

University of Huddersfield Repository

Lee, Tracey, Fuller, Alison, Ashton, David, Butler, Peter, Felstead, Alan, Unwin, Lorna and Walters, Sally

Workplace Learning: Main Themes & Perspectives

Original Citation

Lee, Tracey, Fuller, Alison, Ashton, David, Butler, Peter, Felstead, Alan, Unwin, Lorna and Walters, Sally (2004) Workplace Learning: Main Themes & Perspectives. Learning as Work Research Paper (2). (Unpublished)

This version is available at http://eprints.hud.ac.uk/id/eprint/5586/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/



THE CENTRE FOR LABOUR MARKET STUDIES

Learning as Work: Teaching and Learning Processes in the Contemporary Work Organisation

Workplace Learning: Main Themes & Perspectives

Tracey Lee, Alison Fuller, David Ashton, Peter Butler, Alan Felstead, Lorna Unwin & Sally Walters

Learning as Work Research Paper, No. 2 June 2004

Centre for Labour Market Studies University of Leicester 7-9 Salisbury Road, Leicester, LE1 7QR Tel: 0116 252 5976 Fax: 0116 252 5953 Email: learningaswork@le.ac.uk www.clms.le.ac.uk/research/learningaswork.html







Workplace Learning: Main Themes & Perspectives

Tracey Lee, Alison Fuller, David Ashton, Peter Butler, Alan Felstead, Lorna Unwin & Sally Walters

Learning as Work Research Paper, No. 2 June 2004

> Address for Correspondence: Tracey Lee, Centre for Labour Market Studies, University of Leicester, 7-9 Salisbury Road, Leicester LE1 7QR, tel: +44 (0)116-252-5937; fax: +44 (0)116-252-5953; email: Tracey.Lee@le.ac.uk

ABSTRACT

This paper provides an overview and critical discussion of some of the main themes and perspectives within existing academic literature concerning workplace learning. The introductory section of the paper outlines why learning at work has become a prominent issue for policy makers, employers and employees and discusses the social and multidisciplinary contexts through which workplace learning is understood and conceptualised. The paper continues in section one, to address the different approaches to learning that permeate current enquiry and research within the field. The discussion here centres upon two paradigms and two associated perspectives of learning and highlights how through these, the term 'learning' is subject to multiple definitions. Section two discusses formal and informal learning and attends to the ways in which learning at work has traditionally been associated with informal learning processes. The discussion illustrates how, as a result of ongoing debate, this perspective has been complicated and challenged and that learning at work is now understood to encompass a variety of both 'formal' and 'informal' elements. The final section of the paper, addresses the relationship between organisational structure and individual engagement in workplace learning. The discussion focuses on how underpinning this relationship is a structure/agency dynamic which, when attended to, illustrates how individuals and their learning contexts of work cannot be considered separately.

WORKPLACE LEARNING:

MAIN THEMES AND PERSPECTIVES

INTRODUCTION

The recognition that learning occurs within the workplace and that it is necessary for the development of working knowledge and skills is not new. However, in recent years an interest among employers, researchers and policy makers in what comprises learning and how it can be facilitated within workplaces has increased, and there are now many areas of research in which learning at and through work is a central concern. The concept of the 'learning organisation' is one particular example where this focus is captured, although other concepts such as 'lifelong learning' and the 'learning society' are also areas of research that contribute to the development of 'workplace learning' as a distinctive field of enquiry. As the notion of learning in the workplace is not new why, then, has there been an increase of interest in learning at and through work?

Many commentators, such as Stern and Sommerlad (1999), argue that, "'it has acquired visibility and saliency" because "it sits at the juncture of new thinking concerning the nature of learning about new forms of knowledge, about the transformation of the nature of work and about the modern enterprise in a globalized economy" (cited in Fuller & Unwin, 2002, p. 95). As a concept and set of practices, 'workplace learning' is thus moving through a period of political, economic and social transformation. ¹ Advances in technology, the demise of manufacturing industries and the growth of service sector industries, changes in the meaning of the 'workplace' (for example, home-working (Felstead *et al*, 2000), working-on-themove (Felstead *et al*, in press), 'flexible' working (Felstead *et al*, 1999); and the shift (in many cases) towards new, post-Fordist style workplace structures and practices, all constitute sets of conditions whereby the concept and practices of 'workplace learning' now concern different workplace contexts, different workplace knowledges and also different workers to those of the past.

¹ In this paper we are dealing explicitly with workplace learning in a western context.

Reeve & Gallacher (1999) argue that the increasing globalisation of the economy together with rapid technological development and a growing emphasis on a 'knowledge economy', 'have helped to give rise to a discourse of competitiveness in which a key element is the level and skill of the workforce' (p. 125). They go on to assert that in this context, workplace learning:

... is seen as a flexible form of learning which enables employees to engage in the regular processes of up-dating and continuing professional development which have been increasingly emphasised. Moreover, insofar as the learning is work-based it is also seen as facilitating forms of learning, and types of knowledge which are of particular relevance to the work in which the learners are engaged. (pp. 125-6)

This points to employers' interests in workplace learning, in that significant benefits are accrued by investing in workforce development. However, Forrester (1999), critical of how workplace learning is often portrayed, points to how broader sets of interests are often promoted. In his discussion of post-compulsory education and training in Britain, he notes that the contribution of 'employee learning' to competitiveness and the 'economic well-being' of organisations and companies is promoted by the government to have distinct advantages for individual employees and society as a whole:

A central feature of the "modernising consensus", actively promoted by "New Labour" is not only the recognition of the importance of knowledge and skills within a successful and dynamic economy but also the contribution of this workplace learning and training towards addressing issues of social justice, equity and social inclusion. "Competing within the global economy" by definition also necessitates the existence of a "civilised society and (the development of) the talents of each and every one of us" (Department for Education and Employment 1997. 3). (Forrester, 1999, p. 189)²

Workplace learning is thus often characterised, conceptualised and promoted as advantageous (or at least potentially) for both employers and employees and the State. Within the literature it is understood by many, for example: to promise

 $^{^2}$ Here, the terms 'training' and 'skills' are presented as synonymous with workplace learning. These terms, however, have a variety of meanings and assumptions underpinning them and can not simply be subsumed under the notion of learning at work. Many authors, however, do (problematically) use the terms in this context.

improvements in performance and productivity (Ashton & Sung, 2002); to potentially create opportunities for personal and professional development and promise job satisfaction and self-fulfilment (Matthews, 1999); and to potentially facilitate a movement towards an equal and socially inclusive society where there will be better jobs and more skilled, knowledgeable and flexible workers to occupy them (Senge, 1991). However, it is recognised that these potentials are not simply met by the recognition that learning occurs at work: both the practices and discourses of workplace learning require both understanding and development.

Defining Workplace Learning

The processes of change as described above have also meant that 'workplace learning' has itself acquired a broad variety of different meanings. There is no singular definition or one unified approach to what 'workplace learning' is, what it should be, or who it is/should be for. The reasons put forward for this are generally twofold. First, there is an issue of competing interests and values whereby, as Boud and Garrick (1999) observe:

The workplace has become a site of learning associated with two quite different purposes ... The first is the development of the enterprise through contributing to production, effectiveness and innovation; the second is the development of individuals through contributing to knowledge, skills and the capacity to further their own learning both as employees and citizens in the wider society. (p. 6)

The second reason concerns the different disciplinary backgrounds from which workplace learning has been approached, investigated and theorised (Boud, 1998; Stern and Sommerlad, 1999; Hager, 1999). This has generated a myriad of different lenses through which workplace learning, and the various concepts embodied within it, are viewed and understood. Taking these two main reasons together, Boud (1998) argues that, 'workplace learning is a site of intersecting interests, contested ideas, multiple forms of writing and rapidly evolving practice' (p.11). This is expounded by Candy and Matthews (1998), who state how:

Coming from a range of fields of study (adult education, higher education, cultural anthropology, organisational theory,

innovation studies, industrial economics, management studies, vocational education, etc.), a variety of theoretical perspectives (behaviourism, interpretivism and critical theory), different points of view (the manager, the learner/worker, the development practitioner), various contexts or environments (manufacturing/production-based industries, knowledge- or service-based organisations, the public sector, universities, professional practice etc.), and using every imaginable methodology (from surveys and interviews, to diaries and participant observation) they have generated a bewildering array of models. (p. 15)

Candy and Matthews further observe that as well as the shifting definitions and understandings of workplace learning, due to the competing disciplinary, ideological and organisational perspectives of speakers and commentators, there is also a problem in the use of terminology. Often, people across disciplines will either employ different terminology to describe the same phenomenon, or employ the same terminology when meaning something quite different (ibid, p.16).

