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Nurturing occupational expertise in the contemporary workplace: an ‘apprenticeship turn’ in professional learning

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Abstract

This chapter argues that the organisation of and support for early career professional learning would benefit from an ‘apprenticeship turn’ to enable the development of more overt and robust forms of socio-material support for professionals in contemporary workplaces. It draws on case study research in a range of occupational sectors to argue that apprenticeship offers a supportive scaffold for early career professionals to enable them to develop their expertise. **An ‘apprenticeship turn’ would bring both the individual and organisational dimensions of the apprenticeship model of learning into play, thus effecting workplace as well as individual transformation.**

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Introduction

If the use of the term ‘apprenticeship’ in a book about professional learning seems odd, this is because apprenticeship tends to be regarded as an institutional component of national education and training systems. Yet, its original conceptualisation as a model for developing and refining occupational expertise (through work-based practice) explains why references to apprenticeship still form part of the vocabulary used by many professionals to describe the way they learn (Fuller and Unwin 2010a and b; 2013). In this chapter, we argue that research in and the organisation of and support for early career professional learning would benefit from an ‘apprenticeship turn’ to enable the development of more overt and robust forms of socio-material support for professionals in contemporary workplaces.

As a model of learning, apprenticeship is formed by the interrelationship of pedagogical, social and institutional characteristics which provide the affordances to enable the apprentice to grow as an individual through contributing to and benefitting from the collective endeavour of the workplace. Thus, apprenticeship embraces the concepts of individual agency and identity, without losing sight of the equally important dimension of context. Using apprenticeship as a lens enables questions to be raised about the extent to which the important role that maturation and socialisation play in the formation and refinement of professional expertise is being undermined in two ways. Firstly, early career professionals are entering workplaces where work is increasingly organised as a response to efficiency and competitive imperatives emanating from the wider productive systems within which the workplaces sit. Secondly, the continued emphasis on a front-loaded model of education and training ignores the need for scaffolding structures within the workplace to support continued professional development.

An ‘apprenticeship turn’ aligns with the concept of the ‘practice turn’, which, as Boud (2010:29) has argued, “gives new respect to and also problematises practice” at a time when long-standing assumptions about the relatively stable nature of professional practice and professional identity need to be challenged. Boud identifies three reasons for the ‘practice turn’: a) the acknowledgement that professional work is a collective endeavour (and reflected in the call for a ‘relational turn’ in professional work as advocated by Edwards 2010); b) because “high-level demanding work is not held together by professions or disciplines but by the nature of work itself” (ibid:31), many professionals work in and across multi-disciplinary and often trans-disciplinary groups that are formed and reformed to meet the needs of the work in question; and c) because professionals now often co-construct goods and services

with ‘clients’, the identity of the professional as **the** expert is becoming unsustainable (see also Bishop et al 2009.) In the midst of this turbulent activity, early career professionals need to find firm ground on which to stand whilst they develop their (multi-faceted) expertise. As Fenwick et al (2012:3) argue:

...a core challenge for professionals is to maintain continuity in professional work. This requires stabilisation of knowledge and practice. An emerging question is thus how stability is achieved in practices characterised by multiple knowledge sources, strategies and concerns, while enabling innovation.

The chapter draws on case study research to argue that apprenticeship offers a potential way forward in providing a supportive scaffold for early career professionals to enable them to develop their expertise.

Structure and agency in creative tension

Studies of professional learning are now more likely to acknowledge the importance of context and the impact on professional identity and autonomy of new forms of managerialism, particularly in the public sector. Evetts (2002) has highlighted the shift away from the notion of the professional as a fully autonomous expert to one who seeks ways within the structures in which they operate to find opportunities to exercise discretion (see also Beckett and Hager, 2001). In their research on nurses, Nerland and Jensen (2012), building on the Foucauldian approach of Tobias (2005), argue that it is through being deeply embedded in their epistemic practices and the associated epistemic networks that they can avoid being constrained by structures.

Whilst these arguments are important, they may perpetuate the stereotype of the professional as ‘hero’ battling the system. We argue that a more holistic approach is required, one that brings together the agency of individuals and the relational process of learning and working with colleagues and clients in what Cook and Brown (2005) have called a ‘generative dance’ with the organisational structures in which professional work takes place.

