# Older and wiser?: workplace learning from the perspective of experienced employees

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#### **ABSTRACT**

This paper explores the (changing) role of older, experienced employees in the workplace in terms of their own needs and opportunities for learning and in the context of changing organizational expectations. It draws on Lave and Wenger's (1991) theory of situated learning and the notion of 'learning as participation' as starting points for examining the types of learning opportunities experienced by older workers. The discussion relates the nature of such opportunities to the changing workplace contexts in which employees are located. The article presents illustrative data from a recent research project that focused on how older experienced workers learn at work in two contrasting organizations. A brief review of literature is provided, which discusses the changing nature of work and the implications for learning. The paper then describes and contrasts the sites from which the data presented in this paper were collected, and the data collection methods that have been utilised. An analysis of the research data is presented and the authors discuss what the evidence reveals about the types of learning opportunities older employees are experiencing and how they make sense of them. The analysis suggests that from the perspective of experienced employees, factors such as organizational culture and history, the way jobs are designed and work is organized, and the way people are managed and their performance is judged, help explain the lived realities of workplace learning and provide messages for enhancing workforce development. The paper argues that contrasting forms of work organization and approaches to managing employees are likely to generate different learning environments and opportunities for workplace learning. It concludes by calling for more empirical research to explore the relationship between work organization and learning and to increase understanding of the implications for what and how different groups of employees learn at work.

#### Introduction

In the developed world, people are living longer whilst, at the same time, birth rates are falling. In the UK, there was a 51% increase in the numbers of people aged 65 and over (9.4 million) between 1961 and 2001 (Summerfield and Babb 2003: 30–31). The average age of the population is expected to rise from 39.1 years to 42.4 years in 2026, and by 2025, there will be more than 1.6m people over 65 than people under 16. These trends are shared across the European Union and are reflected in other developed countries (Summerfield and Babb 2003:) 30–31). Some governments, such as in the UK, are telling adults they will have to stay in work until at least the traditional retirement age of 65 and probably beyond in order to sustain their pensions and because the economy needs them. In 1997, the Japanese government decided to launch a national inquiry in order to review the implications of having older people spending longer in the workplace for: (i) health issues; (ii) wage systems and retirement pay; and (iii) job content and the workplace environment (Kumashiro 2003). This is in contrast to the UK government whose recent skills strategy White Paper discusses the need to respond to workplace and economic change without any reference to age (DfES 2003). On the health issue alone, workplaces face considerable challenges if they are to create suitable ergonomic environments for older workers (see Griffiths 2003).

The extension of working life has many social, economic and political implications, and, in addition, it poses challenges in terms of workforce and personal development. Working for longer is occurring against the backdrop of new forms of work organization, the widespread use of information and communication technologies and attempts by many organizations to reformulate and extend the role of individual workers. It is against this backdrop that the paper reports on research that has identified changes in the needs and opportunities for learning available to experienced employees. The paper draws on Lave and Wenger's (1991) theory of situated learning and the notion of 'learning as participation' as starting points for examining the types of learning opportunities experienced by older workers. By older, experienced workers we are referring, in Lave and Wenger's terms, to those people who are conceived as 'full participants' in the 'community of practice' (or workplace setting) in which they operate. The paper continues with section 1, which briefly reviews analyses of the changing nature of work, and the links identified in the literature between different approaches to the organization of work and learning. The review also focuses on the ways in which workplace learning has been

<sup>1</sup> The project is one of five studies located in the 'Improving Incentives to Learning in the Workplace' Network, funded by the Economic and Social Research Council's Teaching and Learning Research Programme, Phase 1, award number L139 25 1005. Our project focused on how young people (apprentices) and older experienced workers learn at work (Fuller and Unwin 2003, 2004a), and also explored how both apprentices as well as their more experienced colleagues routinely engaged in 'teaching' practices (Fuller and Unwin 2002, 2004b).

conceptualized and suggests that 'learning as participation' has become the dominant metaphor though which theorists are seeking to understand learning at work. However, whilst the literature making theoretical connections between work and learning is growing, the empirical literature is still under-developed. With this in mind, the second section of the paper introduces a research project that focuses on the ongoing learning of experienced workers and which sheds light on the relationship between (different) forms of work organization and the (different) opportunities for learning which employees' experience. In section 3, we present an analysis of some of the research data and discuss what the evidence reveals about the types of opportunities older employees are experiencing and how they make sense of them. The analysis suggests that factors such as organizational culture and history, the way jobs are designed and work is organized, and the way people are managed and their performance is judged help explain the lived realities of workplace learning. Illustrative evidence of employees' perceptions and changing experiences of workplace learning in two companies is provided. The paper concludes by suggesting that more research in contrasting organizational settings is needed to better understand the relationship between work organization and the opportunities it generates for workplace learning.

