# Informed Bodies: Does the corporeal experience matter to information literacy practice?

#### Abstract

Bodies are central to the information experience, but are not often accounted for as a source of information, that is central to the information literacy experience. Drawing from research with emergency services personal and with nurses, this chapter explores the role of the body as a locus for understanding and meaning making. Drawing from a sociocultural perspective, the author suggests that the concept of information experience as a standalone conception is meaningless. A solution is to acknowledge the referencing of experience against social conditions and ways of knowing that inform people's experience of practice. Key questions for researchers considering an information experience approach are posed.

## **Keywords**

Corporeal information; embodied learning; embodied knowing; physical information.

## Introduction

In this chapter the corporeal information experience will be explored, drawing from a constellation of related socio-cultural perspectives. The primary thesis of this chapter is the centrality of the body in the co-construction and understanding of the information experience. The body should not be viewed as a *container* but as an ever present site of embodied and experiential knowledge which is referenced against a backdrop of socio-cultural, material, economic and historical horizons from which meaning is co-constructed in relation to others who are located and co-participating in practice.

In the information literacy field to date, and in the broader arena of information studies, the corporeal experience has been uncoupled from the cognitive experience. Consequently there has been little attention paid to corporeal information or the body as a site with the capacity to inform learning. The idea that information is experienced as a cognitive process and that learning is primarily a cognitive experience has long been accepted and supported by Cartesian mind/body dualism, which privileges the cognitive over the corporeal. In this scheme, the body has in effect become an absent presence (Sauer, 1998; Shilling 2003). It is absent, in the sense that insufficient attention is paid to the body as a site of information that is corporeally produced through people's physical experience of their settings (Lloyd, 2010), through their engagement with others and with the material objects of their workplace performance.

In the workplace, the body is the visible enactment of knowing and situatedness. Consequently disassociating the body from research into people's experience of information literacy effectively limits our understanding of the nature of this experience and has implications for accounts of learning (Lloyd, 2010). The primary aim of this chapter is to bring the body into discussions about *information experience* and to suggest that the body, in addition to acting as the locus through which social and epistemic information modalities meet, provides its own narrative that informs learning in all contexts. However, at the same time, this chapter attempts to demonstrate that information experience as a stand-alone conception is meaningless, until it is referenced against the social conditions and ways of knowing that inform people's practice. Consequently, when we discuss the body and the corporeal information ground, we are referencing this against a set of constructions that enable interpretation and understanding.

# Author's perspective on information experience

In this chapter the terms *information* and *experience* are bought together in a specific way that references these two distinct concepts against socio-cultural theory. Drawing from ecological and socio-cultural perspectives, the concept of information is understood by the author to be "any difference which makes a difference" (Bateson , 1972, p. 453). To be recognised as meaningful, information must be referenced against the ontological and epistemological "shape" of the setting, that is

- against the particular agreed upon knowledges that shape the setting and the way of knowing;
  and
- in relation to interaction with others who are co-present and co-participating in its ongoing performances and the material objects of the setting;

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Ontologically, settings reflect the inherent nature of information and knowledge that have been prefigured over time (i.e., What is the nature of reality? What particular types of knowledge such as scientific knowledge, or specific occupational knowledges, are valued?). The nature of knowledge influences the epistemology of the setting (the ways of knowing e.g., What is the relationship between the known and the known?).

While the concept of information is tricky, the concept of experience is even trickier, because experience cannot be understood in its own right, but requires reference against the co-constructions that constitute a particular practice or performance of a practice. In this respect, experiences can be a "complex interaction between body and sensory input and neurological processing—a relationship with the world as humans encounter, interpret and shape messages" (Fox, 2000, p. 41). Experience contributes to outputs such as knowledge or practical wisdom and is drawn from observation, encountering or undergoing something, or remembering previous events or episodes (Macquarie Dictionary, 2005).

Barad (1996, p. 179) has proposed that "knowledge is always a view from somewhere", suggesting that as a source of knowledge, the meaning of our experiences is referenced in relation to the backgrounds of our everyday existences. To understand an information experience, we must be able to reference it against the socio-cultural, material-economic and historical background that comprises our everyday lives. This means that we are able to recognize the information landscapes that we engage with and develop ways of knowing them and the meaning that is attributed to them through our social or physical experience of information. Information landscapes are described in this chapter as the space that is constructed by people who are co-located and co-participating in a set of ongoing practices. Information landscapes reflect the discourse, social order and arrangements that form a social practice (Lloyd, 2010). The structure of a landscape enables or constrains access to certain types of information. When members enter the landscape they engage with information modalities (social, physical or epistemic) that connect them to practice discourses and heritages that prefigures a site, and to the site's arrangements, cycles and patterns (Lloyd 2010, p. 139).

