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## **Information Literacy, work and Knowledge Creation: A hermeneutic phenomenological point of view**

### **Abstract:**

This theoretical paper examines the conceptual premises of the research and practice of Information Literacy (IL) in the workplace in relation to research on knowledge creation (KC) in the field of Knowledge Management (KM). As with education more generally, IL should prepare students for life after formal schooling ends. How can we make the leap, though, from IL in the educational context to successful participation in an information-rich work environment? An hermeneutic phenomenological analysis of IL and KC, which presents IL as a way of being capable to sense, live and be in the world with an open and dialogic attitude, might offer some clues that bridge IL in the two environments while also extending IL practices in the ACRL's Framework for Information Literacy for Higher Education. As such, the study builds on the understanding of IL and KC as situated, experiential and collective phenomena.

## 1 Introduction

As defined by the Association of College & Research Libraries (ACRL 2015, 8), information literacy (IL) is “the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning”. In many educational systems, IL has been a rallying point for librarians from early elementary school to higher education environments, though the concept is not widely recognized outside of the field of Library and Information Studies (LIS) (Bawden, 2001). In ideal situations IL is integrated throughout a student’s education. Young children are taught simple IL methods, such as the Super 3 Research Model’s “Plan, Do, Review” (Nelson and Dupuis, 2010), and increasingly complex information tasks (e.g., using databases; evaluating online material; becoming an ethical producer of information) are presented to students as they mature. With effective scaffolding, graduates should be able to apply their IL skills beyond formal educational contexts (ACRL, 2015). Further research, though, is needed to explain how people might make the leap in applying IL concepts and methods in educational contexts to information-rich working environments.

IL has been developed since the 1970’s, most often in education, and to a lesser degree in workplaces (O’Farrill 2010; Heinstrom and Ahmad 2018). Myriad working groups and task forces created IL standards and guidelines to teach students how to find and use reliable information. The ACRL framework was created in order to address the dynamic nature of information and the increasing expectations of knowledge production and creation. This paper contends that ACRL’s Framework for Information Literacy for Higher Education (the Framework) (ACRL 2015) is applicable in both educational and work contexts in that it describes (8):

- knowledge practices, “demonstrations of ways in which learners can increase their understanding of...[IL]...concepts”
- dispositions, “ways in which to address the affective, attitudinal, or valuing dimensions of learning” and

- metaliteracy, “an overarching set of abilities in which students are consumers and creators of information who can participate successfully in collaborative spaces”.

The Framework emphasizes “dynamism, flexibility, individual growth, and community learning” (ACRL 2015, 8) which describes work not only in education, but also in information-intensive workplaces. In this paper, we describe how to apply the ACRL Framework as such in order to expand existing theories of Knowledge Management (KM), and specifically knowledge creation (KC). We suggest that hermeneutic phenomenology (HP) offers the means of connecting the fields by providing language regarding human experience and action with information across multiple contexts.

KC is a component of the Framework that is especially apt for examination in workplaces. KC is generally associated with the domain of KM in regard to product development or problem-solving in competitive environments. KC lacks a single definition, but it can be categorized as either a process, “the initiatives and activities undertaken towards the generation of new ideas or objects” or an output, “the development of new ideas that reflect a significant elaboration or enrichment of existing knowing” (Mitchell and Boyle 2010, 69). IL, as an experiential and collective phenomenon in workplaces (see Lloyd 2010, 2012; Limberg et al. 2012), has not been extensively examined in relation to KC on a theoretical level (see Forster 2015). KM is an interdisciplinary field that has some overlapping concerns with IL (see O’Farrill 2008), but which primarily is concerned with organizational information sharing to solve problems and create new knowledge (Mitchell and Boyle 2010; Tsoukas 2009; Choo 2016). Both IL and KM are concerned with how human beings find and interact with information, and how they determine what is situationally needed and relevant.

There is a rich tradition within HP (Merleau-Ponty 1962; Gadamer 2004) and within LIS (Benediktsson, 1989; Budd, 1995) that offers a way to connect KM, KC, and IL; simply put, humans constantly encounter and interpret information based on a variety of factors (e.g., preconceptions, environment, and other people), and people use that interpreted information to make intentional decisions to solve problems (Betti 1990; Ricoeur 1990). Together,

the Framework and HP concepts of being and acting with information provide a theoretical basis and practical methods to implement IL at work, improving decision-making in knowledge-based environments.