## The changing nature of work: implications for conceptualizing workplace learning

Arguments surrounding the transition from Fordist and Taylorist forms of work organization to an alternative characterized as post-or neo-Fordist, have been well-rehearsed (see Amin 1994, Drucker 1993). The key debates revolve around two main issues. The first concerns the periodization of economic change and, particularly, whether the contemporary era can be characterized as a radical break from Fordism. This topic has been subject to intense debate over the question of whether a period classified as Fordism or 'industrial society' has given way to a new era of post-Fordism/industrialisation or flexible specialisation (Wood 1989), or has produced the 'knowledge economy' (see Keep 2000, Lloyd and Payne 2002). Other recent conceptualizations of the contemporary economic era, amounting to what Gee *et al.* (1996) have termed the 'new capitalism', have included the 'information society' (Castells 1996), the 'knowledge economy' (OECD 1996) and the 'innovation economy' (Rouach and Saperstein 2002). Some argue that there is a definable new period that dates back approximately to the early 1970s, when the factors seen to support the Fordist system became terminally undermined (see Freeman *et al.* 1982, Piore and Sabel 1984). Others recognize the features of economic crisis that emerged in the advanced industrialized economies in the 1970s but are more circumspect about the onset of an entirely new regime (Amin 1994).

The second area of debate concerns the implications of changing forms of organization and styles of production, often associated with the breakdown of Fordist 'stability', for skill levels (e.g. Brown and Lauder 1992, Brown, et al. 2001) and for the production of knowledge (Gibbons *et al.* 1994). Central to this issue is the role of 'new' technologies. One strand of the argument revolves around the extent to which 'advanced automation technologies' and 'advanced electronic communication and information technologies' can be seen as the main determinant of change (Casey 1995). Some, including 'post-modernists' such as Aronowitz (1981) and Touraine (1981), have read off implications for skills directly from technological capability, arguing that automation leads to unemployment and declining skills. In contrast, others including Zuboff (1988) suggest that the introduction of such technologies can lead to increases in skill levels, while Reich (1991) has argued that economic trends have radically undermined the traditional division of labour based on occupational skills. Recently, the debate has begun to focus on the implication of organizational changes for workplace learning (see Garrick 1998, Boud and Garrick 1999, Engeström 2001, Eraut *et al.* 2000, Rainbird *et al.* 2004), and issues surrounding worker/learner identity (Boud and Solomon 2003). Furthermore, research focusing on the relationship between new forms of work organization and the creation of workplace knowledge has started to emerge (see Boreham *et al.* 2002).

In parallel, there is a substantial literature on the organization of work. One particular strand of this focuses on the extent to which (all) employees are involved in work-related decisions and in a collective effort to improve organizational performance through the implementation of 'involvement practices'. These include a range of practices such as: quality circles; flexible working; an active and positive approach to information disclosure and sharing; high levels of transparency relating to strategic decision-making; and inter-departmental or group co-operation. Some studies have reported a link between the implementation of 'bundles' of such high involvement working practices and improved organizational performance (see Guest 1997, Appelbaum *et al.* 2000, Ashton and Sung 2002). There is an assumption that such new forms of work organization have fostered and provided opportunities for employee learning, and it is further implied that learning is a factor in raising the level of organizational performance. However, very few studies provide empirical evidence about the relationship between these assumptions and workplace learning. Furthermore, these so-called employee involvement practices are being critiqued from the perspective of the sociology of work and the labour process

more broadly. As Forrester (2002: 43) argues, instead of a 'brave new world of "employee empowerment" ... new mechanisms of oppression and managerial control' are just as likely to emerge. Brown (1999: 243) argues that both advocates and critics of workplace change have a 'partial' claim to reality but that they 'miss the contradictory nature' of both the new practices and associated new technologies, both of which are 'constrained by the existing social relations, which have as their foundation the exchange of labour power in the workplace'.

An important starting point for thinking about workplace learning is the recognition that learning is not the primary goal of the workplace but a by-product of engagement in the activities and relationships involved in the production of goods or services. It follows that any analysis of learning at work should be located within a wider analysis of the organizational context within which it is embedded. Basic questions relating to who is learning what, why and how can be more effectively addressed if there is a backdrop of knowledge about the organization, its purpose, the way in which work is organized, skills are distributed and jobs are designed, as well as how employees inter-relate and are managed. It is our contention, supported by the sort of empirical research reported in this paper, that a contextualized approach to researching work and learning illuminates an underlying condition for workplace learning; namely, the extent and nature of the learning opportunities to which individuals and groups of employees have access. This paper adopts an inclusive interpretation of what 'counts' as workplace learning. By this we mean that opportunities for participation (learning) cover those that might be viewed as more formalized and intentional as well as those characterized as incidental (Marsick and Watkins 1990). In this regard, we share the position taken by theorists such as Billett (2001), Eraut et al. (2000) and Beckett and Hager (2002) who reject any notion that learning that takes place in specialist educational institutions is inherently superior to learning that takes place in settings such as the workplace or the home. Indeed Eraut et al. (2000) point out that in many settings, learners experience a mix of formal and 'non-formal' learning approaches. This theme is echoed by Darrah, who highlights the importance of the hidden workplace curriculum: '... quite apart from the formal attempts to provide instruction, experiences are structured by the organization of work and the technology used, and those experiences provide a powerful, largely unacknowledged curriculum' (1996: p. 36).

