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The potential and paradox of informal learning

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Abstract

Through reflection on a lengthy series of research studies of diverse workplace learning conducted in Australia over the past decade, this chapter seeks to position discussion of informal learning as part of everyday working life. It uses a practice theory perspective to show how learning can be understood as a key feature of working and how it is implicated in the normal ebb and flow of work practices. It elucidates some of the tensions that such a view generates and points to the paradox in how promoting informal learning can effectively inhibit it.

1. Introduction

Informal learning at work has attracted growing interest over the past two decades. Interest comes from multiple sources, including modern organizations that generally accept the promise of positive effects on productivity. Organizations have a vested interest in recognizing and harnessing informal learning—not least because of apparent cost efficiencies. For example, little or no training related costs, nor backfill costs to replace workers that are attending training.

Researchers coming from a range of disciplines are also attracted to informal learning at work (Fenwick 2008). Various researchers (ourselves included) seek to capture, name, and ultimately *understand* more about it. Interesting research questions arise when we understand that learning occurs without the infrastructure of curriculum, structured training activities or the intervention of training personnel: what forms can it take and what are the effects on organizations? From our background in adult education research, our own concern is that in order to understand informal workplace learning, we need new and different perspectives to view it: perspectives that go beyond both conventional understandings of training derived the vocational education and training literature, as well as from those arising from organizational theory. Informal learning in and for work is an important feature of working life, and as such requires a new set of understandings not located in either of these two areas.

To this end, this chapter makes use of practice-based theorizations. In particular, it draws on the work of Theodore Schatzki (2001, 2012) and Stephen Kemmis (2000; 2005, 2010). This approach means that the activities or *practices* of workers, rather than individual workers, constitute the unit of analysis. This enables everyday work practices, undertaken with no thought to learning as such and often overlooked in other studies, to be examined in terms of learning. Understanding informal learning as

embedded in practices differs from accounts of informal learning that see learning as ‘a thing acquired by individuals’ (Hager 2008), or as a phenomena independent of the context in which it occurs, or as something that individuals do alone (ibid). Through a practice approach we understand learning as phenomena dependent on the activities, practices, and socio-material arrangements in which it is located.

Before continuing, however, we acknowledge that ‘informal learning’ is a contested term subject to a number of definitions. To say that something is formal or informal is to oversimplify, as most practices that involve learning have features of formality or informality associated with them. To uncritically name learning as either formal or informal is to essentialise a complex combination of learning processes which have varying degrees of formality and informality (Colley, Hodkinson & Malcom 2003). For example, participation in a formal course may lead to little learning without the informal interactions among learners and between learners and teachers that typically occur. Conversely, informal learning among workplace peers may involve reference to formalized manuals or procedures. There are also issues about naming the learning of others when those others do not recognise it as learning (Eraut 2004; Boud and Solomon 2003). Therefore, in this chapter in the service of clarity, we take a broad view that understands informal learning as a phenomenon that is *not* the result of some planned and structured educational or training activity. In doing so we acknowledge that some of the learning described here might also be categorized differently (for example, as incidental).

This chapter seeks to provide a fresh way of understanding informal learning at work through a secondary analysis of five published studies undertaken by researchers in our own institution in a broad range of Australian sites utilizing practice perspectives. The chapter is divided into three key parts. In the first part, by way of background, we outline developments in approaches taken in the study of informal learning and justify our approach and why it is a helpful framing for investigating informal workplace learning. The second part discusses a set of practices from across the studies, along with some examples, to give flavor to the range of practices identified. The third part turns attention to our analysis of the (learning rich) practices, and then to the learning *in* practices. It continues by drawing attention to the tensions of understanding learning as embedded in work, and the dilemma of seeking to influence informal learning through the examination of the potentially counterproductive effects of formalizing it.

2. Background

2.1. Approaching the study of informal learning

Interest in workplace learning has evolved over the past few decades resulting in the development of a growing range of concepts that can be used to identify and understand it. To help make sense of the scope of these resources, there are useful synopses in contemporary literature. For instance, Hager (2011, 2012, 2014) has provided overviews of the development of approaches to the study of work-based learning that spans from early mentalist understandings, to sociocultural, through to what he perhaps provocatively names postmodern theories. Similarly, in the introduction of a recent edited volume on the topic, Dochy (2011) provides an overview of various learning theories deployed in studies of workplace learning.

Further overviews of workplace learning theories can be found in the work of Fenwick (2008), and others (for example Malloch et al. 2011).

What is clear from discussions of this kind is that any approach, while illuminating some aspects of learning, also limits potential to notice others. For instance, some earlier cognitive approaches to researching learning have been recognised to be inadequate given the assumptions of the individualistic nature of learning on which such approaches are based. Other limitations included a backgrounding of the material contexts in accounts of learning and the adoption of unproblematic static views of knowledge.

Many have responded by shifting their approach to one that focuses more on the social, or collective, nature of work. Lave and Wengers' (1991) well-cited 'communities of practice' (CoP) is a good example of approaching research in workplace learning in a manner attentive to the sociality of work. It focuses on informal learning without overemphasizing informality as such. While situated views like CoP have been well taken up by organizations, and may be helpful for describing how newcomers are inducted into a field, they are typically silent 'about how, in practice, members of a community *change* their practice or innovate' (Fox 2000, p. 860 emphasis added). That is, processes through which ongoing learning occurs. Along with a silence on change and innovation, situated understandings of learning have been critiqued for various other reasons including assumptions about homogeneous 'communities' and the limiting of 'situatedness' to the social context alone (see for example Gherardi, Nicolini & Odella 1998; Roberts 2006).

