 33 were from the CIL domain and 23 from WIL (with two overlapping).

Articles were analysed manually to enable a high degree of intellectualisation and conceptualisation (King, 2004; Thorne, 2000), as well as creativity and fluidity in theme generation (Welsh, 2002), crucial for reflexive thematic analysis. The search process is presented in Figure 1.

Figure 1: PRISMA flow diagram (adapted from Moher et al., 2009)



The coding data set was purposively selected from the corpus data (Braun & Clarke, 2006, p. 79), with its size determined *in situ*, reflecting the emergent nature of qualitative research (Robinson, 2014; Sim et al., 2018, p. 630). The criteria of information power (Malterud et al., 2016) and conceptual density (Nelson, 2017) further guided the selection. Only text segments offering original conceptual and theoretical insight into IL and its core dimensions were coded. A hybrid deductive-inductive strategy (Braun & Clarke, 2006, 2013) was employed. While the analysis was predominantly deductive (theoretical), it was also inductive, with *in vivo* as well as semantic codes developed, with occasional latent coding used to identify implicit, conceptual level of meaning. The six recursive phases of reflexive thematic analysis (Braun & Clarke, 2006, 2020; Braun et al., 2019; Terry et al., 2017) were followed, guided by a critical-theoretical framework. Findings are presented in the next section and summarised in Figure 2.

3. Findings and discussion

Five main themes and 16 subthemes were constructed, capturing the core dimensions of IL as conceptualised within the CIL and WIL domains (see Figure 2 at the end of this section). The

first query provided preliminary evidence of the siloed development of the two domains, as only 17 records were found, of which just one explicitly referenced both CIL and WIL (Figure 1). This finding was further reinforced by the thematic analysis, presented and discussed in this section. It should be noted that while the first search query provided an indicative sense of explicit cross-referencing between CIL and WIL, it cannot be interpreted as a measure of the degree of overlap (or detachment) between the domains. Its purpose was only to establish whether such direct connections appear in the literature, with conceptual overlaps and divergences addressed in the thematic analysis itself.

The constructed themes are as follows:

1. Functional skills and competences
2. Cognitive skills and competences
3. Social skills and practices
4. Critical consciousness
5. Critical-pedagogical approaches

The themes are presented and discussed with subthemes to facilitate a clearer understanding of the conceptual complexity of IL across the analysed domains. Citations in parentheses are illustrative rather than comprehensive, indicating examples where particular conceptual elements appear in the literature without aiming to capture all relevant sources.

3.1 Functional skills and competences

This theme comprises two subthemes: (1) core, generic skills and competences and (2) a utilitarian-economistic conception of IL.

3.1.1 Generic skills and competences

At its core, IL is frequently conceptualised as a set of fundamental or generic skills—particularly the ability to find, evaluate and use information, sources, tools and knowledge. This core has been part of IL's conceptualisation in both domains but framed with divergent purposes. In WIL, this conceptualisation often expands to include a distinct skill of information management. Importantly, WIL research reveals that there is no unique definition of IL nor are there unique measurement criteria; however, they do commonly focus on information-handling skills aligned with workplace practices and goals (Widén et al., 2021b, p. 34). Also in the WIL domain, IL is frequently considered “a facet of information behaviour” (Middleton & Hall, 2021), referring to efficient information seeking and use (Bird et al., 2012). In some cases, though especially in CIL, information avoidance is included as a special information behaviour strategy—what Clouesley (2021) describes as “actively pursued illiteracy” in response to bias, information abundance, or harm to solidarity.

Both domains highlight that seeking and finding information presupposes the awareness of a process of looking and seeking for information (Sayyad Abdi et al., 2013). This includes the awareness, knowledge, and capacity of recognising, understanding, defining, and evaluating the information need, defining its nature and scope and determining the most appropriate type, timing, and format of information needed. This dimension was highlighted by a number of authors, often reflecting foundational IL definitions (ACRL, 2000; ALA, 1989; CILIP, 2018). In the WIL domain, the emphasis here lies on practical applicability and purposeful and strategic use of information. Authors underscore the efficiency dimension, as well as that of strategic and purposeful information seeking (Kolstad, 2015; Middleton & Hall, 2021). Dimensions of

efficiency, purposefulness and criticality are important facets also of the skill and competence of information use, which is often paired with ethical and legal aspects (Flaspohler et al., 2007).

Information assessment—critically assessing its relevance, accuracy, validity, reliability, authority, bias, timeliness and perspective—is another core element described variously as skill, competence, disposition or reflective habit of mind (Flaspohler et al., 2007; Middleton & Hall, 2021). Assessment in the CIL domain concerns not just assessing accuracy or authority but primarily interrogating the ideological underpinnings of sources and systems. CIL literature takes a similar stance on other generic skills and competences, treating them mainly in political and transformative terms.

Overall, the persistence of generic skills and competences across both domains suggests that they form a conceptual core of IL, its baseline without which other, more complex dimensions cannot emerge. However, the analysis also shows a clear divergence between WIL and CIL. In WIL, generic skills are framed instrumentally as measurable, context-bound competences tied directly to workplace efficiency, performance, and employability. Conversely, in CIL, generic skills are conceptualised as a baseline from which to build critical reflection and socially situated practices. CIL fundamentally problematises them as insufficient when detached from the sociopolitical contexts that shape information use and reinforce power dynamics.

3.1.2 The utilitarian-economistic conception of information literacy

This subtheme, distinctive to WIL, frames IL as a set of functional skills and/or competences serving business and organisational objectives, such as innovation, efficiency, productivity and competitiveness. IL is viewed as a key competence workers must possess to contribute to organisational efficiency, adaptability, and knowledge economy goals (Ahmad et al., 2020; Widén et al., 2021b).

Emphasised competences typically include seeking, assessing, and using information, along with the competence to interact with one's information environment. This includes making informed decisions on work activities with a view of understanding and meeting business goals (Inskip & Donaldson, 2021; Lockerbie & Williams, 2019). Elements of this conception of IL also include recognising and generating business value (Ahmad et al., 2020; Naveed, 2022), which lies not solely in the information itself—as a potential asset with economic worth, a resource that supports innovation, efficiency, productivity, competitiveness and decision-making—or in the competence to assess and evaluate information in ways that align with organisational objectives. Rather, the business value also comes from the holistic process of applying information and information-related competences to achieve specific organisational outcomes. Other associated elements include cooperability and readiness for teamwork and to learn new skills—competences and dispositions framed as essential to business awareness, employability (Malafi et al., 2017) and opportunity recognition (Ahmad et al., 2020). This conception of IL is further reinforced by research suggesting positive correlations between IL awareness and organisational outcomes (Widén et al., 2021b), enhanced job satisfaction (Ali & Richardson, 2018), positive macro-effect, and an impact on innovation. IL is thus framed as integral to organisational learning and innovation (Goldstein & Whitworth, 2017, as cited in Ahmad et al., 2020,). Although IL research, especially more recent research and that within the WIL domain, highlight its contextual and situated nature, many studies also stress its transferability—the ability to apply IL skills and competences across different work settings, including their transitive effect throughout organisational hierarchies (Ahmad et al., 2020).

Such utilitarian-economistic framings are notably absent from CIL. Instead, CIL critiques them for reducing IL to functionalism and neoliberal logics that position IL, information and knowledge, as a commodity and prioritise market value over the emancipatory potential of information. CIL work often directs their critique toward “mainstream” IL research and commentary, in particular the ACRL *Standards* (for example, Cope, 2017; Šobota & Špiranec, 2022; Tewell, 2015).

3.2 Cognitive skills and competences

This theme comprises four subthemes: (1) critical thinking; (2) production of information and knowledge; (3) metacognition; and (4) (informed) learning. IL is conceptualised as a set of cognitive skills and competences—critical thinking and analysis, a way of thinking, a critical disposition, intellectual agility, and awareness of information and information environment.

3.2.1 Critical thinking

Critical thinking is a fundamental feature of IL, highlighted in both domains but framed differently. It includes the ability to critically analyse, reason, assess and evaluate information—and its implications, sources, and information environment—extending to “comprehension of an entire system of thought and the ways that information flows in the system” (Elmborg, 2006, p. 196, as cited in Dold, 2014).

In WIL, critical thinking is usually framed instrumentally as a cognitive skill and a capacity to analyse, evaluate and apply information in ways that support organisational performance, success and adaptability, balanced and informed decision-making, problem-solving and knowledge creation, often linked to enhancing efficiency and productivity (Malafi et al., 2017). Some studies tie it explicitly to managerial judgement and innovation outcomes (Widén et al., 2021a, 2021b).

By contrast, CIL situates critical thinking within a broader sociopolitical context and critique of the dominant power structures, authorities, and knowledge systems and identifying and addressing bias and systemic inequalities (Elmborg, 2006, as cited in Dold, 2014). It is closely tied to Freirean notion of conscientisation and is seen as a disposition that empowers individuals to navigate, challenge, and contribute to the information ecosystems and sociopolitical structures that shape social life. In other words, critical thinking is a political and ethical stance linked to civic agency and resistance (Angell & Tewell, 2017; Branch, 2019). This also aligns with CILIP’s (2018, pp. 3–4) definition of IL as “the ability to think critically and make balanced judgements about any information we find and use,” empowering individuals to reach and express “informed views and to engage fully with society.”