During research in a wide range of occupational sectors in the United Kingdom (UK), we drew on the economic concept of the productive system as an analytical tool for examining

how organisations of all shapes and sizes are affected by the structures and stages of production governing their activities (see Felstead et al, 2009, for a detailed analysis). The structures of production form the vertical axis of the productive system. An automotive manufacturing plant making doors and wheels for cars in one country, for example, might be owned by an organisation in a different country and hence, there will be structural layers above the workplaces where the doors and wheels are produced. The extent to which the engineers, managers and supervisors can exercise discretion in the way work is organised and conducted in the factory will be subject to pressures exerted from far up the structural axis. In contrast, an employee-owned architectural practice may sit at the top of its structural axis, though it will be subject to and very mindful of regulatory requirements imposed by bodies sitting to the side of the axis. Even the freelance professional will be affected by the productive systems of the client organisations for whom they work. These structural frameworks determine the nature of the employment relationship for full-time, part-time and project-based practitioners (see Rainbird and Munro 2003).

The stages of production form the horizontal axis of the productive system and encompass the flow of work and materials for processing, whether patients in a hospital, students in a university, cases in a law firm, or raw materials in a manufacturing plant. In professional work, the management of the stages of production determines the extent to which individuals and teams have sufficient time and resources to complete their part of the overall process to a standard they believe to be right. When timescales are squeezed, often due to pressures being exerted in the vertical axis, professionals come under stress and the effects are felt throughout the whole system, including in the relationships with clients (see Jewson et al 2008). Early career professionals can be caught in the crossfire as the productive system buckles, leaving them insufficient time and space for the maturation process that is central to the development of expertise.

Creating the appropriate conditions for early career professional learning needs to begin with an understanding of the productive system in which that learning takes place. By exposing the characteristics of the productive system, it becomes possible to identify the points at which early career professionals will need to be given greater or lesser amounts of support, and afforded more discretion to take on more responsibility and be subject to great risk. We have argued (Fuller and Unwin 2003) that the positioning and treatment of apprentices in an

organisation provides a valuable window on its understanding of the workplace as a learning environment. This is because the very presence of an apprentice necessitates that attention be paid to the creation of a programme of activities both inside and outside the workplace that will enable the apprentice to grow into becoming an expert in their own right. The central tension rests in finding the right balance between engaging the apprentice in productive work and allowing time for reflection and the learning of theories and concepts that underpin occupational practice. The trick here is to create a programme that takes account of each individual's capacity whilst providing a framework of support that can weather the worst storms emanating from turbulence inside the productive system, thus achieving the stability advocated by Fenwick et al (2012).

Apprenticeship as a model of learning

There are four dimensions to the apprenticeship model of learning which resonate strongly with the needs and experiences of early career professionals:

1. *Pedagogical dimension* - the workplace views the work and development of the apprentice through a pedagogical lens. A workplace curriculum is constructed, made visible and enacted through the apprentice's participation in authentic and relational work with colleagues (and clients). Feedback and the modelling of the career trajectory are central to the manager/supervisor's role. In addition, to use Wenger's (1998) terminology, apprentices also 'disengage' with the workplace, to acquire knowledge beyond the immediate needs of the job and/or scope of the organisation and develop a critical capacity leading to individual transformation (see Guile 2010; Engeström 2001)
2. *Occupational dimension*- the apprenticeship functions to initiate the individual in to an occupational community, defined by the solidarity formed around shared knowledge, skills, values, customs and habits. In the case of early career professionals, it is this dimension that is critical for providing a sense of stability. The pedagogical dimension, as described above, ensures that stability does not restrict the innovative capacity of the apprentice or early career professional.
3. *Locational dimension*- apprenticeship is an outward symbol of an organisation's commitment to providing opportunities for skilled employment supported by substantive training for young people living in the same area as the employing organisation. Whilst recruitment, management and the carrying out of the work itself have all become less

spatially specific, most work activity still has a locational dimension, even in cases of workplaces governed by multi-national organisations. In the case of organisations providing professional services (for example, hospitals, law and accountancy practices, and schools, colleges and universities), this locational and civic dimension gives rise to obligations which underpin their reputation and socio-economic standing in the community . For individuals who are less locationally anchored, professional networks and associations can provide a means of staying connected to the dispersed occupational community, enabling them to reach their potential within the spatial configuration of wherever the work takes place, including in the home or on the move (see Felstead et al. 2005)