To this end, there are more recent approaches that attend to the physical, social and political contexts of work. For these sorts of approaches, learning (and *not* learning for that matter) is not simply a matter dependent on individuals and their interactions, but also on the physical, social, cultural and political contexts in which work is carried out. Billett's (2001) significant attempt to bring together the individual *and* the work context—with context offering affordances for, or inhibiting, workplace learning—provides an early example of this approach. His later work expanded on these ideas (Billett 2011; Billett 2004). Further examples of approaches alert to the social, organizational and political context, with a less central focus on learning as such, include complexity and activity theories. These provide more complex understandings of non-homogeneous workers' learning in socio-political contexts and their constructivist understandings of learning leave open possibilities for innovation (cf Engeström 2009; Engeström, Engeström & Vahaaho 1999).

2.2. A practice approach (and why we adopt it)

While we appreciate the insights made available through this emerging body of work, and in particular the more recent developments, we take a 'practice approach' to our discussion here. Practice based theories represent an emerging tranche of contemporary research offering new and different understandings for those interested in work and learning (Hager, Lee & Reich 2012). Practice theory is not a unitary approach and nuances are seen amongst its central proponents (Gherardi 2000; Gherardi 2009; Kemmis 2000; Kemmis 2005; Kemmis et al. 2014; Nerland & Jenson 2012; Schatzki 2001, 2012). While a full discussion of differences between practice scholars is beyond the scope here, some shared features are relevant to our discussion.

Practices are a collective pursuit. Understanding practices as a common enterprise has important implications for understanding informal learning—not least of all in avoiding inappropriately individualized accounts of informal learning. A practice approach takes the connected activities of work, rather than attributes of individuals, as the unit of analysis. A practice is the ‘organized constellation of different peoples’ activities’ (Schatzki 2012, p. 13), and as such it has a shared understanding among those who practice them. Practices are not the ‘possessions’ of individual practitioners’ but are ‘the collective ‘property’ of groups, (Kemmis 2005, p. 393). In other words, a practice approach is more cognizant of the collective and integrated nature of work because a practice is a shared enterprise that extends beyond any individual person or discrete set of work processes.

A practice has ‘*extra-individual* features’ (Kemmis 2005, p. 393). Not only do humans shape practice, but non-human features of practice are also afforded agency. For instance, history, materiality and the socio-political influence practices. A practice approach is attentive to the context (not as a stage or background) but as implicated in, and/or shaping, practice. Fenwick et al (2011) have been among the key proponents in this regard: in particular drawing attention to the socio-material aspects of work and learning and the value in research of pursuing the everyday objects of work.

A practice is ever emergent. However, it typically has a history that precedes those who practice it (Schatzki 2012). Given the significance of ever changing contexts in which they are enacted, each enactment or iteration of a practice leaves open the potential for it to be done differently. A practice approach then, not only recognises how practices persist, but also how they change over time. This understanding is especially helpful when considering learning. Silvia Gheradi’s work on innovation (2000; 2009) is a key resource here as she notes how small-scale innovations, as a result of practices being undertaken in always unique circumstances, are daily occurrences in organizations.

Finally, understanding practices in this way invites drawing on different and more useful metaphors for learning. Many point to the limitations of traditional metaphors for learning. While Sfard (1998) provided an important contrast in learning metaphors (acquisition versus participation) in the late 1990s, others have since acknowledged and worked with and extended her ideas (Boud & Hager 2011; Hager 2008; Rooney & Solomon 2006). In particular Hager (2004, 2008, 2014; 2012) consistently argues the limitations of the common ‘transfer’ and ‘acquisition’ metaphors that have static views of knowledge. Practice based approaches employ different metaphors: including, the metaphors of ‘participation’ or ‘becoming’. These metaphors invite epistemological questioning—how is knowledge enacted, coproduced, as well as a focus on collective, coordinated and in situ activities of workers. Whereas ‘becoming’ metaphors invite consideration of not only how worker and organizational identities are produced through practice, but also acknowledge and exemplify the importance of recurrent learning (Hager & Hodkinson 2011).

While these are not the only features of practice as seen in literature, for present purposes they provide a useful basis for discussion.

2.3 Method

This chapter undertakes a secondary analysis of five published studies. Secondary analysis involves using data from previous studies to ask new questions or provide new insights into some phenomena (Heaton 2008). In the present case, key papers published in international journals from a series of qualitative studies undertaken within our own research group over a 15-year period were chosen as the data set. These met a quality standard, having all been peer-reviewed, involved existing workgroups at different levels of the organisations concerned, and represented a very wide range of workplace contexts. All included a focus on what is here described as informal learning, though this label was not often used in the original studies. While secondary analysis of quantitative data is a common strategy, the same cannot be said of qualitative data. However its popularity is growing due to its capacity to make better use of large amounts of data (among other things). In our own case the data sets are compatible though not quantitatively commensurate (see below). Furthermore, because one or both of us undertook the original fieldwork, we are familiar with the specificities of the studies. These facts address many of the key methodological concerns of secondary analysis. Another concern of secondary analysis we consider here is that of ethics, and in particular the informed consent of participants to participate in secondary studies (Heaton 2008). Across the studies, all participants gave informed consent for interview and focus group data to be included in publications. In two of the five studies' informed consent forms the use of data is limited to the original study alone (ie. the context, judgement and informal learning, neighborhood centre studies). In these instances we only reuse passages from existing publications in addition to citing their sources.