All this has created what Stern and Sommerlad (1999) describe as an 'elasticity' to the term 'workplace learning', although they argue that different understandings can nonetheless still be discerned and categorised. They suggest that this can be based on the degree to which 'learning' and 'work' are separated³, which they argue can be captured under three broad approaches: the workplace as a site for learning; the workplace as a learning environment; and learning and working as inextricably linked (p. 2). The first approach involves the spatial separation of learning from work, where learning activities, typically in the form of 'in-company training' will take place 'offthe-job' and outside of the immediate working environment. In the second approach, learning is also planned and organised but takes place within the working environment and is largely 'on the job'. The third approach is characterised by the notion of 'continuous learning' and Zuboff's (1988) assertion that 'learning is the new form of labour' (cited in Stern and Sommerlad, 1999, p. 2). In this approach, the workplace is structured to maximise processes of learning where employees learn how to become learners and learn skills related to their own jobs and those of other workers. Work is organised along a 'high performance' model (see Butler et al, 2004)

 $^{^{3}}$ It is worthy of note here, that the notion of 'the workplace' is taken for granted, and is assumed to refer to a physical environment. This is highly problematic given new forms of work which have radically changed what the 'place' of work may be. See for example, concepts of the 'mobile office' and 'exploding workplace' (Felstead *et al* 2000, and 2005 in press).

where learning occurs 'informally' within the workplace and through team work, problem solving and social interaction with colleagues and clients/customers. These categories are similarly invoked by Stevens *et al* (2001) who, in their discussion of workplace learning and organisational performance, argue that crucial to understanding workplace learning is a distinction between, 'activities generally covered by the term "training", away from the job, formal, learning experiences, generally delivered by professional trainers and ... "informal learning" on or close to the job, through experience' (p. 13).

Whilst these categorical understandings of workplace learning are by no means exhaustive in terms of the broad range of issues that are discussed within the field, they do nonetheless encompass salient features of three prominent themes that run throughout the literature. These themes can be summarised as follows:

- Approaches to learning
- Formal/informal learning
- Organisational structure and individual engagement in workplace learning, and the structure/agency relationship

The remainder of this paper provides an overview and critical discussion of these three themes as they have been developed within academic literature concerning workplace learning.

1. APPROACHES TO LEARNING

Standard paradigm of learning & learning as acquisition

Workplace learning theories and perspectives arise through and centre upon what Beckett and Hager (2002), and Hager (2004a), refer to as two different 'paradigms' of learning, where each has different epistemological assumptions and beliefs about knowledge and knowing.⁴ Formal learning as found within educational institutions is defined as operating through a 'standard paradigm of learning' which, as well as

⁴ A similar discussion of these 'paradigms' of learning is also offered by Sfard (1998), although she refers to them as 'metaphors'.

assuming didactic teaching methods (which position the learner as the relevant 'object' to be 'taught'), has three distinctive characteristics. Firstly, 'the basic image for understanding learning is of an individual mind steadily being stocked with ideas' (Hager, 2004a, p. 243). Secondly, mental life is considered as 'interior' to persons, where learning is thus perceived to involve 'a change in the contents of an individual mind, i.e. a change in beliefs' (ibid). Third, there is an assumption of a transparency of learning, the idea that if something is truly learned it can be made explicit (ibid, p. 244). Underpinning these three key characteristics is therefore an epistemological assumption and/or belief that knowledge is something that exists independently of the knower but is that which the knower can acquire, internalise, own, and exhibit (Sfard, 1998, p.5).

Hager (2004a) notes that the standard paradigm of learning assumes abstract propositional, context dependent and transparent knowledge to be the best and most desirable form of learning, whereby learning that occurs outside of educational institutions is positioned as its inferior 'other'. Thus, 'concrete' skills learning, context dependent learning and also tacit forms of learning and knowledge – in other words, those forms of learning and knowledge that are typically found within the workplace - are 'consigned to second-rate status' (ibid, p. 244). As will be discussed below, this notion has been strongly contested by workplace learning theorists, especially in relation to debates about formal and informal learning. However, notwithstanding this contention, the 'standard paradigm of learning' can be seen to underpin a particular category of theorising within workplace learning which, following Sfard (1998), Hager (2004a) terms a 'learning as acquisition' perspective. Theories within this perspective have five common features:

- they centre on individual learners;
- they focus mainly on the rational, cognitive aspects of work performance;
- work performance tends to be conceived as thinking or reflection followed by application of the thinking or reflection;
- learning itself is taken for granted and not theorised and problematised [where it is assumed] that workplace learning is akin to formal learning;
- they downplay the importance of social, organisational and cultural factors in workplace learning and performance (p.244).

Theories and approaches which demonstrate these features tend, broadly, to be influenced by the disciplines of cognitive and behaviourist psychology. Two examples are the highly influential work of Schön (1983) and Argyris and Schön (1978). Argyris and Schön identified processes of 'single loop learning' where the learner reacts and adapts to circumstances as they change but in relation to existing assumptions and understandings; and the more complex (and superior) form of 'double loop learning', where across changing circumstances the learner builds upon prior learning in ways that may challenge or move beyond their existing system of beliefs and understandings. Schön (1983) went on from his work in this area to investigate 'reflective practices' where he argued that knowledge is developed and transformed in a circular fashion via the practices and actions of practitioners and through their inner reflection on these practices and actions. In each theory, focus is placed upon individual knowledge acquisition and analytic attention is primarily given to how various cognitive and affective factors contribute to the processes involved.⁵

Emerging paradigm of learning & learning as participation

Those workplace learning theorists who adopt various 'socially' informed perspectives on learning and/or who are concerned with informal learning processes are, conversely, contributing towards what Hager (2004a) terms an 'emerging paradigm of learning'. Hager argues that the paradigm should be termed as 'emerging' because, 'though a diverse range of critical writings on education can be seen as pointing to this new paradigm, it is still a long way from gaining wide recognition and support characteristic of an established paradigm' (ibid, p. 246). The issue of the diversity of writings may also, however, have some additional significance here. For example, although many commentators may position themselves as a writing from a 'social' perspective of learning this does not mean that it constitutes a unified or near-unified approach. As discussed earlier, workplace learning literature encompasses a variety of different disciplinary perspectives and

⁵ Both authors were, however, interested in how individual learning contributed to the 'learning organisation'. Whilst they were, therefore, also concerned with social/institutional factors, these were seen as 'effects' of individual learning rather than as factors which themselves influenced the individual and their learning.

within these, different definitions and understandings of the 'social' and the relationships between social structure, culture and agency are abound. As such, the idea that a 'paradigm' is emerging may be somewhat problematic.

The perspectives within what Hager terms the 'emerging paradigm', however, unlike the 'standard paradigm of learning', do tend to conceptualise knowledge differently. They see it as fluid, that is, produced and continually reconstructed through the relationships and interactions between individuals, rather than as an object which is acquired, internalised and owned. As Sfard (1998) observes, rather than speaking of 'knowledge':

> The terms that imply the existence of some permanent entities have been replaced with the noun "knowing", which indicates action. This seemingly minor linguistic modification marks a remarkable foundational shift ... The talk about states has been replaced with attention to activities. In the image of learning that emerges from this linguistic turn, the permanence of *having* gives way to the constant flux of *doing* (p. 6, emphasis in original)

Thus, learning is similarly seen as involving action, 'doing', and active engagement. This is something which is stimulated and produced through social interaction and which is also contextual; that is, through their learning, individuals shape and transform both themselves and the social/interactional environments within which they work. From this perspective, the appropriate unit of analysis is social/discursive relations between people rather than the isolated 'individual'.

Following Sfard (1998), Hager (2004b) characterises the dominant approaches within this emerging paradigm as informed by 'learning as participation' perspectives. These have been developed through social theories of learning (see, *inter alia* Engeström, 1994, 2001, 2004; Lave and Wenger, 1991; Wenger, 1998). Lave and Wenger reject traditional didactic understandings of teaching and learning and argue that learning is intrinsic to human activity; that it is situated and occurs through processes of participation in communities of practice (i.e. a family, a work team, a club member). According to this perspective, learning involves the 'whole' person (not just the mind) where through participation, 'agent, activity, and the world mutually constitute each other' (Lave and Wenger, 1991, p. 31). As Wenger (1998) writes:

Participation here refers not just to local events of engagement in certain activities with certain people, but to a more encompassing processes of being active participants in the *practices* of social communities and constructing *identities* in relation to these communities. Participating in a playground clique or in a work team, for instance, is both a kind of action and a form of belonging. Such participation shapes not only what we do, but also who we are and how we interpret what we do. (p. 4, emphasis in original)

The local processes of participation through which this shaping is accomplished are captured by Lave and Wenger (1991) through the concept of 'legitimate peripheral participation'. This concerns how the learning processes for learners take place through the relations of 'newcomers' and 'old-timers' within communities of practice. Lave and Wenger discuss the processes of legitimate peripheral participation in modes of apprenticeship within five communities of practice: Yucatec midwives; Vai and Gola tailors; naval quartermasters; meat cutters; and non-drinking alcoholics (AA). Through these case studies they illustrate how, through the relational structure of 'newcomer' and 'old-timer' members, the novice as a 'newcomer' moves towards becoming a fully fledged member of the community and towards 'full participation' and 'expert' status. This is achieved not only by learning particular task related skills, but also by learning how to 'be' an appropriate (and thus legitimate) member of that community.

