Designing Professional Development for the Knowledge Era

Workplace Changes: change and continuity in the workplace of the future

A Think Piece prepared by Richard Hall for ICVET – (TAFE NSW International Centre for Vocational Education and Training Teaching and Learning)

March 2006
About the Author

Richard Hall is Associate Professor of Organisational Studies and Human Resource Management at the University of Sydney, Australia. He was previously Deputy Director of ACIRRT, the work research centre at the University of Sydney. His recent research has focused on IT systems and organisational change, knowledge management, new skills in the services sector, temporary agency work and critical approaches to international HRM. He is currently undertaking a major research project funded by the Australian Research Council examining the impact of enterprise resource systems, such as SAP and PeopleSoft on the organisation of work. He has published in journals including Work, Employment and Society, Industrial Relations, New Technology, Work and Employment and Economic and Industrial Democracy.

© 2006 TAFE NSW International Centre for VET Teaching and Learning

This work is Copyright.

It may be reproduced in whole or in part for study or training purposes, subject to the inclusion of an acknowledgement of the source and it is not used for commercial use or sale. Reproduction for purposes other than those indicated above requires the prior written permission from the Commonwealth. Requests and enquiries concerning reproduction and copyright should be addressed to the Manager, International Centre for VET Teaching and Learning at ICVET@tafe.nsw.edu.au

Disclaimer

The views expressed herein do not necessarily represent the views of TAFE NSW International Centre for VET Teaching and Learning.
Workplace Changes: change and continuity in the workplaces of the future

Introduction

While it is tempting to see the changing nature of the workplace in the terms of the ‘knowledge era’, the ‘knowledge economy’, the ‘information age’ and the ascendancy of the ‘knowledge worker’ a consideration of the empirical evidence and the history of workplace change suggests that predictions of a future dominated by knowledge work need to be carefully qualified. This is not simply an academic exercise in critique; much can be learnt from a considered re-evaluation of the knowledge era thesis and the evidence concerning workplace change. Indeed, without this constructive re-evaluation policy and practice interventions are likely to be misconceived, and ultimately ineffective.

The central argument of this paper is that while there are major changes occurring in the workplace, and while these have significant implications for learning and development, the complexity of those changes cannot be adequately comprehended by the knowledge era thesis for three reasons:

1 The growth in knowledge work and in the number of knowledge workers is far from universal, uniform or inevitable.

2 The rise in the importance of knowledge work is only one force impacting on the future of work. Other critical forces include:

   – The changing nature of labour supply
   – The changing nature of labour demand
   – Changes to product and service markets
   – The changing role of the state and community sector
   – Changes to organisational structures
   – Technological changes

The complex interplay of these forces will continue to result in different outcomes for different kinds of workers, in different industries, markets, occupations, professions and organizations. These forces can be understood as factors that serve to mediate the relations between the knowledge work imperative and the workplace outcomes for workers and organisations.

3 Knowledge work and knowledge workers are distinctive and critical to organisations of the future. However, when considering the professional development of knowledge workers, the structural realities represented by the mediating forces noted above highlight a number of key problems that must be addressed by organisations, managers, learning and development professionals, policy makers and knowledge workers themselves if professional development interventions are to be effective.
What’s wrong with the Knowledge Era thesis?

In a nutshell, the Knowledge Era thesis claims that a potent combination of globalisation, intensified competition and new technology has seen knowledge emerge as the critical resource which organisations need to exploit to secure competitive advantage. As a result, knowledge work – centred on the ‘acquisition, creation, packaging or application of knowledge’ and characterised by ‘variety and exception rather than routine’ and undertaken by professionals with ‘a high level of skill and expertise’ (Davenport et al 1996: 54) – is becoming increasingly important and knowledge workers are proliferating. These developments are associated with the emergence of the ‘knowledge economy’ based on ‘intangibles’ associated with knowledge – ideas, concepts, images, brands, software, services more generally - and contrasted with the old economy based on the production and distribution of hard, tangible products. The rise of knowledge work and the knowledge worker has implications for organisations, management and learning and development. Knowledge workers are powerful because they possess the now critical resource – knowledge; a resource cannot be separated from its owner, the knowledge worker (Despres and Hilltrop 1995). These highly skilled, footloose and in-demand workers are powerful, demanding and able to dictate the terms on which they might work for (or with) an organisation. These are Handy’s (1990) portfolio workers, accumulating skills and experience and moving easily between lucrative contracts.