In a recent review of 'informal' learning at work (Fuller et al. 2003), we suggested that the metaphor 'learning as participation' has become the dominant approach to understanding workplace learning. A central plank of this idea is that each workplace will offer distinctive opportunities, along quantitative and qualitative dimensions, for employees to learn. Adopting this perspective allows research to address how people learn at work in what appears to be a relatively naturalistic way through participatory activities such as interactions between employees, undertaking tasks and through playing their work roles. Underpinning this approach is the conception of learning as a process that is primarily social and situated (Lave and Wenger 1991). A strength of the situated perspective is that it treats learning transfer as problematic. If learning is conceived as a process embedded in particular social activities and relations, it follows that learning cannot straightforwardly be replicated from one situation or context to another. This insight draws attention to the pedagogic value of providing employees participating in off the job learning programmes with support to help facilitate the transfer process. Looked at from a more critical standpoint, Lave and Wenger's (1991) theory of learning developed from their analysis of how new entrants learn to become members of a community of practice through the process of legitimate peripheral participation. The focus here is on the journey from the periphery of the community of practice to the mainstream undertaken by newcomers and facilitated through their interactions with more experienced colleagues, and their increasing participation in the activities around which the community is sustained. However, the theory has much less to say about the ongoing learning of experienced workers (see Fuller et al. 2005). Moreover, there has been less emphasis in the situated approach on the ways in which organizational factors (including structure, history and culture) relate to workplace learning. We would argue that an analysis of such characteristics can shed light on the sorts of opportunities for workplace learning that are available and the barriers to learning which might affect individuals and specific workforce groups. Such issues are clearly important to the development of a better understanding of the opportunities open to older workers and their ongoing experiences of learning at work.

Cultural historical activity theory can provide one starting point for addressing the shortcomings in the situated approach. For example, Engeström (2001) identifies how activity theory has evolved from its concentration on individuals to a focus on systems, which are conceived as having internal contradictions, multiple perspectives and voices and as interacting with other activity systems. Some workplace learning researchers are recognizing the importance of context, and in particular the relevance of how work is organized and jobs are designed and distributed, to the type of learning opportunities available to workers (see Koike 1997, 2002, Boud and Garrick 1999, Probert 1999). Probert, for example, has argued that the gendered nature of work means that opportunities for and barriers to learning are unevenly dispersed across the workforce. She states that: 'there are no grounds for believing that the new emphasis on workplace learning will do anything other than reproduce these

inequalities since the dominant discourses continue to rely on abstracted conceptions of work and workers that privilege men' (1999: 113). Solomon (1999) is concerned that the recent emphasis on the opportunity to engage in 'informal' learning at work has a negative side in that it may be undermining the need to provide employees with opportunities to engage in off-the-job provision as well. She implies that providing fewer off-the-job opportunities gives employees less chance to stand back and reflect critically on their practice:

As workplace learning becomes increasingly integrated into everyday work practices and further away from discrete classroom training programmes the socialising of people to be certain kinds of workers is accompanied by a complimentary socialisation to be certain kinds of learners. (1999: 123)

Survey research already suggests that employers invest less in training lower level workers, and consequently, these groups have fewer (formal) training opportunities than their more senior and secure peers (e.g. Beinart and Smith 1998, La Valle and Blake 2001). In this regard, we are concerned that the current popularity of situated learning theory is double-edged. On the plus side, as already mentioned, it draws attention to the workplace as an important site for learning. On the other hand, if conceiving all learning as situated has the effect of confining workers to a particular workplace, on the grounds that (all) learning is highly context-dependent, their opportunity to gain new perspectives, cross boundaries and participate in other communities of practice will be denied. It follows that their chance to acquire expertise and engage in the creation of new knowledge will be restricted and their ability to progress will be inhibited. As a final point in this part of the discussion, it is important to clarify the relationship between individuals and the opportunities and barriers to learning they may encounter at work. Following Billett (2004), there is a distinction between the extent to which the organizational and pedagogical context affords access to diverse forms of participation and the extent to which individuals 'elect to engage' in those opportunities through the exercise of individual agency. The reasons why individuals engage with and respond differently to the (same) workplace learning environment are explained by writers such as Hodkinson and Hodkinson (2003) in terms of individual biographies and dispositions for learning. In her study of adults aged between 40 and 56 in Australia who embarked on courses of study in their local university after redundancy, Davey (2003) agrees with Cross (1981) that whilst their biographies affect their lifecourse opportunities, adults can and do still make choices. In our view, it is necessary to recognise the importance of structure in shaping the character and availability of workplace learning opportunities, whilst at the same time viewing individuals as active agents who can elect the extent to which they engage in the situations open to them. The next section of the paper introduces the organizations that took part in the research and outlines the methodology employed and the types of data collected.

#### The research

The three-year project, which underpins this paper, was completed in June 2003. The research analysed the different learning environments found in four companies: a manufacturer of steel-based products with 700 employees (A); a steel processing mill with around 200 employees (B); a steel stockholder with 80 employees (C); and a specialist polisher of steel with 40 employees (D). The focus on this paper is on the older, experienced workers employed in companies A and B. Both these companies experienced very low labour turnover and have workforces where the majority of employees have several years' service. One of the challenges of research in to learning at work is to find ways of capturing the range of opportunities for learning available to employees as well as eliciting data on a phenomenon that is often tacit and embedded within day-to-day work activities and routines. In order to address this, we adopted a multi-layered case study approach. Data were collected in a variety of ways, including interviews, structured learning logs, surveys and observations. The case studies revealed strong contrasts between the approaches to workforce development taken in the two companies and highlighted links between these and the different ways in which employees experienced workplace learning.