Thus, while both domains value critical thinking as central to IL, they diverge in teleology: WIL stresses the instrumental utility of critical thinking for work performance and strategic judgement; whereas, CIL foregrounds critical-theoretic approaches, that is the political, emancipatory and transformative dimensions.

3.2.2 Production of information and knowledge

Both domains conceptualise IL as the capacity to create and shape information and build knowledge and sense/meaning. Information (and IL) is not regarded solely through the prism of the ability of access, but also as a means of shaping (one’s) world and engaged citizenry, especially in the CIL domain (Cloudesley, 2021; McDowell & Vetter, 2022). Individuals are

positioned not only as information consumers but also as producers of information and knowledge, both independently and collaboratively (Rapchak, 2021; Somerville & Howard, 2008).

The subtheme also includes the capacity of creativity and uncovering new ideas (Lockerbie & Williams, 2019; Middleton & Hall, 2021). In the WIL domain this is often discussed in relation to IL as a precondition to innovativeness and meeting business aims. WIL frames information and knowledge production as pragmatic, valued for their contribution to business aims (Sharun, 2019). It also frames them as relational, highlighting collective knowledge creation and the embeddedness of information use and production in workplace social relationships (Kirk, 2004 and Lloyd, 2006, as cited in Somerville & Howard, 2008). In this view, knowledge emerges through collaboration and interaction, with access and distribution shaped by workplace hierarchies and social dynamics.

CIL, by contrast, foregrounds the constructivist approaches that frame knowledge as interconnected with social forces. Rather than valuing information and knowledge production for its economic utility, CIL problematises the politics of knowledge production and provision, asking who creates knowledge, how, and in whose interests (Luke & Kapitzke, 1999, p. 484, as cited in Hicks & Sinkinson, 2015; Irving, 2020), thereby calling attention to exclusion and privilege in information systems (Linares-Gray et al., 2022) and structural inequities embedded in information production and organisation (Marsh, 2022).

3.2.3 Metacognition

Metacognition, a higher-order competence or the awareness of one's cognitive processes and their role in shaping interactions with information, is consistently highlighted across both domains. This encompasses the awareness of one's meaning- and sense-making ability and practices (Langan, 2021; Middleton & Hall, 2021), recognition of cognitive dissonance (Hicks, 2014; Wittebols, 2020), and awareness of the inadequacy of (one's own) knowledge. It also includes the ability to organise, assimilate, synthesise, connect, and summarise information (Lockerbie & Williams, 2019; Naveed & Kamran, 2022), making balanced judgments and decisions, and strategic application of information to solve problems (Ahmad et al., 2020; Inskip & Donaldson, 2021).

WIL typically frames metacognition in pragmatic and instrumental terms, linking it to reflective practice or professional self-evaluation, enabling workers to adapt, improve performance, or to support knowledge creation, innovation, and effective participation in organisational life (Bird et al., 2012; Middleton & Hall, 2021). In the workplace context, metacognition often emerges through embodied, collective experiences rather than individual cognition alone, reflecting Lloyd's work. Several authors also stress the awareness of how one's cognitive processes shape interactions with information and information sources (Malafi et al., 2017; Rapchak, 2021), and the ability to recognise and understand information need. Some conceptualisations also include the "ethical mind" (Gardner, 2008, as cited in Lockerbie & Williams, 2019)—the cognitive ability of understanding the ethical aspects of information and the information environment and their evaluation as ethical practice (Widén et al., 2021b; Sharun, 2019).

In the CIL domain, metacognition is often conceptualised as a critical reflection on one's own assumptions, biases, and ways of knowing. Here, reflection is not just an internal cognitive process or a self-improvement act but a political and ethical act, enabling individuals to locate their perspectives within broader systems of power. These conceptualisations reflect the

influence of both CILIP's IL definition (2018) and, particularly within CIL, Freirean pedagogy, which encourages individuals to "read themselves"—to become critically aware of their cognitive processes and the sociopolitical structures that shape their perspectives. Furthermore, the emphasis on metacognitive reflection aligns with arguments that without developing "our inner information capacities, we fail to become fully information literate" (Ward, 2006, p. 22). This also supports calls to integrate reflection into conceptions of IL (Corrall, 2017; Critten, 2016), as is already the case with the conceptions of CIL (Kos & Špiranec, 2015).

3.2.4 (Informed) learning

This subtheme conceptualises IL as a practice which comprises the activity and capacity of learning, and which contributes to informed, lifelong learning. The literature treats IL and learning as interrelated, conceptualising IL as a practical competence (Malafi et al., 2017), enabling engaged (Torrell, 2020) and affective (lifelong) learning (Hicks, 2013), as well as the mastery of (professional) knowledge and crafts (Lockerbie & Williams, 2019). Drawing on Bruce's work (Bruce, 2008; Somerville & Bruce, 2017), several authors define IL as a capacity and a driver of informed learning—using information for learning purposes (Middleton & Hall, 2021; Phillips & Whitworth, 2022). The workplace, in particular, is viewed as an important space for learning and knowledge creation (Lloyd, 2011, as cited in Middleton & Hall, 2021), where information use is embedded in practice and contributes to professional competence. This especially pertains to WIL, where IL is closely tied to workplace learning, treated as interrelated competences that enable mastery of professional knowledge, skill-building, and growth.

In both domains, learning is sometimes framed through communities of practice, where IL develops via participation in shared (workplace) practices and social learning (Hicks & Sinkinson, 2015; Sayyad Abdi et al., 2013). IL is also associated with the concept of the "disciplined mind" (Gardner, 2008, as cited in Lockerbie & Williams, 2019), representing a disposition of readiness for learning, self-development and skill-building (Lockerbie & Williams, 2019; Naveed, 2022). IL is thus not only a set of skills but a learning activity itself—or a by-product of learning—helping individuals address challenges such as information overload, misinformation, and disinformation (Phillips & Whitworth, 2022).

In the CIL domain, IL is conceptualised as a transformative activity that enables individuals to learn with and through information in ways that foster agency and the capacity to critique dominant narratives and power structures (Torrell, 2020). Overall, across both domains the cognitive dimension positions IL as a way of knowing, a disposition that underpins decision-making, problem-solving and knowledge creation. Yet the analysis shows a tension between cognitive pragmatism in WIL, tied to efficiency and innovation, and critical reflexivity and a political stance in CIL, oriented towards emancipation and resistance.

The cognitive and functional skills and competences described here are characteristic of, and reflect the influence of, psychological-cognitive approaches and the autonomous model of literacy (Street, 1984) which frames literacy as a contextually independent cognitive capacity linked with a person's intellectual capacities and is his/her sole responsibility (Lonsdale & McCurry, 2004). In contrast, the following three themes—social practices, critical consciousness, and critical-pedagogical approaches—draw on sociocultural traditions and the ideological model of literacy (Street, 1984), which treats literacy holistically, as a social practice inseparable from its context and as a matter of social responsibility.

3.3 Social skills and practices

The third theme comprises the understanding of IL not primarily as a set of skills but as a form of socially situated practice. The theme is defined as a set of social skills of networking and cooperation, and a constellation of sociocultural activities and interactions with information, information sources, and environment, as well as a holistic, contextually dependent information practice. It encompasses three subthemes: (1) social interaction and collaboration; (2) information practice; and (3) contextuality and situatedness.

3.3.1 Social interaction and collaboration

This subtheme refers to IL as a relational and collaborative practice grounded in sociocultural interaction. It involves social skills of networking and cooperation, sociocultural social and collective practices, actions and interactions with information, information sources, and environment. A constitutive element of IL are “human competencies” (Malafi et al., 2017, p. 84)—the skills and abilities to interact, network, and cooperate with people. Both domains view IL as inherently social and relational: WIL highlights collaboration as a mechanism for workplace efficiency, cooperation, and learning, while CIL frames it as a means of fostering awareness, democratic participation, and solidarity.

The analysed papers from the WIL domain conceptualise IL as a relational, sociocultural, collective practice, drawing heavily on practice theory and especially on the work of Annemaree Lloyd (2004, 2005, 2007, 2010, 2012). Social relationships and interactions (socialisation processes) are seen as a key mechanism through which IL is developed, reproduced, and constituted (Hicks, 2014; Lloyd, 2014). As a collaborative practice, IL entails the ability to engage in social information behaviour—efficient social networking for gathering, finding, and sharing information (Carter et al., 2018; Hepworth & Smith, 2008; Somerville & Howard, 2008) to solve work-related problems. Several WIL studies also highlight interpersonal social competences such as developing and maintaining functional relationships (Inskip & Donaldson, 2021), teamwork (Hepworth & Smith, 2008; Raish & Rimland, 2016), and the ability to identify, connect, and work efficiently with others.