Despite its appeal, the knowledge era thesis is overstated. While there is evidence that many organisations are increasingly valuing knowledge and knowledge work (Hall 2003) and while the ranks of knowledge workers are certainly growing in all advanced industrial economies, there is little evidence to support the claims that knowledge work is emerging as a dominant form of work, that knowledge workers are transforming power relations at work or in the labour market, or that the economy has been transformed into a new, ‘weightless’ economy based on fundamentally new knowledge-based intangibles.

First, knowledge workers are a significant but hardly dominant feature of the contemporary and emerging labour market. First, even in the US, it has been estimated that only one in five workers could be classified as a knowledge worker (Brown and Hesketh 2004). Other estimates drawn from US, UK and Australian studies utilising various definitions range from one-third to one-quarter. The number of knowledge jobs has been growing, but no faster than the growth in other, often low-end services jobs. In 2003, for example, it was estimated that in Sydney in the period 2000-2005 the number of computing professionals would grow by 5.6% per annum. Yet the number of cleaners (6.0%), childcare workers (6.0%), waiters (4.4%) and registered nurses (4.1%) were also expected to grow strongly (NSW BVET quoted in Thompson 2004). It has often been noted that most of the growth in services has been and will continue to be in relatively lower end, lower-paid, lower-skilled work – cleaning, security, call centre, retail and hospitality.

Second, as the bursting of the dotcom bubble clearly demonstrated, the rules of the economy have not been fundamentally transformed in the so-called ‘knowledge era’. As Paul Thompson (2004) has forcefully argued, it is not the tangibility or intangibility of resources which is important to the economy, rather it is the extent to which resources are converted into commodities that can be produced and sold which matters. Knowledge can and must be used in the creation of any product or service. Services have certainly been displacing manufactured goods as a proportion of economic activity and value in all industrialised economies and are projected to continue to do so in the future. But this has not transformed
the rules of the economy or generated a new dynamic of capital accumulation. On the contrary, if anything, intensified competition on an increasingly global scale (in services as much as manufacturing) has forcefully re-asserted the imperatives of efficiency, labour productivity and profit maximisation. While enhanced productivity can be achieved through the enhanced use of knowledge and innovation, the evidence (considered further below) does not suggest that this has been the predominant path taken by Australian business. At best, low-wage, low-end services work appears to be just as important to the emerging Australian economy as high-end knowledge work.

Third, and in light of the foregoing arguments, it is unsurprising that there is also little evidence that knowledge workers are fundamentally altering the political dynamics of workplace relations. Of course, a relatively small elite of in-demand knowledge workers with skills sets and project experience in short supply are able to exploit their labour market clout to their advantage. However, organisations are not simply sitting idly by. Through various strategies detailed below, organisations are seeking to control the power and autonomy of their workers, including many of their so-called knowledge workers so as to manage the risks associated with excessive dependence on a cadre of powerful, highly skilled and expensive knowledge workers. There is therefore also little evidence to support the associated knowledge era claim that organisations are becoming more open, democratic and supportive of worker innovation, creativity and freedom. Indeed, as argued below there are strong forces pushing in the opposite direction toward greater standardisation, control and compliance with carefully detailed business processes.

What's really happening in workplaces?

To dispute the portrayal of workplaces suggested by the knowledge era thesis is not to deny that very significant changes are occurring and will continue to occur at the workplace. The knowledge era thesis, while overstated, contains some important insights. Knowledge is critical to organisational success. Many organisations are seeking to exploit knowledge in new ways for competitive advantage. Services continue to grow as a proportion of the economy and many new services and products rely on the innovative and intensive use of knowledge, information, data and associated technologies. Jobs, organisational structures, methods of working, forms of collaboration and the skills and attributes required are all changing. The point is, however, that these trends are not all in the direction of greater knowledge intensity. Other forces are mediating the ways in which the role and significance of knowledge is impacting on workplaces and workers.

Predicting the shape and character of the workplace of the future is a messy and difficult business. Despite the ubiquity of some trends, and the convergence of at least some practices, workplaces will continue to be extremely diverse. This is to be expected given the range of forces that can be seen to be influencing, more or less in any given case, the character of work organisation and the nature of work.