Company A designs and manufactures bathroom showers, thermostats and valves. The company has experienced a number of different owners in recent years. It is currently owned by a major American bathroom manufacturer and is running profitably. It has a strong learning culture in which employees at all levels of the organization are encouraged to participate in development opportunities. A key indicator of the company's commitment to workforce development is its well-developed internal labour market in which able staff are rewarded with promotion. For example, graduates from the company's long-standing apprenticeship programme have progressed into product design and senior management positions. The company's approach to apprenticeship formed the model for our analysis of the features that constitute an 'expansive' apprenticeship (see Fuller and Unwin 2003). Core components of the company's approach to workforce development are:

• A commitment to apprenticeship;

- An embedded training needs analysis process for all levels of the organization;
- Personal development planning is key—training for all employees;
- Operator progression programme;
- Sponsored student programme;
- Continuing professional development programme; and
- Opportunities to participate in work-related further and higher education

With regard to data collection amongst older workers, in-depth interviews were conducted with four employees who were participating in off-the-job work-related learning opportunities. In keeping with its emphasis on workforce development as a central dimension of its quality and competitiveness strategies, the company's training officer was asked to investigate how it might usefully add to the training and development opportunities offered to production operators, by introducing a progression programme. The programme was piloted with five volunteers (all experienced workers/operators) during the course of our case study research. In the pilot, the operators following the units required for the attainment of a National Vocational Qualification level 2 (NVQ 2) in Engineering Production. As a contribution to the company's evaluation of the pilot, we invited a sample of 11 experienced operators to complete (weekly) learning logs over a period of eight weeks. Of these, five were the pilot participants and six were not. The aim of the exercise was to examine whether the involvement of the former group in the programme provided participants with learning opportunities and experiences beyond those encountered in their daily work situation. In brief, the findings indicated that there was little difference between the everyday learning experiences of the two groups, although those participating in the programme were slightly more likely to state that they 'had learned something new'. Both groups reported learning on the job and from colleagues as the most popular methods of learning at work. They indicated that they felt supported and could ask for help when needed, and that they were often involved in helping others to learn. Overall, the positive attitudes towards workplace learning were consistent with a workplace environment characterized by the sorts of high involvement working practices identified earlier in the paper.

Company B manufactures steel rods and bars for the construction industry. In recent years, the steel production industry in the UK, including this company, has been struggling against increasing global competition and 'cheap imports'. Consequently the company's workforce has been contracting. The vast majority of employees have been with the company for many years and nearly half have over 20 years service. The workforce is divided broadly into two groups: the larger one consists of production workers and the other of maintenance engineers. The personnel and training managers have been aware that the pressure to cut costs and labour has restricted the availability of off-the-job training opportunities in recent years. Historically, the company has had a good reputation for training and apprenticeship programmes, and had its own training centre. In the light of its uncertain economic and commerical situation, the apprenticeship programme has been suspended and the training centre has been disbanded. In response to his concerns about the lack of progression opportunities for employees, the personnel manager has offered support and funding to enable employees to participate in non-work related courses. Individuals can make a personal case outlining the course they would like to follow and, budget permitting, the company pays the course fees. Attendance on and study for such courses takes place in the employee's own time.

Data were gathered from company B employees in a range of ways including interviews, learning logs and the administration of a survey to all employees. The survey was designed to: collect background information about respondents' characteristics (e.g. age, length of service, qualifications); to investigate how they learned their jobs and their experiences of workplace learning; and to capture their participation in off-the-job learning opportunities and their attitudes to learning at work, particularly in the light of the new working arrangements. In-depth interviews were carried out with a small sample of experienced employees (four) who completed the learning logs, and who the company was supporting to participate in non-work related learning outside work. Interviews were also conducted with a group of 12 employees, all of whom had substantial experience with the company and had been selected into the new role of 'team leader'. They had participated in a programme of off-the-job workshops designed to train team leaders in the steel industry. An important indication of the difficult business climate in which the company was operating at the time of the research, was its decision to introduce 'flexible' working practices. During the early part of the case study, the management and unions had concluded a long running negotiation over the introduction of new working arrangements, terms and conditions. The aim of the 'new agreement' was to improve the flexibility and productivity of the workforce by implementing team working. This involved moving away from a structure based on specific occupational skills to a broader team-

based approach. A newly created post of team-leader accompanied the change and superseded the previous roles of foreman and charge hand.