4. *Social dimension* - the quality of its apprenticeships is one of a number of litmus tests of an organisation's public image (locally or globally). Recent negative reports in the British media about organisations running unpaid and exploitative internships highlight the strength of feeling among members of the general public when they suspect that young people striving to enter the labour market are being mistreated (Wood 2011; see also Grugulis and Stoyanova 2012). At a time when corporate social responsibility matters to organisations in both the public and private sectors, being able to demonstrate a commitment to supporting the next generation brings rewards.

These four dimensions complement the productive system concept by connecting the pedagogical and occupational characteristics of apprenticeship to the organisation's position within the society or societies in which it is physically, virtually and operationally located. In the next section, we illustrate how this relationship works to the advantage of all stakeholders when apprenticeship is organised along what we have elsewhere conceptualised as 'expansive' lines (Fuller and Unwin 2003; 2004; 2010b).

Learning as apprentices in expansive environments

Through our research across a range of workplace and sectoral settings, we developed the concept of the 'expansive-restrictive continuum'. Organisations that regard workforce development as a vehicle for aligning the twin goals of developing individual and organisational capability create expansive learning environments. Due to the nature of their

productive systems, however, sustaining and enhancing such environments is challenging, regardless of the size or nature of the organisation and, hence, all organisations (and/or workplaces within them) move within the continuum. Apprentices who find themselves in organisations closer to the expansive end of the continuum will find their apprenticeship is underpinned by a number of key features not found in organisations closer to the restrictive end. These features include:

- The apprenticeship is embedded within the broader business plan of the organisation
- The organisation protects the identity of the apprentice as learner and worker throughout the apprenticeship
- The apprenticeship reifies time for disengagement from productive work and for apprentices to cross work boundaries
- The apprenticeship has a clear end point signified by the achievement of some form of certification to mark that a recognised level of expertise has been reached and that the apprentice can move to the next stage of development.

One of the organisations, in which we have carried out research, runs an apprenticeship programme that epitomises these expansive features. It is a medium-sized company (around 700 employees) manufacturing bathroom showers. Here, we met Peter, a young man in his early twenties who had completed an apprenticeship in engineering and was given a permanent job in the company's special projects department as an 'ancillary project engineer'. Peter was working with five colleagues on a project to redevelop one of the company's 'power shower' models. He reported to the project team leader and underwent a monthly performance review and development session with his line manager. In addition, he had been given sole responsibility for reclassifying the parts of the previous power shower model as 'old spares' and for moving these to a 'spares cell'. When showers are superseded by new versions, it is company policy to make spare parts available to customers for a period of 10 years after the line has been discontinued.

Peter told us how his career progression in the company and in the wider labour market was dependent upon three interconnected and formalised elements of his programme of development, starting with the apprenticeship and now post-apprenticeship: a) gaining increasing work experience; b) proving his ability at each level; and c) gaining further nationally and occupationally recognised higher level qualifications (to degree level) to

signal his growing knowledge base beyond that established through the apprenticeship. At each stage, from the beginning of the apprenticeship through to the point when we met him, when he was now seen as an early career professional, Peter had been guided by more experienced colleagues, who monitored his progress and formally recorded how and when he should be given more responsibility.

Professional learning as a fragile endeavour

We now contrast Peter's experience with a group of early career researchers in the fields of biological, experimental and social sciences in an English elite university whom we interviewed and observed over a period of two years. We begin by describing where the researchers sit in the university's productive system. The university is governed by a Royal Charter and so is technically an institution independent of government, though partly funded by government. Since the 1980s and, in particular, since the 2004 Higher Education Act, universities have become subject to more intense monitoring and accountability regimes exercised by central government and its agencies. It has complex managerial structures which are extended and hierarchical. The early career researchers we studied sit near the bottom of the institutional hierarchy. Above them sit, lecturers, professors, department and faculty heads, and senior university level management. Like their thousands of counterparts in the British higher education system, these researchers are paid from externally funded research grants and, hence, are known as 'contract researchers'. They are employed on fixed term contracts determined by the length of the project. In 2006, there was a major jolt to the productive system when the European Commission introduced new legislation to reduce the use of fixed term contracts, thus forcing universities to pay much more careful attention to the career and employment prospects of this highly vulnerable category of staff. This led to the creation of 'open-ended' contracts, which mean that, if a project is coming to an end and a researcher has been employed for at least four years, then alternative work should be found, for example in another department.

