

A CRITIQUE OF WORKPLACE LEARNING DISCOURSES: PARTICIPATION IN AND CONTINUITY OF PRACTICE

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This paper proposes that current discourses on workplace learning restrict how it is conceptualised and discussed. Describing workplace learning environments and experiences as 'informal' and proposing that 'informal learning' occurs in workplaces constrains understanding how learning occurs through work. Instead, learning experiences in workplace are structured by historical, cultural and situational factors and that this structuring influences how and what is learnt. As in educational institutions, there are intentions for work practice, goal-directed activities that are central to the practice's continuity as well as interactions and judgements about performance shaped by their practice. These workplace affordances shape the kinds of activities individuals participate in and the guidance they can access and from which they learn. It is therefore incorrect to describe learning through work as being 'informal', as this structuring shapes learning and often has inherently pedagogical purposes associated with continuity of the practice through participant learning. Also, describing learning in workplaces as being either 'formal' or 'informal' suggests a situational determinism that de-emphasies the role of human agency in the learning process. Linking both individuals' agency and workplace goals is continuity through learning. It is proposed therefore that learning in workplaces be conceptualised in terms of participatory practices focused on continuity.

1. Structuring participation

It is timely and necessary to critique some current assumptions in the workplace learning discourse in order to advance our understanding of learning through work. A central proposition advanced here is that workplaces and educational institutions merely represent different kinds of social practices, where learning occurs through participation. To distinguish between the two in terms of formalisms of social practice is erroneous. Instead, it is proposed that both of these practices are constituted historically, culturally and situationally, and share a common focus on the continuity of the practice. The needs for educational institutions and other kinds of workplaces evolve over time. However, they are constituted as a product of particular cultural practices and needs. The manifestation of the particular social practice (e.g. workplace or school) is also shaped by situational factors such as local needs, the individuals involved, the goals for the activities and how judgements are likely to be made about performance.

If learning is seen as something privileged by practices within educational institutions, rather than as a consequence of engagement in all kinds of social practice (e.g. workplaces, homes, unions, clubs) more generally, this may inhibit understanding learning in workplaces, and learning more broadly. If, however, learning is conceptualised as being the product of participation in social practice through engagement in the activities and access to support, it may be possible to adopt a broader view of learning experiences and their enhancement. The growing acceptance of learning as an inter-psychological process (i.e. between individuals and social sources of knowledge) prompts a consideration of learning as engagement with the social world more widely, and not only through close personal interactions as Vygotsky (1978) proposes.

Other reasons warrant making participation a central concern for a workplace pedagogy. For many, perhaps most, workers the workplace represents the only or most viable location to initially learn and develop further their vocational practice throughout a working life. Workplaces are becoming even more salient as expectations for maintaining the currency of workers' vocational practice is being now being transferred to workers themselves in the current reformulation of lifelong learning practices and policies. The often contested relations that constitute work practice are central to understanding learning through work. Opportunities to participate in work, the kinds of tasks individuals are permitted to engage in and the guidance provided become key bases to understand and evaluate how and what individuals learn through their work. Understanding how workplaces afford individuals or cohorts of individuals these opportunities become salient. Also, it becomes important to account for how individuals elect to engage with work activities and access the support and guidance that workplaces afford them. Individuals determine what constitutes invitational qualities. Hence, participatory practices such as those shaping individuals' engagement in workplace activities become central to understanding learning at work. It is these relations that are central to the social basis of knowing. In the following, a critique is advanced of the current discourse of workplace learning. A major concern is to provide a space for learning in workplace to be discussed at least partially unencumbered from assumptions based on practices in educational institutions.

2. Workplace participation and sustaining practice

Describing workplaces as 'informal' learning environments does little to assist the standing of or understanding of workplaces as learning environments. Importantly, such conceptions may impede the development of a workplace pedagogy. Nevertheless, the use of negative labels for workplaces as learning environment, such as 'non-formal' and 'informal', persists, often without a critical appraisal. In the following three premises are advanced to question the assumptions that underpin the current terminology of learning experiences and outcomes in workplaces.