In the past, the division of labour had been based on specialisms and status was associated with this and seniority. The new approach required all members of the team to be competent in at least 60% of the team's tasks. These arrangements affected various types of workers differently. Many of the production operatives were given the opportunity to gain pay and status through engaging in the learning necessary to achieve 60% competence and therefore to achieve the threshold for a pay increase and higher grade. However, some of the craftsmen (maintenance engineers) and senior operatives were already paid more than the level associated with the 60% threshold but because they were trained, qualified and utilized as specialists (e.g. as electricians and mechanical engineers), they had not developed the sort of broad competence associated with the requirements of flexible team-work. From the perspective of pay alone, there was little incentive for these workers to broaden their competence. The introduction of the new agreement provided a different more integrated approach to skill formation and career development, which had been negotiated with the unions. However, changes relating to the company's approach to work organization, employee status and pay were sensitive and undermined the established division of labour and status between engineers and production workers. The changes also influenced the attitudes of individual workers to the new forms of work organization and the extent to which they engaged positively in the opportunity to learn new tasks and skills.

#### **Findings**

We now present the findings from the two case study companies along three broad themes: (a) in relation to respondents' perceptions of how they learn their jobs; (b) their attitudes to learning and its relevance to their jobs; and (c) the relationship between learning at work and organizational change. The first two themes revolve around employees' perceptions and experiences of learning and work. The final theme provides evidence that illustrates a link between (changing) forms of work organization and employee management and the (changing) nature of employee participation and opportunities to learn at work.

#### Perceptions of workplace learning

Overall, employees from both companies reported that they learn their jobs by doing them and through the help and guidance of colleagues. This was perceived to be the most important and effective method of learning how to do the job. Given that the data have been collected from experienced employees and not from new entrants, the findings also provide evidence to suggest that learning in the workplace is a continuous, everyday activity. From the perspective of Lave and Wenger's (1991) theory of learning as legitimate peripheral participation, it confirms that their perspective underplays the on-going learning of workers, whom they term 'old timers' or 'full participants'. The findings from this project and from other recent research (Fuller et al. 2005) suggest that the dynamic nature of the workplace environment, the work process and the relations that being a member of a workforce entail, provide the underlying conditions in which experienced employees continue to learn at work. The data reported here are derived from the survey of employees in company B and learning logs with employees in company A. The survey was distributed to all employees (213) at company B and produced a response rate of 40%. The respondent group broadly reflected the profile of the workforce as a whole, in terms of age, gender, level and length of service. Given the company's fragile economic status, it had no new recruits or inexperienced personnel at the time of the survey. Employees were invited to respond to a range of statements designed to elicit their attitudes to workplace learning. The vast majority of respondents (88%) reported that 'it takes a long time to learn how to do my job well'. The methods by which they developed their job-related learning and their associated attitudes to learning were explored in a section of statements grouped under the umbrella heading of 'learning to do my job'. The responses confirmed the value employees attach to learning in the workplace. For example, 85% of respondents agreed with the statement 'I learn what I need to know in my job by doing it'. The findings also indicated the importance of learning from others at work: 69% agreed with the statement 'I learn what I need to know from experienced workers' and 86% with 'Learning from more than one person helps you do your job better'.

With regard to company A, the weekly learning logs completed by 11 production operators indicated that the most popular methods of learning were practical and experiential and involved learning from others. For example, the logs required respondents to select from a range of possible ways in which they could have gained 'new learning at work'. The most frequently ticked items were all practical, on-thejob methods including: 'working alongside someone doing the task'; and 'through practice at work'. Interviews with a small number of employees occupying supervisory and line management positions, and who were all ex-apprentices, reinforced the perception of the company's positive learning culture and attitude to workforce development. They talked

about the way in which employees are encouraged to gain experience in different parts of the organization in order to develop their sense of how the various functions fit together.

Attitudes to learning and its relevance to jobs

The data collected from employees in both companies indicated that experienced employees are positive about learning when it is relevant to their jobs and helps them to do their jobs better or more easily. The previous section highlighted the value attached to learning on the job but this positive attitude extends to more formalized modes of participation in training episodes at the company where the purpose of the activity explicitly involves learning job-related skills. In this regard, the learning at work survey conducted in company B investigated respondents' learning experiences and preferences. Two thirds of respondents indicated that, in the year prior to completing the questionnaire, they had participated in job-related learning at the company: this was defined as 'on-the-job training delivered by an inhouse expert and specific skills training delivered by in-house or external experts'. Three quarters of respondents indicated that they would like to participate in such learning opportunities in the succeeding 12 months. In another section of the survey, respondents were invited to respond to a range of statements on training that were designed to elicit their attitudes to participation in activities with a 'deliberative' learning intention, as opposed to the more 'reactive' process associated with learning as a by-product of doing the job (Eraut *et al.* 2000).