We take a two-step approach to our analysis. First we look across each study to identify work activities that involve learning. The following criteria is used to warrant relevance:

- The practices are ones where learning of some sort has been identified.
- The practices are independent of any formal training programs or initiatives explicitly intended to bring about learning
- The practices primarily serve some function other than bringing about learning. This means that mentoring and coaching (which have some deliberate pedagogical intent) are excluded.
- The practices, when intentionally deployed, do not involve people who occupy a learning function within the organization (eg. trainers and HR personnel).
- As in the source studies, practices were identified that were typically commonplace in the work unit and were not outliers.

This strategy generates a list of practices from across the multiple and very diverse sites of five separate studies: a wider range of contemporary work than any single study alone. Second, we look across the list and frame these activities as practices before focusing specifically on the contingencies of informal learning within these practices. This focus also leads to identifying some tensions between effective learning and those who seek to actively promote it, which we illustrate with further empirical examples. The aim of this analysis, shared with the original studies, is not to seek generalizability to other contexts, but to portray issues that arise in such studies that may have resonance elsewhere.

2.3. The studies

We draw from five Australian studies (see below) undertaken since the early 2000's. The studies represent the work of at least 15 researchers (including six doctoral students attached to the studies). One or both of the current authors, or their immediate colleagues, were involved in each study (which explains the regrettable abundance of self citation here!). The studies are:

1. Uncovering learning at work in a public sector organization
2. Context, judgement and informal learning: an investigation of factors crucial for enhancing performance
3. Beyond training: integrated development practices in organizations
4. Neighbourhoods: centres of learning
5. Identifying and developing capability in engineers continuing professional learning

Each study identifies and analyses *inter alia* forms of informal learning typical of the work of the organizations or contexts in which they were conducted. As the studies' names suggest, the foci differed considerably. See Table 1. However, despite differences they share three important features. The first is that all studies are broadly interested in learning in work. While workplace learning can occur in structured learning activities that might be described as 'formal', the foci of these studies were on learning that ensues as people go about their everyday activities (not learning as result of structured educational events). Hence, a first unifying feature of the studies is that each can be said to explore aspects of 'informal' learning.

A second similarity among the studies is that all are richly qualitative in nature. They employed a combination of ethnographic data collection methods including semi-structured interviews and focus groups where participants were invited to talk at length about their ordinary work and to give examples of their daily work practices. Data collection also included non-participant observations and, in some cases, member feedback sessions. Not only do comparable methods across studies result in data sets that are more readily suited to the analysis (Heaton 2008), but they are also appropriate methods for the practice approach taken here: "There is no alternative to hanging out with, joining in with, talking to and watching, and getting together the people concerned" (Schatzki 2012, p. 25).

In its original form the qualitative data of each study was typically subject to thematic analysis drawing out key themes concerning learning. Some made use of spatial, identity and discourse theories in their analysis, whereas others made explicit use of socio-material and practice based theorizations. While exact figures are near impossible to ascertain, the combined studies; accrued hundreds of hours of qualitative data; represent the experiences and input of several hundred participants; and prompted numerous published accounts of learning (of which we draw on here).

A third similarity is that they were each undertaken in one or more Australian sites. While varying in size and type, the sites included: a further education college, a winery, a community college, a public utility, a local council, a large engineering firm, an orchestra, a commercial kitchen, a corrective services unit, and

community/neighbourhood centres. They thus share a very broad socio-cultural context, though it must be recognized that the Australian working population is very diverse in terms of ethnicity, country of origin and educational background.

3. Learning practices from across the studies

What were the practices identified in the studies that involved learning? In identifying these practices we follow Schatzki's point about noticing how people name their activities (2012, p. 24), as this helps confirm a shared meaning. The names given to the practices identified below could easily be given as the answer to the question, "What are you doing?"

While not exhaustive, the examples below provide good illustrations of the range of practices identified across the various studies. In addition to these are other well-documented practices, including: *performance appraisals* (Chappell et al. 2009); *coming into the office* (Solomon, Boud & Rooney 2006); and *work design* (Price, Scheeres & Boud 2009).

The identified practices are presented in four main groups. First are practices germane to the particular nature of the occupations involved. The second group includes practices that are seen in multiple types of work. Third, are responses to 'out of the ordinary' events. Finally, are common practices that happen in all kinds of workplaces, but are not necessarily part of the essential business of the organization. In each group brief examples give flavour. The practice and illustrations of it are then drawn on in following parts of the chapter.

3.1. Practices germane to the occupations involved

Some practices are unique to the occupation or professions involved. Several practices were identified that fit this category. For instance, Hager and Johnson (2012) identified rehearsals as a practice that supported learning among orchestral musicians. They also identified chefs and kitchen staff learning in the delivering an *à la carte* dining service (2012). In another study the site-walk practice undertaken in engineering work was a practice involving learning (Rooney et al. 2015a; Rooney et al. 2015b), and this constitutes a first example.

A site-walk generally involves the purposeful inspection of aspects of a particular work site. Engineers along with other relevant people typically undertake the site walk. For instance, an environmental scientist, client or proxy for a client and/or the foreman may accompany the engineer. Despite being an everyday practice for engineers, these site walks are shown to be 'complex and potentially learning-rich practices' (Rooney et al. 2015b). The engineers talked about how their work has changed since environmental matters became more prominent – and how they think differently about their work now that undertaking site-walks sometimes involves environmental scientists (*Ibid*). They also added how the emergent interest in environmental matters is reshaping how they currently undertake their site-walks and other aspects of their work. They note how two decades ago a similar reshaping took place, along with much associated learning, when matters of safety became prominent.

