

## Improving Working as Learning

This project enhances our understanding of how improving working can lead to improvements in learning. It develops the Working as Learning Framework as a new way of specifying the links between macro-level forces that shape employment, the nature of work organisation, and the 'expansive' or 'restrictive' character of learning environments. The empirical findings are based on interviews, surveys and observations carried out in twelve contrasting settings. The analysis demonstrates how the Framework can be applied and what new insights it can offer.

- The Working as Learning Framework conceptualises the context of which workplace learning is an integral part. → The Framework allows strategies to improve the conditions for growing, nurturing and sustaining learning at work in the public and private sectors to be tested.
- The same occupational groups or types of workers may have different learning experiences, because different productive systems and ways of organising work create different learning environments. → Occupational labels can be misleading indicators of the knowledge, skill and learning experiences of workers.
- Increased levels of discretion and responsibility enhance opportunities for learning and raise aspirations. → Organisations need to provide managers with time and professional development so they can properly support learning at work.
- The position an employee occupies in the productive system influences the extent to which their knowledge is valued. → Organisations need to recognise that the creation and use of knowledge is widely distributed, and to avoid the assumption that it is only held in specific 'elite' pockets.

# The research

The project reported here focuses on learning that goes on every day in offices, factories and shops throughout the world. Such activities can take a number of forms, including off-the-job training courses, on-the-job instruction, or learning from others as work is carried out. This project is not the first – and will certainly not be the last – to have such a focus. However, it does claim to be the first to analyse learning at work systematically in a range of different occupations and economic sectors, using a single, newly developed analytical framework, which we refer to as the Working as Learning Framework (WALF). We argue that a holistic understanding of learning at work can only be achieved by traversing a series of analytical layers of enquiry. This journey takes us beyond the particularities of the work task itself and into the world of work organisation and the wider pressures organisations face for survival, growth and development, or what has previously been referred to as the ‘context of learning’.

The growing interest in learning at work has captured the attention of researchers and policy-makers around the world. This gives the findings of the project international significance. Exhortations from policy-makers for improvements and enhancements to learning are commonplace. However, there is a tendency to view learning as a product with a visible, identifiable outcome, often accompanied by certification or proof of attendance. This can be seen most starkly in the continued use of qualifications as the proxy measure for skills, and in the number of surveys that depict learning related to the workplace solely in terms of formal episodes of ‘training’ that can be counted and costed. On the other hand, learning can be conceived of as a process in which learners improve their work performance by carrying out daily activities which entail interacting with people, tools, materials and ways of thinking. This project collected data on both of these aspects of learning, although particular emphasis was placed on the iterative and ongoing processes of working and learning (see the NIACE reports, listed below, for our attempts to capture these processes in UK-wide surveys).

The project makes two main contributions to existing research. First, during the course of the project we developed a new conceptual framework (WALF) which links the following dimensions:

- the vertical and horizontal inter-dependencies that comprise productive systems;
- the levels of discretion afforded and

created by different forms of work organisation;

- the nature of workplace learning environments.

Second, we applied this Framework to sectors that have different histories, trajectories, markets and driving forces. The sectors studied were selected with this in mind, thereby generating data on learning in a range of contrasting contexts and involving different types of workers. They were:

- Back office staff and telephone operators and managers in a local authority contact centre;
- Commission-based sales staff in the leisure industry;
- Contract researchers in higher education;
- Exercise-to-music instructors in health and fitness clubs;
- Franchise chain operators, salon managers and hair stylists in hairdressing;
- Health visitor teams in community health care;
- Project managers in construction;
- Research and development personnel in commercial sandwich manufacturing;
- Service staff and managers in restaurant chains;
- Shop floor workers and managers in automotive manufacturing;
- Software engineers in hi-tech industries.
- Store staff and managers in supermarket retailing;

## Mapping the Working as Learning Framework

The Working as Learning Framework (WALF) is built on three concepts: productive systems; work organisation; and learning environments. Our central argument is that in order to understand the extent to which learning environments at work are more or less ‘expansive’ or ‘restrictive’ (Fuller and Unwin 2003), researchers need to examine how work is organised and how its organisation is influenced by wider forces. The Framework specifies the links between the broad relationships that shape employment relations and the nature of workplace learning. This approach enables us to explore how these broader processes are played out in specific workplaces and in the narratives of people’s working lives.