## Information literacy and learning: a brief sociocultural view

Sociocultural theories emphasise that all human practices (including learning and information literacy) are social, ongoing, bound to specific contexts and manifested through a suite of activities that enable construction and reconstruction of information. These theories have been used to frame information literacy and information practice research (Lipponen, 2010; McKenzie, 2003; Tuominen, Savolainen & Talja, 2005). In discussing this approach, Talja and Lloyd (2010) suggest that the "sociality of practice is based on two premises: firstly, that a common sense of what constitutes competent practice originates not from the heads of individual actors, but among the members of a community of practitioners; and secondly, that practice is always organised in relation to some significant others" (p. xii). A sociocultural approach emphasises shared ways of interaction and literacies (such as information literacy) are viewed as developing within the social contexts. As such, literacies are shaped by knowledges and by ways of knowing that are specific to the particular setting. From this perspective, learning is viewed as holistic, emphasising the relationship between the learner and the learning environment, and the process of learning (Hager, 2004, p. 14). Learning consequently engages a multiple range of literacies, including corporeal literacy.

## Information literacy and corporeal literacy

An outcome of information literacy is the ability to know what there is in a landscape, and to draw meaning from our engagement with and experience of information (Lloyd, 2006). This is a holistic view of information literacy as a social practice, and it draws from my understanding that an information landscape is constructed by social, epistemic and corporeal information modalities that are entwined together and give the setting its specific knowledges, character and discourses. As a social practice, information literacy is enacted as a way of knowing and informed by the sayings, doings and relatings

specific to the environment (Lloyd, 2010; Schatzki, 2002). From this perspective, to understand how information literacy is enacted also requires the researchers to recognize the potential of the body to act as a site of information that reflects a person's experience of being in the world. Corporeal literacy is reflexive, and refers to the ability to recognize and attend to information that is created through physical experiences, as part of information literacy practice.

# The site of the body in theory

The prevalent emphasis on the Cartesian view, which considers learning to be an exclusively internal and individual process, has produced a view of knowledge as rational and objective (Shilling, 2003). This view also informs much of the work undertaken in the library and information studies field, which is focused on text as the primary source and representation of knowledge. As a result, there has been insufficient attention paid to the body as a significant *site* of physical information that informs information literacy practice and learning (Lloyd, 2010).

A number of theoretical frames (Dewey, 1939; Foucault, 1979; Goffman, 1983; Merleau-Ponty, 1962) have been applied to empirical explorations of the body in social theory, particularly in relation to learning. Through these frames, the sensory and sentient body is examined as social, institutional, material and communicative, as practising bodies in vocational settings. This socio-cultural approach provides a holistic understanding of the nature of social interactions in the ongoing performances related to information literacy and learning.

A number of social theorists have noted the role of the body as a site of practical and social information that contributes to learning. In early work, Dewey (1938) recognised the *social body* and the sociality of bodily experience. In considering the role of experience, Dewey argued for the inclusion of the body as central to the learning process. Influenced by pragmatism, which recognises the human world as both shaping and being shaped by the doings of people, Dewey's work on experiential learning challenged the mind/body duality. Key concepts attributed to Dewey include understanding the dual nature of experience in learning and in learning from experience, the importance of context through which people operate, and recognition of the link between the body and cognitive function (Dewey, 1938).

Early phenomenological accounts by Merleau-Ponty (1962) took up the challenge of the Cartesian mind/body divide by arguing that knowledge is rooted in experience. For this scholar, the body is the centre of experience and therefore should be incorporated into the practice of learning because it acts as storehouse of information and understanding (O'Loughlin 1998). For Merleau-Ponty (1962), perception is experienced as meaning-generation and occurs through sensations such as seeing, hearing and tactile encountering. It is an action and a way of thinking, informing the body to conditions external to it, while simultaneously conditioning the way in which meaning is made of external events. In this respect, mind and body cannot be separated "since it is the body that is which furnishes the meaningful configuration of

senses which is the process of perception" (O'Loughlin, 1998, p. 283). According to Merleau-Ponty (1962) the body has two sides, the sentient (it sees) and a sensible (it is seen), suggesting that it is positioned in relation to the world (Crossley 1995, p. 47). Waskul and Vannini (2006) extend this phenomenological notion of the *signifier body* by suggesting that the body acts as an anchor in the metaphorical and literal sense where "meaning is comprised in embodied action and the body is interpreted by frameworks of meaning" (p. 9).