3.2. Practices seen in multiple types of work

Unlike say site walks and rehearsals (germane to the work of engineers and musicians), there are practices that are more dispersed and are common in multiple types of work. A good example of this is meetings, and these were identified in several of the studies as practices where learning occurred (Reich et al. 2015; Rooney et al. 2015a; Scheeres et al. 2010). Another example is safety practices, and both the *Beyond Training* as well as the *Engineers' Professional Learning* studies identified these as practices involving learning.

While most organizations have in place general procedures around worker safety, they are perhaps more pronounced in work involving hazardous conditions. This was the case for winemakers and utility workers in the *Beyond Training* study. An example from this study includes the observation of a team leader. The organization had implemented safety audits as part of larger initiative to reduce worker injuries. The organizational expectation is that *all* workers share the responsibility of keeping themselves *and* their fellow workers safe. During such an audit, a manager observed a team leader with his sleeves rolled up (Australian weather conditions result in very high incidences of melanomas—outdoor workers are advised to wear long sleeves to prevent them). The manager describes how the observation unfolded:

[He said] You're dealing with apprentices a lot of the time, how do they feel, don't you think it'd be good if you could set the example and therefore they won't have melanomas like you've got if they have their sleeves rolled down" and you could see the brain tick and he thought about it, and the next minute he rolled his sleeve down. (Price et al. 2012).

A different example is that of reception work. Many types of organisations include reception work, and in the *Neighbourhood Centre study* the work of a volunteer receptionist provides a helpful example. Reception work in the centre brought the receptionist in contact with a variety of others and in particular with prisoners' families (the centre involved was located in a regional town that had a jail). Learning is identified as he describes how he came to challenge his previous understandings of offenders:

I thought that was just something that happened to other people – it happened in the news, and then all of a sudden you have contact with these people. Its not just the person in jail that suffer – you have the family and its not their fault either [it] makes you ask why they did it. There's always two sides to every story [but] you only ever get [the] news – the criminal – the police side (Rooney 2011, p. 218).

3.3. Practices responding to 'out of the ordinary' work

So far the practices are part of the seemingly ordinary work of those involved. However, there were also examples across the studies where the impetus of learning came from responding to the challenges of 'out of the ordinary', or to some sort of significant change. These challenges or changes could be either planned or unplanned. Learning was prominent in responding to planned change like implementing a restructure: seen in two *Beyond Training* study sites (a public utility and a local council). However, learning was also intensified in responding to unexpected events.

A good example here is the learning by council workers as result of a fire that burnt down the council chambers. In these examples the workers spoke about intense periods of learning as they responded to the challenges presented.

A less dramatic example of learning in 'out of the ordinary work', albeit a more prolific one, is identified in the practice of 'acting-up'. Acting-up is the name given to a common practice in many organizations where one worker temporarily takes on the work of another due to illness, leave or some other circumstance. Given the unfamiliarity of the work involved, those who acted up talked explicitly about the excitement and fear involved in taking on these temporary roles, and 'learning by the seat of their pants' (Price, Scheeres & Boud 2009).

3.4. Common practices *at work*, but not key part *of work itself*

While the practices (site walks, acting up, reception work, and rehearsals) are sanctioned organizational practices, other mundane and less job-related activities involving learning were also identified across the studies' published accounts. Some of these included; taking a break and/or eating together (Rooney & Solomon 2006; Solomon, Boud & Rooney 2008); smoking or drinking; and, moving between work sites (Solomon, Boud & Rooney 2008).

Our example here involves local council field workers (eg. dog catchers, parking attendants and rangers) who would meet in a local park for lunch. They told the researchers how they would chat about all sorts of things, and while much of this was non-work related, there was also general chat about aspects of an individuals' work that would impact on anothers' (Rooney & Solomon 2006).

4. Influencing contingencies of informal learning

From our reading across the source studies, we turn first to reiterating some key features of everyday (learning) practices, before turning attention explicitly to learning (in practices).

4.1. Key features of everyday (learning) practices

The practices discussed above are independent of any formal training programs that exist within the organisations studied. Given that they all involve learning of some kind, they are also presented as examples of informal learning. Additionally, they are not understood as primarily serving a learning function. Rather, they serve a substantive organizational purpose. When intentionally deployed, those who deploy them do not see themselves as enacting a learning function within the organization involved, they are simply 'doing their work'.

The various examples also illustrate how practices proliferate in work. Practices are ubiquitous and are part of the day-to-day happenings of the sites involved. While they might respond to massive change (like a fire, or a restructure), they are also a response to the everyday challenges of the jobs involved (eg site walks and rehearsals). Any single set of workers may undertake a number of these practices in any given day. Say, engineers might attend a meeting, have lunch, and then carry out a site walk. Understanding the ubiquitous nature of practices has profound

implications for understanding informal learning.

Informal learning is entwined in these everyday practices of work. It cannot be understood independent of the practices in which it occurs: eg. the volunteers' learning about offenders' circumstances or the engineers' learning about environmental matters cannot be understood without also appreciating the practices of reception work and site-walks. The practices listed above demonstrate the ubiquitous nature of informal learning. Learning is not something that happens occasionally by *some* workers in some situations, but can proliferate in the work practices of *all* forms of workers in a multitude of practices. This is not to say that *all* workers *always* learn through undertaking a practice. To make such a claim would not only be unhelpful, but would also dismiss occasions where learning does not occur, such as in the repetition of a standard response to a common problem. Rather, our point is that work consists of multiple practices and these practices have potential for informal learning.