Hermeneutics and phenomenology have been explored and discussed in the field of LIS as foundational to the discipline (Benediktsson, 1989; Budd 1995, 2005; Hansson 2005; Savolainen, 2008; Suorsa and Huotari 2014; Suominen and Tuomi 2015; Gorichanaz, 2017). LIS rests on the premise that people use textual information “to understand the world, a problem, and so forth” (Benediktsson 1989, 214). In recent years, hermeneutics and phenomenology have been employed to understand experiential and dialogical premises of information and its use (e.g. Gorichanaz, 2017; Suorsa, 2015). Our paper contributes to these discussions.

## **2 Information Literacy as a path from school to work**

### **2.1 Information Literacy as a tradition**

IL was coined in a 1974 keynote to the information industry by Paul Zurkowski, who stated that “information is not knowledge; it is concepts or ideas which enter a person’s field of perception, are evaluated and assimilated reinforcing or changing the individual’s concept of reality and/or ability to act” (Zurkowski 1974, 1). The address was more of a call for governmental support of the information industry than one to improve critical thinking, though.

Bibliographic instruction is a close relation to IL rooted in reference librarianship (Greene, 1876). Information technologies and databases such as Medlars and DIALOG, dictated fairly constant changes to information access and library instruction by the mid 20th century. According to Behrens (1994), the term ‘information literacy’ was used by librarians by 1976. IL became more firmly entrenched as a mission of librarianship in 1989 with the American Library Association’s (ALA’s) and ACRL’s presidential reports on IL. ALA’s 1989 report defined IL as knowing how to learn and postulated that it is essential for navigating changes in job markets and even citizenship (ALA 1989). The ACRL report, too, discussed IL as a prerequisite to responsible citizenship and job preparedness in wake of an “ever growing tidal wave of information” (ACRL 1989, para. 1). Library resources were of central importance, as teaching

students how to use the library would enable a lifetime of problem solving. The American Association of School Librarians (AASL), too, has devoted considerable effort to IL in K-12 education. Concern with IL is not confined to the United States; many countries have developed IL models that fit within their own educational and publication realities. IL has ultimately been framed as a human rights issue by the International Federation of Library Associations (IFLA) and other organizations.

In 2015, the ACRL introduced a new Framework for IL in Higher Education. The Framework responded to the lack of flexibility in previous IL standards, shifting expectations within higher education regarding how and where students learn, as well as students' participatory, creative products as outcomes of learning (see e.g. Sample, 2020). The Framework is "based on a cluster of interconnected core concepts" (ACRL 2015), or six defined frames that include knowledge practices, or ways of acting, and dispositions, or attitudes. The expectations of students to be collaborative producers of knowledge aligns with dispositions required in knowledge-based organizations. How, though, does the Framework support KC beyond university education? This is the focus of Section 4.

## **2.2 Research on Information Literacy**

Librarians developed IL concepts and standards around information access and use (Sundin, 2008; Sample 2020). Within LIS research and education, IL is most closely associated with information behavior and library instruction. The concept and practice of IL has inspired a vast amount of research that frames IL alternately as a set of skills, a way of thinking or as a social phenomenon. Such conceptualizations impact how IL is examined and taught in practice (Addison and Meyers 2013; see also Sample 2020).

Many researchers have sought to clarify core aspects of human information behavior and activity that effect IL competencies at school and work (Sample 2020; Julien et al. 2020). Others have focused on psychological aspects of information seeking and IL; for instance, Kuhlthau's (1991; Kuhlthau et al. 2015) Information Search Process (ISP) demonstrates that people go through points of uncertainty, frustration, and clarity during the research

process. The experiential nature of IL has been a focus for some researchers (Lloyd, 2010; Limberg et al. 2012), and IL has also been explained in terms of a praxis or practice (e.g. Tuominen et al. 2005; Lloyd 2010; Multas and Hirvonen 2019). IL research itself has been approached critically by some authors (e.g. Jacobson and Mackey 2013; Suominen and Tuomi 2015) who seek to untangle its complexities, sometimes in relation to other literacies.