In the CIL domain, the emphasis is on social interaction as a critical and emancipatory practice. CIL foregrounds the collective process of building knowledge, community, and solidarity (Cloudesley, 2021), as well as appreciating different cultural perspectives (Lockerbie & Williams, 2019). Social interaction is framed as a means of fostering critical awareness and democratic participation, with dispositions of cooperability and collaboration treated as an “essential component” of CIL (Dold, 2014).

3.3.2 Information practice

This subtheme pertains to the conceptualisation of IL as a holistic sociocultural information practice, rather than (only) a cognitive or rational information practice, that is, a set of unrelated basic skills. IL is understood as a complex construct composed of a constellation of intertwined practices, competences, skills, dispositions, and sociocultural purposeful activities and interactions with information and information environments, which jointly reflect the social order and knowledge domains, as well as enable ways of knowing them (Lloyd, 2014). This represents a shift from an emphasis on an individual and his/her skills to members of a community (Savolainen, 2007) and to “how information is given meaning, evaluated, and used within different social practices” (Sundin, 2008, p. 28).

In the WIL domain, information practice is typically conceptualised in relation to Lloyd's concept of the information landscape. A number of authors, building on Lloyd's research (2004, 2005, 2007, 2010, 2012), emphasise that expert information practices imply the ability of understanding and knowing the entirety of the information landscape, including multiple information modalities, sources of information, and situated practices, as well as social, procedural, and physical information that constitutes an information universe (Bird et al., 2012; Hicks, 2013, 2014). WIL studies highlight the embeddedness of IL in social and organisational routines, positioning workers' ability to access and use information as inseparable from roles and material contexts.

A dimension found in both domains, although predominantly in CIL, is the ability of understanding social-discursive, material-economic, and social-political factors that impact the information landscape (Lloyd, 2014; Šobota & Špiranec, 2022; Tewell, 2015).

Within CIL, information practice entails a more critical encounter with information landscapes. Here, the conception of IL involves a broader perspective to literacy and an integrated approach to understanding information and the entire information environment, where IL encompasses a complex set of behaviours, attitudes, critical thinking, and interactions aimed at engaging critically in information landscapes and reshaping them in more equitable directions (Dold, 2014; Hicks & Sinkinson, 2015; Tewell, 2016).

3.3.3 Contextuality and situatedness

This subtheme further develops the idea of IL as inherently contextual and situated. Unlike the works which stress the functional dimension of IL and the generic character of skills, as well as their transferability across situations/contexts, the papers that are classified under this main theme and subtheme, primarily from WIL, reject the notion of a universal definition of IL. Instead, they posit that IL manifests differently depending on the context, because information practices of gaining experience of the context (the information environment) are specific to the setting (Lloyd, 2014; Lockerbie & Williams, 2019). Integral element of such a conception of IL, observed in both domains, is the ability to understand information as a social construct with a specific purpose (Swanson, 2005, as cited in Hicks, 2013; Warren & Duckett, 2010).

In the WIL domain, contextuality is most strongly theorised through Lloyd's (practice-based) work: IL is understood as "a way of knowing" an information landscape and environment (; Hicks, 2014; Middleton & Hall, 2021; Lloyd 2017, as cited in Widén et al., 2021b) and as a situated, socially mediated and contextually dependent experience, a situated engagement with information, which acknowledges the individual's experience of IL but also the social and cultural contexts that affect practices. This perspective highlights adaptation to organisational environments and the tacit knowledge embedded in everyday workplace routines.

CIL literature shifts emphasis from contextual adaptation to the politics of context. It stresses the sociopolitical and dialogic construction of information and knowledge. This also includes the awareness of the inherently situated nature of information (seeking and evaluation) and knowledge (Marsh, 2022; Tewell, 2016) and of what constitutes knowledge in a certain setting and information practice, that is, the awareness that it is dialogically constructed and shaped by the institutional context and social roles of all the involved (Eckerdal, 2011; Lloyd, 2007; Lundh & Limberg, 2008).

While both domains reject decontextualised notions of IL, they differ in emphasis: WIL conceptualises context as an environment to be navigated and learned through practice,

shaping how one interacts with and experiences information, while CIL frames it as a contested political space that requires interrogation of the sociopolitical forces that shape it. In sum, the social skills and practice theme reveals that IL is deeply socially embedded and inherently relational. It comes into being through social practice and constructs meaning through collaboration and discursive negotiation, with WIL emphasising collective adaptation to organisational change and CIL stressing practice as resistance and empowerment.

3.4 Critical consciousness

This theme refers to critical reflection and awareness of the origin and functioning of information, of the political, economic and social aspects, ideologies and power dynamics, to critical self-reflexion and awareness of one's own positionality, agency and agentic capacity, as well as to addressing and resisting inequality, the status quo and neutrality through transformative-critical action.

Critical consciousness is defined as a multidimensional construct comprising (1) critical (sociopolitical) reflection, (2) critical self-reflection and (3) critical action.

3.4.1 Critical (sociopolitical) reflection

In the CIL domain, critical (sociopolitical) reflection is positioned as central to IL. It aligns closely with the concept of political literacy (Buschman, 2019; Smith, 2013), and refers to the competence, skill, and disposition of critically reflecting on the political, economic, and social aspects, ideologies, and power dynamics in the information environment. Authors emphasise the importance of a discursive approach to information and power relations (Šobota & Špiranec, 2022; Tewell, 2015). This involves the comprehension of power structures, privileges, structural issues, and sociopolitical dynamics and politics of information and the ways in which they shape everyday discourse and the information ecosystem (Cope, 2017; Langan, 2021; Marsh, 2022). Aimed at developing the ability to navigate and resist ideological structures, critical (sociopolitical) reflection is also directed at uncovering and critiquing social and political ideologies behind information and their role in the information production and dissemination (Schlesselman-Tarango, 2014; Tewell, 2015, 2016), but also of the ways in which information and various actors maintain the status quo and hegemony and perpetuate systems of oppression (Mecenas et al., 2021; Cope, 2017).

As an ongoing decoding of reality, including of culture, communication, and media (Tewell, 2016; Wittebols, 2020), critical reflection also involves awareness of (systemic) information barriers (Cloudesley, 2021), of the social construction and political dimension of knowledge (Curry, 2022; Tewell, 2015), and of economic conditions and structures that shape the ways of accessing, evaluating, creating, and using information, including criticism of information as a commodity (Fister, 2017; Tewell, 2016). Central here is taking a conscious, active stance—awareness and critical-dialogic questioning of information and information sources, the way information is constructed, disseminated and understood, and uncovering the politics of knowledge and the entire information system (Cope, 2017; Hicks & Sinkinson, 2015).

Awareness of the information environment as part of the critical (sociopolitical) reflection subtheme was also found in the WIL domain, by acknowledging that information practices are situated and structured, shaped by organisational and contextual conditions. Some WIL studies also extend this to questioning organisational norms and reframing workplace routines and knowledge structures (Ahmad et al., 2020; Williams et al., 2014), however, WIL generally stops short of systemic critique that is central to CIL.

An integral part of this subtheme is “decentring the authority” (Raphcak, 2021), which involves questioning and resisting dominant, elitist knowledge, authorities and paradigms, and privileging (personal) experience, local narratives, and marginalised voices (Curry, 2022; Irving, 2020; Schlesselman-Tarango, 2014). This includes recognising how authority is contextualised in the process of knowledge production and its impact on information (Angell & Tewell, 2017), as well as interrogating the production and control over knowledge, whose interest it serves, and how political and cultural contexts legitimise certain discourses and ideologies while marginalising others (Tewell, 2015, 2018). The ability to reflect on the position of marginality, missing voices, and the sociopolitical factors that produce exclusion is another important element of critical consciousness in the CIL domain (Curry, 2022; Marsh, 2022; Tewell, 2018).

3.4.2 Critical self-reflection

The second subtheme relates to critical self-reflection of one’s positionality, identity, attitudes, cognitive processes, roles and agentic capacity in relation to information and the wider information environment, as well as power structures that operate within it. Across both domains, some aspects of self-reflection are shared. These include dispositions of self-efficacy and self-confidence—often emerging as functional IL within WIL, associated with the ability to adapt to professional demands and to perform tasks effectively—and as elements of CIL, inseparable from awareness of agency (McDowell & Vetter, 2022). Other shared aspects include metacognitive or metareflective awareness of one’s assumptions, perspectives, and cognitive processes.

In WIL, critical self-reflection is primarily conceptualised in functional terms, tied to effectiveness, professionalism, and organisational responsibility, for instance how ethical awareness shapes the evaluation and responsible use of information in professional practice (Ahmad et al., 2020). Yet this treatment remains pragmatic, without extending to deeper engagement with power structures and ideological contexts that characterises CIL. By contrast, in the CIL domain self-reflection is explicitly conceived as ethical-political. It is conceptualised as a “theoretically informed approach to [IL] that addresses *the political nature of one’s engagement with information*” (Tewell, 2016, p. 305, emphasis added). This includes the understanding of oneself, self-awareness of one’s own positionality in the (informational) world, and how to act effectively and ethically in it (Hicks, 2013; Irving, 2020). This also involves a self-reflexive stance toward one’s own information creation, dissemination, and use (Hicks & Sinkinson, 2015).