4.2. Key features of everyday learning (in practices)

Informal learning, like practices, is profoundly situated. It is not enough to say context matters. Rather, what we might call 'context' is implicated in learning. For instance, temporal implications impact the learning of engineers as they respond to the contemporary focus on the environment, just as they did two decades ago when safety matters were prominent in other groups. The geographical location of Australia is implicated in outdoor workers learning about sun-safety: just as the location of a jail near the neighbourhood centre provided impetus for the volunteer receptionist's learning about the lives of offenders and their families. Furthermore, the socio-political climate has invitational qualities when it comes to learning; take for example, the new public management discourses which shape organizational restructures, which in turn shape learning.

Informal learning is in-between, or at the intersection of, the practice and the immediate circumstances in which a given practice is practiced in a given context (Solomon, Boud and Rooney 2008). Workers learn informally as result of meeting the contingencies of everyday work. While the practices have a history beyond that of the individual, there is always some element of uncertainty (same practice, which can be different with each iteration). The emergent nature of practice points to the necessity of informal learning. Workers also learn informally in response to unforeseen events. Challenges (eg fire, restructure, critical incidents) present intensified periods of uncertainty, requiring historical practices to be intensified or redefined.

An associated feature of informal learning is that, like the practices it is embedded in, it is relational. Learning involves others. While this itself is not new, what *is* worth stressing, is the heterogeneous relationships involved. In many of the examples above the (learning) practices involved non-homogeneous workers – that is, those involved in the practices were not necessarily employed to undertake the same sort of work, nor in any type of supervisory relationship with others. For instance; site-walks involved engineers, environmental scientists, clients; reception work involved volunteers as well as members of the local community; safety practices involved managers and outdoor workers. This means that everyone has the potential to be involved in others' learning and to learn from others. Interestingly, these others are not 'teachers' or 'trainers': environmental scientists, centre users and managers are

not normally regarded as 'teachers' or 'facilitators', yet in our studies they were necessary implicated in the engineers, reception and outdoor workers' learning.

What also becomes obvious, is how learning is mediated through talk or chat (Boud, Rooney & Solomon 2009). For instance it is through talking to centre users that the receptionist learned, or the chat between field workers that enabled informal learning. Again we point out that the unlikelihood that interlocutors involved would normally consider themselves as teachers or learners, yet they 'teach' each other all the same without this being a conscious part of what they see themselves as doing.

4.3. Tensions and dilemmas

The understandings of informal learning above present a paradox. On the one hand the discussion and examples in the previous part of this chapter point to the ubiquitous nature of informal learning itself. Informal learning is embedded in the practices of everyday work and is intrinsic to that work. It is not a separate object of attention in the way that training might be. On the other hand, and perhaps because of its ubiquitous nature it is (most often) invisible to those involved: as well as to observers of work (eg managers and researchers alike). While learning may be embedded in work practices and more prolific than first thought, we add that this has both positive and negative consequences and, in this final part, we outline some tensions and illustrate these with further examples from the studies.

The nomenclature surrounding learning presents an associated dilemma. The naming of 'invisible' learning as learning has consequences for those involved. In some cases it may be 'safe' for those who learn to acknowledge their learning, and to identify as a learner. For instance, it is reasonable to assume that someone who is temporarily 'acting up' may not know all there is to know about the role they are acting in, whereas the same might not apply to a highly experienced engineer working on a multi-billion dollar construction. There are consequences for one's identity and one's perception in the eyes of others for naming oneself or being named a learner, and for framing what is done in a learning discourse. It is little wonder then that, in some cases, there can be resistance to naming one's learning and to naming oneself as a learner (Boud & Solomon 2003). For example, how can one justify to oneself or to others drawing a full salary when only being 'a learner'? Learners are commonly seen as junior or subordinate and traditionally learning is seen what is needed at early stages of a career. Why name everyday working practices as learning, with the consequences to self and others that such identification brings, when they are a necessary and intrinsic part of work itself? A lifelong learning discourse may have pervaded the domain of education and training policy, but that does not mean that it is widely accepted in workplaces.

But it is not only the learners who engage in the naming and framing of practices in particular ways. Indeed, this very chapter has renamed the work practices of workers as learning practices. The consequences of this may also have consequences. For instance, our intention of saying something about informal learning may impact a manager's decision to seek an intervention impacting on future workers and, through extension, may result in further worker resistance. Likewise, in many organisations there are various discourses of learning in circulation that espouse, if not celebrate, the value of workers learning; for example, the learning company or the learning

organisation. Some of these may be codified in policy documents and vision statements, yet there is potential for tension when these exist alongside workers' perceived consequences of 'being a learner' within the organisation.

We began this chapter by talking about employer organizations' interest in informal learning, driven by the promise of organizations harnessing the potential of informal learning. It is not unreasonable for managers to seek interventions that potentially maximize opportunities for informal learning in their organization. However, there are associated dilemmas of seeking to influence informal learning, as well as potentially counterproductive effects of formalizing it. Like resistance to naming learning, there can also be resistance to interventions that seek to promote it. To best illustrate this point we return to the council field workers, and offer one last example.

