Judgements as a basis for informal workplace learning
– preliminary research findings
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Abstract

Informal learning can be broadly characterised as learning found in everyday opportunities where learners interact with the world around them. It can be distinguished from formal learning where the purpose, structure and content for learning are imposed on the learner. When informal learning occurs in the context of work or organised settings, factors such as performance, practice, sociocultural dynamics and situational context influence its nature and quality. Previous research by Beckett, Hager and Halliday (Beckett, 1996; Beckett & Hager, 2000, 2002; Hager, 2001; Halliday & Hager, 2002) asserts that productive informal learning is better characterised as a growing capacity to make contextual-sensitive judgements – a discretionary and discriminating process that involves holistic and embodied knowing.

Our paper reports on progress in an Australian Research Council funded Discovery project designed to test this judgement-as-learning approach. Detailed case studies of critical incidents in a range of workplaces are being constructed and the learning or otherwise by key players involved in these incidents is being elucidated and analysed. This empirical investigation provides a means of analysing significant workplace events in order to develop a model of informal learning and an associated theory of practice. The paper outlines the overall project rationale and discusses findings from one initial case study. Additional findings from other case studies developed after submission of this paper, will be presented and discussed at the conference.

Introduction

Contemporary workplaces are constantly challenged by the need to respond to increasingly complex environments of change, dynamism, uncertainty and risk. Decisions, actions and practices taken individually or collectively in organisations must not only have immediate performance outcomes but also serve as a basis for longer-term organisational learning and capability-building, if organisations are to adapt to, and succeed in, these uncertain futures.

Traditionally, practitioners and researchers have tackled this learning challenge using dualistic assumptions (classical Greek thought and Descartes as discussed by Hager, 2001; Lakoff & Johnson, 1980; White, 1997). That is, learning is primarily a
cognitive ‘of the mind’ activity, an accumulation of propositional knowledge that can be transferred to practice through a variety of contextual situations. Thus theory informs practice, mind directs bodily actions and knowledge transfers as decontextualised products. These learning assumptions are evidenced by the widespread use of structured training as a method to develop vocational skills and technical knowledge.

However, as Hager (2001) pointed out, there are problems with this standard paradigm of learning – it is not necessarily wrong, rather, inadequate and insufficient. Building upon the philosophical contributions of Dewey, Ryle and Wittgenstein, Hager argues for an active, broad, integrated and informal view of learning as everyday acting and knowing in the world. Under this characterisation, learning is practice-based, holistic in that it ‘attends’ to social, conative, cultural and political factors, transformative and constantly being reconstructed. This view of learning is consistent with action-based learning approaches (Argyris, Putnam & Smith, 1985; Argyris & Schön, 1978; Schön, 1983), social learning theories (Bandura, 1977; Elkjaer, 2003; Lave & Wenger, 1991; Wenger, 1998) and more recent views on practice-based knowing (Nicolini, Gherardi & Yanow, 2003b) and collective knowers (Toulmin, 1999).

Where this view of informal learning may be particularly relevant for the emerging workplaces of tomorrow is in giving a central role to ‘making judgements [as a] … holistic workplace activity that is an expression of practice-based informal learning from work’ (Beckett & Hager, 2002, p.184); more specifically, practical judgements or knowing what to do. This judgement-as-learning approach is gaining increasing support within the research community as a new epistemology of professional practice (Beckett & Hager, 2000, 2002; Harris 1993; Schön, 1991, 1995).

**Theoretical Background**

**Workplace learning as contextual practice-based judgement**

In daily work life, individuals and groups choose how to act and what to do, that is, they exercise judgements. These judgements may be intuitive or explicit, often have consequences and are defined by their appropriateness or rightness. Increasingly in work and life, the judgements of a few managers or leaders have significant collective, societal or environmental impact.

The nature of these judgements is embedded in practice and integrated in human experiences bringing together early Aristotelian concepts of practical reasoning (*phronesis*) and moral virtues. Following Aristotle, MacIntyre (1984, p.187) defines a practice as

any coherent and complex form of socially established co-operative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended.

Thus for MacIntyre, internal goods are intrinsic to that particular practice, illustrated by individual actions set within norms of agreed-upon collective action. In contrast,
external goods are those that can be achieved instrumentally and not necessarily definitive of that practice, for example, status, recognition, compliance or to gain rewards.

Further, actions within practice are highly contextual, reflecting the uniqueness of the combination of situational features and learners at a given time. This requires a capacity for action and choice that forms the basis of learning or future anticipative actions. In Beckett and Hager’s detailed analysis, practical judgement at work thus exhibits six significant features (2002, p.185):

1. Judgements are holistic
2. Judgements are contextual
3. Judgements denote
4. Judgements are defeasible
5. Judgements include problem identification
6. Judgements are socially shaped.