Changes in labour supply

Changing demographics, educational profiles, worker preferences and expectations are all influencing the nature of labour available for Australian organisations. As the recent debate in Australia around the extent and depth of alleged skill shortages has indicated, making sense of labour supply dynamics can be a tricky business. Rates of labour market participation have been increasing, especially amongst women and young workers, leading to greater diversity in
Designing Professional Development in the Knowledge Era

A research project by ICVET* and Commonwealth Department of Education, Science and Training (DEST)

many organisations and increased pressures for various kinds of flexible work arrangements. Higher levels of educational attainment, particularly higher school retention rates and increasing attainment of tertiary qualifications, has led to more qualified labour pools, but also to job seekers and workers with heightened labour market expectations. The implications have been diverse. For example, it is apparent that decades of representing manufacturing and many ‘old economy’ industries as declining has had a negative impact on traditional trade apprenticeship commencements and the supply of trade skills in the economy. Alternative narratives portraying the attractiveness of ‘new economy’ professions and occupations in sectors such as IT, media and financial services have also encouraged graduates to pursue these opportunities and to expect high pay, rewarding work and quick promotion when they do so. Amongst other things, this has led to increasingly diverse and often discontinuous career paths. It might also be contributing to increased turnover and dissatisfaction for those workers whose expectations of gaining high-quality, knowledge work are unmet.

Changes in labour demand

Of all the categories of workplace change forces, changes to the nature of labour demand are probably the most significant and far-reaching. The knowledge era thesis would predict that employers will increasingly demand more knowledge workers and more knowledgeable workers as knowledge jobs proliferate and the knowledge content of much other work increases. As noted above, there is little evidence that the growth in knowledge jobs has been markedly greater than that in other white-collar work, much of it routine. When considering the extent to which the knowledge content or intensity of jobs demanded by employers might have been increasing it is worth remembering that a startlingly high proportion of workers in Australia and other advanced industrial economies continue to work in jobs for which they are over-qualified. Thus Thompson (2004) reports that in the UK between 25% and 34% of graduates (depending on the precise study) are currently in jobs that do not require degree qualifications. Similarly, in Australia, 31% of graduates are employed in occupations that do not require a bachelor’s degree (ABS 2005). Far from suggesting a dire shortage of knowledge workers these data indicate that there may well be a shortage of knowledge jobs rather than knowledge workers.

How can this be so? A reconsideration of the other elements of apparent labour demand leads us closer to a solution of this apparent conundrum. In brief, labour demand in Australia (and other Anglo democracies) has been characterised by: the intensification of jobs, especially professional and managerial jobs; increasing labour flexibility; and, an increasing commitment to rigid and disciplined management of labour, even professional and managerial labour.

Firstly, work intensification across the labour market has been evidenced by longer working hours and, in particular, the growth in the proportion of workers working very long hours. This trend is especially pronounced amongst professionals and managers (Watson et al 2003: 88). Workers, especially professionals and managers, are also reporting increased work pressures, work effort and work intensity generally. Work intensification has been driven by a range of factors: intensified globalised competition and the sustained pressure of shareholder value have increased demands on all organisations to achieve greater productivity and this has, in Australia’s case, typically been achieved through greater labour productivity under conditions of resource stringency – in colloquial terms, ‘doing more with less’. Restructuring, delayering, downsizing and the introduction of teamwork have all been associated with fewer human resources being expected to produce more (or the same) output. Restructuring with
teams has often been associated with organisations introducing business units, work groups or project or operational teams as discrete cost centres often expected to operate as micro-businesses. As a result, responsibility for performance and profits is pushed down occupational hierarchies (as reflected, for example, in the tendency for organisations to re-badge even mid to lower level service jobs as ‘managerial’ if only in name). Amongst other things, this has contributed to the intensification of work. Professionals and managers, in particular, have also been exposed to closer performance scrutiny, more detailed measurement and seemingly perpetually increasing performance expectations through the development of performance management systems and performance-based pay.