The findings reinforced the view that the majority of respondents feel positively about training both for its relevance and for the activity itself. For example, 70% disagreed with the statement 'training wouldn't help me to do my job better', and three quarters agreed with the statement 'training is enjoyable'. A quarter of respondents indicated that they would like to participate in 'formal' learning activities (e.g. college courses or distance learning) outside the company. Whilst this proportion is significantly smaller than the proportion of respondents who indicated that they would like to participate in job-related learning at the company, it indicates that there is an appetite amongst some older workers for learning beyond the parameters of what they need to know in order to be able to perform their (current) jobs effectively at work. Those employees who had career or personal aspirations beyond their current jobs were more likely to view opportunities to learn outside work positively than those who were content with their position and who were not aspiring to change. This attitude was the case for employees at company B who were participating in non-work-related learning activities. It was also the case for employees in company A who were following work-related courses that had been chosen to support their career development aspirations, as well as the company's strategy of supporting learning assessed as relevant to achieving business goals. For example, over the past five years and with the company's support, Tom has participated in a range of work-related courses<sup>2</sup>. He outlined his experience and expectations as follows:

I came here [joined the company] and I thought I could with some electronics knowledge so I saw my manager who said do a college course, so I did HNC [Higher National Certificate] in electronic engineering. I finished that and asked if I could do the HND [Higher National Diploma] because it helps with my job, it makes me more efficient in my job, so therefore it saves the company money in the long run ... Hopefully you're not doing the college course just because somebody's telling you to do it, you've got to want to do it, that's important. If you're doing it you've usually identified a reason for it. In my case it's ... to make my job easier – that was my personal benefit, and the company benefits because it gives me more time to do other things, and at the end of the day you're hoping, I suppose at the back of your ... to move you up the ladder. The more confident or capable you are in your job and the rewards should be there.

Simon, on the other hand, is participating in off-the-job learning on a very different basis to Tom. He has been employed by Company B for 24 years as a production operator and is participating in an extended programme of 'non-work-related' learning. Over the past five years, the company has supported him as he has followed humanities courses with the Open University. At the time of the interview he was two thirds of the way to completing his BA honours degree and explained how he had originally become interested in studying:

Basically once I'd been in the steel works I started reading first off papers, obviously, and graduated from *The Sun* and *Star* and ended up with *The [Daily] Telegraph* and *The Independent...* as I was reading I just wanted more out of the reading, and more understanding as you do. I was reading novels and then I switched to historical fiction and then war biographies and then I found myself, I just wanted to formalize what I was doing myself, self-learning. I wanted to make sure I was getting full potential

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<sup>&</sup>lt;sup>2</sup> Names have been changed to protect anonymity of research participants

out of the books I was reading. I thought the best way to do that was to go with the OU [Open University] eventually... No one's pushing me in here to get more education. It's all voluntary... I'm 100% sponsored by work.

In response to being asked how he perceived the value of the knowledge and qualifications he was accumulating, Simon alluded to their importance in terms of personal development and growth and as 'an endorsement of personal effort'. He also referred to the parlous state of the steel industry and the increasing value of qualifications to individuals in the labour market: 'As I say because the steel's declining as an industry, I feel that I'll need a qualification to move into a different industry. I don't think I'd go into production work now'.

Those workers who were voluntarily participating in study outside work (with the support of the employer) experienced this activity as contributing to their personal development and potentially as opening up employment opportunities elsewhere should the firm fail. The employees selected to become team leaders and so to follow the team leader training believed that participation in the programme and the achievement of the accompanying NVQ3 was improving their self-confidence and would strengthen their labour market position in the event of redundancy.

Relationship between learning at work and organizational change

Overall, there was a distinction between the way in which employees in the two companies perceived the relationship between learning and organisational change. In company A, change was perceived as an ongoing and integral aspect of working life and as central to the company's continuing success. The notion of organizational change sat comfortably within a coherent and consistent 'high involvement' organizational culture, which valued the contribution of individual workers and teams, alongside its emphasis on continuous performance improvements, the design and development of high quality products and high levels of cooperation between managers and workers. Elsewhere, we have conceptualised company A's approach to workforce development as 'expansive' (Fuller and Unwin 2003). The following excerpt from the transcript of an interview with the training officer is illustrative as he explains the company's approach to individual and organisational development:

I think, yes, whatever else training does, it has to enhance capability. If someone is more capable and more employable and the business benefits anyway because they can do more and they are better at it. The examples we give, or the example I gave in the two briefings recently to the other assessors, and I was making the point that I think people need to be stretched and gain more under-pinning knowledge. It is all very well saying to someone, 'why have you fitted that seal with such care?' It is not good enough for them to tell you, 'Oh, otherwise it might leak'. We want them to talk about pressure and decay over a period of time of pressure-sealing if they don't quite fit that properly ... I want them to know that if they are not expanding, if they are not developing that way – now many of them would already have this ... but I do know a lot of people would not ... Similarly in terms of the business, I think that at the end of it they should have a better idea of how this business clicks together, like a jigsaw ... So that's what I want them to get out of it, you know ... I have been encouraged all the way by [... Human Resources Manager] and my director and by the people I come into contact.

In company B, the need for organizational change was negatively associated with a direct and immediate threat to the survival of the company. From the perspective of employees, it was seen to be challenging the historical division of labour and established status arrangements and pay differentials. The survey provided an opportunity for respondents in company B to offer open-ended comments on the new working agreement and its implications for work organisation, training, employee competence, flexibility, pay and progression issues. Criticisms of the new system revolved around the target of achieving competence in 60% of tasks. This was perceived to be encouraging a superficial approach to on the job training:

'Setting a percentage of job capability has not made people more efficient or effective in their daily roles, all it has done is to encourage people to reach the required percentage, reach a new pay level then sit back and forget it'.