Lave and Wenger's concepts of 'legitimate participation' and 'communities of practice' have enjoyed widespread currency within workplace learning theory and research. However, some commentators have begun to point to some shortcomings in their work. One broad criticism is that the communities of practice they examine, which illustrate and support their theory, are not representative of most contemporary workplaces and work organisations (Rainbird *et al*, 2001). Fuller *et al* (2004), drawing on their own empirical research, cite four specific areas which they argue require further conceptual attention. They argue that:

- no account is taken of how 'old-timer' employees who have achieved full participation may be continuing to learn;
- no account is taken of the role of 'teaching', and the ways in which apprentices may have skills and knowledge that they may share with others, or

the role of formal education within workplace learning, and how this can also be seen to be a form of learning through participation;

- no account is taken of prior learning and how learner identities are therefore also constructed through social relationships and processes that go on outside of a particular community of practice;
- issues of power, inequality and conflict are acknowledged but are not investigated (pp. 22-24).

The social theory/perspective of learning developed by Engeström (2001; 2004) moves beyond the concerns with learning as this occurs *within* communities of practice and addresses learning, knowledge production and 'expertise' as these are dynamically constructed through and *across* multiple and interacting communities of practice (2004, p. 148). Engeström's approach to the processes of learning is based within activity theory and one of his central concerns is to identify and explicate the processes of what he terms 'expansive learning'. Activity theory, in which the notion of a community of practice is replaced with the term 'activity system', is based upon five principles:

- The prime unit of analysis is the 'collective, artefact-mediated and objectoriented activity system, seen in its network relations to other activity systems';
- An activity system is always made up of 'multiple points of view, traditions and interests' it is multi-voiced. This therefore increases in networks of interacting activity systems;
- Activity systems are generated and transformed over time a local history of the activity and objects as well as the broader history of the discourses which shape the activity need to be taken into account;
- Contradictions (tensions within and between activity systems) are central to activity systems they are the source of change and development;
- Transformation occurs where over time contradictions are 'aggravated'. An expansive transformation occurs when individuals start to question and challenge existing norms within the activity system and the 'object or motive of the activity are reconceptualized' into a broader horizon of possibilities than previously (2001, pp 136-137).

Within this framework, Engeström (ibid) argues that the concept of learning as acquisition is inadequate as, not only does it assume that the knowledge or skills gained are stable and well defined but:

The problem is that much of the most intriguing kinds of learning in work organizations violates this presupposition. People and organizations are all the time learning something that is not stable, not even defined or understood ahead of time. In important transformations of our personal lives and organizational practices, we must learn new forms of activity which are not yet there. They are literally learned as they are being created. There is no competent teacher. Standard learning theories have little to offer if one wants to understand these processes. (pp. 137-8)⁶

Here, Engeström points to how learning is an action-oriented process of construction and reconstruction and it is this, together with the theoretical model of social/interactional 'activity system' processes outlined above, that underpins his theory of 'expansive learning'. This is developed by Engeström by drawing on Bateson's (1972) theory of learning which consists of three distinctive learning levels: conditioning/acquisition, learning the 'hidden curriculum', and questioning/reconstruction. For Engeström, expansive learning is that which takes place through the third level of learning and, moreover, it is a collective rather than an individual endeavour:

> We speak of *expansive learning*, or third order learning, when a community of practice begins to analyse and transform itself. Such expansive learning is not any more limited to predefined contents and task. Rather, it is long-term process of re-fining the objects, tools and structures of the workplace' (Engeström, cited in Fuller and Unwin, 2003, p. 412, emphasis in original).

Engeström (2001) exemplifies activity theory and develops the theory of expansive learning through a discussion of an interventionst study which he carried out with a range of 60 staff representatives from a children's hospital and a health care centre in Finland. The study involved what Engeström calls a 'Boundary Crossing Laboratory'. This involved staff (from managers to physicians and nurses) who were responsible for children's health care in the two services, participating in a series of joint discussion sessions which were stimulated through the presentation of patient case studies. By invitation, some parents of patients also attended the discussions. The aim of the discussions was to enable both sets of staff to devise a new, collaborative way of working. The goal was to solve the identified problem of a lack of co-

⁶ This can also be found in Engeström 2004, pp. 150-151.

ordination and communication between the two institutions, which had had the effect of wasting time and resources in both settings as well as creating problems for the sick children and their families who were using both services. Engeström utilised the methods of observation and discourse analysis (both textual and conversational)⁷ to illustrate the various processes of learning and knowledge making between the health teams, and how through these, the existing services were transformed.

Engeström's development of expansive learning through activity theory is generally well received among workplace learning commentators, although several problems have been raised. Some authors, notably Young (2001) who is concerned with its utility within Vocational Education and Training, have pointed out that not all workplace learning will take place across teams, in relation to a specific problem or common aim, or in the social/discursive circumstances such as those Engeström discusses (i.e. group discussion). As such, in many cases there may not be social relationships or particular problems to transform at the intensity deemed to qualify as 'expansive' learning. Young's contention raises a further point that is also worthy of note. It could be argued that the emphasis that expansive learning places upon transformation could potentially lead to the creation a new learning binary mirroring that of formal/informal learning (discussed below). Thus, learning that cannot be characterised as having reached the 'gold standard' of expansive learning could potentially be perceived to have lower status and value.

Young further points out that Engeström does not deal with the issue of power. He notes that in the notion of the questioning/re-construction that accompanies the third level learning, and which is characteristic of expansive learning, Engeström does not take into account who the participants are. Thus, the issue of *who* is doing the questioning and *who* is being silenced or prevented from participating in the questioning, and thus the expansive learning, is not addressed. It could be argued that Young's point is particularly significant given the constructivist foundations to Engeström's approach, which emphasises social/discursive relations, interaction and participation. Indeed, what could also be added to the concerns Young raises, is the

⁷ Discourse analysis refers to both an analysis of texts and language in use. It can also be conceptualised on two levels: as broad repertoires of beliefs and understandings (such as what it means to be a practitioner of a certain kind of medicine) and also as the meanings and understandings that are locally accomplished through interaction. Engeström (2001) utilises both levels in his discussion and analyses of the health care teams.

issue of Engeström's own participation in the 'interventionist' studies within which activity theory and 'expansive learning' are developed. Despite the constructivist approach which underpins both activity theory and expansive learning, Engeström does not discuss (nor draw attention to), at least within his academic papers, his own interventions and positioning within the learning processes he observes and analyses. Such an omission within these papers can be seen to obscure (although beg) the question of whether the guidance/consultancy role he occupies within the studies he reports should also be taken into account as an inherent factor within the expansive learning process.⁸

A further criticism has been raised in relation to Engeström's theory of expansive learning which also draws attention to issues of power. This is that he does not take into account organisational environments and work contexts, and especially the processes and impact of top-down decisions, many of which are often made in response to external influences (Fuller and Unwin, 2004a). By this omission and failure to attend to relations of power, Engeström could be accused of assuming an even playing field of both equal access to, and participation in learning and decision making which, as many commentators have shown, is simply not the case (see, inter alia, Probert, 1999; Bierema, 2001; Fuller and Unwin, 2004b).

The standard and emerging paradigms of learning together with the learning as acquisition and participation approaches which are generated through them, have both informed, and have been informed by discussions about formal and informal learning. These discussions have occupied a central place within workplace learning theory, policy and practice. The following section will outline definitions of formal and informal learning, how the relationship between them has been conceptualised and what issues have arisen as a consequence of these debates.