For many years, council field workers met informally for lunch and in so doing exchanged information about aspects of their work that had implications for their workmates' work. In all, field workers utilized these informal events as valued opportunities for networking (Boud, Rooney and Solomon, 2009, 329). Building on this example, their manager had also recognized the potential of this practice for networking and sought an intervention in the form of scheduled, compulsory morning teas. However, fieldworkers voiced their resistance to the intervention:

We have a compulsory morning tea, believe it or not—to make people talk to each other, and it's really strange because all these people in the office that you don't know and you can't really talk to them because you're only sort of may talk to them once a month [...and] we just stand around and stare at each other (Boud, Rooney and Solomon, 2009, p. 330-331).

What had been an organic practice that fostered informal learning and was motivated by a desire of colleagues to share their experiences of doing a similar and sometimes challenging job was eroded by a well-intentioned management intervention meant to foster it. The movement of the practice from the informal to the formal domain of work-life fundamentally changed its character. It was perceived differently by the workers and led to their alienation from it. As decisions about it moved up the hierarchy, its ownership shifted away from the workers to managers. Ultimately, despite well meaning attempts to foster learning, the implementation of the morning tea did not appear to deliver what those who initiated it expected: perhaps even undermining the desired effects.

We should be careful though not to over-interpret this phenomenon. There is of course a place for management-initiated learning interventions, and they may be prompted by observations of what appears to be effective in the informal domain. We do not advocate a hands off approach, but for extremely careful consideration in thinking through the implications of interventions. As in this case, good intentions can lead to bad outcomes. When attempting to influence informal learning, the introduction of formality can effectively eliminate or occlude the very phenomenon it is seeking to foster. To this end, Schatzki adds the following:

The best that designers of lives and institutions can do is create contexts that, as experience and thought show, make certain activities very or more likely (Schatzki 2012, p. 22).

The paradox of informal learning is that it can be readily undermined by the good intentions of those who seek to identify, name and/or foster it. It is important not to view workplace practices solely through the lens of education and training. These practices do many things and to extract a 'learning method' from a complex set of social relations and expect it to operate independently from the networks and expectations that hold it in place is naïve. We therefore need to conceptualise informal learning quite differently than hitherto. It is no longer a kind of workplace learning event characterized by a lack of deliberate intervention by those who oversee training and development that is unchanged when systematized by those in authority. It should be regarded as sets of learning practices initiated and constructed by learners themselves to pursue ends they believe to be mutually worthwhile. Such informal learning may also pursue the goals of managers and trainers, but this is not necessarily the case and it must never be assumed to be so. In some cases informal learning can help workers meet challenges not yet articulated by managers; in others, workers may pursue directions or means counter to those desired by those who manage.

This points to the need to develop a more discriminating discourse in workplace learning that goes beyond formality and informality to recognize whose interests are being pursued, to what ends, in which context and according to whose strategies and processes. Learning cannot be extracted as a distinct entity from the multiple sets of expectations, relationships and purposes of work, nor indeed from the exigencies of work itself. It is not possible to assume that there are shared intentions for learning between or among different parties. Research on workplace learning in general and informal learning at work in particular must take this centrally into account in research studies.

5. Conclusion

This chapter has reframed informal learning through the use of a practice lens. It has used practice theory to locate informal learning as an intrinsic feature of everyday work. Learning is not positioned in relation to formal educational or training programs but as an everyday workplace phenomenon in its own right.

It is necessary to understand informal learning as a phenomenon dependent on the activities, practices, and socio-material arrangements in which it is embedded. The concept of practices enables everyday work activities, often overlooked in other studies, to be examined in terms of learning. This leads us to suggest that practices should be unit of analysis in future studies of informal learning and that frameworks which privilege the socio-cultural elements of work itself, rather than notions of curriculum and pedagogy, and shared interests be taken as a starting point for the discussion of learning.

References

- Billett, S. 2011, 'Workplace curriculum: practice and propositions', in F. Dochy, M. Gijbels & P. van den Bossche (eds), *Theories of learning for the workplace: building blocks for training and professional development programs*, Routledge, London, pp. 17-36.