The university in our study was making considerable effort to use the new legislation as a catalyst for improving the employment conditions of contract researchers because it realised that there were business advantages in trying to solve a personnel problem. The Human Resources director told us:

...if we can get it right then we will be able to both attract and retain very good people which is just absolutely critical to the future of the institution... however, brilliant the PI [Principal Investigator] is, they need to be surrounded by really really good researchers because actually it's the dynamic of all that that works...

Other studies of contract researchers (see, inter alia, Roberts 2002; Allen-Collinson 2003) have highlighted the problems they face. As well as job insecurity and a sense of being seen as 'second class' as compared to their colleagues in established posts, these researchers complain strongly about the lack of robust structures to enable them to develop their careers. When we began our study, we became acutely aware of how much the plight of these researchers resembled that of apprentices we had studied in a range of restrictive environments. We now turn to the four dimensions (pedagogical, occupational, locational and social) presented earlier in the chapter to examine how far the contract researchers could be said to be supported by any form of apprenticeship-style framework and to what extent the managers of the researchers are able or willing to exert agency within the productive system of British higher education.

Pedagogical and Occupational Dimensions

The starkest evidence of the restrictive nature of the researchers' professional environment relates to the way in which many of the researchers we interviewed and observed were positioned in a 'master—servant' style relationship with the colleague who controlled the research grant. Known in the British higher education system as the 'Principal Investigator' and referred to colloquially as the PI, the grant holder is in a position of considerable power.

It is here that the importance of having a productive system analysis needs to be asserted. A personnel officer in the university, who was attempting to encourage PIs to pay more attention to the career development needs of their researchers, said:

I can think of one department where the researcher just has to do the work: [the supervisor asks], "what do you mean look at their future career?" "What do you mean give them time to go to a workshop?...Well that's crazy who's going to do the project?" You know it's almost a factory mentality. (Personnel Officer)

This encapsulates the pressures facing the PIs who, on the one hand, have to ensure they meet the demands of the funders of their research as well as other demands related to the performativity measures that impact on British universities, whilst, on the other hand, being expected to accept responsibility for the career development of their junior colleagues. Many of the PIs will themselves have once been contract researchers or post-doctoral research assistants and so will know only too well what it was like being in the ‘servant’ category. Some PIs will have experienced expansive forms of a researcher apprenticeship, but many will be modelling the restrictive practices that they experienced. It should also be stressed that some PIs will have only recently ended their apprenticeship and taken the leap from servant to master.

Although the blame for the PIs’ behaviour might be laid fully at the door of the productive system, there are, however, questions to be asked about the way universities allow that productive system to fashion the way work is organised and managed within their institutions. For example, whilst many universities will have personnel guidelines that stress the importance of PIs (as line managers) taking responsibility for the career development of their researchers, they could do far more to support the PIs in achieving this. Although the researchers in our study ranged in age and experience (as would be the case across higher education in Britain), they are positioned as apprentices in occupational terms. The goal they all strive to achieve and that marks the end of their apprenticeship is to conceive and submit research proposals in their own name to funding bodies. This signals that they have made the transition from being apprenticed to being autonomous, independent professionals with the necessary expertise to be trusted by their managers. As Fox (1974) has argued, it is much harder to generate a trusting environment in workplaces where power is unequally distributed. Generating trust requires managers to afford individuals and teams the discretion to conceptualise, carry out and evaluate their work tasks, and it is this affordance of responsibility that is both a hallmark of the professional workplace and also central to the way in which professionals continue to develop and refine their expertise.

The contract researchers in our study commented on the limited amount of discretion they had and the lack of opportunity to move beyond the stage of carrying out tasks assigned to them, as illustrated in this quotation from a scientist:

Well because I'm contract staff...I have to do what I'm told. So in terms of research, well my boss specifically is very sort of hands-on...So it's a question of going to her and asking exactly what you're going to be doing in the experiment that day...