There is a small body of literature connecting IL and HP. For example, Limberg et al. (2012) note that IL is inherently interpretive and criticizing authority described in pre-Framework IL models. Lloyd (2010 para. 39) states that “information literacy must be understood as a lived experience (...) manifest through our bodies (...) which enable shared mutual understanding to develop among people in co-participatory practice...”. IL is thus explained as a product of lived experience that enables KC through shared understanding in working situations. The embodied experience of IL and KC is ripe for examination in multiple contexts through the lens of cooperative relationships that facilitate growth and advance knowledge.

### **2.3 Working and KC as a place for IL practice**

KC is the ultimate goal of IL, as presented above. Within the field of KM, KC has been examined as a process involving sharing information and knowledge, especially within knowledge-based organizations. According to Choo (2016) successful employees are able to prosper through their creativity in change-driven knowledge-based organizations. As with IL, KC has been approached from various angles (Mitchell and Boyle 2010), for example by studying employee behavior and creativity, or organizational environments that support KC. Some studies have focused on the organizational conditions under which interpersonal interactions and communication thrive (e.g. Nonaka and Takeuchi 1995; Tsoukas 2009; O’Farrill 2010). Nonaka and Takeuchi’s (1995) SECI (socialization, externalization, combination, internalization) model of KC, for instance, illustrates conditions for dialogue and methods of communicating tacit and explicit knowledge. In workplaces, specialists communicate via specialized languages as well as professional norms; such boundaries enable dialogue and novel conceptual combinations to reframe problems (Tsoukas 2009).

A point of agreement regarding KC is the centrality of interaction between people and also between people and information sources (e.g. Cook and Brown, 1999; Morner and von Krogh, 2009; Tsoukas, 2009; Auernhammer and Hall, 2014). KC happens when people share their experiences and information (Cook and Brown, 1999; Tsoukas, 2009; Suorsa, 2015). Individual perspective and interpretation of shared information in new situations is an important aspect of KC (Cook and Brown 1999; Suorsa and Huotari 2014). HP offers a means to examine the dialogical and experiential nature of KC (e.g. Suorsa and Huotari 2014; Suorsa 2015).

Many policy documents on IL focus on long-term goals of training or education, but there is little cross-pollination between the subfields of IL and KM (O’Farrill 2010). We do know that employees’ information use and sharing impacts organizations’ performance and development (Cheuk 2017). Organizations have both structures (e.g. information management systems) and practices (e.g., morning meetings, brainstorming sessions) that guide and support information use, and also subtle, jointly developed, collective information practices and rules (Lloyd 2012). Such structures can be explored to find ways to improve employees’ individual and collective IL: knowing what information is needed and how to find it (ALA 1989). However, as O’Farrill (2010, 726) found, “... this structure of awareness...shows how research on IL is difficult because a lot of the knowledge and skills involved are not in the foreground of awareness.” Hence, the phenomena and practices of IL and KC are intertwined in seeking and using both formal and informal information (Forster 2015; Ahmad et al. 2019; Widén and Karim 2018).

In sum, people working in information-rich environments regularly use textual and interpersonal information sources to innovate and solve problems. Being able to make use of information is dependent upon organizational structure and the environment for communication and interaction, which falls under the domain of KM. A premise of IL is that people should be able to recognize their own information needs, but workplace collaboration and information use is a hermeneutical process.

### **3 Hermeneutic phenomenology for understanding humans and information**

There is a rich tradition of HP in LIS (e.g. Benediktsson, 1989; Budd 1995, 2005; Burnett 2002; Hansson 2005; Savolainen, 2008; Suorsa and Huotari 2014; Suominen and Tuomi 2015; Gorichanaz, 2017). An HP approach provides the means to explore the interdependence of IL and KC by demonstrating how people use and interpret information in various contexts in order to create new knowledge. Budd (1995, 298) explains that much of LIS research has been based on “the phantasm of certainty” inherent in positivism, but should instead look to HP, which “is not a method or a set of methods (...) (but) a position which opens the inquirer to possibilities instead of barricading avenues” (304). Furthermore, Budd (2005) advocates using phenomenology to study human experiences of perception, intention, and interpretation, as well as how people use tools of information storage, retrieval and use (see also Butler 1998; Gorichanaz 2017). With HP, these can be understood as practices or processes that occur in interactions between people and the environment. Conversely, HP can uncover problems that stymie KC (Suorsa and Huotari, 2014).