2. FORMAL & INFORMAL LEARNING

As discussed above, the concept of workplace learning has acquired a broad array of meanings. Whilst this has partly been due to the different disciplinary fields within

⁸ Engeström does discuss this within his practitioner-based writings. However, insofar as this is omitted from his academic writings, and particularly in view of his methodological 'discursive' approaches, which demand demonstrability, this criticism is reasonable.

which one can approach workplace learning, a further contributing factor is the different types of learning that can referred to. These are the processes of 'formal' and 'informal' learning, where the latter is also sometimes referred to as 'non-formal' learning (Eraut, 2000; 2001). Formal learning is defined as structured learning that takes place 'off-the-job' and outside of the working environment, typically in classroom-based formal educational settings (Marsick and Watkins, 1990; 2001). It is also, as discussed above, conceptualised as a 'standard paradigm' of learning: a form of learning within traditional 'educational' pedagogical frameworks, based on didactic interaction (Beckett and Hager, 2002; Hager, 2004a, 2004b). Eraut (2000) outlines how formal learning has the following characteristics:

- a prescribed learning framework
- an organised learning event or package
- the presence of a designated teacher or trainer
- the award of a qualification or credit
- the external specification of outcomes (p. 114)

Informal learning, as pointed out by Colley *et al* (2002), tends largely to be 'defined in relation to what it is not – formal' (p.5) and, in parallel with wider debates about workplace learning per se, there are problems of definition:

Many texts use one or more of the terms without any clear definition. In an arguable even larger number, issues involved are either assumed or addressed, but without the explicit use of the terms at all. A smaller, but still considerable and growing body of writing sets out definitions of one or more of the terms concerned. Within that third body of literature, there is little agreement about how these terms should be defined, bounded or used. There is often considerable overlap, but also considerable disagreement. (p.5)

The term 'informal learning' can, however, be conceptualised according to four broad organising principles:

- Context: learning that occurs outside of classroom-based formal educational settings
- Cognisance: intentional/incidental learning
- Experiential: practice and judgement

• Relationship: learning through 'sitting next to Nellie', mentoring⁹, team working

These four organising principles of informal learning are seen to be central features of work as a practice, the workplace as an environment, and workforce/individual development. 'Informal learning' tends, therefore, to be considered as not only crucial to understand and facilitate, but as a more significant, effective and thus 'superior' form of learning to formal classroom-based learning (Colley *et al*, 2002; Hager, 2 004a).

Informal learning is defined by Dale and Bell (1999) as that:

... which takes place in the work context, relates to an individual's performance of their job and/or their employability, and which is not formally organised into a programme or curriculum by the employer. It may be recognised by the different parties involved, and it may or may not be specifically encouraged. (p. 1)

Marsick and Watkins (1990; 2001), however, offer a looser definition. They state that informal learning will 'take place wherever people have the need, motivation, and opportunity for learning' (2001, p.28) and that it 'is usually intentional but not highly structured [and] includes self directed learning, networking, coaching, mentoring, and performance planning that includes opportunities to review learning needs' (pp. 25-6). Drawing on a review of several studies of informal learning they characterise it as follows:

- It is integrated with daily routines.
- It is triggered by an internal or external jolt.
- It is not highly conscious.
- It is haphazard and influenced by chance.
- It is an inductive process of reflection and action.
- It is linked to learning of others (cited in Marsick and Watkins, 2001, p. 28).

Marsick and Watkins also refer to 'incidental learning', which they describe as 'a byproduct of some other activity such as sensing the organisational culture, or trial and

⁹ Colley *et al* (2002, p. 5) note, however, that within the literature concerning mentoring there are distinctions made, and debates about, 'formal' and 'informal' mentoring .

error experimentation' (1990, p. 8). This is considered to be a distinct form of informal learning which highlights intentional or non-intentional learning processes and also the significance of 'tacit knowledge'.¹⁰ Eraut (2000; 2001), who uses the term 'non-formal' rather than informal learning, moves beyond a binary model of 'intentional and non-intentional' informal learning and, taking a psychological approach, outlines three learning modes concerning intentionality. These are 'implicit' and 'deliberative' learning (mirroring non-intentional and intentional learning) and 'reactive learning'. The latter is an 'in between' category which describes 'situations where the learning is explicit but takes place almost spontaneously in response to recent, current, or imminent situations without any time being specifically set aside for it' (Eraut, 2000, p. 115). In this third category of 'reactive learning', Eraut introduces the dimension of time as an additional and significant factor within informal learning. Here, he points to how events/actions and interactions that generate and facilitate learning do not necessarily occur simultaneously. We may, for example, learn in the present (intentionally or nonintentionally) from events that have happened in the past, or by projecting events and our actions within them into a future time. In his discussions of this issue Eraut is largely concerned about the timing of a learning 'stimulus' and is interested in 'time' primarily in terms of how it impacts on memory and the learning and 'acquisition' of different types of knowledge (tacit and explicit).

Learning modes, particularly 'reactive' learning can, however, be differently interpreted and understood. For example, through the perspectives of social-psychology or sociology the issue of individual biography, and especially narrative modes of enquiry through which this can be examined, are pertinent. Meaning-making in the 'now' of present time is understood within narrative enquiry as constructed through different narrative genres, such as hypothetical narratives and retrospective narratives, where the past is always re-interpreted from the speaker's point of view in the present (Riessman, 1993). This suggests that Eraut's mode of 'reactive' learning can be understood as involving more than simply the timing of a learning 'stimulus'. Rather, it will involve *narrative work* where learning in that mode may be 'retrospective' or 'hypothetical' learning, achieved through a series of interwoven narratives concerning: the self, biographical history, and work

¹⁰ See Walters *et al* (forthcoming) for an overview and discussion of the literature concerning tacit knowledge/learning.

experiences and practices. This social approach is not considered by Eraut, although it does provide an interesting and perhaps useful way in which to conceptualise learning as it occurs across workplace contexts, practices, relationships and through time.

Eraut's adoption of the term 'non-formal learning' as opposed to informal learning can largely be seen to be influenced by a standard paradigm of learning and informed by the psychological, learning as acquisition perspectives he brings to his analysis. For example, for Eraut, informal learning is ubiquitous and has 'so many other features of a situation, such as dress, discourse, behaviour, diminution of social differences – that its colloquial application as a descriptor of learning contexts may have little to do with learning per se' (cited in Colley *et al*, 2002, p. 9). Eraut thus argues that analyses of informal learning at work must primarily be concerned with identifying *significant changes in understanding and capability* and how these have come about (Colley *et al*, 2002, p. 9). It is this, it can be argued, that he intends the term 'non-formal' learning and his associated learning modes to capture.

Formal/Informal learning: problematising the distinction

The ubiquity of informal learning is also generally recognised by other writers in the field, including those who adopt a social rather than a psychological perspective (see, *inter alia*, Colley *et al*, 2002, Hager, 2004a, 2004b). However, this tends to be seen as presenting a serious challenge to the idea that there can and should be a distinction between formal and informal learning. In their study of formal, non-formal and informal learning, Colley *et al* (2002) examined data drawn from several broad research arenas which covered: workplace learning for school teachers and learning within Further Education; community education and learning; and mentoring in the contexts of business and working with excluded young people. They state that in each arena informal learning was revealed to be significant in formal settings and vice versa, and that the data suggested 'that there are few, if any, learning situations where either informal or formal elements are completely absent' (p. 5).

Billett (1999; 2002) similarly argues against making a distinction between formal and informal learning. However, unlike many who assert the superiority of informal learning as both a 'practice' and an emerging new learning 'paradigm' (Lave and

Wenger, 1991; Beckett and Hager, 2002; Hager, 2004a, 2004b), he is particularly concerned to move discussions about workplace learning out of an 'informal learning' framework. Billett's objections to the association with informal learning are twofold. First, he argues that, despite attempts to argue otherwise, informal learning positions workplace learning as 'ad hoc' and thus places it as inferior to the learning processes found within formal educational institutions (Billett, 2002, p. 58). This concern, as discussed above, can be seen to be rooted in the problem of how, against the standard paradigm of learning, other forms of learning are accorded less status and significance. However, rather than attempt to overcome this through claims, such as those above, of the superiority of informal learning, in his second objection, Billett asserts that workplaces are in fact highly structured environments for learning:

As with educational institutions, in workplaces there are intentions for work practice, structured goal directed activities that are central to organisational continuity, and interactions and judgements about performance that are also shaped to those ends. Therefore describing learning through work as being "informal" is incorrect. (ibid, p. 56)

Billett thus moves the discussion of workplace learning away from the binary of formal and informal learning. However, as will be discussed later, he also broadens the notion of a structured learning environment to involve more than the pedagogical structures of formal education. For Billett, rather than focusing on modes of informal, non-formal or formal learning, attention should rather be paid to the structures, norms, values and practices within workplaces and how these structure opportunities for, and participation in, learning. This, he argues, is key to understanding both the quality and distribution of learning within the workplace.

Fuller and Unwin (2003) have also pointed to formal learning as having significance within workplace learning. Drawing on empirical research concerning Modern Apprenticeships they developed a framework of an 'expansive/restrictive continuum' to capture modes of 'expansive' and 'restrictive' participation in learning at and through work. Expansive participation is characterised as facilitating 'deeper', more 'investigative' and 'imaginative' learning than that which occurs through restrictive participation (ibid, p.412). Contributing to this is a range of what can be identified as 'formal' modes of learning, following Eraut's (2000) characterisation above. The expansive features of participation in learning, for example, include college

attendance, access to qualifications, learning through a 'programme', and a 'reification' of apprenticeship through language and also artefacts such as documents and tools (Fuller and Unwin, 2003, p. 411). This suggests, therefore, that formal and informal learning not only tend to occur alongside one another, as Colley *et al* (2002) argue, but that elements of formal learning can and do have particular value in their own right.