2.1 Negative titling and inappropriate premises

Describing a phenomena by what it is not: (e.g. informal- 'not formalised', unstructured – not structured) is unhelpful. It does little to assist understand its qualities or characteristics. In this instance, the use of concepts and assumptions associated with particular social practices --- educational institutions --- are advanced as premises for characterising what constitutes the formalisms and structures of workplace learning experiences and appraising their worth. For instance, teaching and learning are commonly, if erroneously, held to be synonymous or at least associated. Therefore, the absence of qualified teachers and didactic learning experiences lead to assumptions that learning in workplaces will be inferior to that occurring in educational institutions. This learning might also be seen to be ad hoc because the activities are not consistent with practices adopted in these institutions. So, from a perspective privileging the practices of educational institutions, the absence of a written curriculum document which aims to order teachers' actions and learners' experiences alike, qualified teachers and teaching practices, raises the concern that learning through work, if it occurs at all, will be weak, ad hoc, concrete and incidental. However, there is evidence aplenty that rich learning occurs outside of educational institutions (see below). Consequently, assumptions based on practices in educational institutions may not be useful in discussing learning in or the development of a pedagogy for other kinds of social practice, such as workplaces. If, however, the discourse holds learning to be an inevitable outcome of thinking-acting this

may well provide richer bases by which to consider workplace learning experiences. More appropriately, the goal for participation as learning in workplaces can be seen as sustaining practice, which may also be goals for educational institutions.

2.2 Workplaces and structuring of activities, participation and performance

It is inaccurate to describe workplace learning experiences as being ‘unstructured’ or ‘informal’. Experiences (activities and interactions) within workplaces, as in other social practices, such as in homes (see Goodnow 1996), are shaped by their norms, values and practices. Moreover, the structuring of experiences in workplaces is often premised on bases associated with sustaining the practice through learning, which incites inherently pedagogic practices. Furthermore, what constitutes performance in workplaces and bases for judgements about performance are structured by workplace norms and practices. These points are now discussed in turn.

The structuring of workplace experiences

Rather than being without structure or formalisms, workplace activities are often highly structured and formalised. Just as the goals for, and norms and practices of educational institutions frame the activities in which students engage, similarly the goals and practices of workplaces determine workplace tasks and activities and how and which individuals engage in and are guided in these experiences (Billett 1996; Lave 1990; 1993). Rather than being unintentional, the learning experiences within social practices is often central to sustaining those practices (i.e. their learnt continuation) and the communities themselves. Examples here include learning to navigate (Hutchinson 1983), weaving (Childs & Greenfield 1980), dairy workers (Scribner 1984), midwifery (Jordan 1989) and tailoring (Lave 1990). Instead, rather than being ad hoc, approaches to work practice are often intentionally organised to structure workers’ access to the knowledge they need to sustain the practice through individuals’ learning. This structuring has been referred to by Lave (1990) as the ‘learning curriculum’.

Although not intentionally stated in the form of a syllabus, the pathways of experience in the workplaces are often inherently pedagogical because they are aimed to assist sustaining the practice through its participants’ learning. Lave (1990) found that tailors’ apprentices learnt by participating in work activities that were structured through engagement in increasingly more accountable and complex tasks that incrementally provided greater access to the practice required for work. This structuring includes intents associated with sustaining practice. The apprentices moved through activities that first provided access to the overall goals required for performance, then the requirements for particular performances. For instance, initially, the apprentices finished and ironed completed garments. These activities provided an understanding of the requirements for their work, including the standard of finish demanded for a garment and to understand the shape of the garment components. The pathway of activities was ‘formalised’ by a progression through tasks of increasing levels of accountability --- that is, movement from tasks of low to high accountability (i.e. those where mistakes can be tolerated to those where mistakes would have significant consequences – e.g. making children’s’ undergarments first). Lave (1993), an anthropologist, concludes that whenever you examine practice you identify learning. Both the cognitive and sociocultural constructivist psychological perspectives also support this contention through linking of engagement in goal-directed activities to learning. This engagement is held to reinforce, refine or extend individuals’ knowledge. Therefore, more than an end in itself, this engagement also incites change in individuals’ capacities: learning.