Furthermore, self-reflection means metareflective and metacognitive awareness of one’s own consciousness and attitudes, perspectives, assumptions, goals, prejudices, and values, and an awareness of how one’s own moral and ethical framework and criteria influence the evaluation of information and the determination of the validity of sources, and how one’s own values (co)relate with the values of others (Cope, 2017). Reflexivity in CIL also extends to cultural and historical self-understanding (Tewell, 2016), recognition of one’s role in reinforcing and perpetuating problems (Marsh, 2022; Rapchak, 2021), and systemic analysis of sociopolitical forces shaping identity and perspectives (Wittebols, 2020).

Another key aspect is awareness of one’s own agentic capacity, motivation and responsibility for creating (personal and social) change. Authors conceive of IL as a critical approach to the information world which emphasises “personal agency to self-actualise through challenge and disruption” (Cloudesley, 2021, p. 31). That is, they emphasise the importance of the practice of

critical questioning and resisting neutrality. This involves a disposition, mind-set of resistance, for instance, to the effects of hegemonic forces, and taking an active stance of critical and purposeful individual and collective action.

3.4.3 Critical action

This subtheme is defined as a practice of critical questioning, rejecting neutrality, and engaging in resistance, as well as undertaking individual and collective action against oppression and injustice in the information environment. This dimension of IL is characteristic almost exclusively to CIL, confirming the claim put forward by Swanson (2005, p. 67) in their concise definition of CIL: “information literacy is meaningless without purpose and action.” It comprises a wide range of forms of action and accompanying competences and dispositions that mostly target unequal power relations and structures at the foundations of information production and dissemination, social injustices, and systems of oppression. Critical action manifests as political and contextualised practice of opposition (Hamelink, 1976, as cited in Tewell, 2016), disruption, and resistance to dominant narratives and hegemonic systems, whether in relation to neoliberal orientations, exclusionary discourses, or information privilege (Cope, 2017; Tewell, 2016).

It includes resisting neutrality—both in terms of understanding IL as a discipline and in terms of the nature of the role of, primarily, librarians in IL instruction (Cope, 2017; Tewell, 2016), a position and role assigned to them by Elmborg (2006) in his foundational, Freire-inspired work on the implications of CIL for instructional practice. By taking a non-neutral stance, librarians are repositioned as reflexive practitioners and transformative agents (Hicks, 2013). Along those lines, advocacy is another form of critical action, understood as engaged talk that reorients citizens toward the public good, gives voice to the marginalised, and promotes inclusivity, tolerance, pluralist values, and social justice (Cloudesley, 2021; Cope, 2017; Stonebraker et al., 2017).

Similarly, information activism (Cuevas-Cerveró et al., 2023; Irving, 2020) involves the strategic use of information, information tools, and technologies to make decisions and create positive social change (Curry, 2022; Schlesselman-Tarango, 2014) or improve one's own position and protect rights (Sharun, 2019; Šobota & Špiranec, 2022). The purpose of IL is to strengthen political agency and critical engagement in information landscapes, as well as engage in a critical uncovering of and navigate information and the information environment. In the process, collective action, such as protests (Šobota & Špiranec, 2022) and other transformative and solidarity-based actions (Cloudesley, 2021; Jacobs, 2014), represent a significant mode of critical engagement. Some authors even describe radical actions of actively pursued “illiteracy” and “disengagement” with information (their avoidance) as a means of resisting oppressive systems and “repairing” the information landscape (Giroux, 1988, as cited in Cloudesley, 2021).

The common thread across these forms of critical action is their transformative and normative purpose and goal: creating positive change and building a better society. (Critical) IL is thus conceptualised as a call to action for social justice, empowering individuals as transformative agents through a constellation of critical reflection, commitment, and agency. IL is understood as a possibility of hope and change, as well as a tool with a revolutionary potential (Tewell, 2015), that seeks to promote and attain democracy and tolerance, and is vital for their attainment through active and engaged participation and action (Cope, 2017; Cloudesley, 2021). Notably, the literature highlights that critical (self-) reflection and critical action are deeply interconnected dimensions. This reflects that the analysed works are strongly anchored in critical theory, the concept of *praxis* and Freire's (2000[1970], pp. 87, 88, 128) “action-

reflection”, that is, the understanding of (transformative) action and reflection as simultaneous and inseparable processes which are in “radical interaction.”

While the CIL literature offers the most explicit articulation of critical action, this study acknowledges that some practice-theory perspectives in WIL, mostly echoing Lloyd’s work, hint at related forms of praxis and agency through reflective professional or organisational practice, without explicitly using the “critical terminology.” For example, studies link IL to questioning organisational routines (Williams et al., 2014) or describe IL as enacted through embodied and relational practices that empower workers to navigate the information landscape of the workplace. However, in the dataset these elements in WIL remain largely latent, implicit, and pragmatically framed and are not critical in the sense defined here. That is, they are framed without the overt political or emancipatory orientation that defines CIL.

Overall, this theme shifts IL from an epistemological concept (what one knows) to an ontological one (how one positions oneself to act in relation to the environment and power structures), stretching IL teleologically toward critical transformative action: from a way of knowing to knowing in order to act, positioning it as an action literacy and a tool for justice.

3.5 Critical-pedagogical approaches

This final theme, constructed exclusively from the CIL literature, refers to pedagogical approaches necessary to achieve the core goal of IL as a driver of positive social change. The most frequently invoked approach is Paulo Freire’s, but Henry A. Giroux’s critical pedagogy is also relevant.

The theme is defined as a critical-pedagogic holistic educational practice conceived as dialogic, democratic, and explicitly value- and advocacy-driven. Rooted in sociopolitical consciousness, these approaches position education as political action directed toward emancipation and empowerment for transformative action. It comprises three subthemes: (1) empowerment and emancipation; (2) decentring the authority and giving a voice; and (3) transformative-normative ambition.

3.5.1 Empowerment and emancipation

This subtheme pertains to critical pedagogy as a method of empowerment, emancipation and liberation through *conscientisation*—consciousness raising for critical reflection, agency and transformative action in relation to oppressive power relations. CIL scholarship emphasises empowerment and capacity building for critical sociopolitical reflection and discussion (Curry, 2022; Schlesselman-Tarango, 2014). This involves examining political and social issues, analysing the impact of inequalities, critiquing hierarchical systems and oppressive power structures, and questioning the dominant (capitalist, neoliberal) values and hegemonic positions (Tewell, 2018).

Another key dimension is developing agentic capacity—the capacity for critical action. This entails cultivating dispositions of confidence and self-efficacy—a sense of personal empowerment, the ability to take up an assertive, critical role in society, to make meaningful choices, and to critically produce information and knowledge (Curry, 2022; Tewell, 2015). Learners are encouraged to see themselves as active, transformative agents able to resist, take control, and take action against oppressive power structures (Stonebraker et al., 2017; Waddel & Clariza, 2018).

Here again, what distinguishes CIL from WIL is its explicitly political and emancipatory orientation. While WIL studies occasionally gesture toward empowerment through, for instance, communities of practice or professional development, capacity-building, and adaptation to change, these are framed in utilitarian terms rather than as practices of liberation or opposition, which are central pedagogical objectives in CIL.

3.5.2 Decentring the authority and giving a voice

This subtheme involves critical questioning and resisting dominant knowledge, authorities, paradigms, and exclusion, while privileging personal experience, local narratives, and marginalised voices, and advocating for inclusivity, egalitarianism, pluralism, and tolerance. Critical-pedagogical approaches stress consciousness raising, reflection, and challenging the dominant perspectives, information, and knowledge privilege, and the systems of marginalisation and exclusion (Cope, 2017; Irving, 2020). They aim to equip learners to question conventional criteria for evaluating information and authorities, and to problematise knowledge production, scientific communication, and pedagogical practices that perpetuate academic exclusion. Much of this work in CIL explicitly situates librarians and educators as mediators of these processes, positioning them not as transmitters of knowledge but as facilitators of dialogic learning and epistemic justice, enabling pedagogical spaces that actively challenge exclusionary practices within academia and beyond.

Along those lines, critical pedagogy is realised as a holistic, advocacy-oriented, discursive-dialogic educational practice of representing and valuing diverse perspectives and voices, especially those of the oppressed, marginalised, and silenced. Rather than seeing education as content transfer based on the assumption of students' knowledge/competence deficit, these approaches are realised as a Freirean dialogic education, grounded in democratic forms of teaching and "horizontal classroom relationships" (Marsh, 2022): pedagogic student-centred practices anchored in their authentic experiences, identities, and realities. Learners are positioned as "generative social subjects-creators" (Cope, 2017, p. 268), through reflective dialogue and problem-posing aimed at addressing collaboratively relevant issues and developing "critical, reflective habits of mind" (Jacobs, 2008, as cited in Tewell, 2015, p. 31), with the ultimate goal of transforming students' reality.