We did find evidence of PIs who afforded their researchers considerable levels of discretion, but this required working against the grain of the productive system of higher education, as illustrated by this comment:

...So we're going to put this[proposal] in....I told my ex-boss about this, you know said, this guy wants me to be on it.. and I was like well it's completely my project anyway...but he rang up my colleague in this other institution and said that if [researcher's name] goes on that grant then I'm pulling the plug on this whole thing... So my name gets scrubbed off and his name got put on it...'

In occupational terms, universities are faced with a curious dilemma in their approach to contract researchers. On the one hand, they need some of these apprentices to become autonomous experts to build the next generation of PIs, but, on the other hand, they also need a substantial army of operatives to ensure projects are completed. This leaves many contract researchers in the difficult position of being perpetual apprentices, as this quotation illustrates:

...they put your CV in a box a year or so before your contract's due to end and then they try and find you an alternative position within the department to avoid making you redundant...but it's difficult to do that because people that work in a particular group obviously have particular specialities and it's, I mean skills are definitely transferable, but it's still going to take a lot of training up for some postdocs to shift from one lab to another...So it's really not as easy as kind of transferring from one lab to the other... it's nice to learn a brand new technique within your own field, but to go into somebody else's field completely unknown, that you've never worked on before at all, and then just effectively start from scratch again...

The university was clearly aware of this problem and had introduced training programmes and improved careers guidance to help the contract researchers with their occupational development. Ironically, however, and in contrast to an apprenticeship-style approach, this activity was largely regarded by researchers as a means to help them gain jobs in other universities. This perception was underpinned by the fact that the training and careers advice

were delivered by staff who worked in a separate area of the university from the academic departments. This relates to the point made above about the absence of an official duty of care on the part of PIs to take direct responsibility for nurturing the career trajectory of their researchers. The resources for and attention to the generic aspects of career development are certainly present in the university, but they are divorced from the actual workplaces within the university where staff develop their specific expertise. This creates a fracture between the organisational goals of the university and the way work is organised.

Locational and Social Dimension

Due to its history, the university has a civic identity in the city in which it is located, but as an elite research-intensive English university, it also sees itself a global player. Like other elite universities, it has to manage the potential tensions between maintaining a civic identity and its global ambitions. The danger with the latter is that they can encourage universities to prioritise the global over the local and, therefore, to downplay their physical and historical foundations (see Goddard 2009). The contract researchers are very aware that they will have to be prepared to move if they want to pursue not just an autonomous academic career, but also to sustain their employment as a contract researcher. This is particularly true for researchers in the natural, experimental and biological sciences where it is expected that researchers will spend time with different research groups in a range of institutions. In this, they are different to the classic apprentice who is regarded as being a central part of the future of the organisation in which they work. As we saw in the previous section, the university provides resources to help contract researchers manage their careers and encourages them to attend training courses, but the emphasis is on moving to another organisation. Moreover, and again in contrast to an apprenticeship model, the separation of professional development from organisational goals (from the locational dimension) means that the university does not have a strategy for moving its early career professionals on from the status of, in Lave and Wenger's (1991) terms, legitimate peripheral participants.

Mobility was central to the medieval concept of apprenticeship. On completion of their initial training, an apprentice became a journeyman (sic) who could now sell their expertise without being beholden to their master, though they would still be part of their occupational community of practice (the guild). Thus, apprenticeship was the vehicle for sustaining and expanding the craft or trade as a whole. As the patterns and organisation of work changed

through industrialisation and bureaucratisation, apprenticeship became the vehicle for embedding individual development within organisational strategies for sustainability and growth. Some professional communities reflect both this transition to an organisational approach whilst also maintaining a strong sense of being a community of individual experts, as in the case, for example, of small-scale accountancy, architectural and legal practices that are found in towns and cities in many countries.