Pathways of learning activities have also been identified in contemporary work settings. In hairdressing salons, the tasks apprentices engage in and their progress through these tasks are determined by the particular salon's approach to hairdressing (Billett 1995a). For instance, in one salon where the client is serviced by a number of hairdressers, the apprentices first engage in 'tea and tidy' --- tasks that keep the salon clean and tidy, and getting hot beverages for clients. Later, the apprentices work alongside experienced hairdressers, helping to place rods and curlers in clients' hair. Later still, before being permitted to cut and colour women's hair, they commence by cutting men's hair, which is seen as being less difficult and of lower accountability than cutting women's hair. This pathway of activities continues until the apprentices can style hair independently. However, in another salon, where hairdressers have responsibility for the entire hairdressing task, the apprentice is required to learn to cut and colour far earlier than in the salon referred to above. The structured pathway of activities in the second salon includes gaining competence with procedures that permit independent practice early in the apprenticeship. The two salons referred to have quite distinct hairdressing practices and goals and individual participation in these practices and learning is central to the continuity of those practices. Darrah (1996) has also shown how access to work in a computer manufacturing company, is organised and sequenced to structure learning through a pathway of activities. In commercial aviation there is a pathway of learning associated with movement from being a flight engineer, to first officer through to captain (Hutchins & Palen 1997). Again, these provide instances of sustaining practice through learning.

Other inherently pedagogic practices have been identified in circumstances outside educational institutions. Hutchins' (1983) study of fishermen identified a deliberately structured approach to learning to navigate. Substitute objects (shells and other beach debris) were used to represent objects (night star and constellation patterns) that cannot be seen during the day. So where the learning to sustain the practice (fishing) could not proceed through work a substitute learning experience is provided. The Guarenos of the Orinoco Delta of Venezuela also teach cultivation, animal husbandry, hunting and fishing in ways that are highly structured through learning by doing and being provided with an initial understanding of each task and its goals (Ruddle & Chesterfield 1979, cited in Rogoff & Gardiner 1984). Jordan, (1989) notes how Yucatan birth attendants learn their profession through the structured observation of more experienced practitioners. Their apprenticeship proceeds with little or no separation between daily working life and the learning of the professional skills of midwifery. These learning experiences, which are essential to their communities' continuity, would be described by many as being 'informal'. However, they are highly structured and formalised by the norms and practices of their communities. Moreover, the learning arising is not necessarily concrete --- wedded to circumstances of their construction --- they can incite adaptable learning. Rogoff (1982) and Rogoff and Gauvain (1984) found that the potential for transfer from this kind of learning was as great as that from school-based learning. The development of what Vygotsky refers to as scientific, rather than everyday concepts, has been shown not to be dependent on whether they were learnt in or out of school, but whether processes that can make that knowledge accessible (Billett 1995a). So claims about the concreteness of learning in social practices other than educational institutions needs to be critically appraised, particularly in light of the crisis of transfer claimed to be occurring with learning from educational institutions (e.g. Raizen 1994). In sum, although intentionally concerned with continuity of practice rather than individual learning, the structuring of workplace activities is often inherently pedagogic, because they are associated with maintaining that continuity through participant learning. The degree by

which these experiences are pedagogic are determined by the quality of participatory practices: that is how individuals engage in the inter-psychological process of thinking-acting-learning in the workplace.

The structuring of workplace participation

Another kind of structuring of workplace learning experiences is how opportunities to participate are distributed. Given the salience of access to the kinds of activities individuals can engage in and guidance by more experienced coworkers, how the workplace affords these opportunities is key to its pedagogical character. Workplace factors structure and distribute opportunities for participation and, hence shape these opportunities. Opportunities are distributed by factors such as workplace cliques, affiliations, gender, race, language or employment standing and status. Workplace participatory practices can be benign. However, they are often contested between 'newcomers' or 'old-timers' (Lave & Wenger 1991), full or part-time workers (Hughes & Bernhardt 1999); teams with different roles and standing in the workplace (Hull 1997); between individuals' personal and vocational goals (Darrah 1996) or among institutionalized arrangements such as those representing workers, supervisors or management (Danford 1998). This contestation determines opportunities to engage in novel activities (from which new learning might be derived) and access to close guidance by more expert co-workers. Those inhibited from engaging in new tasks and denied access to goals and understandings will likely have more restricted learning outcomes than those invited to participate more fully. In these ways, the norms and values of the workplace shape and distribute opportunities for participation. They structure the participatory practice of the workplace, and how it is sustained.