The emphasis on dialogic, democratic pedagogical practices reflects a broader critique of academic exclusion and epistemic injustice and entails a normative claim positioning democratic educational strategies that redistribute authority and voice as essential conditions for social justice. In the analysed sample, such emphases were articulated exclusively within CIL, though, admittedly, WIL literature also deals with knowledge flows, but it does not interrogate epistemic authority or privilege directly nor make similar normative and value claims.

3.5.3 Transformative-normative ambition

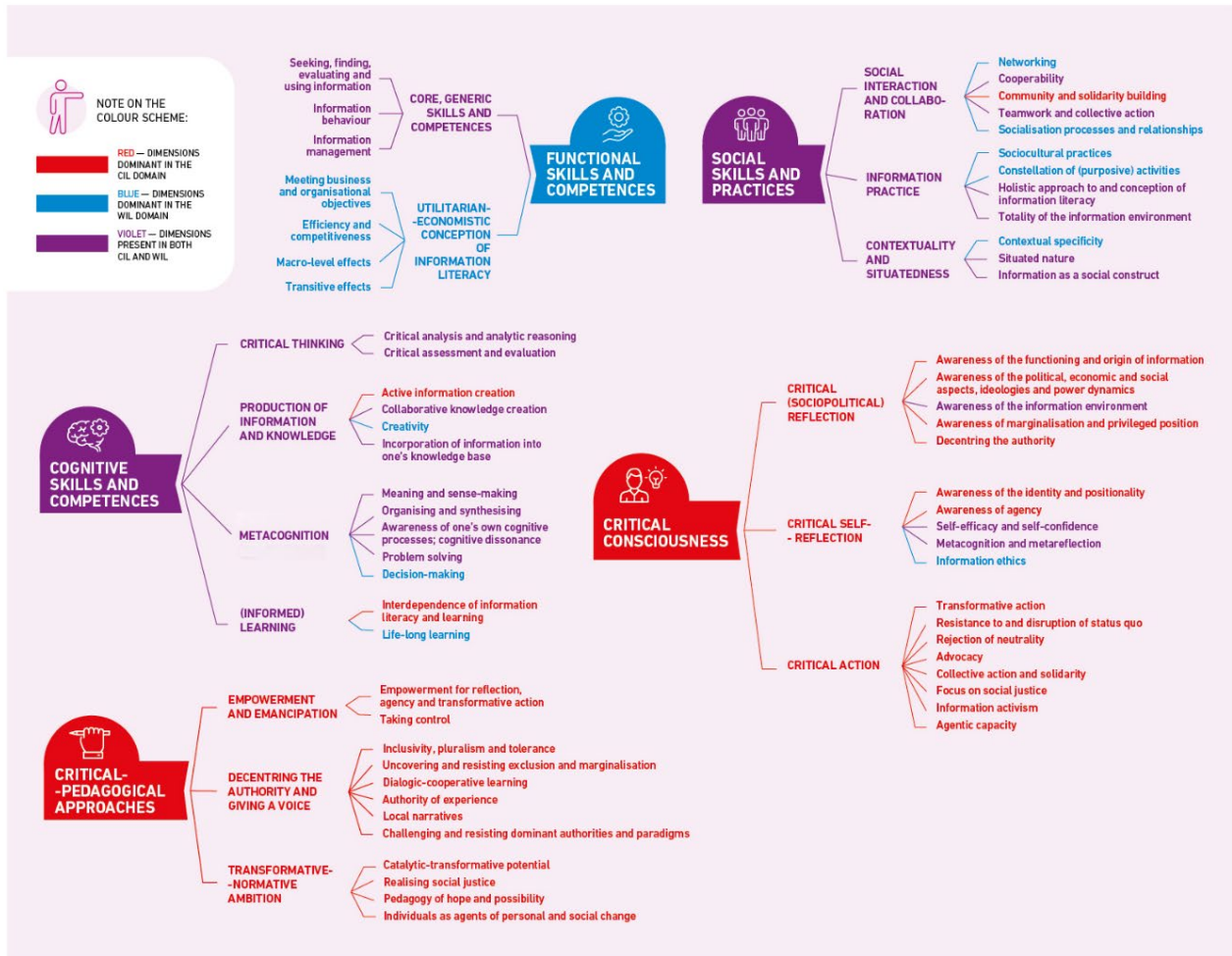
This subtheme captures the catalytic and transformative ambition of IL when rooted in critical pedagogy. Here, IL is not just an academic or cognitive construct, but a vehicle for positive personal and social change (Stonebraker et al., 2017; Tewell, 2015), conceived as "an important aspect of centering social justice in pedagogical practices" (McDowell & Vetter, 2022, p. 2). In this framing, teaching is not value-neutral but inherently political. The goal is to empower individuals to act against injustice, challenge oppressive information structures, and create more equitable knowledge landscapes. Education itself is repositioned as a form of political agency and social activism (Freire, 2000). Critical pedagogy becomes a "catalyst for

social justice and civic responsibility" (Tewell, 2015, p. 26), a "catalyst for social change" (Waddell & Clariza, 2018, p. 231), a pedagogy of the "possibility of hope and change" (Tewell, 2015, p. 36), and a pedagogy of daring and courage (Curry, 2022). Within this framing, librarians and educators are often cast as catalysts of social change, whose pedagogical roles extend beyond skills-based instruction toward enabling participatory knowledge-making and fostering social justice through transformative educational practices. With this, IL is positioned at the nexus of pedagogical practice and political project, explicitly linking pedagogy to activism.

By contrast, WIL does not articulate such transformative-normative ambitions. Its pedagogical orientation remains pragmatic and utilitarian, emphasising functional and transferable learning outcomes aimed at optimising workplace performance (for example, preparing workers to adapt, innovate, or perform their work tasks more efficiently) without advancing broader claims and ambitions about social justice.

The overview of the constructed themes, subthemes and the main concepts of IL across the CIL and WIL domains is shown in Figure 2.

Figure 2: Thematic map of core dimensions (themes, subthemes and main codes) of IL in the CIL and WIL domains



4. Limitations

This study is subject to several limitations that should be considered when interpreting its findings. First, the literature search was limited to a single database, *Scopus*. While the inclusion of additional databases or a manual search of key journals might have been useful, this choice reflected both access constraints (for example, the unavailability of *LISA*) and a deliberate decision to avoid selection bias. However, the main reason was because the research did not aim to represent the entire domains; therefore, there was no need to conduct a systematic literature review. Preliminary *in situ* analysis of the results of querying *Scopus* revealed that the data set met the information power criterion. Notably, some seminal works—such as those by A. Lloyd and J. Elmborg—were not retrieved directly but were indirectly represented through citations in the included literature. As a result, some influential aspects of scholarship—particularly those related to practice-theoretical accounts of IL, agency, and workplace learning—are underrepresented in the findings. This may partly explain why critical

dimensions appear less explicitly in the WIL literature identified, compared to the more established critical vocabulary in the CIL domain.

Second, the literature search was limited to peer-reviewed scientific articles in English, published between 2006 and 2022. This might have excluded recent scientific production on the IL conceptualisation or those of culturally or regionally specific perspectives, that could contribute to the preliminary articulation of the construct. This was done due to language limitations, limited availability of some sources, as well as incoherent criteria of evaluation of some types of sources, but primarily because the objective was not to map *all* the existing conceptualisations of IL in the two domains (nor to determine the prevalence of themes), but to determine the core elements of the concept across the domains as groundwork for subsequent empirical research.

Finally, while qualitative data analysis software might have provided additional insights, manual coding was chosen to align with reflexive thematic analysis and the study's critical-transformative framework, as well as given its advantages in allowing deeper conceptualisation.

5. Conclusions

This study mapped the core dimensions of IL, as conceptualised within the CIL and WIL domains, offering a pathway for their integration through the CWIL construct. Thematic analysis constructed five major themes—functional skills and competences, cognitive skills and competences, social skills and practices, critical consciousness, and critical-pedagogical approaches—comprising 16 subthemes representing key conceptual elements of IL across both domains.

While not aiming to provide an exhaustive analysis and comparison of the two domains—an important task for future research—the analysis highlighted shared and divergent elements. These differences are largely matters of emphasis: some elements are more central in one domain, or even exclusive to it. Both domains share the same core IL elements congruent with the typical conceptions of IL—generic skills and competences of finding, evaluating and using information, as well as critical thinking. Moreover, recent scholarship in both domains frames IL as an information practice, inherently social and relational, and a way of knowing, echoing paradigmatic IL definitions and sociocultural approaches.

On the other hand, the research confirmed the articulated contrast between the two literacy paradigms and approaches—the contrast between the affirmative, utilitarian-economistic approach, dominant in WIL, and the critical approaches and perspectives central to CIL. The most striking difference between the WIL and CIL domains is that the former puts more emphasis on utilitarian and functional conceptions of IL based on skills and competences, which are absent from the CIL domain, as well as on the contextual and situated nature of information. In contrast, critical perspectives and dimensions, in particular critical action with catalytic and transformative ambition, and the development of the agentic capacity and critical consciousness through critical-pedagogical approaches, are largely absent from the WIL domain but are the main constitutive elements of the concept within the CIL domain. While the CIL literature explicitly articulates these dimensions, practice-theoretical perspectives in WIL implicitly point to related forms of praxis and agency, even if not framed in explicitly critical terms. This suggests that the absence of explicit critical dimensions in WIL should not be read as a complete absence of reflexivity of agency, but rather as a difference in purpose: WIL frames them pragmatically, as

professional or organisational praxis, bounded by organisational-economistic aims, while CIL frames them critically in the sense defined here – they are political, transformative and emancipatory, with an explicit orientation toward emancipation and social justice. This also affirms that CIL construes the concept more holistically, going beyond pragmatic, instrumental and functional dimensions, while not disrupting the conceptual continuity of IL (Špiranec et al., 2016) but adding to it more nuanced layers and (value) dimensions, such as critical action, which have not been clearly mapped so far.