'Too much emphasis is placed upon people learning a new task or job only superficially, i.e. they don't learn the job well enough to be left alone'.

'Mediocre at lots of jobs, master of none just about sums things up.'

'At my age [55] it seems now, I'm asked to move aside from the jobs that I've taken a lifetime to learn for younger less experienced personnel ...'

In contrast, several respondents commented on the opportunities for new learning that had been created by the introduction of the new agreement:

- 'With the new team working there is opportunity to train in a wider range of activities, instead of the next job on the move up the ladder'.
- 'I was in a dead end job before team working came in. Now I have skills in other jobs around the mill whereas before team working there was no need to train anywhere else'.
- 'Because of the new agreement I have finally been shown how to use the computer'.

The interview data shed some light on the sources of the contrasting perspectives and the reasons for them. In essence, employees with a background in craft skills and with engineering qualifications perform the company's engineering maintenance functions. They are products of specialist training programmes, which typically begin with an in depth apprenticeship, with further upgrading over time by participation in off the job courses. These employees are sceptical of the move to team working, which assumes that tasks can be learned relatively quickly. Alternatively production employees who have enjoyed less status and pay, and who have not had so much opportunity to participate in off the job courses have tended to perceive the change in a more positive light. The following quotes taken from interviews with production workers are illustrative and were made in response to probing about the effects of the new agreement on learning:

- '... essentially through this team work, I mentioned today that I started off on the weighbridge a couple of hours this morning and then I went on to another job because we're moving around constantly, we're picking up more skills as we go through.' (Production worker)
- 'Throughout the job rotation and throughout the meal breaks everyone moves round during the day. Someone's gone on to my job today, now, so I can come here for a half-hour.'

In some similarity, interviews with the new team leaders of production teams revealed that helping team members to acquire the new skills and knowledge necessary to achieve their 60% competency threshold was a major part of their responsibility and took the majority of their time: 'Most of my 12 hour shift is spent training other people'. In contrast, the engineering team leaders stressed that members of their teams were already highly experienced, and were skilled and qualified engineers. They did not require further training in their specialist areas and already had the equivalent or higher pay levels and status than those recently achieving the 60% threshold. According to one engineering team leader, his and his team's primary function revolved around the performance of their technical function: 'In a normal shift, 50 per cent [of time] is spent on breakdown and recovery and 50 per cent on scheduled inspections and maintenance'. There are two points at issue here. First, we highlight the sense that the historically superior pay differential enjoyed by the engineers was being undermined by the ability of production workers to improve their pay through achieving 60% competency. Second, the long-established higher level status previously associated with the engineers' specialist skills and formal qualifications was being undermined by an approach that elevated the value of multi-skilling and flexibility. The following quotes from a long-serving production operator highlight the tensions that have emerged from moving from a system based on seniority to a system based on task competencies:

'Right up till recently I suppose that training in-house was expected within the system we had, and the system we had was move-ups on sickness, illness and absenteeism, so we would move up and we would learn the next job that was in front of you ...'

#### He went on:

"... the thing was, instead of being a specialist in a particular area ... it was agreed that we became, come away from the specialist attitude because the problem is if you have got a specialist, this is the way the management looked at it, if that specialist is not here then you might have someone moving up that is not so competent in that job, so they were looking for a broader scope."

The introduction of the new form of working, while ostensibly increasing learning opportunities as individuals were encouraged to pass the 60% competency threshold, was differently experienced and perceived according to the prior status and individual disposition of workers.

#### **Discussion and conclusions**

The research reported in this paper has confirmed the importance of the workplace as a site for learning and as a site in which older people continue to learn. The adoption of a case study approach incorporating a variety of data collection methods enabled us to capture a wide range of learning activities and to relate the ways in which learning was experienced to the wider organizational context as well as to the backgrounds and dispositions of individuals. The approach has enabled us to draw out important similarities and contrasts between the two companies in terms of the relevance of (changing) forms of work organization to the availability and experience of workplace learning. Respondents from both companies perceived the value of learning on the job, through experience and from work colleagues. The extent of this learning and the value placed upon it was strong in both companies despite the uneven availability of learning opportunities and the different ways in which workforce development was conceived in each organization. Evidence of employees' experiences and perceptions of learning has confirmed the value they attach to on the job learning. There was also a recognition that learning off-the-job can provide personal development and growth, and the means to facilitate career change. This offers a challenge to critics such as Cruickshank (2002: 151) who has claimed that, 'Where once lifelong learning encompassed a broad variety of spheres, it has become a handmaiden of the market'. Clearly, there is a powerful and insidious rhetoric which seeks to harness the concept of learning (lifelong or otherwise) to purely economic goals. Field (2000: 119) has argued that, 'It is easy to forget just how commonplace the conscription of adults into training has become'. The employees in Company B who were participating in nonwork related courses of study away from the workplace provide evidence that employers can acknowledge the limitations of their workplaces as learning environments.