Performance requirements and acknowledgement

The third premise refers to the structuring of what constitutes performance and how it is acknowledged in a particular workplace. Situational factors constitute what passes as appropriate performance. The requirement for performance is not a phylogenetic or socio-cultural given (i.e. there is no such thing as a vocational practitioner per se, as judgements will be made in the circumstances of its enactment) (Billett 2001). What is taken as expertise in one situation might be deemed inappropriate or indulgent in another. Moreover, how performance is acknowledged in the workplace is also determined situationally. In Darrah's (1996) computer manufacturing company, the 'heroes' were those who worked in the systems design area. These workers received accolades and support that were not extended to the production teams even though their work was as demanding and central to the company's continuity. In hairdressing salons, it was acceptable for an experienced hairdresser or owner/manager to give a treatment outside the salon's practice, but a novice would be admonished for doing the same.

In sum, participation and learning in workplaces are highly structured by the goals, activities and culture of the work practice, or what Suchman (1996) refers to as local negotiations and Engestrom and Middleton (1996) as local orderings. These structures have inherently pedagogical qualities focussed on continuity through participant learning. This structuring extends to how and what is valued as effective workplace performance. Together, these suggest that describing workplace learning as informal and unstructured is far from accurate

2.3 Learning as a negotiated and reciprocal process

The third point refers to the unqualified use of the term 'informal learning', which may also limit understanding learning in workplaces and learning more generally. To describe

the process of learning as being 'informal' or 'formal' suggests either a fixed and irreducible relationship between the circumstances in which the learning occurs and changes in individuals, or that it is possible to approximate that learners' engage in a qualitatively different way in different kinds of social practice. That is, that the kinds of circumstances determine the kind of learning that occurs (i.e. those that are formal and those informal). Such a view de-emphasises the role of human agency in the construction and further development of their knowledge. Even the most structured learning experiences can only shape individuals' learning. Therefore, it is not useful to describe learning outcomes solely on the basis of the structuring of learning experiences. As Wertsch (1998) points out, unwelcome social press may lead to a kind of learning, which he refers to as mastery, that is a superficial learnt response to that press. He distinguishes this kind of learning from appropriation where the individual embraces the knowledge to be learnt 'as their own'.

Therefore, despite the solid contributions from participation in social practice, individuals' learning is not socialisation. Individual agency also shapes engagement in work practice and what is learnt. Individuals' engagement in social practice is likely premised on their socially-derived and constituted personal histories or ontogenies (Cole 1998, Scribner 1985), which result in particular ways of knowing --- understanding and engaging with the social world. Ontogenies are socially-shaped through participation in different social practices throughout life histories (Billett 1998). Ultimately, individuals' learning will always be unique, because as Valsiner (1994, Valsiner & van de Veer (2000) argue the process of knowledge construction is reciprocally constructed (co-constructed) between the individual and the social experience. Similarly, Meade (1934) views cognition as an ongoing process of negotiating with the social world in which individuals engage. Accordingly, we find individuals who dis-identify with the social practice in which they engage (Hodges 1998); workers who elect not to engage in team work when it clashes with their cultural values (Darrah, 1996), workers resisting training when view its purposes as compromising them and new recruits ignoring and denying affordances that were intended to assist their participation. The tension here is between the direction of the continuity of the social practice and individuals' life direction. So although acknowledging the strength of experiences and guidance that individuals are afforded by the workplace, to describe the process of learning that occurs as a result of those encounters as 'informal' or 'formal' de-emphasises the co-construction that occurs through engagement in inter-psychological processes. In considering the relations between a social practice such as in individuals' learning in workplaces we should heed Miller and Goodnow's (1995) advice to avoid the twin perils of social determinism and individual constructivism (particularly when portrayed as being overly mentalistic). Instead, we need to consider relations between the evolving social practice and individuals' ontogeny.