At the same time, this asymmetry underscores long-standing critiques of IL silos: the two domains, while not oppositional, remain largely disconnected, with few works bridging the gap, as seen in the first literature search which returned only one paper retained for analysis spanning both domains. Moreover, WIL tends to overlook broader sociopolitical dimensions, while CIL often neglects systematic conceptual elaboration of (critical) IL by focusing more on the role of libraries and on epistemic and pedagogic aspects. Both therefore have contributed only partially to the theoretical development of IL and have created another IL silo (Šobota, 2024).

By mapping and articulating these underexplored critical dimensions, particularly those that transcend the conventional focus on skills and competences, for instance by detailing the multidimensional concept of critical consciousness, this study contributes to a richer and more nuanced conceptualisation of IL, often overshadowed by functional or cognitive approaches. These layers emphasise the broader sociopolitical and transformative aspects of IL, supporting its teleological reconceptualisation from “a way of knowing” to “**a way of knowing and taking critical action**”. This shifts the discourse from static competences and description of practices toward a more dynamic, purposeful engagement with the world, to a *standpoint literacy*.

This reconceptualisation has significant implications for CWIL. It's true potential lies in its ability to bridge these conceptual gaps and resolve the ideological tensions between the two domains. To be meaningful and to contribute to confirming the real-life value of IL, CWIL must integrate the functional-pragmatic dimensions of WIL with the critical-emancipatory dimensions and ambitions of CIL. WIL's deep engagement with professional practice and functional application can ground the often-abstract theories of CIL into the concrete realities of work(place), thus preventing (C)IL from remaining an academic abstraction. Simultaneously, CIL's sociopolitical, transformative lens and commitment to ethical inquiry and social responsibility can activate WIL's latent agency and redirect it from purely pragmatic, organisational improvement towards explicit political critique and transformative action necessary for decent work. This would prevent WIL from neglecting worker agency, social justice, and the broader power dynamics that shape workplace (information) environments, ultimately failing to challenge the status quo within organisations. In this way, an integrated CWIL construct addresses these respective blind spots of each domain, and has the potential to reposition IL as a tool for action to bring about change and address contemporary challenges in both workplace and broader information and sociopolitical environments (Šobota, 2024). In an era defined by information overload, workplace precarity and social complexity, reconceptualising IL in this way is both timely and necessary.

To build on these insights, a clear agenda for future research is proposed. Systematic literature reviews could be combined with (comparative) bibliometric analysis to comprehensively map developmental trajectories, chronological trends, and conceptual and epistemological shifts across CIL and WIL. Beyond this, several avenues for further research emerge that would help

develop robust and coherent arguments about CWIL's significance in the world of work. As a next step, a Delphi study with an international panel consisting of experts in CIL and WIL, labour researchers, and trade unionists is conducted to further develop the CWIL construct and explore its relevance to decent work and complex workplace challenges.

Other research avenues include empirical studies testing CWIL in diverse contexts, through cross-sectional, longitudinal, and critical qualitative research; intersectional and interdisciplinary research of how sociopolitical, economic, historical and subjective factors configure (prohibitive) experiences that affect information practices, thereby testing also frequently unquestioned assumptions about the automatic positive effects of IL (Šobota, 2024) and the simplistic conceptualisations and perceptions of information and information practices. Further research could also examine how CWIL can be translated into pedagogical practices or policy frameworks related to skills development and decent work. Such efforts would enable more effective integration of the concepts of CIL and decent work into pedagogical approaches relevant to the real-life needs of students/workers, as well as stronger ties between theory and practice.

Ultimately, CWIL holds promise to synthesise the distinct theoretical frameworks and domains, thus challenging the traditional silos and conceptual-methodological monism, as well as extending its applicability to other complex, tension- and conflict-ridden settings and scenarios. In doing so, it may contribute to theoretical development and conceptual coherence of IL, while positioning it as a flexible, multidomain construct capable of reshaping theoretical discourse and driving real-world impact.

Declarations

Ethics approval

Ethical approval was not undertaken as it was not considered necessary in alignment with the University of Zagreb's guidance on the conduct of ethical research.

Funding

Not applicable.

AI-generated content

AI tools (ChatGPT) have been used for proofreading the manuscript.

Acknowledgements

The author expresses her sincere gratitude to the anonymous reviewers for their thoughtful and constructive comments, which have strengthened the analytical depth and conceptual clarity of the paper. The research presented in this paper is based on the author's doctoral research and dissertation, *Konceptualizacija kritičke informacijske pismenosti na radnome mjestu* [The conceptualisation of critical workplace information literacy] (2025), Faculty of Humanities and Social Sciences, University of Zagreb.

References

References marked with an asterisk (*) indicate papers included in the thematic analysis.

- *Ahmad, F., Widén, G., & Huvila, I. (2020). [The impact of workplace information literacy on organizational innovation: An empirical study](#). *International Journal of Information Management*, 51.
- *Ali, M. Y., & Richardson, J. (2018). [Workplace information literacy skills: Library professionals' competency at university libraries in Karachi, Pakistan](#). *Information and Learning Science*.
- American Library Association. Presidential Committee on Information Literacy. (1989). *Final report*. American Library Association.
- *Angell, K., & Tewell, E. (2017). [Teaching and un-teaching source evaluation: Questioning authority in information literacy instruction](#). *Communications in Information Literacy*, 11(1), 95–121.
- Association of College and Research Libraries. (2000). *Information literacy competency standards for higher education*. Association of College and Research Libraries.
- Bezerra, A. C., & Schneider, M. (2023). The radical and the radioactive: Grasping the roots of theoretically informed praxis in Brazilian studies on critical information literacy. In A. Hicks, A. Lloyd & O. Pilerot (Eds), *Information literacy through theory* (pp. 57–70). Facet.
- *Bird, N. J., Crumpton, M., Ozan, M., & Williams, T. (2012). [Workplace information literacy: A neglected priority for community college libraries](#). *Journal of Business & Finance Librarianship*, 17(1), 18–33.
- *Branch, N. A. (2019). [Illuminating social justice in the framework: Transformative methodology, concept mapping and learning outcomes development for critical information literacy](#). *Communications in Information Literacy*, 13(1), 4–22.
- Braun, V., & Clarke, V. (2006). [Using thematic analysis in psychology](#). *Qualitative Research in Psychology*, 3(2), 77–101.
- Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. Sage.
- Braun, V., & Clarke, V. (2019). [Reflecting on reflexive thematic analysis](#). *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597.
- Braun, V., & Clarke, V. (2020). [One size fits all? What counts as quality practice in \(reflexive\) thematic analysis?](#). *Qualitative Research in Psychology*, 18(3), 328–352.
- Braun, V., & Clarke, V. (2022). [Conceptual and design thinking for thematic analysis](#). *Qualitative Psychology*, 9(1), 3–26.

- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. In P. Liamputtong (Ed.), *Handbook of Research Methods in Health Social Sciences* (pp. 843–860). Springer.
- Bruce, C. (1997). *The seven faces of information literacy*. Auslib Press.
- Bruce, C. S. (2008). *Informed learning*. Association of College and Research Libraries/American Library Association.
- Bruce, C. S. (2015). Information literacy: Understanding peoples' information and learning experiences. In *12th International Scientific Conference: Western Balkan information literacy* (pp. 11–16).
- Bruce, C. S. (2016). [Information literacy research: Dimensions of the emerging collective consciousness. A reflection](#). *Australian Academic & Research Libraries*, 47(4), 239–244.
- Buschman, J. (2019). [Good news, bad news, and fake news: Going beyond political literacy to democracy and libraries](#). *Journal of Documentation*, 75(1), 213–228.
- *Carter, S., Koopmans, H., & Whiteside, A. (2018). [Crossing the studio art threshold: Information literacy and creative populations](#). *Communications in Information Literacy*, 12(1), 36–55.
- Chartered Institute of Library and Information Professionals (2018). [CILIP definition of information literacy 2018](#).
- Cheuk, B. (2017). The hidden value of information literacy in the workplace context: How to unlock and create value. In M. Forster (Ed.), *Information literacy in the workplace* (pp. 131–148). Facet.
- Clarke, V., & Braun, V. (2021). *Thematic analysis: A practical guide*. Sage.
- *Cloudesley, S. P. (2021). ['Informed', 'active' and 'engaged'? Understanding and enacting information literacy from a UK citizenship perspective](#). *Journal of Information Literacy*, 15(3), 20–40.
- Cope, J. (2010). Information literacy and social power. In M. T. Accardi, E. Drabinski, & A. Kumbier (Eds.), *Critical library instruction: Theories and methods* (pp. 13–28). Library Juice Press.
- *Cope, J. T. (2017). [The reconquista student: Critical information literacy, civics, and confronting student intolerance](#). *Communications in Information Literacy*, 11(2), 264–282.
- Corrall, S. (2017). [Crossing the threshold: Reflective practice in information literacy development](#). *Journal of Information Literacy*, 11(1), 23–53.
- Crawford, J. (2020). Information literacy and national policy making. In S. Goldstein (Ed.), *Informed societies. Why information literacy matters for citizenship, participation and democracy* (pp. 111–127). Facet.