Formal/Informal learning: drawbacks and the 'dark side'

Whilst most commentators tend to view informal learning within the workplace positively, some have pointed towards its drawbacks in relation to its processes and learning outcomes. On a practical level and largely from an organisation-centred focus, Dale and Bell (1999) point out that:

- It may be too narrowly based so the employee only learns part of a task or superficial skills which may not be transferable;
- It may be unconscious and not be recognised. This does not build confidence nor lead to development;
- It is not easy to accredit or use for formal qualifications;
- The employee may learn bad habits or the wrong lessons (p.4).

From an employee-centred and a broader social focus, others have argued that the emphasis on, and interest in informal learning within the workplace overlooks and/or obscures a variety of problematic issues. Fuller *et al* (2003) draw attention to the perspective that an over-valuing of informal learning could lead to fewer opportunities for employees to participate in formal 'off-the job' training (p. 18). As well as indicating that this could reduce the possibilities for expansive participation (Fuller and Unwin, 2003), it also raises the issue of knowledge control within the workplace. This prompts questions such as, what counts as valid knowledge, who defines it, and whose interests will such knowledge serve, which are increasingly being addressed and discussed (see, *inter alia*, Blackler, 1995; Spencer, 2001).¹¹

Some authors draw attention to how informal learning leads to various forms of job intensification which is being obscured through workplace cultures, discourses of

¹¹ The issue of 'knowledge' both for and within the workplace is a growing field of enquiry in its own right. It is often discussed under the term 'knowledge management'.

flexibility, and the new worker subjectivities that are produced through them (See, inter alia, Du Gay, 1996; Edwards, 1998; Solomon, 1999; Usher and Solomon, 1999; Garrick and Usher, 2000). They argue that workplace cultures and informal learning processes involve surveillance, control and governmentality which, ultimately, are shaping employees identities and subjectivities in ways that coincide with the interests and needs of organisations. This argument is largely built upon Foucault's (1995) notion of disciplinary and regulatory power whereby power is not exercised from above (e.g. from the employer or manager) but from within individuals themselves, a form of self-surveillance which is conditioned through the discourses that surround them. It can be argued, however, that the authors mentioned who draw on Foucault's work do so selectively, and do not engage with those aspects of his work from which a different and more complex picture emerges. Indeed, had they drawn on Foucault's (1980) concept of 'reverse discourses' - where individuals claim the identity discourses for themselves and then use them to gain rights and resist social control - a very different interpretation would have become apparent. This is not to suggest, however, that discursive influences upon workers identities and relations of power and control are not important within analyses of learning at work. The ways in which these influences and relations are played out through informal learning processes can be problematic on the basis that they place varying constraints upon individual workers. Fenwick (2001) argues, for example, that workers' lives are becoming 'a human resource development project' where:

> The narrowing of identity options to a powerful and prescriptive imperative for all workers [to become] a reflexive enterprising self ignores the different opportunities and capabilities of different individuals to flourish in such a regime. (p. 12)

This issue is also taken up by authors concerned with gender inequalities. Probert (1999) and Bierema (2001) argue that for women there are barriers to, and limitations for learning as a result o workplace structures and discourses that privilege men. The 'hidden curriculum' that these create not only disadvantages women but also reinforces and perpetuates gendered stereotypes which ultimately curtail the professional and personal development of both sexes. Cutting across gender inequalities are further inequalities based on class and ethnicity. As Colley *et al*

(2002) observe, these inequalities and the power relations which underpin and are played out through them are highly significant:

Research shows that sites of informal learning, such as the workplace, are also deeply unequal, with those higher up the status and management hierarchy getting more and better opportunities for learning than those towards the bottom, who were more likely to be female, working class or, at least in western countries, of non-white descent' (p. 8).

These issues are seen by many as important areas of enquiry that need to be investigated in order that informal learning is egalitarian both conceptually and in practice. However, for others, issues of inequalities are also understood to be significant *topics* for workers to learn. As Fenwick (2001) observes:

Important learning is conceived not as gaining skills desired by the organization, but as coming to critical awareness about one's workplace contexts, as well as one's contradictory investments and implications in what knowledge counts in work communities. (emphasis added, p. 9)

The debates on informal learning within the workplace have therefore also raised a further issue of *what* learning should be considered to be important, as well as 'how' such learning is or is not occurring. As Fuller and Unwin (2002) also note:

We also need multiple definitions of what people learn at and through work. For example, people learn to perform competently but also to 'beat the system'; they learn about personal relationships and about power; and they learn about their own potential and the extent to which the workplace can fulfil or restrict their aspirations (pp. 95-96)

Thus, informal learning can be seen as informing the workplace curriculum as well as pedagogy, and also the kinds of research on, and discussions about workplace learning that are increasingly taking place.

Two significant themes can be seen to run through the above discussion. First, how workplace contexts may shape individual learning and their opportunities for learning. Secondly, how individual learners are active participants within learning processes at work. In the following and final section of this paper these themes will be discussed and the ways in which the relationship between them has been theorised and approached will be examined.

3. ORGANISATIONAL STRUCTURE AND INDIVIDUAL ENGAGEMENT IN WORKPLACE LEARNING: ISSUES OF STRUCTURE/AGENCY

Until relatively recently, most commentators within workplace learning have focused upon the characteristics of learning for individual learners at work, and have paid relatively little attention to the ways in which organisational structure and workplace context may shape and interact with learning activities (Ashton, 2004).¹² This tendency has been shaped though the learning as acquisition and participation approaches, and also discussions about informal learning, that characterise workplace learning discourses. These approaches and discussions have been concerned with learning as individual and/or collective processes, and it is these that have been deemed as the legitimate foci for analysis. A few commentators, however, notably Billett (2001, 2002), Fuller and Unwin (2003, 2004a), and Ashton (2004), have sought to extend this view and have pointed to organisational structure and context as significant factors within the processes of learning at work. They have been concerned with how organisational structures and workplace contexts constitute sites of engagement for individual learners and concomitantly, how these shape, facilitate or restrict their learning within the workplace. This section will examine how these authors have approached the issue of 'organisational structure' and 'individual engagement'. In so doing, it will examine how both terms operate through a structure and agency dynamic whereby each stands in a complex and mutually constitutive relationship to one another.

Ashton (2004) is primarily concerned with the lack of attention that has been given to organisational structures within workplace learning discourses. He argues that attending to organisational structures not only reveals how they shape and impact upon learning process, but also facilitates explanations as to why workers will develop and acquire different levels of knowledge and skill within the workplace.

¹² Some literature does discuss or prescribe 'workplace learning models' that organisations can adopt in order to maximise learning. However, this does not address or examine how organisational structures and workplace contexts impact upon learning and learning opportunities. See, for example, Matthews (1999).

Ashton exemplifies this through a discussion of empirical research that he carried out with a large case study organisation in Malaysia. Through a series of interviews conducted with staff from across all grades within the organisation, he identifies the hierarchical structuring of relationships, the design of jobs, and movement of employees, organisational decisions about learning and its importance, and decisions about the system of rewards as significant structural factors that impacted upon and shaped learning within the workplace. These can be summarised as follows:

1. *The hierarchical structuring of relationships* produced uneven learning opportunities and access to knowledge within the organisation. For example, senior staff had access to specialist training for their particular posts through which they were able to develop in-depth specialist skills. In addition, a professional development programme for these employees was also in place whereby they were able to gain a broad knowledge of the company and its workings. Technicians had access to lengthy training programmes and 'in-house' specialist technical training through which they could develop their job-related skills. The training for clerical and support workers, however, was largely 'on the job' and for the job and did not expose them to knowledge concerning the broader workings of the company (ibid, pp. 47).

2. *The design of jobs, and movement of employees.* Knowledge of the company and its resources was often available to senior staff and engineers but not to support and clerical staff. Senior managers and some engineers were expected and encouraged to gain a broad knowledge about the organisation and its production system. Clerical employees, however, were limited in the knowledge and skills that they could gain due to their narrowly defined tasks. These employees would also often be moved to other posts within the organisation, where the random nature of these moves which did not facilitate continuity, limited what otherwise might have been an opportunity to gain further knowledge and skills (ibid, p. 49).

3. Organisational decisions about learning and its importance. This underpinned the support available for the learner. Senior staff, and in particular the graduate trainees, had extensive support for their learning. This support was received from their peers and the HR department. Clerical and more junior staff, on the other hand, were dependent on the attitudes and the abilities of their managers and supervisors which would often vary in terms of what learning was seen to be appropriate and how this

learning should take place (ibid, p. 50).

4. *Decisions about the system of rewards*. For senior staff, learning was linked to monetary rewards. They would receive increases in their salary as they gained more knowledge and 'moved up the internal career ladder'. For clerical and more junior staff, however, 'there was less progression and their rewards were more dependent on their immediate supervisor's knowledge of their performance' (ibid, p. 51). Often, supervisors were not familiar with all the people they were responsible for, which resulted in many employees not getting recommended for a pay award and feeling resentful that their learning and efforts to learn were not being recognised.