In the work of Foucault (1979), the body acts as text onto which the circumstances of events and performances are inscribed. From this perspective, the body is subject to organisational regimes and becomes a discursive construction reflecting institutional frameworks, regulatory discourses and symbolic processes. In describing the post-modern construction of the body, O'Loughlin (1998) suggests: "The body is the inscribed surface of events; it is a text to be decoded and read - a locus of production, the site of contested meaning. "(p.276), The idea of the *socially inscribed* signifier body, was taken up by Goffman (1983) who suggested that the body is central in the generation of meaning, by creating the visual clues about performances (i.e. roles, activities) that can lead to the construction of a shared vocabulary that enables embodied knowing.

In describing the communicative body, O'Loughlin (1998, p. 279) has argued for corporeality as "that for which gesture, body orientation and proximity are the vehicle through which meanings are expressed. Thinking is undeniably embodied." O'Loughlin has also considered the body as the producer of meaningful expressions:

Meaning which is always socially produced emerges from embodied co-operative human activity. By ongoing participation in the activities of a group, the weaving of relations amongst its members, body subjects learn to respond with habitual orientations to the charged stimuli of their environments. Embodied communication is the way in which over time people grasp things in common and come to partake of communication in common understanding (1998, p. 286).

Central to the theme of the informed body is the concept of embodiment, which has been defined by Nagatomo (1992) as knowledge residing within the body and through the body. Davis (1997, p. 15) considers embodiment to be "experience or social practice in concrete social, cultural and historical contexts, and bodies are therefore not only subject to external agency, but also influenced by 'agents in their own social construction.'" In discussing embodiment, O'Loughlin (1998, p. 279) argues that the "body and self do not stand in a relation of owner/occupier; rather, the body is itself both communicative and active" (p.279).

In describing writing as an embodied practice, Haas and Witte differentiate between embodiment and the analytical category of the body by defining embodied as lived experience, while the body is defined as a cultural, social and linguistic construct (2001, p. 417). Hass and Witte view the embodied act as "taking place in real time and in specific physical spaces" (p.417).

#### The vocational body

The idea that the body has become absent from learning and knowing practices has also been considered by a number of authors whose key interest lie in workplace learning. In recognising the relegation of the body and arguing for the body as a site of worthwhile knowledge that contributes to workplace learning, Beckett and Morris (2001) note that "the highest status is reserved for the most abstract and immaterial learning... and the lowest status is accorded to concrete, material learning, much of which we learn in daily embodied actions." Similarly, Fenwick (2003, p. 124) claims that "the body in some respects has been somehow banished from learning, along with the body's enmeshments in its social, material and cultural nets of action."

The continued erasure of the body in vocational and workplace training packages has produced "a thin practice of developing this competence" (Mulchay, 2000, p. 506). Bodily knowledge, according to Mulchay, is "built up and passed on generationally, in a hands-on, in-practise fashion" (2000, p. 507). Constructing and maintaining competence requires a close connection between explicit and codified knowledge representing the institutional goals and embodied knowledge, which is tacit and gained from the body in action and passed from person to person (Mulchay, 2000)

In relation to learning, Yakhlef (2010) suggests that the corporeal ground provides an understanding of practice-based learning. Yakhlef (2010) views the body as the connection between social and material worlds and therefore central to "learning and knowing" (p. 409).

#### **Practising bodies**

Accounts of practice theory also highlight the role of the body. Bodies are seen to signify the nature of practice (as social site), and, in the performance of work, demonstrate practical reasoning and know-how that is valued as part of the social conditions and structure of the site. In referencing the body, Schatzki (1996, p. 44) suggests, "it is through the performance of bodily actions that the performance of other actions is constituted or effected." Similarly, Gherardi (2009) in discussing the relationship between knowledge and practice has argued "not only do people work with their bodies, but they also know through them" (p. 354). In identifying this type of corporeal knowledge and knowing as sensible knowledge, Strati (2007) states:

Sensible knowledge concerns what is perceived through the senses, judged through the senses, and produced and reproduced through the senses. It resides in the visual, the auditory, the olfactory, the gustatory, the touchable, and in the sensitive-aesthetic judgement. It generates dialectical relations with action and close relations with the emotions of organisational actors (p. 62)

In locating the body in practice theory, Reckwitz (2002, p. 251) argues that seeing the body in different ways lies at the core of this perspective. According to Reckwitz "[a] social practice is the product of training the body in a certain way; when we learn a practice, we learn to be bodies in a certain way (and this means more than to use our 'bodies')." In the performance of routine activities, the body is a visible representation of practice, including the associated mental, emotional and structural aspects that act to situate the body. This suggests that bodies are both instrumental and communicative and "give the world of humans its visible orderliness" (Reckwitz 2002, p. 251).