- Critten, J. (2016). Introduction: What does critical information literacy do?. In A. Downey (Ed.), *Critical information literacy: Foundations, inspirations and ideas* (pp. 1–10). Library Juice Press.
- Cuevas-Cerveró, A., Colmenero-Ruiz, M. J., & Martínez-Ávila, D. (2023). [Critical information literacy as a form of information activism](#). *The Journal of Academic Librarianship*, 49(6), 102786.
- *Curry, R. (2022). [Insights from a cultural-historical HE library makerspace case study on the potential for academic libraries to lead on supporting ethical-making underpinned by 'Critical Material Literacy'](#). *Journal of Librarianship and Information Science*, 55(3) 763–781.
- *Dold, C. J. (2014). [Critical information literacy: A model for transdisciplinary research in behavioral sciences](#). *The Journal of Academic Librarianship*, 40(2), 179–184.
- Eckerdal, J. R. (2011). To jointly negotiate a personal decision: A qualitative study on information literacy practices in midwifery counselling about contraceptives at youth centres in Southern Sweden. *Information Research: An International Electronic Journal*, 16(1), n1.
- Elmborg, J. (2006). [Critical information literacy: Implications for instructional practice](#). *Journal of Academic Librarianship*, 32(2), 192–199.
- *Fister, B. (2017). [The warp and weft of information literacy: Changing contexts, enduring challenges](#). *Journal of Information Literacy*, 11(1), 68–79.
- *Flaspohler, M. R., Rux, E. M., & Flaspohler, J. A. (2007). [The annotated bibliography and citation behavior: Enhancing student scholarship in an undergraduate biology course](#). *CBE—Life Sciences Education*, 6(4), 350–360.
- Freire, P. (2000[1970]). *Pedagogy of the oppressed* (30th anniversary edition). Continuum.
- Giroux, H. A. (2001). *Theory and resistance in education: Towards a pedagogy for the opposition*. Greenwood Publishing Group.
- Goldstein, S. (ed.) (2020) *Informed societies*. Facet.
- Gregory, L., & Higgins, S. (2013). Introduction. In L. Gregory, & S. Higgins (Eds.), *Information literacy and social justice: Radical professional praxis* (pp. 1–11). Library Juice Press.
- Hayes, N. (2000). *Doing psychological research: Gathering and analysing data*. Open University Press.
- *Hepworth, M., & Smith, M. (2008). [Workplace information literacy for administrative staff in higher education](#). *The Australian Library Journal*, 57(3), 212–236.
- *Hicks, A. (2013). [Cultural shifts: Putting critical information literacy into practice](#). *Communications in Information Literacy*, 7(1), 50–65.

- *Hicks, A. (2014). [Bilingual workplaces: Integrating cultural approaches to information literacy into foreign language educational practices](#). *Journal of Information Literacy*, 8(1), 21–41.
- Hicks, A. (2021). [Working it](#). *Journal of Information Literacy*, 15(2), 1–3.
- Hicks, A., & Lloyd, A. (2022). [Agency and liminality during the COVID-19 pandemic: Why information literacy cannot fix vaccine hesitancy](#). *Journal of Information Science*, 50(6), 1557–1572.
- *Hicks, A., & Sinkinson, C. (2015). [Critical connections: Personal learning environments and information literacy](#). *Research in Learning Technology*, 23.
- Hicks, A., Lloyd, A., & Pilerot, O. (2023). Introduction: Themes, patterns and connections. In A. Hicks, A. Lloyd, & O. Pilerot (Eds.), *Information literacy through theory* (pp. xiii–xxv). Facet.
- Hicks, A., McKinney, P., Inskip, C., Walton, G., & Lloyd, A. (2022). [Leveraging information literacy: Mapping the conceptual influence and appropriation of information literacy in other disciplinary landscapes](#). *Journal of Librarianship and Information Science*, 55(3), 548–566.
- *Inskip, C., & Donaldson, S. (2021). [Exploring effective information use in an insurance workplace](#). *Journal of Information Literacy*, 15(2), 45–77.
- *Irving, C. J. (2020). [Critical information literacy. Adult learning and community perspectives](#). *European Journal for Research on the Education and Learning of Adults*, 11(1), 65–76.
- *Jacobs, H. L. (2014). [Pedagogies of possibility within the disciplines: Critical information literacy and literatures in English](#). *Communications in Information Literacy*, 8(2), 192–207.
- Jackson, N., & Slade, B. (2008). Hell on my face. The production of workplace illiteracy. In M. De Vault (Ed.), *People at work: Life, power and social inclusion in the new economy* (pp. 25–39). NYU Press.
- Johnston, B., MacNeill, S., & Smyth, K. (2018). [Information literacy, digital capability, and individual agency](#). In *Conceptualising the digital university* (pp. 105–125). Palgrave Macmillan, Cham.
- Kelly, J. J. (2023). The roots and future of information literacy: Reflections from 11+ years working with Paul G. Zurkowski, Esq. *Qualitative and Quantitative Methods in Libraries*, 12(3), 403–416.
- King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 257–270). Sage.

- *Kolstad, A. K. (2015). [Co-teaching in information literacy during work placements: The librarian's role](#). *Liber Quarterly*, 25(2), 56–86.
- Kos, D., & Špiranec, S. (2015). [Understanding the field of critical information literacy: A descriptive analysis of scientific articles](#). In S. Kurbanoglu, J. Boustany, S. Špiranec, E. Grassian, D. Mizrahi, L. Roy (Eds.) *Information literacy: Moving toward sustainability* (pp. 579–589). ECIL 2015. Communications in Computer and Information Science, vol 552. Springer, Cham.
- *Langan, K. A. (2021). [The library language game: Information literacy through the lens of Wittgenstein's language games](#). *Communications in Information Literacy*, 15(1), 104–118.
- *Linares-Gray, R. H., Newman Carroll, S., & Smith, E. K. (2022). [The stories we tell: Engaging with authority in critical health pedagogy](#). *Communications in Information Literacy*, 16(2), 151–166.
- Lloyd, A. (2004, June 13-16). *Working (in)formation: conceptualizing information literacy in the workplace*. In *Lifelong learning: Whose responsibility and what is your contribution?* [Refereed paper]. 3rd International Lifelong Learning Conference, Yeppoon, Queensland, Australia.
- Lloyd, A. (2005). [Information literacy: Different contexts, different concepts, different truths?](#) *Journal of Librarianship and Information Science*, 37(2), 82–88.
- Lloyd, A. (2007). Recasting information literacy as sociocultural practice: Implications for library and information science researchers. *Information Research* 12(4), 1–13.
- Lloyd, A. (2010). [Framing information literacy as information practice: Site ontology and practice theory](#). *Journal of Documentation*, 66(2), 245–258.
- Lloyd, A. (2012). [Information literacy as a socially enacted practice: Sensitising themes for an emerging perspective of people-in-practice](#). *Journal of Documentation*, 68(6), 772–783.
- *Lloyd, A. (2014). [Following the red thread of information in information literacy research: Recovering local knowledge through interview to the double](#). *Library & Information Science Research*, 36(2), 99–105.
- *Lockerbie, H., & Williams, D. (2019). [Seven pillars and five minds: Small business workplace information literacy](#). *Journal of Documentation*, 75(5), 977–994.
- Lonsdale, M., & McCurry, D. (2004). *Literacy in the New Millennium*. National Centre for Vocational Education Research Ltd.
- Lundh, A., & Limberg, L. (2008). [Information practices in elementary school](#). *Libri*, 58(2), 92–101.