#### **3.1 Hermeneutic phenomenological conceptions of using information**

This section provides an overview the HP tradition (Heidegger, 1985; Merleau-Ponty, 1962; Gadamer, 2004; Betti 1990; Ricoeur 1991). The roots of traditional hermeneutics reside in scriptural interpretation. One of hermeneutic’s modern advocates, Hans-Georg Gadamer (2004, xxxviii), states that humans need a sense of “what is feasible, what is possible, what is correct, here and now.” Betti (1990, 161) adds a situational premise: “without any knowledge about the circumstances of an action and the events preceding or following it, which locate it within a chain of events, it would be difficult to attempt such an inference...”. Hermeneutics is in essence how people can understand the world by reading and interpreting texts (Gadamer 1976, 2004; Betti 1990). While pure access to an author’s original ideas is impossible, readers can increase understanding of the text if they maintain awareness of their own biases and the context in which the information was created.

The idea of “reading a text or a work” should be understood in the broadest possible sense, as a text may be a book, a film or any number of communicative actions. Reading, in its turn, refers to the act of using a text in a certain time and context. The nature of the text is temporal, as Paul Ricoeur (1990, 324-325; emphasis in original) describes: “the work *decontextualizes* itself, from the sociological as well as the psychological point of view, and is able to *recontextualize* itself differently in the act of reading.” Ricoeur (1990, 325) defines this as distanciation (see also Burnett 2002). Being aware of this distance and working to understand its impact on information gained from the texts is one of the aims of IL. Distanciation refers not only to the perception of the reader’s relationship with the world but also to self-understanding as a reader. The challenge for the reader is the temporality of reading, as in interpretation of any text, many contexts and temporal levels are combined (Ricoeur 1991, 77).

Phenomenology, the “study of human experience and of the ways things present themselves to us through such experience” (Sokolowski 2000, 2), provides a means to understand the temporal and experiential nature of reading and interpretation, and also elucidates the possibility of being able to incorporate information from texts. Phenomenology stresses the importance of intentionality, “the conscious relationship we have to an object” (Sokolowski, 2000, 8) Consciousness is always consciousness of something, meaning that we take an active stance on all the information we perceive or experience. Our mind and body are united in perception and understanding with no separation between the world and the human (Merleau-Ponty 1962; see also Lloyd 2010). This premise provides a basis for understanding all kinds of knowledge and information processes, tying them to the present moment and ongoing situations (see also Suorsa and Huotari 2014; Gorichanaz 2017).

Phenomenology also gives us a way to approach problems concerning biases in interpretation. Lyotard (1991, 32-33) explains that phenomenology “seeks to explore the given – ‘the thing itself which one perceives, of which one thinks and speaks – without constructing hypotheses.” The goal is to approach phenomena without *a priori* presumptions; they are given to consciousness, and only then are they evaluated or placed within a context.

The hermeneutic circle (Gadamer 2004) further clarifies the dialogical and interactive nature of KC. It provides a structure for understanding human action, as the intersection of past, present, and future. The circle describes a fundamental movement between the text and different temporal levels and experiences in the event of reading as described above (Ricoeur 1990). It can also describe a concrete event of a conversation between people (Gadamer 2004). In relation to IL and KC, people bring prior knowledge (or the horizon of expectation created by prior experiences), evaluate the usefulness of new information, and then apply it to solve a problem or create new knowledge. The horizon of expectation is constantly changing. The hermeneutical circle is temporal movement involving constant anticipation, correction, and reassessment of expectations, which form a unified conception of the whole (Gadamer 2004). Interaction thus describes the act of interpretation in a certain time and place in order to create a new understanding (Gadamer 2004). This is the point at which HP is used to show the intersection of IL and KC: information is encountered, interpreted, and new knowledge is created which elucidates any context or situation.

### **3.2. IL and KC combined in the light of hermeneutic phenomenology**

We suggest four basic conceptualizations that explicate the relationship between IL and KC:

**The practice of IL as reading a text:** A hermeneutic premise is that humans are able to sense what is feasible, possible and correct in a certain time and place (Gadamer 1976). KC happens when a person encounters new information; and they evaluate if knowledge can be created, or if there is a need to seek more information. IL enables someone to be an active and conscious reader, aware of the temporal and experiential distances between the text and self (see also Burnett 2002). This kind of act can be seen as KC in situations where there is room for reflection and creation of new meaning based on information and knowledge (see also Suorsa and Huotari 2014). Reading is an active, interpretive event that can be understood as “processing information” of any kind. Hence, the content, or information, and also its evaluation is connected to

the problem or situation. As such, HP underlines the fact also stressed in the Framework, that there is no way to universally apply what is or is not relevant (Budd 2005; Limberg et al. 2012).