Through the above findings, Ashton argues that organisational structures can and do influence learning and access to learning and have a differential impact upon employees' in terms of their occupational positioning and status within an organisation. For senior staff, learning was expected and encouraged and jobs were designed in ways in which this would be maximised. Their learning was facilitated within the organisation. This was not the case, however, for the clerical and more junior staff. Their learning was predominantly task–focused and, contained within the immediate needs of these tasks, was effectively constrained by the organisation.

Whilst Ashton is concerned to examine how organisational structures influence and shape learning and the opportunities for learning, he also draws attention within his discussion to the significance of employee agency and the formal and informal interpersonal relations between staff. For example, access to knowledge within the organisation is shown to have also been shaped by the gate-keeping activities of both senior managers, who were keen to protect their position within the hierarchy; and other more junior staff who, in competition with others within the payment system, saw their knowledge as a competitive resource (ibid, p. 48). Access to broader knowledge about the organisation and its workings could also be gained by those junior employees who knew 'the right people'. As Ashton notes, these relations were, therefore, also significant to the processes and opportunities for learning within the organisation:

... a great deal of the knowledge required for skill formation was transmitted in the immediate work context, through ongoing interpersonal relations. In this context the attitude and behaviour of management, supervisors and co-workers was crucial as they were all in a position to act as "gatekeepers" to knowledge. (ibid, pp. 48-49)

This then, draws attention to how speaking about 'organisational structure' may, therefore, be problematic as within this term there are multiple dimensions involved. This point is also noted by Watson (2003), who argues that, 'if we wish to look at organisational structures in their own terms we need to conceptualise them in a way that ensures both official and unofficial aspects of organisational activities are covered' (p. 83). Thus, informal structures which arise through the ongoing interrelationships within between workers and across various occupational/professional levels within a workplace can been as significant in the shaping of learning as other more formal structures (i.e. systems, policies, rules and 'top-down' decision making).

What can be understood, then, as 'organisational structures', workplace 'contexts' and the processes through which learning within the workplace is shaped, are brought about by, and operate through various activities that are generated through a complex structure/agency dynamic. In other words, individual engagement has a significant part to play in how organisational structures are both constructed and operationalised, and in turn these create the conditions for (but do not determine) individual engagement. In this sense, the organisational structures which will shape and influence learning are not separate entities which 'bear down' on individuals but are rather created and continuously re-created through them. As Watson (2003) further observes, 'structures are not objectively existing entities outside of patterns of interaction, even though it may sometimes feel as if they have this kind of forceful presence' (p. 5). Organisational structures may, therefore, be seen to be dynamic rather than static entities where, following the sociological insights of Giddens (1984), it is perhaps more useful to think about organisational structures as a social process: as organisational 'structuration' (see also Hatch, 1997, pp. 180-181).

Billett (2001, 2002, 2004) is similarly concerned with the impact of organisational structure upon processes of learning at work but is also attentive to how individuals engage with the opportunities and obstacles to participate in learning. Echoing Ashton (2004), Billett (2002) argues that:

26

Workplace factors structure and distribute opportunities for participation and, hence, the prospects for learning. Seniority in workplaces ... and work demarcations ... as well as internal and external competition, restructuring and redeployment are all likely to influence the bases of access to work-tasks and guidance, particularly prized opportunities for individual advancement or continuity. Workplace cliques, affiliations, gender, race, language or employment standing and status also influence the distribution of opportunities to participate. (p.62)

In recognising that participation in learning is influenced by the workplace context, Billett adds that, 'individual agency also shapes engagement in work practice and what is learnt' (ibid, p. 63). Billett thus brings the structure/agency dynamic into sharp focus which he captures, characterises and deals with through the concept of 'co-participation' (see Billett 2001, 2004). This refers to the interrelationship between the opportunities for learning that are 'afforded' by the workplace, and the extent to which employees will 'elect' to take up those opportunities. This he argues, 'is central to understanding workplaces as learning environments' (Billett, 201, p. 209).

Billett points out, akin to Ashton (2004), that workplace affordances for learning are generally not evenly distributed within the workplace as employees tend to be differentially placed within an organisation on a variety of levels. The bases upon which he sees affordances as distributed include:

- perceptions of individuals' competence;
- the worker's race and gender;
- the status of work;
- employment status;
- workplace demarcations;
- personal relations, workplace cliques and affiliations (Billett, 2001, p. 210).

He argues that through these elements access to learning opportunities can be a source of contestation which can have a direct facilitating or restricting impact upon participation. Further echoing Ashton (2004), Billett (2001) discusses, for example, contentious relationships regarding opportunities for participation, where competing interests among employees can give rise to competition and exclusion. The interests of employees may be based in social relations between: 'newcomers' or 'old-timers'; full or part-time workers; teams that have different roles and status within the

workplace; the personal and vocational goals of individuals; and workers, supervisors or management (p. 210).

The concept of 'co-participation' is illustrated by Billett in a discussion of empirical research carried out in three workplaces. These are 'Healthylife', a large food manufacturer that had good 'invitational' qualities for learning participation; 'Albany Textiles', a large textile manufacturer which had a hierarchical organisational structure and little in the way of 'in-house training'; and 'Powerup', a public sector power distribution company. This latter company was in the process of transforming itself into a new corporate structure and role but was not 'ready or committed' to the workplace learning arrangements which had been put in place (ibid, pp. 211-212). Billett discusses how one new recruit in 'Healthylife' had resisted and rejected participating in what constituted good systems for learning within the organisation, whereas one mentor and two learners in Albany Textiles - which had low levels of 'support and readiness for guided learning and low levels of reported outcomes' - had actively engaged in learning process and had generated their own supportive and 'invitational' environment (ibid, p. 212).

Billett argues that these two instances illustrate how learning opportunities are variously 'afforded' within and in between organisations and also highlight how, due to the agency of employees, such opportunities are not therefore determined. Thus, a working environment structured to facilitate learning will not necessarily always guarantee employee 'take up' of the learning opportunities that are offered. Similarly, a working environment where there appears to be little opportunity to participate in learning will not guarantee that no learning will take place. Through these findings, Billett stresses the notion of their being an inter-dependency between structure and agency: that individual agency always shapes what constitutes (through workplace 'affordance') 'an invitation to participate' in learning and that this is not, therefore, a process, structure or characteristic that can be conceptualised as the exclusive property of an organisation or workplace. He notes that this notion is largely commonsensical but argues that it is easily overlooked if not theoretically understood (ibid, p. 212).

Billett's work successfully counters the over determinist view of learners and workplace learning processes offered by some Foucauldian inspired accounts (discussed above). Similarly, it challenges the structural determinism of workplace learning 'models', often found in literature where there is a chief concern to inform and advise organisations (see, for example, Matthews, 1999). Indeed, it points towards there being a complex relationship between organisational structures and individual participation in learning within the workplace. However, it can be argued that there are two main problems with his approach. First, the notion of interdependency rests on a distinction between structure and agency which, as argued above, can not be sustained. Secondly, agency has been both over emphasised and over-played. Although Billett points to a broad set of factors through which learning affordances are distributed (see those listed on p. 26, above) he does not discuss how through these factors, agency is itself something which is (or is not) 'afforded'. Thus, decisions to participate, or not to participate in learning are not merely grounded in individual 'free will'. Decisions are themselves either enabled or subject to various degrees of constraint through factors such as occupational positioning, one's position within a workplace hierarchy and also within these, one's gender and social class location etc (Giddens, 1984; Archer, 1996). Whilst Billett identifies agency in his analysis he does not explain it as grounded within these sorts of social relations and tensions. This has the effect of suggesting both a voluntarism, which through his acknowledgement of contextual constraints he clearly seeks to avoid, and a reified organisational structure which is somehow independent of the individuals through whom it operates.

Fuller and Unwin (2003, 2004a), in their discussion of learning opportunities within Modern Apprenticeships, do not explicitly discuss the operation of a structure/agency dynamic. However, they do invoke it as they highlight how learning is shaped through a complex interplay between organisational structures, workplace contexts and different forms of participation across communities of practice. This understanding is captured and examined by Fuller and Unwin (2004a) through an 'expansive/restrictive continuum' (see also p. 18, above). This was developed through qualitative empirical research, which included interviews, observations and learning logs, carried out in four private sector companies in the UK steel industry. The continuum refers to features of workplace environments, and also practices and approaches to learning that can be characterised as restrictive – where the opportunities for learning are limited; and expansive – where a variety of learning opportunities are facilitated. Within this framework:

... there are two broad categories of expansive and restrictive features: those which arise from understandings about the organizational context and culture (e.g. work organization, job design, control and distribution of knowledge and skills) and those relating to understandings of how employees learn (through engaging in different forms of participation) (ibid, p. 132)

Fuller and Unwin give an in-depth discussion of the working and learning environments of several of the apprentices they interviewed in the course of their research (see, for example Fuller and Unwin, 2003). Significantly, they found that learning and opportunities to participate in learning varied among the apprentices. This was due to a combination of structural, cultural and pedagogical factors. They found that the factors which generated an expansive learning environment for the apprentices included: opportunities for both 'on-and off-the-job' learning; knowledge and skill development through participation in multiple communities of practice; access to knowledge-based qualifications; and a structure for progression. In contrast, a restrictive working environment included: a narrow range of 'on-the-job' training; no organisational structure for progression and the gaining of new skills; no access to knowledge-based qualifications; and restricted participation within a singular community of practice (see Fuller and Unwin, 2003, 2004a).