## **Corporeal experience of information**

Common to all the views expressed above is the idea that our bodies are not often regarded as a primary site that informs learning, and yet they are central and always present in that learning because it is through them we are situated and our performances are experienced. Our bodies also act as an *information locus* (Godbold, 2012) providing access to information and knowledge, but also providing access to experience and skills.

Although still emerging, recent studies of information literacy practice, in the context of emergency services personnel (Lloyd 2006, 2009), nurses engaged in renal care (Bonner & Lloyd 2011) and renal care patients (Bonner & Lloyd 2011; Godbold, 2012), have identified the importance of the body and its role in informing workplace learning and becoming information literate, in relation to the content and structural architectures of the setting and its performances.

## Corporeal aspects of information literacy experience

A number of studies by the author (Lloyd-Zantiotis, 2004, 2009; Bonner & Lloyd, 2011) have included an exploration of the body and the role of corporeal information in the information literacy experience. While work in this area is still emerging, to date the analysis of this data has suggested that the body and corporeal modality are a central site of information that contributed to the information literacy experience and practice of novices and experts. These studies extend and challenge information literacy from a skills-centred conception related to print based sites, to a more embodied and situated conception framed through a people-in-practice perspective (Lloyd, 2012). The people-in-practice approach attends to information literacy as socially enacted practice. It focuses on participants' engagement with (a) information sites that inform disciplinary or vocational knowledge (content) and (b) the structure of the site (sociocultural/material conditions which shape the local paradigms of the site), and considers the activities and skills that are required to connect with the information landscape and also to participate in its ongoing shaping and reshaping. Central to this perspective is the body, as a source of reflexive information and as site of meaning for others who are co-located and co-participating in the social and material performances of the setting.

#### **Emergency Services Studies**

In my emergency services studies of fire fighters (Lloyd-Zantiotis, 2004) and ambulance officers, (Lloyd 2009), the body was identified by participants as an active site of information (the corporeal information modality) that was drawn upon in learning about work, during the performance and practice of work, and through reflections about the sociality of work. This experiential and embodied information was used to form the narrative, which identified fire fighters' bodies as expert or as novice.

In the performance of their work, fire fighters developed *fire sense* which represented the corporeal information ground within their information landscape. This type of information is difficult to accurately represent in written form, because it is sensory and derived from bodily experience on the ground. The concept of *fire sense* has parity with "pit sense" (Sauer, 1998; Somerville, 2002) and describes the attainment of sensory information that could not be articulated via text. This type of information is tacit and often contingent upon the immediate situation. In the case of emergency service workers, this type of information is distributed orally and becomes embedded in social practices and traditions as embodied knowledge (Lloyd, 2010).

Emergency services workers also describe how observation of other workers' bodies provides a source of information that helps to shape their own body in relation to the expectations that surround the performance of work. (Lloyd, 2010). The body of an emergency service worker is signified in a number of ways and is shaped through institutional discourse that teaches them how to act in accordance with the norms and values of the setting (e.g. a fire fighter's body may act in different ways to that of an ambulance officer's body, because the performances and expectations of them are different). This information emerges through access to on the job training.

In another study (Lloyd, 2009) ambulance officers described how they *rely on each other to verify and confirm* things when they are practising. They *observe* each other's bodies and watch each other do practical assessments, evaluating performance against a competency checklist: "We rely on each other to confirm that we are doing it right [...] like one will watch the other do the actual assessment and will have the actual checklist and will tick off everything for that competency" (Ambulance Officer, Lloyd, 2009, p. 402).

Participants in both studies describe the use of their senses to gather information. Fire fighters describe the smell and sounds of fires as sites of danger, while ambulance officers describe how their senses work to enable them to assess the potential dangers associated with entering unknown premises. The body as an internal and external site of information, was also reported by participants in the ambulance study (Lloyd, 2009). "Your hands are kinda moving there by the time your brain's thought about what you're doing [...] it is a skill, touching, getting hands on, information just seems to be absorbed a lot better when I

am physically doing it and think about what it means and how you convey that information, what you do with that information" (Ambulance Officer, Lloyd, 2009, p. 203).

In both studies the body acts as a site of acquisition and dissemination and therefore becomes a locus of information (Godbold, 2012). The experiences of practice and performance provide the body with a rich corpus of information that can be drawn upon in reflexive consideration. As a dissemination site, the bodies of emergency service workers signify the impact regimes of institutional power and of embodied experience.