**The ideal of seeking truth as hermeneutic circle:** Current research on KC and HP discusses interaction in practice-based aspects of IL (e.g. Tsoukas 2009; Suorsa and Huotari 2014). The hermeneutic circle provides a theoretical framework for describing IL processes such as evaluating information to make decisions in the course of action in working situations. Decision-making in this sense is a product of constant motion, as new information is sought to build on previous knowledge, interpreted, critically evaluated, and then incorporated as knowledge in order to expand an understanding of truth (Gadamer 2004).

**Distanciation by critically examining preconceptions:** A central element in the HP approach of studying humans and information lies in the attitude towards what is known. Previous experiences and thinking are constantly tested when people are open to the truth, as it is revealed through new information. (see also Tsoukas, 2009; Suorsa and Huotari 2014). In KC situations this means being open to a situation and actively questioning own prejudices and preconceptions. In HP, it also means the responsibility to strive for the truth (Lyotard 1991). This is manifested in IL as critical evaluation of information, including understanding its origins (see also Benediktsson 1989).

**Interpretation as creating new knowledge:** HP dictates that humans' relationship with the world is in constant change, as information is always interpreted in the present moment. Every encounter is potentially a knowledge creating event, producing a new understanding of the world as one 'reads' the situation, the environment, and possibilities (Gadamer 2004; Ricoeur 1990; see also Suominen and Tuomi 2015). Encountering information as a hermeneutic circle means endeavouring to reach the truth through active interpretation. In KC, HP dictates listening and questioning information. Active listening and reflection requires cultivation and conscious action (Budd et al. 2010).

In sum, establishing IL on of experience is not meant to emphasize experience in general, but through the application of a broad phenomenological orientation (Merleau-Ponty 1962; Heidegger 1985; Gadamer 2004; see also Gorichanaz 2017). Every situation and information encounter involves a

physical act of perception and interpretation. The attitude towards the encountered is crucial (see Budd et al., 2010).

#### **4 Reading the Framework through the hermeneutic phenomenological lens**

The ACRL Framework was created to develop models and curricula for IL in higher education. The ACRL Information Literacy Competency Standards Review Task Force (2015) recognized that IL is a moving target and proposed the Framework to counter older prescriptive models of teaching IL. It emphasizes both skills and attitudes of critical thinking as well as ethical production of information (e.g., attribution). Here, we focus on analyzing the Framework as it describes IL in relation to KC, and specifically turn to the system of HP to unite IL and KC in the workplace.

HP stresses the common goal of the study of both IL and KC: aim to reach a best possible information to do good decisions in everyday life and at work (see O’Farrill 2010). The Framework describes the development of knowledge processes and dispositions of an information literate person in the context of their academic discipline (ACRL 2015, para. 2). This disciplinary emphasis suggests a path to extend both the knowledge processes and dispositions from education to work, and HP provides the means to examine this in the light of experiences and interaction.

First of all, the Framework offers a basis to clarify the role of information in workplaces. **Knowledge processes** encompass activities and practices that comprise the core of knowledge work in organizations. Information-literate people working in knowledge-rich environments know how to find information and employ informed techniques to use those information systems (e.g., people, files, databases, a search engine). They make informed decisions by evaluating the value and content of information. They create new knowledge in everyday situations and in meetings, when decisions are made as events unfold (Tsoukas 2009). IL enables agility. The hermeneutic phenomenological concepts outlined above are point to the complexity of being involved in various knowledge processes simultaneously, as well as the possibilities of coping with such work by developing knowledge, skills, and

practices that enable a person to thrive in challenging situations in information literate way.

**Disposition** is defined in the Framework as “a tendency to act or think in a particular way. More specifically, a disposition is a cluster of preferences, attitudes, and intentions, [and] capabilities” (ACRL 2015, para. 2). IL begins with an open, dialogic attitude but is honed over time with experience. The hermeneutic phenomenological premise is that humans are active and reflective creatures who are capable of change (see Heidegger, 1985; Suorsa and Huotari 2014).