In sum, it may not be useful to describe or judge what happens in workplaces based on discourses drawn uncritically from practice in educational institutions. The discourse used to discuss learning in workplaces needs to account for the attributes of these settings and not be constrained by assumptions and practices of educational institutions, as well as the co-constructive processes that occur through work. Instead, we should consider how workplaces can best contribute to learners' development in their own terms. In particular, it is important to consider the participatory practices that shape access to activities and guidance that variously reinforce, refine or extend learning are distributed across the workplace. In terms of the workplace, the core of pedagogic practices may be understood through a consideration of reciprocal participatory practice at work, which focus on continuity.

3. Workplace participatory practices as co-participation

Throughout the above, it has been advanced that participatory practices are useful bases for considering learning in social practices, such as workplaces. This is because of: the close associations between engagement in goal-directed activities and learning; the centrality of access to activities and guidance in inter-psychological processes and needs to account for the agency of individuals. It has been proposed that participation has at least two dimensions: workplace affordances and individuals engagement in the workplace. As discussed, how the workplace invites individuals to participate in workplace activities and provides them with access to guidance is central to individuals' learning. These affordances (Gibson 1969) likely shape how individuals engage in goal-directed activities and secure the close and more distal kinds of guidance (e.g. opportunities to observe and listen).

The conceptual significance of co-participation at work can be seen as illuminating relations between the social world and the mind at intersections between the trajectories of the transforming social practice of the workplace and individuals' evolving ontogenies as they engage in work activities. It also suggests that rather than considering whether the mind is individual or social, it can be found in a complex of relations between the two. Procedurally, it advises that a workplace pedagogy might be developed and how this could assist effective workplace learning. Such a goal is urgent as the demands of learning throughout working lives are being increasingly directed towards individuals who may be ill-placed to secure that development in contested workplaces that may resist their efforts at continuity of practice.

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References

- Billett, S 2001, 'Knowing in practice: Re-conceptualising vocational expertise', *Learning and Instruction* 11 (6).
- Billett, S 2000, 'Guided learning at work', *Journal of Workplace learning* 12 (7) 272-285.
- Billett, S 1998, 'Situation, Social systems and learning'. *Journal of Education and Work* 11 (3) 255-274.
- Billett, S 1996, 'Towards a model of workplace learning: the learning curriculum'. *Studies in Continuing Education*. 18 (1) 43-58.
- Billett, S 1995a, *Structuring Knowledge Through Authentic Activities*. Unpublished PhD thesis. Brisbane, Australia: Griffith University, Faculty of Education.
- Billett, S 1995b, *Skill Formation in Three Central Queensland Coal Mines*. Brisbane, Australia: Centre for Research into Employment and Work, Griffith University.
- Childs, C P & Greenfield, P M 1980, 'Informal modes of learning and teaching: the case of Zinacanteco weaving' in *Advances in cross-cultural psychology* (ed). N.Warren vol. 2. Academic Press, London
- Cole, M 1998, Can cultural psychology help us think about diversity? *Mind, Culture and Activity*, 5 (4) 291-304.
- Danford, A 1998, 'Teamworking and labour regulation in the autocomponents industry' *Work, Employment & Society* 12 (3) 409-431
- Darrah, C N 1996, *Learning and work: An exploration in Industrial Ethnography* Garland Publishing, NY
- Engestrom, Y & Middleton, D 1996, Introduction: Studying work as mindful practice. In Y Engestrom & D. Middleton (Eds), *Cognition and Communication at Work*. (pp.1-15). Cambridge: CUP.
- Gibson, E J 1969, *Principles of perceptual learning and development*, Prentice-Hall, NY