The concept of ‘productive systems’ provides the broadest perspective since it offers a holistic, relational model of economic activity that identifies interlocking levels of institutional practices and controls. This takes us beyond a workplace or even an organisational-level focus – typical of concepts such as ‘high

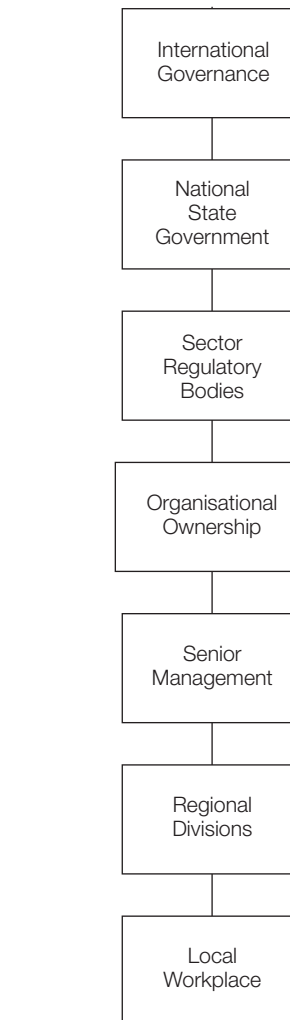


Figure 2: Structures of Production

performance work systems’ (Appelbaum et al. 2000). Instead, the notion of productive systems encompasses a multitude of stakeholders; customers, suppliers and sector bodies, as well as the employing organisation. It refers to the totality of social relationships entailed in processes of commodity production and the provision of services, and which have horizontal and vertical dimensions. The horizontal dimension refers to the sequences in which raw materials are transformed into goods and services that are consumed by end-users, while the vertical refers to the regulation and control mechanisms that impinge on each stage of the production process (see Figures 1 and 2).

We use the concept of discretion to capture the degree of autonomy and responsibility exercised by workers in the labour processes in which they are engaged. The nature of the productive system may influence the latitude they are given as well as the level and nature of trust in the employment relationship. Managerial strategies may respond to

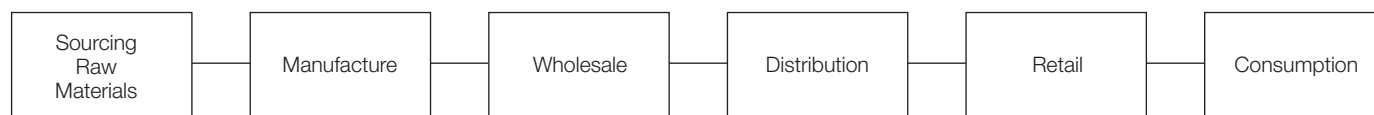


Figure 1: Stages of Production

the uncertainties inherent in complex productive systems by enhancing or by minimising discretion and trust in the workplace.

Our prime focus is on learning environments, the networks of relationships within which learning takes place. Our analysis here draws on the concepts of 'expansive' and 'restrictive' learning environments (Fuller and Unwin 2003) to offer a generative, transformative, process-conscious conception of learning. Moreover, the notions of expansive and restrictive extend to include the learning territories of individuals. This allows the expansive-restrictive model to link the organisation of work in its broadest sense to the learning processes of individuals. Integrating the expansive-restrictive continuum with the productive systems perspective creates a conceptual framework for understanding working as learning. This Framework addresses systemic issues at the same time as illuminating the experiences of specific individuals. Moreover, it takes a dynamic view of these linkages, with an emphasis on process, change and development.

## Applying the Working as Learning Framework

To illustrate the utility of the Working as Learning Framework, each of the sector case studies uses and develops different dimensions. Some cases emphasise the importance of understanding both the vertical and horizontal pressures placed upon organisations and workplaces. Our study of how a local authority contact centre was set up uses the Framework to show how the balance of power shifted away from service departments which no longer acted as the first port of call for queries. As a result, their tasks were reconfigured and contact centre operators became involved in new and largely unrecognised kinds of interactions that called for distinctive knowledge and skills. These developments were the result of vertical pressures to make economies, and hence the contact centre was created to occupy a pivotal position in the horizontal process of production which linked callers with service departments. Similarly, our study of health visitors reveals how attempts by workers to create a more expansive learning environment was initially facilitated and then thwarted by their location within a complex set of vertical and horizontal relationships with a diverse and fragmented network of managers and fellow professionals.