The Framework (ACRL 2015) is anchored by six non-hierarchical, interdependent frames which are widely applicable outside of their original purpose. Considering the frames in terms of hermeneutical phenomenology The first frame, **authority is constructed and contextual**, explains that people should be cognizant of the origins of information (e.g. who has produced the document used, where, when) in order to determine its value in a given situation. The contextual nature of information is equally important in the workplace, as context is the basis for determining what is situationally feasible, possible and correct (Gadamer, 2004). A hermeneutic phenomenological approach to IL means being aware of the requirements and limits of a current situation and being able to determine how to quickly solve problems using the appropriate texts (widely construed). It means having an open and dialogic disposition when they encounter conflicting information, using the information at hand to solve problems, and being able to determine what is of value, and why.

The second frame, **information creation as a process**, points toward the phenomenon of KC and its end result of new practices, products and information (Choo 2016). People who work in information-intensive environments face a deluge of documentation. An information-literate person should recognize a document’s purpose: was it for planning, or is it or a final (published) text? The Framework is centered on students’ academic work, whereas in the workplace, KC refers to developing something intangible (Cook and Brown 1999; Gourlay 2006). Knowledge can be demonstrated through the production of texts or through decision-making. A core problem of KM (the overarching domain of KC) is managing, transferring and sharing knowledge from the individual level to the community and organization (e.g. Choo 2016).

The realities of workplaces present a number of obstacles to good KM, which prevents or inhibits KC. The hermeneutic phenomenological approach can reveal obstacles that are created and manifest in both practices and tools.

The third frame, **information has value**, harkens back to Zurkowski (1974) as well as KM's foundation in the information marketplace: information is a valuable commodity. Students need to understand how to ethically produce work by obtaining texts through legal means, as well as by using proper citation practices. In knowledge-based organizations (see Taylor 1986), creating knowledge in interactions with the others dictates giving credit where credit is due. HP speaks to this frame in multiple ways: a reflective or dialogic attitude creates a foundation for discovering and communicating truthfully. Ethical workers engage in a process of continual reflection upon where and how they acquired knowledge, determining how it fits into the current knowledge base in order to build new knowledge, in the hermeneutic circle (Gadamer 2004). Ethical workplace environments reward contributions.

The fourth frame, **research as inquiry**, describes the iterative process of knowledge creation, the learning process and growth, and the position of research in larger society. Research impacts work and community life by creating opportunities for conversations around knowledge. The dialogic attitude is at the forefront of this frame, as it describes the attitudes regarding problems that can be solved with research, contextuality in reading a text (Ricoeur 1990), interpretation (Gadamer 2004) and other conceptualizations of hermeneutic premises outlined above. Experience is expressed as a component of the frame (p. 18); researchers should "recognize experiential limitations," "seek appropriate help" and "seek multiple perspectives." The value of texts can be further emphasised by acknowledging their role in clarifying the misunderstandings and working to reduce the distances (see also Burnett 2002).

The fifth frame, **scholarship as conversation**, emphasizes interaction and communication as a basis of knowledge-work. Conveying knowledge between people and building understanding is driven by communication, which underlies knowledge-based organizations (Tsoukas 2009). The Framework and the HP tradition both emphasize that complex problems often have no one correct solution. Knowledge is built over time, but tradition and canon should be challenged as new avenues or ways of communication bring new voices and

perspectives to the conversation. The dialogic nature of humans (with each other and the world), as described in HP, emphasizes how people can bring new perspectives to collective decision-making processes.

Finally, the sixth frame, **searching as strategic exploration**, stresses that searching is often nonlinear and iterative. The frame describes evaluating a range of information sources and flexibility in pursuing alternate avenues as new understanding develops. It also emphasizes the affective and social dimensions of searching, which hint towards an experiential basis of IL (Merleau-Ponty 1962; Lloyd 2010). The literate seeker is creative and flexible as they seek new paths for knowledge without losing the goals of the search. By definition, this kind of activity is constantly creating new knowledge.