One of the messages for those charged with introducing new forms of work organization is to assess the extent to which the process will require other changes particularly in relation to how people are managed, supported and developed. Another is to assess the implications of change for different work groups. The changing organizational context and learning culture revealed in company B was reflected in respondents' mixed attitudes to learning in relation to the new requirements associated with the introduction of flexible team working. The data explored from company A indicated how the strong and embedded learning culture was shaped by and in turn shaped respondents' attitudes to workplace learning. In company A the utilisation of high involvement working practices flows from and is consistent with the shared values of the organisational learning culture. In company B, the attempt to introduce higher employee involvement through the new team system was against a background of economic struggle and workforce contraction. It also ran counter to the established organizational approach to employee development that was based on specialisms and seniority. The resistance to the new form of work organization expressed by some employees was countered by others (e.g. those with previously low status and few progression options), who saw the new arrangements as increasing their learning and progression opportunities.

This case study has highlighted that the introduction of new working practices designed to increase employee involvement and employees' opportunities to participate will not automatically lead to even learning gains across the workforce. In addition, the quality of the learning generated by new forms of work organization was perceived by some to have generated superficial, rather than the deeper, learning necessary to achieve genuine flexibility and interchange between team members. The effects of restructuring and the shift to teams experienced in company B reflect Brown's (1999) findings from a study of similar changes in an Australian clothing company. Here, the predominantly female workers expressed a mixture of positive and negative feelings about the changes that, in similarity to company B, they and their unions had accepted as being necessary to save jobs (from overseas competition) and make the company more successful. Brown (1999: 252) found that there was 'shop floor scepticism about the teams even after the efforts put into training by management'. In contrast to our study, where workers with low status found positive benefits from restructuring, Brown found that the positive reaction to the changes in his research site came from the cutting team, which 'operates the most sophisticated machinery in the plant' and whose members are at the highest skill level and exercise the 'greatest degree of autonomy' (1999: 252) For Brown, therefore, this shift to a 'leaner' model of production, rests largely 'on appropriating workers' knowledge'. (1999: 253) He continues:

Far from being a new, radical breakthrough in management technique it is in essence a reworking of traditional Taylorist methods. Lead production methods, notably team work, refine production by having supervisors and team leaders continually acquire workers' knowledge about the details of the production process ... Lean production aims to enlist workers themselves in 'continually improving' their jobs. (1999: 253)

Whilst acknowledging some similarity in findings to Brown, we would stress that what is interesting here is the way in which different work sites can produce such different results from similar management approaches. The data from the two companies in our study suggest that it is the way new opportunities for learning are embedded, supported and managed within a wider culture of workforce development that will determine the extent to which they are utilized for productive learning, or will be resisted or subverted by employees. Pillay et al. (2003: 96) set their innovative study of older workers in the context of the 'new capitalism' that incorporates 'productivity that is increasingly dependent upon applied science and technology and the quality of information and management, a shift from material production to information-processing activities, a shift from standardised mass production to flexible specialisation and increased innovation and adaptability, a global market, and the current information technology revolution' (see also Lankshear 1997 Gee et al, 1996). They argue that recent research in epistemology and conceptions of learning indicate that 'if workers do not consider learning as part of their conception of work then the approaches they adopt in their work practice may not include learning' (Pillay et al. 2003, p. 96. Pillay et al.'s (2003) study, therefore, set out to investigate workers' conceptions of learning and their conceptions of work in order to better understand the interaction between and integrative nature of these phenomena, and to highlight the 'dissonance (which) may exist between what work and learning mean to workers' (2003: 97). Their findings revealed a hierarchy of conceptualizations of work and learning in their two research sites (medical services and an engineering company). Concepts of work were identified as: work as a job; work as a challenging experience; work as personally empowering; and work as structuring my life. Concepts of learning were identified as: acquiring skills to survive; onsite observing and experiencing; taking formal courses; a continuous lifelong process; and changing as a person. In each site, most workers saw learning at work as about 'acquiring skills to survive or observing and experiencing work practices', concepts that paralleled work as a job and work as a challenging experience. (2003: 109) Hence, there were 'fewer workers who held the higher qualitative conceptions of work' and generally workers 'failed to see the connection between learning and self-development'. Pillay et al. (2003) argue that these findings reflect the fact that the workers in their sample were older and 'consequently more resistant to change'.

Given the trends towards extended working lives referred to in the introduction to this paper, the willingness and ability of older workers to learn and adapt to workplace change is an increasingly important issue. We have presented evidence to show that older workers are participating in a variety of learning opportunities both on and off-the-job and, although experienced, they are still continuing to learn. Vroom *et al.* (2002: 202–203) argue that, 'The erosion of the Fordist system of production has put an end to the relationship between successive, orderly, foreseeable phases in the lifecourse' resulting in 'uncertain, de-standardised and mixed trajectories, as education, work and inactivity alternate in complex, variable ways that are difficult to manage'. This raises important questions about the nature and extent of the roles to be played by employers, the State, the family and society more generally in helping workers/citizens organize their less than linear journey through to old age. We have also related the types of participation in which our respondents have been involved to the associated organizational context and culture and, where appropriate, to the implementation of new forms of work organization. This has revealed that there is a need for further research in to the ongoing learning of older workers and the ways in which different groups are affected by organizational and wider social and economic change. More research is also needed on how such changes can be more successfully implemented in organisations whose cultural history indicates that they will produce a range of tensions.

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