In some cases, one of the Framework's dimensions may predominate in explanations of why some learning environments are more expansive and others more restrictive. For example, the software engineers we studied experienced a more expansive learning environment than university contract researchers mainly because they worked in a setting with fewer and weaker vertical pressures. Similarly, the Framework highlights the fact that the locus of control

# Major implications

The project reported here took place over almost five years. During that time, interest in the relationship between working and learning continued to grow within research, policy-making and practitioner communities across the world. Yet, despite a great deal of activity and a substantial body of high-quality research evidence, our understanding of that relationship has tended to remain as separate pieces of a large and daunting jigsaw puzzle. This project provides what we believe to be the first substantive attempt to put those pieces together to form an integrated picture of the ways in which working and learning relate to one another. The Working as Learning Framework evolved through detailed and extensive fieldwork conducted across the public and private sectors of the UK economy, by building on existing theories and concepts, and through vigorous inter-disciplinary debate within the research team as well as with other stakeholders.

The Working as Learning Framework allows us to show how each learning environment comprises a dynamic interplay between processes generated within workplaces and those emanating from wider structures and stages of the productive system. These shift, change and re-organise, like the shapes in a kaleidoscope. This dynamic complexity overrides conventional notions held by some policy-makers, researchers and practitioners that the differences between workplace learning environments can be accounted for by fixed variables such as sector, size, and market. Other researchers claim that employee characteristics, dispositions and biographies are also important influences. However, in seeking to demonstrate the power of individual agency, these researchers can lose sight of the contextual factors. Our argument is that all these influences are important and relevant, but that they are only some of the processes that, together, comprise a complex social world.

can shift in this analytical space. It may move backwards or forwards along the horizontal stages of production, and up or down the vertical structures of production. Our study of sandwich manufacturing shows that large retailers can exercise power backwards over those who produce goods for sale. However, power can be exercised forwards by manufacturers over those who interact directly with the final consumer, a point demonstrated in the delivery of ready-made aerobics classes. Long-running debates, such as those surrounding the utilisation of artefacts, can be examined afresh by adopting this Framework. This is illustrated in our study of competence assessment procedures adopted in two automotive component manufacturing companies, and the use of stock control devices in supermarket retailing.

The Working as Learning Framework can be used by researchers seeking to understand the nature of workplace learning in all economic sectors and in different societies. It also reveals the futility of using occupational labels or qualification levels in isolation to calibrate the knowledge, skill and learning experiences of those who occupy such positions. Instead, their learning environments need to be understood in terms of the productive systems in which they operate and the discretion levels they are able to exercise. Furthermore, it cannot be assumed that what is taught off-the-job can easily be transferred to daily working practices or that the learning environments for workers with a similar occupational title or level of qualification are the same.

Finally, given the strength of the field and the continued growing international interest from policy-makers and practitioners, as well as researchers, there is considerable scope to be more ambitious in terms of the scale, scope and design of future projects. We need projects with a greater longitudinal dimension and much greater effort to bridge the gap between qualitative and quantitative methodologies. Most importantly, we need to build projects that deliberately aim to examine working and learning from an interdisciplinary perspective. It is no longer good enough to study learning at work as a purely economic, psychological or sociological phenomenon. Nor is it good enough to try to isolate the impact of learning on productivity and performance as if learning is a distinct, concrete variable that can be easily slotted into a one-dimensional equation.

## References

Appelbaum, E., Bailey, T., Berg, P. and Kalleberg, A. (2000) *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*, Ithaca: Cornell University Press.

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): 407-426.

## Further information

The project has produced 18 Research Papers. These can be found on our web site: <http://learningaswork.cf.ac.uk/>. Other publications include:

### Book:

Felstead, A, Fuller, A, Jewson, N and Unwin, L (2009) *Improving Working as Learning*, London: Routledge.

### Refereed Publications:

Felstead, A, Fuller, A, Jewson, N, Kakavelakis, K, and Unwin, L (2007) 'Grooving to the same tunes? Learning, training and productive systems in the aerobics studio', *Work, Employment and Society*, 21(2): 189-208.

Felstead, A, Fuller, A, Unwin, L, Ashton, D, Butler, P and Lee, T (2005) 'Surveying the scene: learning metaphors, survey design and the workplace context', *Journal of Education and Work*, 18(4): 359-383.

Fuller, A, Unwin, L, Bishop, D, Felstead, A, Jewson, N, Kakavelakis, K and Lee, T (2007) 'Knowledge use and creation in the workplace: the characteristics of a differentiated process', *British Educational Research Journal*, 33(5): 743-759.