Secondly, labour demand continues to be characterised by the search for higher levels of labour flexibility. Working time flexibility has been secured by converting jobs tied to specific designated working hours and times to open-ended jobs where work only ends (for the day, week, month or year) when the projects are complete. The growth in so-called ‘non-standard work’ is well-known and the strong continuing growth in the ranks of casual, fixed-term, contract and agency workers is evident (Watson et al 2003: 62-77). While there are numerous implications of labour flexibility, its links to increased job insecurity are especially notable. In short this means that workers – both knowledge workers and lower-skilled workers – are increasingly subjected to heightened performance expectations and intensified performance pressures under circumstances where their sense of security at work has been compromised by a history of perpetual restructurings and the current reality of an insecure fixed-term, casual or agency contract.

Thirdly, recent trends in the management of labour do not seem consistent with a decisive trend toward enhanced discretion, autonomy, opportunities for creativity and genuine knowledge work that would be consistent with the knowledge era thesis. Numerous studies have demonstrated that the key managerial reforms (or ‘management fads’ for some) of recent times – Just-in-Time, Business Process Reengineering, lean production, high performance work systems - have typically had little to do with extending empowerment or genuine discretion and autonomy of work to workers whether professional, managerial, operational or support. Work intensification and increasing insecurity have more often been the characteristic results. Knowledge management provides a particularly relevant example. Depending on the form of knowledge concerned, I have argued elsewhere (Hall 2006) that knowledge management means either: a) identifying optimal business processes and defining and imposing standard operating procedures on workers so that those processes are adhered to as efficiently as possible; or b) codifying, where possible, traditionally tacit skills and forms of knowledge so as convert individual skills and knowledge into organisational skills and knowledge. These trends to greater standardisation of process are entirely consistent with the rise of the standards movement (eg: ISO 9000) and the increasing globalisation and tightening of supply chains. For present purposes, though, suffice to note that these forms of knowledge management are hardly consistent with optimistic or progressive models of knowledge work.

Understanding these trends – work intensification, labour flexibility and increasingly rigid and disciplined management of labour – makes it easier to understand the changes to employer demand for skills. For all the talk of a knowledge era, the evidence concerning labour demand does not suggest an unequivocal increase in demand for higher order intellective skills (Zuboff 1988), greater creativity and higher-order, complex problem-solving skills. In a recent study of services skills in a range of services industries in Victoria, undertaken by the author and others at acirrt (Buchanan and Hall 2003), it was found that
Designing Professional Development in the Knowledge Era

employers were typically demanding an increasingly specialised combination of technical skills in conjunction with a range of behavioural skills (or attributes) including customer service and sales skills and entrepreneurial or business development skills. To take the example of IT consultancy professionals studied as part of that project, new IT consultants were expected to have a specific combination of IT technical skills as well as a demonstrated ability to develop their own clients and line of work, assume total responsibility for the management of accounts, on-sell further work to clients, manage competing demands and be committed, dependable and thrifty. Clearly, these are extensive skill (and attribute) demands, and they draw on a need for significant technical, cognitive and behavioural knowledge, however they are not a simple manifestation of the knowledge work skills as conventionally understood.

Other critical forces driving workplace changes

Most of the other forces associated with changes in the workplace are themselves reflected in the changing demand for labour noted in the previous section. As a result they need only be mentioned in passing here.

Key dimensions of the changing nature of service and product markets include the compositional shift from manufacturing to services and an increasing demand for a broader range of services generally. Consistent with the earlier analysis, there has been strong growth in the demand for low-end, budget services as well as high-end services catering to the affluent. Low cost airlines provide a good example. The jobs created by the proliferation of low cost airlines may or may not be classified as knowledge jobs, but it is important to recognise their characteristic features: thinking of customer-facing jobs in this sector, they will typically be non-standard, require a high degree of working time flexibility, require workers to perform a wide range of customer service and associated tasks, be relatively insecure, have limited clear career paths and be relatively low-paid. Moreover, while a keen ability to handle disgruntled customers would obviously be an advantage, customer service workers in this industry typically work according to extensive and detailed standard operating procedures and protocols that might include a requirement to adhere to carefully scripted and tightly controlled model service procedures.

The changing role of the state and associated changes in the community sector are also related to changes at the workplace. The withdrawal of the state from much direct provision of services has expanded demand for services from the private sector. The imposition of business models in both the public and community sectors has also forced public sector and community agencies to act and manage their workers in ways that are consistent with private sector, for-profit organisations. Work intensification, labour flexibility and management pressures in these sectors have increased as a result.