**Factors affecting judgement**

If we are to suggest how to build learning capacity in the exercise of judgements, it is important to understand what factors might shape or influence those judgements. The concept of intentionality as described by motivation and self-determination theories from educational and organisational psychology are particularly relevant.

Athanasou builds upon Halliday and Hager’s framework to offer a Perceptual-Judgement-Reinforcement model of learning (2004). Athanasou suggests, following Dewey, that individuals will respond to contextual antecedents to judgement in lawful but idiosyncratic ways (2004, p.65). Such antecedents are perceptions of patterns that influence judgements. These patterns can be classified as explicit factors of context, features that all learners recognise, and implicit factors or assumptions taken for granted that could be problematic. This approach is consistent with social judgement analysis intended to understand which are key cues attended by persons when making decisions or judgements concerning perceptions of interest (Athanasou, 1998, 2002).

An underlying assumption of individuals exercising contextual-based judgements is that they exhibit autonomy or act ‘with a sense of volition and … the experience of choice’ (Gagne & Deci, 2005, p.333). When individuals work on an activity they find interesting for its own sake, they are intrinsically motivated by definition but also autonomously motivated (ideal state). However, most organisations set task performance requirements, work climate constraints and cultural values expectations on individuals so that many activities are not intrinsically motivating yet must be performed. So motivation must be extrinsically-driven (job security, status, advancement) and thus more controlled (compliance). What Gagne and Deci suggest is there is a continuum from amotivation (totally lacking in self-determination) to extrinsic motivation (in varying degrees) to intrinsic motivation (invariantly self-determined). The degree of autonomy increases through this continuum and is characterised by various levels of regulation. The more that behaviour and values are internalised or integratively regulated, the more autonomous and self-determined the behaviour is. Thus characteristics of learners under judgement-making conditions are
influenced by perceptions of assumed or stated patterns in specific contexts and perceptions of self-determination and autonomy in the selected choice of actions.

**Individual and collective judgement**

The final theoretical perspective relevant to the role of judgement as learning is alignment and inter-relationships between individual and collective judgements. While significant research has been completed on individual and group decision making using classical subjective utility theory (Hogarth, 1987; historical review plus discussion of von Neumann and Morgenstern & Savage by Goldstein & Hogarth, 1997), only a few have focused on more contemporary applications of organisational decision making suitable for ambiguous and uncertain environments (Bazerman, 2002; also naturalistic decision making processes discussed by Connolly & Koput, 1997). What is unexplored in current literature is the relationships between individual and collective judgements and their implications for associated practices, communities and identities (see for example, the notion of social identity discussed by Jenkins, 2004). An early hypothesis is that individual actions that support practice standards reinforce practices whereas actions that challenge those standards cause creative tension that have the possibility to reshape learning and reconstitute practices. This area would seem fruitful for additional research as inter-organisational partnerships become more common and the wisdom of collective collaboration becomes more evident (Surowiecki, 2004).

**The research project**

Our research project investigates the central role of judgements in workplace learning. It is funded by an Australian Research Council Discovery grant intended to research the factors in informal learning that contribute to, and enhance productive workplace learning. One strand of the research examines how individuals make judgements and decisions during the conduct of their daily professional practice. This individual practitioner research is being led by Professor John Halliday of the University of Strathclyde using cases located in the United Kingdom (Halliday in preparation).

The other strand examines the role of organisational practitioners, or how individuals and groups within organised settings make judgements and decisions concerning activities for which they contribute and share a common goal or outcome. This research is being led by our team using cases located in Australia. Both research efforts build upon earlier individual practitioner research of Australian cases conducted by Hager and Beckett (1999). The current research looks to extend our understanding of judgements used in various contexts, to examine the linkages between judgements and learning and to identify factors that contribute to productive learning.

The focus of this paper is to describe and discuss preliminary findings from the organisational practitioner research. The research method adopted is empirical case study analysis using semi-structured retrospective interviews with participants involved in a recent organisational initiative or critical incident. Participants are asked to reflect on their roles, the judgements they and others made during the progress of the initiative and identify the learning or otherwise, from an individual and team perspective. Narratives from participant interviews are complemented by
researcher reviews of internal and external information written on the initiative. In this analysis, we have adopted a phenomenological tradition of crediting meaning to participant experiences and considered the verbal cues and descriptive and evaluative terms used in narrative and written texts.