## Corporeal experience of renal care nurses

In a study of renal care nurses (Bonner & Lloyd, 2011) revealed the importance of corporeal information to the workplace performance and learning of nurses. Nurses in this study recognized that it was not only their own bodies that acted as sites of information, but also the bodies of their patients and of other nurses, which acted as important sites to inform information literacy practice and learning. In this study, which focused on renal care nurses, sensory information was recognized as important, and nurses developed trust in their sense of touch and smell. Patients' bodies were recognized as a diagnostic site and nurses were aware of the role of observation as an information gathering activity. Nurses in this study reported the importance of learning to access corporeal information in order to inform their decision-making. A nurse participant summed this up as "really important, I use my sense of touch to assess the patient, my eyes, to sense what I am hearing... my sense of smell is really important; probably the only thing I wouldn't use is my sense of taste" (Bonner & Lloyd, 2011, p. 1217). In these instances nurses draw from the corporeal experience, "what you see triggers all those other things in your mind as to what's going on, whether they walk in and they're happy or sad... triggers alarm bells or not straight away and a couple of questions will often find that you know they're not crash hot" (Bonner & Lloyd, 2011, p. 1217).

A recent study by Godbold (2012) of patients with chronic kidney disease (CKD) confirms the findings of Bonner and Lloyd (2011; Lloyd, Bonner, & Dawson-Rose, 2013). In her ethnographic study, Godbold repositions patients and their bodies, locating the body as a central site of information about CKD and about the effect of the practices of medical care because "they move in and with the ill body in ways which slow or assist the healing process; because they self-care; and because they decide when to bring changes to the attention of medical professionals" (Godbold 2012; p. 17).

# Discussion

The above studies demonstrate that bodies are not passive receptors of information but actively and internally anchor information drawn from experience in relation to reflexive understanding about our place in the world then (re) present those experiences externally for others to see. This suggests that

bodies act as a site of knowledge but also as a site of information for others. Corporeal information contributes to the narrative, and emerges through performance and interaction with others' bodies located together. The corporeal ground is therefore central to the practice of information literacy because it acts as a site about the nature of people's ongoing performances as they act out their practice. Bodies play a significant role in learning, because they act as the intersection where information that has epistemic origins (i.e., the rules and regulations), meets social information (i.e.,informal, local and situated knowledges), related to the community's intersubjective ways of knowing and doing. In workplace settings, bodies are inscribed with cultural meanings and therefore have the capacity to act as an object of discourse, and signifier of symbolic meaning and power. The performing body also provides information about skills and experience, which may be used by others to inform their own practice.

However, as stated earlier, the concept of experience is tricky and what I have attempted to do is to demonstrate that information experience must be referenced against a background that enables it to emerge as a construction. In the brief excerpts from the studies that have been undertaken, the body acts as a central information site, but this experience must be understood in relation to the social and normative conditions (norms, values, rules, regulations, etc.) that influence becoming and being a fire fighter, nurse or ambulance officer. The information gained from this experience is therefore referenced against prefigured understandings and constructions related to practice and performance, and the information is thus made meaningful.

# **Concluding thoughts and questions**

Experience is an interpretation that is referenced against a set of normative and non-normative social constructions, which constitute reality, and ways of interpreting and understanding it. To understand experience is to reference it against information that is made meaningful through an agreed process of construction between people who are engaged in joint projects and located in similar settings. Fox (2008) argues, "experience serves as away of talking about what happened, of establishing difference and similarity, of claiming knowledge that is unassailable" (p. 52). However, the implication for the use of this term and its coupling with an even more difficult term "information" is still to be explored in the information studies field. As Fox (2008) suggests, what counts as experience is not always "self evident nor straightforward; it is always contested, always political" (p. 52).

The studies used in this chapter highlight the importance of the corporeal site and physical information, to information literacy practice. However, and more importantly, they are examples of experiences as they are referenced and understood by participants' in *particular setting* and *through engagement with particular kinds of practices*. This leads me to end by suggesting a range of questions that should be considered when attempting to understand information experience:

• When does an information experience start?

- When does an information experience finish?
- How are the boundaries of experience constructed?
- How does experience become object of analysis? How is it referenced? What counts?

These questions are not confined to research which seeks to explore the corporeal information experience, but also apply to research that may wish to explore information experience as a general phenomenon of the lived experience, or more specifically in relation to information literacy practice. This produces a tension and opens up an area of debate for information literacy researchers who may wish to consider information experience as a guiding framework.

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