Changing organisational structures have been a major theme in the knowledge era literature. Flatter organisational hierarchies, decentralisation, teamworking and the rise of various network organisational forms and inter-organisational relationships have been routinely identified. As the record of downsizing, delayering and so-called ‘team-Taylorism’ referred to above attests, organisational forms have been changing, but it is simply naïve to see these changes as inevitably leading to richer, more rewarding knowledge work. Knowledge era theorists who see the new organisational forms and practices as leading to more democratic, liberated, creative and autonomous work (and associated ‘leadership’, rather than ‘management’ styles) overlook at least one critical fact: while organisational responsibilities
may well have been decentralised, organisational power has not. In Bennett Harrison’s terms organisations have combined decentralisation of operational responsibility while maintaining and even extending the concentration of power and control in the hands of senior management. Thus Harrison’s (1994) own characterisation of the contemporary organisation as ‘lean and mean’ seems somewhat more compelling than the knowledge era theorists predictions of more collegial and participative management. As Milkman notes there is a ‘huge gap between the rhetoric of participation and the reality of the factory or shopfloor’ (1998: 33).

Finally technological changes have played their part in the forces that are shaping the contemporary and future workplace. While the implications of technological change are, of course, diverse and multi-faceted, it is apparent that technology, especially ICT, has played a critical role in facilitating many of the managerial and organisational changes noted above. For example, local area networks and management software have combined to increase the capacity of management to measure the performance of all workers at all levels in the organisation. Sophisticated enterprise resource planning (ERP) systems or enterprise systems have directly facilitated the pushing of operational and management reporting responsibilities down occupational hierarchies while enhancing management’s ability to access to real-time performance information. And finally, the explosion in the use and availability of mobile technologies such as mobile phones, laptops, PDAs, email, Blackberries, etc. has served to further blur distinctions between work and non-work with obvious consequences for work intensification.

A broad range of fundamental political, social and economic forces are shaping the workplaces of today and tomorrow. While the knowledge era thesis, in simple terms, might be too simplistic to adequately capture and interpret these changes, there clearly have been dramatic changes to work with important implications for the skills and professional development opportunities needed by workers. In the least, these workplace changes throw up a series of problems or challenges that must be considered in thinking about professional development initiatives for workers of the future.

Problems and challenges for professional development

While the preceding discussion has considered the nature of workplace changes with reference to workers, including professionals and knowledge workers, this section considers the implications of this analysis for professionals and knowledge workers in particular. Professional work has been shaped decisively by the increasing strategic significance attributed to knowledge in many organisations, but it has also been shaped by the other forces already identified. Many of the professional development initiatives proposed for knowledge workers (Staron, Jasinski and Weatherley 2005) are critical. The suggestions and ideas in this section should, in general, be read in addition to those proposals and initiatives.

While many professionals and knowledge workers might be able to shield themselves from some of the worst consequences of the workplace changes discussed here, they still confront a number of significant challenges. Professional and knowledge workers (hereinafter ‘professionals’) have been subject to a major intensification of their work, they report working the longest hours, they express dissatisfaction at their capacity to balance work and family and they are exposed to often extreme performance pressure at work. Many professionals have borne the brunt of organisational restructurings and have seen colleagues and support staff made redundant. The majority, with at least some managerial
responsibilities, have also been expected to manage the consequences of those restructurings for their areas of responsibility. All this at a time when the technical skills and demands of their profession or area of expertise have in all likelihood been changing at an unprecedented rate.

Five particular challenges can be identified as particularly relevant for professionals in the so-called knowledge era:

1 **Managing the tyranny of operational demands**

Work intensification is not only a problem for individual professionals in the sense that it can lead to dissatisfaction, poor performance, poor health and even ‘burnout’, but it also generates specific problems for the development of knowledge work and knowledge skills. An intense work environment where there is unrelenting pressure for results tends to squeeze out the opportunities for actually doing creative or innovative knowledge work. Even where organisations might want to encourage their professionals to ‘do’ knowledge work, the operational realities and performance expectations confronted by professionals frustrates any such attempts. Moreover, intense work environments also tend to have few available personnel who can ‘cover’ for professionals while they might be undertaking professional development activities either for themselves or for their colleagues or subordinates. The challenge therefore is to design and develop professional development activities for professionals that can be accommodated. More ambitiously, the challenge is to get organisations to recognise the value of professional development activities by actually resourcing the indirect as well as the direct costs of that development.