Project aims and outcomes

The primary aim of the research is to develop a model of informal learning centred on judgements. The research questions are:

- Is productive learning enhanced if judgements are contextualised within practices that feature both internal and external goods?
- Is productive learning enhanced in practices where internal goods predominate? Or its corollary: in contexts where internal goods are neglected, is learning significantly less productive?
- To what extent is the internal-external distinction useful in gaining a richer understanding of workplace learning in general?

Findings and Discussion

Our case study examined the learning of a partnership constructed among three separate organisational entities: a corporation in the commercial sector, a community organisation and a governmental educational entity brought together to address a shared goal of improving financial literacy in specific disadvantaged community segments. Each partner had competencies or assets to contribute, each could not deliver the target outcomes by working independently and each entity (as well as the individual team members) had not previously worked together. On the surface, the corporate partner contributed funding, the community organisation contributed expertise of community initiatives and managed the project and the educational partner contributed curriculum development expertise and knowledge of the educational system. However, in constructing the narrative of the case, participants identified a partnering discovery process from which shared values emerged supported by actions and practices that ultimately become mutually reinforcing. In this discussion, the names of participants and entities have been changed to assure their anonymity.

Seasoned practitioners know what constitutes good practice and how to play the rules of the game:

[Bill, curriculum developer]:
‘I knew the idea could work. But I had definite ideas about what good curriculum materials should be – they had to have sound pedagogical objectives and be teacher-friendly. We had to embed the materials into the curriculum outcomes, not as an extra program on the side’.

[Martha, corporate partner]:
‘We tried at one stage to push progress forward and offered to meet with the educators. Bill said: No, we have certain ways to work this through the system. Bring them the solutions, not the problems … and thank goodness we listened to his advice’.

The judgements made by individuals seemed imbued with ethical, political, emotional and values-based factors but were always grounded in actions:
[Sally, community coordinator]:
‘As a new employee, I found myself asking can I ask for this in the partnership, what would [my bosses in my company] say?´
‘I learned a lot about the practical realities of school environments – the pressures and powers that principals have’.  

[Susan, corporate partner]:
‘The partnership really worked because we shared the same values and operated that way’
‘Occasionally I felt like a gate-keeper when some of my corporate colleagues asked about when we could leverage our products and I said no. It’s a different type of performance outcome from ones they were used to’.  

[Bill, curriculum developer]:
‘Personal factors played a lot in my decision to participate’. 

We found internal and external goods typically co-exist in varying degrees shaped by perceptions and motivations of interest and value:  

[Bill, curriculum developer]:
‘If I couldn’t do it right, I wouldn’t have participated. My curriculum team had several other projects to work on. They paid us but I wasn’t out to make money on this... [when probed why by the researcher] ... personal factors – I felt there was trust, flexibility and an openness in the team. Plus financial literacy is more about making values explicit, about learning responsibility – it’s important and needs to be taught’.  

[Colin, another curriculum developer from a different entity working on a parallel project stream]:
‘We felt strongly about following our community action research approach’.
‘I think we did a very good job for the limited budget and time we had’.  

Here, both Bill and Colin identify the importance of delivering effective practice (internal goods) as well as acknowledge the benefits of instrumental rewards such as project fees (external goods). But whereas Bill seemed intrinsically motivated and values-focused, Colin appeared less so, possibly constrained by implicit factors disclosed in the interview such as size of engagement, time availability and employment status. 

When asked about what learning emerged from their participation on the initiative, several participants commented that they had tacitly learned, but not explicitly verbalised the experience as ‘learning’ until specifically asked. The nature of the project as it evolved lent itself to collective sense making by ‘problem framing’ rather than ‘problem solving’ (Weick, 1995). This is learning characterised more as ‘modes of exploration [rather than] modes of regularization’ (Buchler cited by Harris, 1993, p.24, our italics) even though simultaneously, the normal project pressures to deliver outcomes (external goods) still existed.  

[Sally, community coordinator]:
‘Our corporate partner got down and dirty and were very involved. They discovered they were on a [learning] journey as well’. 
‘We got to a stage where we could predict what was going to be a red flag for each other and work the issue’.  

[Bill, curriculum developer]:
‘Our community partner didn’t think our early drafts focused enough on the concept of giving, so we modified them’.  

[Susan, corporate partner]:
‘I guess we discovered and evolved our process during the first phase. We learned that we had developed a rigorous model with demonstrable results. After Bill convinced us it could be bigger than we originally thought, we felt we had nothing to lose - we should take the chance and push onto the next phase. We were much more articulate in what we wanted to do in the second phase’.