- Billett, S. 2001, 'Learning through work: workplace affordances and individual engagement', *Journal of Workplace Learning*, vol. 13, no. 5, pp. 209-14.
- Billett, S. 2004, 'Workplace participatory practices: conceptualising workplaces as learning environments', *The Journal of Workplace Learning*, vol. 16, no. 6, pp. 312-24.
- Boud, D. & Hager, P. 2011, 'Re-thinking continuing professional development through changing metaphors and location in professional practice', *Studies in Continuing Education*, vol. 34, no. 1, pp. 17-30.
- Boud, D., Rooney, D. & Solomon, N. 2009, 'Talking up learning at work: cautionary tales in co-opting learning', *International Journal of Lifelong Education*, vol. 28, no. 3, pp. 323-34.
- Boud, D. & Solomon, N. 2003, '"I don't think I am a learner": acts of naming learners at work', *Journal of Workplace Learning*, vol. 15, no. 7/8, pp. 326-31.
- Chappell, C., Scheeres, H., Boud, D. & Rooney, D. 2009, 'Working out work: Integrated development practices in organisations', in J. Field, J. Gallacher & R. Ingram (eds), *Researching transitions in lifelong learning*, Routledge, London, pp. 175-88.
- Colley, H., Hodkinson, P. & Malcom, J. 2003, *Informality and formality in learning: a report for the Learning and Skills Research Centre*, Report, Learning and Skills Research Centre, London.
- Dochy, F. 2011, 'Introduction: building training and development programmes on recent theories of learning', in F. Dochy, M. Gijbels & P. van den Bossche (eds), *Theories of learning for the workplace: building blocks for training and professional development programs*, Routledge, London.
- Engeström, Y. 2009, 'Expansive learning: toward an activity-theoretical reconception', in K. Illeris (ed.), *Contemporary theories of learning: learning theorists ... in their own words*, Routledge, London, pp. 53-73.
- Engeström, Y., Engeström, R. & Vahaaho, T. 1999, 'When the centre does not hold: the importance of knotworking', in S. Chaiklin, M. Hedegaard & U.J. Jensen (eds), *Activity theory and social practice: cultural-historical approaches*, Aarhus University Press, Aarhus, pp. 345-74.
- Eraut, M. 2004, 'Informal learning in the workplace', *Studies in Continuing Education*, vol. 26, no. 2, pp. 247-27
- Fenwick, T. 2008, 'Workplace learning: emerging trends and new perspectives', in S. Merriam (ed.), *New directions for adult and continuing education: third update on adult learning theory*, Jossey-Bass, San Francisco.
- Fenwick, T., Edwards, R. & Sawchuck, P. 2011, *Emerging approaches to educational research: tracing the socio-material*, Routledge, London.
- Fox, S. 2000, 'Communities of practice, Foucault and actor-network theory', *Journal of Management Studies*, vol. 37, no. 6, pp. 853-67.
- Gherardi, S. 2000, 'Practice-based theorizing on learning and knowing in organizations', *Organization*, vol. 7, no. 2, pp. 211-23.
- Gherardi, S. 2009, 'Communities of practice or practices of communities', in C. Fukami (ed.), *The SAGE handbook of management learning, education and development*, SAGE, Los Angeles, pp. 414-530.
- Gherardi, S., Nicolini, D. & Odella, F. 1998, 'Toward a social understanding of how people learn in organizations', *Management Learning*, vol. 29, no. 3, pp. 273-97.
- Hager, P. 2004, 'Lifelong learning in the workplace? Challenges and issues', *Journal of Workplace Learning*, vol. 16, no. 1/2, pp. 22-32.

- Hager, P. 2008, 'Learning and metaphors', *Medical Teacher*, no. 30, pp. 679-86.
- Hager, P. 2011, 'Historical Tracing of the Development of Theory in the Field of Workplace Learning', in M. Malloch, L. Cairns, K. Evans & B. O'Connor (eds), *The SAGE handbook of workplace learning*, Sage, pp. 17-32.
- Hager, P. 2012, 'Theories of practice and their connections with learning: a continuum of more and less inclusive accounts', in P. Hager, A. Lee & A. Reich (eds), *Practice, learning and change: practice-theory perspectives on professional learning* Springer, Dordrecht, pp. 17-32.
- Hager, P. 2014, 'Practice as a key idea in understanding work-based learning', in P. Gibbs (ed.), *Learning, work and practice: new understandings*, Springer, Dordrecht, pp. 85-106.
- Hager, P. & Hodkinson, P. 2011, 'Becoming as an appropriate metaphor for understanding professional learning', in L. Scanlon (ed.), "*Becoming" a professional: an interdisciplinary analysis of professional learning*, Springer, Dordrecht, pp. 33-56.
- Hager, P. & Johnsson, M. 2012, 'Collective learning practice', in P. Hager, A. Lee & A. Reich (eds), *Practice, learning and change: practice-theory perspectives on professional learning* Springer, Dordrecht, pp. 249-65.
- Hager, P., Lee, A. & Reich, A. (eds) 2012, *Practice, learning and change: practice-theory perspectives on professional learning* Springer, Dordrecht.
- Heaton, J. 2008, 'Secondary analysis of qualitative data', in P. Alasuutari, L. Bickman & J. Brannen (eds), *The handbook of social research methods*, Sage, London, pp. 506-19.
- Kemmis, S. 2000, 'Five traditions in the study of practice', in S. Kemmis & R. McTaggart (eds), *Participatory action research, Chapter 22 in Denzin, N. and Lincoln, Y (Eds) Handbook of Qualitative Research, 2nd edition*, Sage Publications, Thousand Oaks, Calif, USA, pp. 1-18.
- Kemmis, S. 2005, 'Knowing practice: searching for saliences', *Pedagogy, Culture and Society*, vol. 13, no. 3, pp. 391-426.
- Kemmis, S. 2010, 'What is professional practice? Recognising and respecting diversity in understandings of practice', in C. Kanes (ed.), *Elaborating professionalism, innovation and change in professional education*, Springer, Dordrecht, pp. 139-66.
- Kemmis, S., Wilkinson, J., Edwards-Groves, C., Hardy, I., Grootenboer, P. & Bristol, L. 2014, *Changing practices, changing education* Springer, Singapore.
- Lave J, & Wenger E. 1991 *Situated learning: legitimate peripheral participation*. Cambridge University Press, Cambridge
- Malloch, M., Cairns, L., Evans, K. & O'Connor, B.N. (eds) 2011, *The SAGE handbook of workplace learning*, SAGE Publications Ltd., London.
- Nerland, M. & Jenson, K. 2012, 'Epistemic practices and object relations in professional work', *Journal of Education and Work*, vol. 25, no. 1, pp. 101-20.
- Price, O., Johnsson, M., Scheeres, H., Boud, D. & Solomon, N. 2012, 'Learning organizational practices that persist perpetuate and change: a Schatzkian view', in P. Hager, A. Lee & A. Reich (eds), *Practice, learning and change: practice-theory perspectives on professional learning* Springer, Dordrecht, pp. 233-48.
- Price, O., Scheeres, H. & Boud, D. 2009, 'Re-making jobs: enacting and learning work practices', *Vocations and Learning*, vol. 2, no. 3, pp. 217-34.