2 **Developing the job as well as the professional**

Most of the emphasis in much of the contemporary professional development literature focuses on the individual professional and their individual development. However, given the above analysis, it is clearly critical to also consider the need to further develop many jobs (including professional jobs) so that they more closely approximate knowledge jobs that have genuine and significant opportunities for creativity, innovation and new knowledge development. While this is largely a matter for organisations, and senior management in particular, it might also be possible for professionals to contribute to the development of their jobs, seeking ways to expand the knowledge content, span of control, scope for discretion and control over resources associated with their responsibilities.

3 **Developing professionals as managers**

Most professionals in organisations have management responsibilities and many ‘full-time’ managers are drawn from professional ranks. One of the most important dimensions of professional development might therefore be better thought of as management development or even leadership development. The cause of many of the problems associated with the failure to fully realise the predictions of the knowledge era thesis discussed in this paper relate to failures of management: a failure, for example, to cede sufficient control and discretion to employees and teams to enable them to exercise the level of discretion consistent with the ideals of knowledge work; a failure to trust employees; and, a failure to adequately resource an environment where knowledge work, and knowledge development, can occur. Amongst other things, knowledge intensive organisations need management that is enlightened,
progressive, constructively critical and reflexive. Professional development is an arena in which many of these management skills and orientations might be appropriately developed.

The role of professionals as managers invokes further challenges as well. Professional and managerial responsibilities will often be in conflict, or at least, tension in organisational life, especially where organisations are under intense competitive pressure. Professional development activities might usefully strive to recognise these conflicts and assist professionals in developing strategies for managing, if not resolving, them.

4 **Sustaining multiple identities**

In addition to their potential role as managers, professionals might also be workers, colleagues, mentors and learners, as well as family members, community members and citizens. Under circumstances of intensified work conditions, effectively balancing the demands of these roles presents an acute challenge. Again, while it is apparent the principal causes of these pressures are related to organisational design and management, professional development needs to be alive to these multiple identities and recognise that managing and balancing these demands is in itself an increasingly critical skill.

5 **Establishing a new psychological contract**

The ‘psychological contract’ describes the implicit, informal bargain between a worker and their employer that is often thought to underpin the formal employment contract and account for the level of commitment of an employee to their organisation (Rousseau 1995). According to the psychological contract, a worker expects that they will be treated in a certain way by their employer in exchange for their commitment to work assiduously for the organisation. Where the psychological contract might be breached, for example because the employer has not lived up to their part of the bargain, then the performance and motivation of the worker will normally be thought to decline.

The traditional psychological contract that underpinned traditional forms of employment was thought to be based on a worker agreeing to work dutifully and faithfully for an employer in exchange for a secure permanent job, with satisfactory pay and some opportunity for promotion and development within the organisation. In what Peter Cappelli (1999) describes as the ‘new deal at work’ this historic bargain has been broken. As the foregoing analysis makes clear, organisations are now less able to guarantee any meaningful level of security of employment, even for valuable knowledge workers. The new deal at work can offer workers only the promise of the chance to learn and develop new skills at work; skills and experiences that might then be valuable in the external labour market.

While the new deal at work might be seen to be sufficient for workers who are given the opportunity to learn new skills, the trends in knowledge management discussed earlier might be serving to compromise the terms of the new deal. To the extent that knowledge workers are asked and expected to share their knowledge, whether through participation in formal knowledge sharing activities, contributions to organisational knowledge repositories, or the codification of their techniques into best practice manuals and standard operating procedures, the value of their accumulated learnings might be lessened. From this perspective then, developing knowledge sharing behaviours is not simply a matter of professionals learning how to share knowledge, or of understanding the organisational benefits of knowledge
sharing. The most challenging issue is to understand the terms on which professionals might be encouraged to share their most valuable resource – knowledge – when the rewards offered by the ‘lean and mean’ organisation are so limited.

References