- *Malafi, E., Liu, G., Goldstein, S., Grassian, E., & LeMire, S. (2017). [Business and workplace information literacy: Three perspectives](#). *Reference and User Services Quarterly*, 57(2), 79–85.
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). [Sample size in qualitative interview studies: Guided by information power](#). *Qualitative Health Research*, 26(13), 1753–1760.
- *Marsh, F. (2022). [Unsettling information literacy: Exploring critical approaches with academic researchers for decolonising the university](#). *Journal of Information Literacy*, 16(1), 4–29.
- *McDowell, Z. J., & Vetter, M. A. (2022). [Wikipedia as open educational practice: Experiential learning, critical information literacy, and social justice](#). *Social Media+ Society*, 8(1), 1–11.
- *Mecenas, J., Wilber, Y., & Kwast, M. (2021). [Antiracist and faith-based](#). *The Radical Teacher*, 121, 15–23.
- Mehra, B., Albright, K. S., & Rioux, K. (2006). [A practical framework for social justice research in the information professions](#). In *Proceedings of the American Society for Information Science and Technology* 43(1), 1–10.
- *Middleton, L., & Hall, H. (2021). [Workplace information literacy: A bridge to the development of innovative work behaviour](#). *Journal of Documentation*, 77(6), 1343–1363.
- Milosheva, M., Hall, H., Robertson, P., & Cruickshank, P. (2021, September 20-23). [New information literacy horizons: Making the case for career information literacy](#) [Revised selected paper]. In S. Kurbanoglu, S. Špiranec, Y. Ünal, J. Boustany, & D. Kos. (Eds.), *Information literacy in a post-truth era. The Seventh European Conference on Information Literacy*. ECIL 2021, Virtual.
- Moher, D., Liberati A., Tetzlaff, J., Altman, D. G., & The PRISMA Group. (2009). [Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement](#). *British Medical Journal*, 339.
- *Naveed, M. A. (2022). [Information literacy self-efficacy of scientists working at the Pakistan Council of Scientific and Industrial Research](#). *Information Research*, 27(2), paper 925.
- *Naveed, M. A., & Kamran, M. (2022). [Workplace information literacy: The case of investigation officers from Punjab Police, Pakistan](#). *Information Research*, 27(1), paper 919.
- Nelson, J. (2017). [Using conceptual depth criteria: Addressing the challenge of reaching saturation in qualitative research](#). *Qualitative Research*, 17(5), 554–570.
- Onyancha, O. B. (2020). [Knowledge visualization and mapping of information literacy, 1975–2018](#). *IFLA journal*, 46(2), 107–123.
- *Phillips, J., & Whitworth, A. (2022). [Integrating information practices into everyday teaching: The roles played by the practice architecture and learning activities in South Korean elementary schools](#). *Journal of Information Literacy*, 16(1), 30–49.

- *Raish, V., & Rimland, E. (2016). [Employer perceptions of critical information literacy skills and digital badges](#). *College & Research Libraries*, 77(1), 87–113.
- *Rapchak, M. (2021). [Introducing critical librarianship to information professionals: Using critical pedagogy and critical information literacy in an LIS graduate course](#). *Communications in Information Literacy*, 15(1), 140–157.
- Robinson, O. C. (2014). [Sampling in interview-based qualitative research: A theoretical and practical guide](#). *Qualitative Research in Psychology*, 11(1), 25–41.
- Savolainen, R. (2007). [Information behavior and information practice: Reviewing the “umbrella concepts” of information-seeking studies](#). *The Library Quarterly*, 77(2), 109–132.
- *Sayyad Abdi, E., Partridge, H., & Bruce, C. (2013). [Website designers: How do they experience information literacy?](#). *The Australian Library Journal*, 62(1), 40–52.
- *Schlesselman-Tarango, G. (2014). [Cyborgs in the academic library: A cyberfeminist approach to information literacy instruction](#). *Behavioral & Social Sciences Librarian*, 33(1), 29–46.
- Secker, J. (2023, November 1). [Information literacy at 50](#). Libraries, information literacy and Elearning: Reflections from the digital age.
- *Sharun, S. (2019). [Exploring value as a dimension of professional information literacy](#). *Journal of Information Literacy*, 13(2), 26–40.
- Sim, J., Saunders, B., Waterfield, J., & Kingstone, T. (2018). [Can sample size in qualitative research be determined apriori?](#) *International Journal of Social Research Methodology*, 21(5), 619–634.
- Smith, L. (2013). [Towards a model of critical information literacy instruction for the development of political agency](#). *Journal of Information Literacy*, 7(2), 15–32.
- Šobota, D. (2023). [Critical workplace information literacy: Laying the groundwork for a new construct](#). *Journal of Information Literacy*, 17(1), 138–161.
- Šobota, D. (2024). [Rethinking the teleological essence of information literacy: Academic abstraction or real-life action literacy?](#). *Journal of Information Literacy*, 18(1), 38–46.
- *Šobota, D., & Špiranec, S. (2022, September 26-29). [Informed, active, empowered: Research into workers' information literacy in the context of rights at work](#). In *Proceedings of ISIC: the information behaviour conference*, Berlin, Germany.
- Somerville, M. M., & Bruce, C. S. (2017). [From transaction to transformation: Organizational learning and knowledge creation experience within Informed Systems](#). In Forster, M. (Ed.), *Information literacy in the workplace* (pp. 41–55). Facet.
- *Somerville, M. M., & Howard, Z. (2008). [Systems thinking: An approach for advancing workplace information literacy](#). *The Australian Library Journal*, 57(3), 257–273.

- Špiranec, S., Banek Zorica, M., & Kos, D. (2016). [Information literacy in participatory environments: The turn towards a critical literacy perspective](#). *Journal of Documentation*, 72(2), 247–264.
- *Stonebraker, I., Maxwell, C., Garcia, K., & Jerit, J. (2017). [Realizing critical business information literacy: Opportunities, definitions, and best practices](#). *Journal of Business & Finance Librarianship*, 22(2), 135–148.
- Street, B. V. (1984). *Literacy in theory and practice* (Vol. 9). Cambridge University Press.
- Sundin, O. (2008). [Negotiations of information seeking expertise: A study of web-based tutorials for information literacy](#). *Journal of Documentation*, 64(1), 22–44.
- Swanson, T. A. (2005). [Applying a critical pedagogical perspective to information literacy standards](#). *Community & Junior College Libraries*, 12(4), 65–77.
- Terry, G., Hayfield, N., Clarke, V., Braun, V. (2017). Thematic analysis. In C. Willig, & W. Stainton Rogers (Eds.), *The sage handbook of qualitative research in psychology* (pp. 17–37) 2nd ed. Sage.
- *Tewell, E. (2015). [A decade of critical information literacy: A review of the literature](#). *Communications in Information literacy*, 9(1), 24–43.
- *Tewell, E. (2016). [Toward the resistant reading of information: Google, resistant spectatorship, and critical information literacy](#). *portal: Libraries and the Academy*, 16(2), 289–310.
- *Tewell, E. C. (2018). [The practice and promise of critical information literacy: Academic librarians' involvement in critical library instruction](#). *College & Research Libraries*, 79(1), 10–34.
- Thorne, S. (2000). [Data analysis in qualitative research](#). *Evidence Based Nursing*, 3, 68–70.
- Todd, R. J. (2017). [Information literacy: Agendas for a sustainable future](#). *Journal of Information Literacy*, 11(1).
- *Torrell, M. R. (2020). [That was then, this is now: A case for critical information literacy across the curriculum](#). *Communications in Information Literacy*, 14(1), 118–133.
- *Waddell, M., & Clariza, E. (2018). [Critical digital pedagogy and cultural sensitivity in the library classroom: Infographics and digital storytelling](#). *College & Research Libraries News*, 79(5), 228–232.
- Ward, D. (2006). [Revisioning information literacy for lifelong meaning](#). *The Journal of Academic Librarianship*, 32(4), 396–402.
- *Warren, S. & Duckett, K. (2010). [“Why Does Google Scholar Sometimes Ask for Money?” Engaging science students in scholarly communication and the economics of information](#). *Journal of Library Administration*, 50(4), 349–372.

- Webber, S., & Johnston, B. (2017). [Information literacy: Conceptions, context and the formation of a discipline](#). *Journal of Information Literacy*, 11(1), 156–183.
- Welsh, E. (2002, May). [Dealing with data: Using NVivo in the qualitative data analysis process](#). *Forum qualitative sozialforschung/Forum: Qualitative social research*, 3(2).
- Whitworth, A. (2014). *Radical information literacy: Reclaiming the political heart of the IL movement*. Chandos.
- Whitworth, A. (2020). The discourses of power, information and literacy. In S. Goldstein (Ed.), *Informed societies: Why information literacy matters for citizenship, participation and democracy* (pp. 25–45). Facet.
- *Widen, G., Ahmad, F., & Huvila, I. (2021a). [Connecting information literacy and social capital to better utilise knowledge resources in the workplace](#). *Journal of Information Science*, 1–12.
- Widen, G., Ahmad, F., Nikou, S., Ryan, B., & Cruickshank, P. (2021b). [Workplace information literacy: Measures and methodological challenges](#). *Journal of Information Literacy*, 15(2), 26–44.
- Williams, D., Cooper, K., & Wavell, C. (2014). *Information literacy in the workplace: An annotated bibliography*. Robert Gordon University/InformAll.
- *Wittebols, J. H. (2020). [Critical information/news literacy and the flipped classroom: Student evaluations of information searching and analysis](#). *Journalism & Mass Communication Educator*, 75(2), 210–225.
- Yasukawa, K., & Black, S. (2016). Introduction: Critical perspectives in adult literacy and numeracy in a globalised world. In K. Yasukawa & S. Black (Eds.) *Beyond economic interests: Critical perspectives on adult literacy and numeracy in a globalised world* (pp. ix–xv).