In order to take into account the agency/individuality of the apprentices within these learning environments, but without falling prey to voluntarism, Fuller and Unwin (2004a) have introduced the term 'learning territory'. This refers to the range of learning opportunities that each individual will have had and will continue to have access to throughout their lives. They suggest that this range can be divided into regions which consist of particular learning sites. The sites they offer as examples are: formal education, informal learning at home, and also the workplace - a key region for individuals in terms of their positioning as employees and their experiences of workplace learning. Fuller and Unwin argue that:

... the character and scope of the individual's learning territory (as well as how they respond to it) influences how he or she perceives and engages with opportunities and barriers to learning at work (ibid, p. 133)

Fuller and Unwin have begun to develop this argument and examine its implications in relation to the significance of individual biography in workplace learning (see Hodkinson *et al*, 2004). However, they have also pointed towards a relationship between expansive and restrictive approaches to workforce development and the development of individuals' learning territories. Thus, they suggest that not only do learning territories influence individual engagement with learning opportunities and barriers, but workplace learning contexts themselves are significant influential factors on individuals' learning territory developments in the present and for the future.

This process is exemplified in relation to the individual learning regions of the workplace for some of the apprentices in their study. Those apprentices from relatively poor socio-economic backgrounds and in restricted workplace learning environments, did not 'overcome their other disadvantages' and, 'the workplace as a learning region was making only a limited contribution to extending their existing learning territory' (Fuller and Unwin, 2004a, p. 142). In the case of one apprentice in a similarly restricted learning environment, they also point to how the other learning regions also had an impact:

Company C's apprentice already had a broader learning territory containing good academic qualifications and social skills. He was fully aware that these could be utilized elsewhere should the opportunities provided by his employer prove too restricted. (ibid, p. 142)

This demonstrates, as argued above in relation to Billett's (2001) work, that decisions to participate (or not) within learning environments, are not simply grounded within 'free will' but are rather constrained or enabled through the positions that individuals occupy across multiple contexts and sets of social relations.

Fuller and Unwin's (2004a) concept of learning territories and learning regions suggests a useful way in which agency can be productively taken into account and examined within the context of workplace learning. As a new concept, however, it could be argued that it will require further development. For example, learning regions suggest different types of learning contexts, and as such there may be other types of learning regions than those identified that influence learning at work. Some of these may also go beyond physical environments and may, for example, include

gender, class, ethnicity, religion and also membership in sub-cultures. The regions of 'formal education' and 'the home' also beg further definition in terms of what these comprise and there is an additional question of how learning regions may interrelate with one another across time (from the past to the present) and within different expansive and restrictive workplace learning environments.

In their discussions of the expansive/restrictive framework and learning territories and regions, Fuller and Unwin invoke the structure/agency dynamic in ways that avoid both voluntarism and determinism. The expansive/restrictive framework, focusing upon how learning environments are *created* through their (expansive/restrictive) features and pedagogical approaches to learning, can be seen to be based upon 'practices' rather than modelled on 'structures'. This, it can be argued, enables learning at work to be conceptualised as a *dynamic collective process* whereby the construction and reconstruction of learning contexts *and* learners can be examined and theorised. Similarly, although early in their conceptual development, the notion of learning territories and learning regions, promotes a social and dynamic view of individual learners which, moreover, promises new ways to attend to how agency is itself something which is 'afforded' in the context of workplace learning.

The material discussed in this section highlights the various ways in which the relationships between learners and workplace contexts for learning have been approached and theorised. It has been shown that underpinning these are conceptions of how 'structure' and 'agency' are interrelated and played out. Attention to this dynamic is important because, as has been demonstrated, this changes the way in which workplace structures and contexts, and individual participation and engagement with learning are perceived.

CONCLUSION

This paper has provided an overview and critical discussion of some of the main themes and approaches within academic literature concerning workplace learning. It has drawn on a variety of authors whose work can be characterised as making central contributions to these areas and has pointed towards some of the central issues which continue to be discussed and debated. The different approaches to learning, as characterised within the standard and emerging paradigms of learning and the learning as acquisition and participation perspectives, highlight the different ways in which individual learning is understood and conceptualised. The standard paradigm of learning and learning as acquisition perspectives are rooted in traditional understandings of learning inspired by cognitive psychology and behaviourism. These perspectives tend to focus primarily on how individuals acquire knowledge within and across different psychological processes and levels, and in relation to a variety stimuli. In contrast, the emerging paradigm and associated learning as participation perspectives understand the 'process' of learning to be collectively generated. These perspectives are rooted in social understandings of learning where this is seen to occur through the social relations and participatory practices of individuals within communities of practice. The different approaches across the learning paradigms and learning perspectives highlight how the term 'learning' is subject to multiple definitions and that it is, therefore, a complex and multifarious concept within the literature.

The notions and discussions of formal and informal learning also add to this complexity. This debate is shaped by, but also influences the standard and emerging paradigms of learning and has sought to capture the forms of learning within the workplace in ways that aid recognition of their value and significance. A key concern here, has been to 'rescue' the processes of informal learning that characterise much of the learning that goes on at work, from an association of inferiority in relation to traditional formal education. In the discussions that have taken place, a strict binary of 'formal' and 'informal' learning has been transformed whereby learning is now understood to encompass both elements. This has not only reintroduced a focus upon some of the formal learning process that go on at work, but also provides significant insights for learning process within traditional educational institutions.

Debates about formal/informal learning have also drawn attention to the significance of organisational structure and individual engagement in workplace learning. This paper examined how these issues, and particularly the relationship between them, have been approached and conceptualised in the work of several authors. The discussion highlighted how underpinning this relationship is a structure/agency dynamic which, when attended to, changes the way in which workplace structures and contexts, and individual participation and engagement with learning can be perceived. On practical as well as conceptual levels, questions such as, 'how do workplaces facilitate and encourage or inhibit learning?', and 'how/why do individuals take up opportunities and participate (or not) in learning at work?', are underpinned by assumptions about the relationship between organisational structures and individual engagement. In this paper, it has been shown that answers to these questions inform one another and that workplace learning is an ongoing social process where individuals and their learning contexts of work can not simply be seen as separate considerations.

The approaches to learning across the standard and emerging paradigms of learning and the perspectives of learning as acquisition and participation, the debates about formal/informal learning, and discussions about organisational structures and individual engagement, are central themes within workplace learning that continue to be developed and discussed. This paper has examined these and has highlighted many of the salient points and issues which are raised through the literature, and which require further engagement and consideration within workplace learning research.

References

Archer, M. (1996) *Realist Social Theory: the Morphogenetic Approach*, Cambridge: Cambridge University Press.

Argyris, C. and D. Schön (1978) *Organizational Learning: A Theory of Action Perspective*, Reading, MA: Addison-Wesley.

Ashton, D. (2004) 'The impact of organisational structure and practices on learning in the workplace', *International Journal of Training and Development*, 8:1, pp. 43-53.

Ashton, D. and Sung, J. (2002) *Supporting Workplace Learning for High Performance Working*, Geneva: ILO.

Bateson, G. (1972) Steps to an Ecology of Mind, New York: Ballentine Books.

Beckett, D. and Hager, P. (2002) *Life, Work and Learning: Practice in Postmodernity*, London: Routledge.

Bierema, L. (2001) 'Women, Work and Learning', *New Directions for Adult and Continuing Education*, No. 92, pp. 53-62, Winter 2001.

Billett, S. (1999) Guided Learning at Work, in D. Boud and J. Garrick (eds.) *Understanding Learning at Work*, London and New York: Routledge.

Billett, S. (2001) 'Learning through work: workplace affordances and individual engagement', *Journal of Workplace Learning*, 13:5, pp. 209-214.

Billett, S. (2002) 'Critiquing workplace learning discourses: participation and continuity at work', *Studies in the Education of Adults*, 34:1, pp. 56-67, Spring 2002.

Billett (2004) 'Learning and development through the work and working life: Relational interdependence between the individual and social', paper given at the Centre for Labour Market Studies, 11th June 2004.

Blackler, F. (1995) 'Knowledge, knowledge Work and Organizations: An Overview and Interpretation', *Organization Studies*, 16:6, pp. 1021-1046.