When ‘creating’ rather than ‘fixing’ through coordinated action,

‘[i’t’s not that] people have identical notions of … design, but rather because they have equivalent views of what is happening and what it means. Equivalence allows both coordination and individual expression to occur simultaneously… people are able to accomplish collectively what they could not do individually, but also to cope individually with unexpected problems by virtue of their diverse capabilities’ (Weick, 1993, p.347).

Thus Weick (1993) makes an important point about the value of heterogeneity and participation that this case exemplifies. Each partner contributed and spoke from individual practice-based competencies. But the inter-dependence of these practices and shared values enabled a trust-based discovery process that challenged the traditions of individual practices and created outcomes more substantial than the sum of individual efforts. We believe, it also enhanced and made more memorable, the individual and collective learning experienced by all partners.

The challenge is that often repeatability and valuing reliable behaviour are common preferences for learning behaviour (i.e. attempting to regularise something originally discovered as subsequent lessons learned and best practices).

[Sally, community coordinator]:

‘As an organisation, we’re now using this partnership model to structure how we should deal with other corporate partners. But how do you really have a corporate memory of these experiences? I replaced the original proposal developer and had to personally learn a lot to get up to speed with her vision. What if I left tomorrow, how do we transfer what I know so the partnership doesn’t lose momentum?’

Practice-based knowing is not about codifying all specifics of a project situation in the hope of prescribing an ideal set of learned behaviours for future actions. That set of unique characteristics in place and time is precisely that – unique and not repeatable. In Sally’s case, we could say that her capability for learning has been enhanced through the exercise and experience of her individual judgements on the partnership project. She has shaped and by this process, been shaped by holistic interactions and situational factors as the project progressed. Her future anticipative actions will be shaped by her historical experience and the set of antecedent motivations and interests that influence her judgements on the next unique set of situational factors. Her practice evolves, enriches and reconstitutes because practical judgements make visible consequences of actions as well as reinforcing the rules of the game that work and the values that justify participation.

In exploring whether this individual capability development can be fostered as an organisational capability over multiple instances of contexts, places and time, we identify the following implications for practice that will need further elaboration and testing:

- Seasoned practitioners operate automatically and confidently in their practice but when new contexts challenge the existing frames of reference and test the
boundaries of practice, the rules of practice must be modified, adapted or reconstituted. This discovery-based learning process can be a rich source of productive learning if there is a shared basis of understanding (in this case, shared values and beliefs about the importance of financial literacy) that drives intrinsic participation and willingness to adapt practice.

- Instrumental motivations and actions (external goods such as payment for curriculum development services, required project outcomes, acceptance by stakeholders) may drive progress of performance actions, but may be insufficient to generate creative learning or learning that fundamentally reconstitutes practice rather than merely instantiating it.

- Informal learning is usually hidden from organisational view, unlike structured training. Our participants had not verbalised their learning until we asked them to reconstruct their learning story as narrative. They also found the written case study an artefact of their learning that provided additional insights. Making informal learning explicit through reflection and reconstruction can be valuable for collective learning. The practical challenge is how to embed these steps within the daily actions of judgements as work dynamically unfolds (as opposed to an out-of-context training setting), in order to provide a direct, tangible and integrated example of practice-based knowing and learning that we believe is more powerful and sustainable.

This solitary case is obviously insufficient as a basis for theorising a model of informal learning. But it raises some interesting issues about the characteristics of learners, practices and judgements when focused on practice-based knowing and learning. As Nicolini, Gherardi & Yanow (2003a, p.28) suggest, a practice-based vocabulary and epistemology could be a ‘promising candidate for deepening our understanding of the organizational world in a postindustrial society’. In their opinion, such a vocabulary,

- recognises practice in a world that is always in the making,
- conceives of knowing as a social ecology,
- includes the role of material artefacts,
- acknowledges the spatio-localized nature of contextuality,
- embraces, rather than discounts, change and disorder, and
- crosses boundaries connecting things, people and events (Nicolini et al., 2003a, pp.21-25).

This description is consistent with the assumptions supporting the set of judgemental features previously identified by Beckett and Hager (2002).

**Conclusion**

At this stage, we could claim that judgements contextualised within practices can serve as opportunities for productive learning. Internal goods and external goods co-exist within practices but a focus on internal goods can rebuild and reconstitute practice as needed, thus enhancing individual learning and contributing to collective learning. Through additional cases, we wish to examine the underlying factors that shape judgements and how judgements are exercised under different situations of uncertainty and criticality. Understanding these inter-relationships will help us to develop a robust model of informal learning.
References


Halliday, J. In preparation.