To some degree, the Framework presents an ideal situation of encountering and working with information with few time constraints, and with all tools that are needed to make informed decisions. There is a need to describe how the processes and activities outlined in the Framework can be enabled in the complex and everchanging environment of work. First and foremost, this can be done by acknowledging the temporal and developmental nature of IL, explicated in HP conceptions outlined above. Workers need to have access to information sources and databases that show the context of their creation (e.g., through proper metadata). Obviously, properly using information technology to share relevant information has its place. However, the HP approach underlines the fact that information is situationally and contextually acted upon (see also Gorichanaz 2017). Hence, people need time and space in order to reflect and interact with texts and each other in order to develop IL skills, produce new knowledge, and make better collective decisions.

## 5 Conclusions

HP offers a vocabulary with which to describe human experience. The conceptions of *IL as reading the text*, *seeking for truth as hermeneutic circle*, *distanciation by critically examining preconceptions and interpretation as creating new knowledge* provide the means to understand knowledge processes and frames in the Framework as temporal and experiential in nature.

First, the hermeneutic phenomenological approach suggests that the phenomena described in the Framework and both in IL research (e.g. Tuominen et al., 2005; Limberg et al., 2012) and KC theories (e.g. Nonaka and Takeuchi 1995; Tsoukas 2009) can be conceptualized in terms of how humans exist and interpret the world, and in terms of the possibilities of humans to strive for better understanding. This could be seen as challenging the whole terminology around the topic of IL (see e.g. Jakobson and Mackey 2013), but the approach can also be implemented in a way that benefits the tradition of IL (see e.g. Sample 2020). Practicing IL in a way described in the Framework means actually creating knowledge, as every situation requires interpretation and reading the text anew. With HP, we can understand the complexities of human perception and experience in those situations, including challenges people face using information in decision-making. The hermeneutic circle adds insight into the process of reading.

Another premise given in the HP conceptions is the temporality of being, which suggests that the practice of IL should focus on the processes connected to the human beings within their environment, rather than in individual actions (c.f. Lloyd 2010, 2012; Multas and Hirvonen 2019). Seeing IL as a phenomenon rooted in the experience explains its complex nature, which has been addressed in the Framework.

In this paper we illustrated how the Framework connects to HP to illuminate the knowledge-creating nature of IL. It also describes why informational environments should be continually improved, to aid with both understanding context and origin of documents. This contributes to the existing body of research in LIS using HP on information and its users, leaving room for future research of themes such as information experience (Gorichanaz 2017) and temporal nature of document (Burnett 2002) in this context. Empirical studies could elucidate the experiential and situational nature of using information to create new knowledge.

This paper described how the Framework can be used to support IL beyond higher education. Bringing the ideas of the Framework to knowledge organizations can help bring new voices to organizations and support the

creation of optimal situations for finding and using information in order for organizations to progress. HP offers possibilities to combine the fields of IL and KM (O’Farrill 2010; Widén and Karim 2018; Ahmad et al. 2019), as solving the challenges of IL in work situations is not only a question of an individual’s abilities, but that it also requires an examination of the circumstances of work, collaborative knowledge processes and tools available. This can enhance the discussion of the importance of IL also outside the field of LIS (see Bawden 2001).

Our examination has limitations, as it has aimed at giving an overview of how the HP can be used in understanding KC and IL in the Framework. Hence, there is still room for an even more detailed analysis of the Framework to explicate the benefits and possible challenges in using HP. Furthermore, there are also challenges within the HP tradition. To base the use of information in interpretation can increase subjective biases. Furthermore, the concepts suggested in this paper to avoid these are hard to accomplish. Hence, it is important to stress that in HP the aim is not necessarily to always aim to find the ultimate truth in texts, but rather to better understand a given situation, and also the limitations and the situatedness of one’s own the knowledge. Previous experiences and expertise developed through education and life experiences are crucial components of IL as hermeneutic action.

The HP concepts presented in IL and KC require acknowledging their double role (see Budd et al. 2010): they are descriptions of how humans relate to the world, but also descriptions of ideals to work toward. In the approach suggested here, human beings are considered conscious and thus capable of affecting their own actions. This also provides a basis for examining IL as a tradition of education and librarianship. In practice, the conceptions of HP can be used to plan tasks and methods to teach IL in education, emphasizing the importance of being aware of and analysing one’s own biases and information practices. Furthermore, IL can be used to enhance information seeking and use to improve collaboration and knowledge creation. Moreover, combining the Framework and HP could vastly improve organizational environments and

information processes and systems by taking into account the temporal and experiential ways that people simultaneously use and create knowledge.

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