- Reich, A., Rooney, D., Gardner, A., Willey, K., Boud, D. & Fitzgerald, T. 2015, 'Engineer's professional learning: a practice-theory perspective', *European Journal of Engineering Education*, 40, 4, 366-379.
- Roberts, J. 2006, 'Limits to communities of practice', *Journal of Management Studies*, vol. 43, no. 3, pp. 623-639.
- Rooney, D. 2011, 'Centres 'down under': mapping Australia's neighbourhood centres', *Australian Journal of Adult Learning*, vol. 51, no. 2, pp. 203-25.
- Rooney, D., Willey, K., Gardner, A., Boud, D., Reich, A. & Fitzgerald, T. 2015a, 'Engineers' professional learning: through the lens of practice', in B. Williams, J. Figueiredo & J. Trevelyan (eds), *Engineering practice in a global context: understanding the technical and the social*, CRC Press, Leiden, The Netherlands, pp. 265-283.
- Rooney, D., Gardner, A., Willey, K., Reich, A., Boud, D. & Fitzgerald, T. 2015b, 'Reimagining site-walks: sites for rich learning', *Australasian Journal of Engineering Education*, vol. 20, no. 1, pp. 19-30
- Rooney, D. & Solomon, N. 2006, 'Consuming metaphors: stimulating questions for everyday learning', *Studies in the Education of Adults*, vol. 38, no. 1, pp. 64-73.
- Rooney, D., Willey, K., Gardner, A., Boud, D., Reich, A. & Fitzgerald, T. 2014, 'Engineers' professional learning: through the lens of practice', in B. Williams, J. Figueiredo & J. Trevelyan (eds), *Engineering practice in a global context: understanding the technical and the social*, CRC Press, Leiden, The Netherlands, pp. 265-83.
- Schatzki, T. 2001, 'Introduction: practice theory', in T. Schatzki, K. Centina & E. von Savigny (eds), *The practice turn in contemporary theory*, Routledge, New York.
- Schatzki, T. 2012, 'A primer on practices', in J. Higgs, R. Barnett, S. Billett, M. Hutchings & F. Trede (eds), *Practice-based education: perspectives and strategies*, Sense Publishers, Rotterdam, pp. 13-26.
- Scheeres, H., Solomon, N., Boud, D., and Rooney, D. 2010. When is it okay to learn at work? The learning work of organisational practices, *Journal of Workplace Learning*, vol. 22, nos.1&2, pp. 13-26.
- Sfard, A. 1998, 'On two metaphors for learning and the dangers of choosing just one', *Educational Researcher*, vol. 27, no. 2, pp. 4-13.
- Solomon, N., Boud, D. and Rooney, D. (2006). The in-between: exposing everyday learning at work, *International Journal of Lifelong Education*, vol. 25, no. 1, pp. 3-13.

Table 1. Identification of practices that generate learning informally 1

Practice	Organization	Studies practices seen in	Examples of learning	Learning features						Practice features		
				Potential for change as result	Realized through Chat/talk	Social: Others involved	Collective learning	Learner faced some difference	Involved significant change	Learning not main object of practice	Practice germane to profession or work type	Common in many forms of work
Meetings • Design reviews • Faculty meeting • Toolbox meetings	<ul style="list-style-type: none"> • Further Education college • Public Utility • Winery • Local Council • Engineering Firm • Public Utility 	1, 3, 5	<p>Engineers learned about aspects of others work that and how it impacts their own job (eg construction engineers from estimators).</p> <p>Toolbox meetings at Council, Public Utility and Engineering supported worker learning around safe work practices.</p>	✓	✓	✓	✓	✓		✓		✓
Performance appraisals	<ul style="list-style-type: none"> • Local Council • Engineering firm • Public Utility 	1, 3, 5	Performance appraisal unfolded as both accountability and mentoring. The later featuring advice from their managers enabling them to learn to do their jobs differently.	✓	✓	✓				✓		✓
Acting up	<ul style="list-style-type: none"> • Local Council 	3	Council worker acting in a more senior position learned not only about the acting job, but also their own job from a new perspective	✓	✓			✓	✓	✓		✓

Identification of practices that generate learning informally 2

Practice	Organization	Studies practices seen in	Examples of learning	Learning features						Practice features		
				Potential for change as result	Realized through Chat/talk	Social: Others involved	Collective learning	Learner faced some difference	Involved significant change	Learning not main object of practice	Practice germane to profession or work type	Common in many forms of work
Unplanned radical change	• Local Council	3	A major fire resulted in most workers learning to carry out their work the morning after in a new environment under new conditions.	✓		✓	✓	✓	✓	✓		✓
Rehearsals	• Orchestra	2	Practice for performance	✓	✓	✓	✓			✓	✓	
Work design teams	• Local Council	3	Leading up to a restructure, council workers participated in teams to redefined their own and others' jobs	✓	✓	✓	✓	✓	✓	✓		✓
Site walk	• Engineering firm	5	Undertaking a site walk together with others enabled engineers to learn from others site walkers and the context.	✓	✓	✓	✓	✓		✓	✓	