Kakavelakis, K, Felstead, A, Fuller, A, Jewson, N and Unwin, L (2008) 'Making a sales advisor: the limits of "instrumental empathy"', *Journal of Vocational Education and Training*, 60(3): 209-221.

Unwin, L, Felstead, A, Fuller, A, Bishop, D, Jewson, N, Kakavelakis, K and Lee, T (2007) 'Looking inside the Russian doll: the interconnections between context, learning and pedagogy in the workplace', *Pedagogy, Culture and Society*, 15(3): 333-348.

### Chapters in Books:

Unwin, L, Felstead, A, Fuller, A, Jewson, N, Kakavelakis, K, Lee, T and Butler, P (2008) 'Worlds within worlds: the relationship between context and pedagogy in the workplace', in Nijhof, W J and Nieuwenhuis, L F M (eds) *The Learning Potential of the Workplace*, Rotterdam: Sense Publishers.

Unwin, L, Felstead, A, Fuller, A, Ashton, D, Bishop, D, Lee, T and Jewson, N (2006) 'The value and pitfalls of informal learning', in Porter, S and Campbell, M (eds) *Skills and Economic Performance*, London: Caspian Publishing.

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## The warrant

The project draws on insights provided by educationalists, sociologists and political economists. The twelve sectors studied varied in terms of their size, patterns of ownership and exposure to international competition. Face-to-face interviews were carried out with 475 individuals. These included representatives from umbrella bodies as well as managers and workers at various levels and in different roles. Worker interviews were often preceded by a period of work shadowing, stretching to days and sometimes weeks. Other data collection techniques included: the use of photographs taken by employees to elicit their experiences of working and learning; the completion of 'learning logs' through which employees record and reflect on these experiences; the collection of the artefacts associated with learning; administering and analysing in-house surveys; and securing access to staff attitude surveys carried out by management.

Throughout the life of the project we presented our ideas to academic colleagues at a variety of conferences and seminars. We shared our formative thinking with a 15-member Advisory Group, representing the academic, policy-making and practitioner communities, with whom we met every six months over almost five years. As a result, we refined and developed our approach in the light of the feedback we received from a wide range of stakeholders.

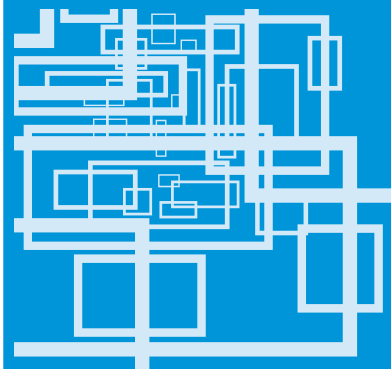
We also developed a collaborative working relationship with the National Institute of Adult Continuing Education (NIACE). Consequently, we designed two new question modules for their 2004 and 2007 annual surveys and analysed the results. Many of our questions have now become an established part of this influential data series.

### Reports:

Felstead, A, Fuller, A, Jewson, N, Unwin, L and Kakavelakis, K (2007) *Learning, Communities and Performance: Evidence from the 2007 Communities of Practice Survey*, Leicester: NIACE.

Felstead, A, Fuller, A, Unwin, L, Ashton, D, Butler, P and Lee, T (2004) *Better Learning, Better Performance: Evidence from the 2004 Learning at Work Survey*, Leicester: NIACE.

## Teaching and Learning Research Programme



TLRP involves some 90 research teams with contributions from England, Northern Ireland, Scotland and Wales. Work began in 2000 and the Technology Enhanced Learning phase will continue to 2012.

**Learning:** TLRP's overarching aim is to improve outcomes for learners of all ages in teaching and learning contexts across the UK.

**Outcomes:** TLRP studies a broad range of learning outcomes, including the acquisition of skill, understanding, knowledge and qualifications and the development of attitudes, values and identities relevant to a learning society.

**Lifecourse:** TLRP supports projects and related activities at many ages and stages in education, training and lifelong learning.

**Enrichment:** TLRP commits to user engagement at all stages of research. It promotes research across disciplines, methodologies and sectors, and supports national and international co-operation.

**Expertise:** TLRP works to enhance capacity for all forms of research on teaching and learning, and for research informed policy and practice.

**Improvement:** TLRP develops the knowledge base on teaching and learning and policy and practice in the UK.

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