- Glassman, M 2001, Dewey and Vygotsky: Society, Experience, and Inquiry in Educational Practice. *Educational Researcher* 30 (4) 3-14.
- Goodnow, J J 1996, 'Collaborative rules: how are people supposed to work with one another'. in P B Baltes & U M Staudinger (eds) *Interactive minds: Life span perspectives on the social foundations of cognition*. Cambridge, UK, CUP
- Hodges, D C 1998, Participation as dis-identification with/in a Community of practice. *Mind, Culture and Activity*, 5 (4), 272-290.
- Hughes, K & Bernhardt, A 1999, *Market segmentation and the restructuring of banking jobs* IEE Brief number 24 February 1999, Institute on Education and the Economy, New York
- Hull, G 1997, 'Preface and Introduction' *Changing work, Changing workers: Critical perspectives on language, literacy and skills* (ed. G. Hull), NY: State University of New York Press,
- Hutchins, E 1983, 'Understanding Micronesian navigation' in *Mental Models* (Eds D. Genter & A. Stevens) (pp. 191--225). Lawrence Erlbaum, Hillsdale, New Jersey
- Hutchins, E & Palen, L 1997, Constructing meaning from spaces, gesture, and speech. In L. B. Resnick, C. Pontecorvo & R. Saljo (Eds.), *Discourse, Tools and Reasoning: Essays on Situated Cognition*. (pp.23-40). Berlin: Springer.
- Jordan, B 1989, 'Cosmopolitan obstetrics: Some insights from the training of traditional midwives' *Social Science and Medicine* vol. 289, 925-44
- Lave, J 1993, 'The practice of learning'. In S. Chaiklin & J. Lave (Eds.), *Understanding Practice: Perspectives on Activity and Context* (pp. 3-32). Cambridge: CUP.
- Lave, J 1990, 'The culture of acquisition and the practice of understanding'. In J W Stigler, R A Shweder, & G Herdt (Eds.), *Cultural Psychology* (pp. 259-86). Cambridge: CUP
- Lave, J & Wenger, E 1991, *Situated learning - legitimate peripheral participation* Cambridge; CUP
- Meade, G H 1934, *Mind, Self & Society: Works of George Herbert Meade* (volume 1) Chicago. University of Chicago Press
- Miller, P J & Goodnow J J 1995, Cultural practices: Towards an integration of culture and development. In J J Goodnow, P J Miller & F Kessel (Eds.), *Cultural Practices as Contexts for Development, New Directions in Child Development*, 67. San Francisco: Jossey Bass.
- Raizen, S 1994, Learning and work: The research base. In Vocational Education and Training for youth: Towards coherent policy and practice. Paris: OECD
- Rogoff, B 1982, 'Integrating context and cognitive development' *Advances in developmental psychology* vol. 2 (Eds M E Lamb & A L Brown) Erlbaum, Hillsdale, New Jersey
- Rogoff, B & Gauvain, M 1984, 'The cognitive consequences of specific experiences - weaving versus schooling among the Navajo' *Journal of Cross-Cultural Psychology* 15 (4) pp. 453-475
- Rogoff, B 1995, 'Observing sociocultural activities on three planes: participatory appropriation, guided appropriation and apprenticeship', *Sociocultural studies of the mind* Eds. J V Wertsch, P Del Rio & A Alvarez (pp. 139-164) Cambridge: CUP.
- Rogoff, B & Gardner, W 1984, 'Adult Guidance of Cognitive Development', in B Rogoff & J Lave (eds) *Everyday Cognition - its development in social context*, Cambridge, Mass: Harvard University Press:
- Scribner, S 1985, Vygostky's use of history. In J V Wertsch (ed). *Culture, communication and cognition: Vygotskian perspectives* (pp. 119-145). Cambridge: CUP
- Scribner, S 1984, 'Studying working intelligence' *Everyday cognition: Its development in social context* Eds. B Rogoff & J Lave (pp. 9-40). Cambridge, Mass. Harvard University Press,
- Suchman, L 1996, 'Constituting shared workspaces'. In Y Engestrom & D Middleton (Eds.), *Cognition and Communication at Work*. (pp.35-60). Cambridge, UK: CUP.
- Valsiner, J 1994, 'Bi-directional cultural transmission and constructive sociogenesis' in *Sociogenesis re-examined* Eds W de Graaf & R Maier Springer, New York
- Valsiner J & van der Veer R 2000, *The Social Mind: The construction of an idea*. Cambridge CUP.
- Wertsch J W 1998, *Mind as action*. New York: OUP.