Boud, D. and Garrick, J. (1999) 'Understandings of workplace learning', in Boud, D. and Garrick, J. (eds.) *Understanding Learning at Work*, London: Routledge.

Boud, D. (ed.) (1998) *Current Issues and new Agendas in Workplace Learning*, Adelaide: National Centre for Vocational Education Research.

Butler, P., Ashton, D., Felstead, A., Fuller, A., Lee, T., Unwin, L. and Walters, S. (2004) 'High Performance Management: A Literature Review', Learning as Work research paper, No. 1, June 2004.

Candy, P. and Matthews, J. (1998) 'Fusing learning and work: Changing conceptions of workplace learning' in Boud, D. (ed.) *Current Issues and New Agendas in Workplace Learning*, Adelaide: National Centre for Vocational Education Research.

Colley, H., Hodkinson, P. and Malcolm, J. (2002) Non-formal Learning: Mapping the Conceptual Terrain, A Consultation report, University of Leeds Lifelong learning Institute.

Dale, M. and Bell, J. (1999) 'Informal Learning in the Workplace', *Research Brief*, No. 134, DfEE.

Du Gay, P. (1996) Consumption and Identity at Work, London: Sage.

Edwards, R. (1998) 'Flexibility, Reflexivity and Reflection in the Contemporary Workplace', *International Journal of Lifelong Education*, 17:6, pp. 377-388.

Engeström, Y. (2001) Expansive learning at work: toward an activity theoretical conceptualisation, *Journal of Education and Work*, 14:1, pp. 133–156.

Engeström, Y. (2004) 'The New Generation of Expertise: Seven theses', in Rainbird, H. *et al* (eds.), *Workplace Learning in Context*, London & New York: Routledge.

Eraut, M. (2000) 'Non-formal learning and tacit knowledge in professional work', *British Journal of Educational Psychology*, 70:1, pp. 113-136.

Eraut, M. (2001) 'Learning Challenges for Knowledge-Based Organisations', in CIPD and the European Consortium of Learning Organisations (2001) *Workplace Learning in Europe*, London: Chartered Institute of Personnel and Development.

Felstead, A. and Jewson, N. (2000) In Work, At Home: Towards an Understanding of Homeworking, London: Routledge.

Felstead, A. and Jewson, N. (eds.) (1999) *Global Trends in Flexible Labour*, Basingstoke: Macmillan.

Felstead, A., Jewson, N. and Walters, S. (2005, forthcoming) *Changing Places of Work*, Basingstoke: Palgrave Macmillan.

Fenwick, T. (2001) 'Tides of change: new themes and questions in workplace learning', *New Directions for Adult and Continuing Education*, No. 92, pp. 3-17, Winter 2001.

Foucault, M. (1980) *The History of Sexuality, Volume 1: An Introduction* New York: Vintage Books.

Foucault, M. (1995) *Discipline and Punish: The Birth of the Prison*, New York: Vintage Books

Forrester, K. (1999) 'Work-related learning and the struggle for subjectivity', *Researching Work and Learning: A first International Conference*, 10th – 12th September 1999, Trinity and All Saints College, University of Leeds.

Fuller, A. and Unwin, L. (2002) Developing pedagogies for the contemporary workplace, in Evans, K., Hodkinson, P. and Unwin, L. (eds.) *Working to Learn: transforming learning in the workplace*, London: Kogan Page.

Fuller, A. and Unwin, L. (2003) Learning as apprentices in the contemporary UK workplace: creating and managing expansive and restrictive participation, *Journal of Education and Work*, 16:4, pp. 407-426.

Fuller, A. and Unwin, L. (2004a) 'Expansive learning environments: integrating organizational and personal development', in Rainbird, H., Fuller, A. and Munro, A. (eds.) (2004) *Workplace Learning in Context*, London & New York: Routledge.

Fuller, A. and Unwin, L. (2004b) 'Older and wiser?: workplace learning from the perspectives of experienced employees', paper to be presented at the European Conference for Educational Research, Crete, September 2004.

Fuller, A., Ashton, D., Felstead, A., Unwin, L., Walters, S. and Quinn, M. (2003) *The Impact of Informal Learning at Work on Business Productivity*, Final Report, Department for training and Industry.

Fuller, A., Hodkinson, H., Hodkinson, P. and Unwin, L. (2004, forthcoming) 'Learning as Peripheral Participation in Communities of Practice: A reassessment of key concepts in workplace learning', *British Educational Research Journal*.

Garrick, J. and Usher, R. (2000) 'Flexible learning, contemporary work and enterprising selves', *Electronic Journal of Sociology*, 5:1, April 2000.

Giddens, A. (1984) *The Constitution of Society: Outline of the Theory of Structuration*, Cambridge: Polity Press.

Hager, P. (1999) 'Finding a good theory of workplace learning', in Boud, D. and Garrick, J. (eds.) *Understanding Learning at Work*, London: Routledge.

Hager, P. (2004a) 'The conceptualisation and measurement of learning at work', in Rainbird, H., Fuller, A. and Munro, A. (eds.) (2004) *Workplace Learning in Context*, London & New York: Routledge.

Hager, P. (2004b, forthcoming) 'Current theories of workplace learning: a critical assessment', in Bascia, N., Datnow, A., and Leithwood, K. (eds.) *International Handbook of Educational Policy*, The Netherlands: Kluwer Academic Press.

Hatch, M. (1997) Organization Theory, London: Oxford University Press.

Hodkinson, P., Hodkinson, H., Evans, K., Kersh, N., Fuller, A., Unwin, L. and Senker, P. (2004) 'The Significance of Individual Biography in Workplace Learning', *Studies in the Education of Adults*, 36:1, pp. 6-24, April 2004.

Lave, J. and Wenger, E. (1991) *Situated Learning: Legitimate Peripheral Participation*, Cambridge: Cambridge University Press.

Marsick, V. J. and Watkins, K. (1990) *Informal and Incidental Learning in the Workplace*, New York: Routledge.

Marsick, V. J. and Watkins, K. (2001) 'Informal and Incidental Learning', *New Directions for Adult and Continuing Education*, No. 89, pp. 25-34, Spring 2001.

Matthews, P. (1999) 'Workplace learning: developing a holistic approach', *The Learning Organization*, 6(1), pp. 18-29.

Probert, B. (1999) 'Gendered workers and gendered work', in D. Boud, and J. Garrick, (eds.), *Understanding Learning at Work*, London: Routledge.

Rainbird, H., Fuller, A. and Munro, A. (eds.) (2004) *Workplace Learning in Context*, London & New York: Routledge.

Rainbird, H., Munro, A. and Holly, L. (2001) 'Between Communities of Practice and the Employment Relationship: a perspective from the labour process, International Workshop, University College Northampton, 8th-10th November 2001.

Reeve, F. and Gallacher, J. (1999) 'How are the discourses of work-based learning influencing practice?', *Researching Work and Learning: A first International Conference*, 10th – 12th Sept 1999, Trinity and All Saints College, University of Leeds.

Riessman, C. K. (1993) Narrative Analysis, London: Sage.

Schön, D. A. (1983) The Reflective Practitioner, New York: Basic Books.

Senge, P. (1991) *The Fifth Discipline: The Art and Practice of the Learning Organization*, New York: Doubleday.

Sfard, A. (1998) On two metaphors for learning and the dangers of choosing just one, *Educational Researcher*, 27:2: pp. 4-13.

Solomon, N. (1999) 'Culture and Difference in Workplace Learning', in D. Boud, and J. Garrick, (eds.), *Understanding Learning at Work*, London: Routledge.

Spencer, B. (2001) 'Changing Questions of Workplace Learning Researchers', *New Directions for Adult and Continuing Education*, No. 92, pp. 31-40, Winter 2001.

Stern, A. and Sommerlad, E. (1999) *Workplace Learning, Culture and Performance*, Institute of personnel and Development, London.

Stevens, J., Ashton, D. and Kelleher, M. (2001) 'The developing contribution of workplace learning to organisational performance', in CIPD and the European Consortium of Learning Organisations (2001) *Workplace Learning in Europe*, London: Chartered Institute of Personnel and Development.

Usher, R. and Solomon, N. (1999) 'Experiential learning and the shaping of subjectivity in the workplace', *Studies in the Education of Adults*, 31:2, pp. 155-163 October 1999.

Walters, S. Ashton, D., Butler, P., Felstead, A., Fuller, A., Lee, T. and Unwin, L. (2004, forthcoming) *A literature Review on Tacit Learning*, paper for the Learning as Work project Advisory Group.

Watson, T. (2003) Sociology, Work and Industry (Fourth Edition), London:

Routledge

Wenger, E. (1998) *Communities of Practice: Learning, Meaning, and Identity*, London: Cambridge University Press.

Young, M. (2001) 'Contextualising a new approach to learning: some comments on Yrjo Engeström's theory of expansive learning', *Journal of Education and Work*, 14:1, pp. 157-161.