There are still, of course, examples of the journeymen (sic) of the past such as the freelancers in the media, design, and consultancy sectors. Our concern here is with early career professionals who work within organisations that can and should have a responsibility of care for their career progression. In the case of the contract researchers, our evidence suggests that they are in a vulnerable position because their employers have not sufficiently thought through how to combine the local and social dimensions that make the apprenticeship model of development so robust. When attention is paid to these dimensions, employees in a transitional category (e.g. apprentices, interns, graduate trainees, and early career professionals) are regarded as being in transition in an occupational rather than an organisational sense. In other words, they are treated as if they are going to stay with the organisation even if the reality is they will move on at some point. As such, they will reflect well on the organisation and enhance its local civic, and sectoral (and in the case of some organisations even their international) reputation.

For many early career professionals, the expectation of mobility clashes with their personal and social aspirations, as well as the lived reality of their social characteristics. Gender, ethnicity, and family circumstances are important here, and, given the extended nature of the transition from education to the labour market that is now a common feature of advanced economies, age has also become a factor challenging the concept of the mobile professional. In our study, both male and female researchers were particularly concerned about their capacity and/or willingness to buy into the mobility game, and were fearful that they faced years of short-term contracts which would impede their chances of putting down roots and having children.

Our evidence suggests that there are weaknesses in the ability of existing approaches and practices to scaffold individuals beyond the last (post-doc) stage of their apprenticeship and into the role of independent researcher generating their own projects. Part of the problem is that there is a shortage of the sort of research posts that allow holders to make their own

applications. However, there are two further questions relating, first, to whether PIs recognise that the ability to generate ideas and translate them into fundable research proposals is a skill that their researchers need support to develop; and, second, the extent to which PIs have been trained and encouraged by institutions to provide their researchers with the professional development they need to make the transition from ‘post-doc’. A goal of renewing and strengthen universities’ local social and civic missions would be one way of helping to generate the sort of underpinning organizational culture likely to generate a more expansive approach to the development of early career professionals and the workforce as a whole.

Conclusion

Despite their initial professional skill formation through completion of undergraduate and postgraduate programmes, the contract researchers discussed in this chapter still entered the workplace needing mentoring, training and ongoing support and commitment from the organisation and its experts to complete their transition to independence. As novices, researchers need help, but they find themselves in an asymmetric power relationship with the PI. Their ability to integrate into the established academic community and progress toward autonomy is closely tied to the willingness and capacity of the PI to take on this responsibility by, for example, building researchers into their networks. Conceptualising and articulating the relationship between a PI and a contract researcher in terms of ‘expert’ – ‘apprentice’ rather than ‘master’ – ‘servant’ is more likely to invoke an apprenticeship pedagogical approach where teaching is an integral and accepted part of the managerial role and reflected in the social relations of producing research. Whilst the structures and stages of production in the contemporary higher education sector in the UK help explain the fracture between organisational goals of the University and the way research work is organised and distributed, utilisation of an (expansive) apprenticeship approach would help repair that fracture by reducing the likelihood of variable and even exploitative practice.

We have argued that the pedagogical and occupational dimensions of apprenticeship could provide a framework of support for new professionals that was lacking for the contract researchers and we referred to the experience of Peter, the early career

engineer, as an illustrative example. Elsewhere we have discussed at more length another case which explored how a company deliberately set out to create a stable environment within which to develop and nurture the expertise of its newly recruited and novice software engineers (Fuller and Unwin 2010b). Key to this was the way the social relations of production were organised to ensure that newcomers were incorporated into project teams as part of their planned trajectory over time to project leader status. Coupled with this, an apprenticeship approach to teaching and mentoring was articulated and practised as core aspects of the manager's role and responsibility for less experienced staff. The organisation's competitiveness was associated with its system for generating high level technical competence and also creative and innovative ideas and solutions. Interestingly, the founders of the organisation had introduced a model of employee share ownership which they believed created and supported a stable and high trust organisational environment in which they could grow their own highly skilled and innovative workforce. The software engineers we spoke to made the link between their ability to be creative professionals and their sense of feeling 'safe' in the organisational culture.

In conclusion, therefore, we propose that apprenticeship, when viewed as a model of learning and support for the development of occupational expertise, is as relevant to early career professionals as it is to intermediate or technician level workers. This is not to suggest, of course, that all apprenticeships provide high quality teaching and learning experiences; or that they all allow individuals to make gradual and effective transitions to skilled status and constitute a platform for ongoing education, training and career progression. The concept of the expansive – restrictive continuum provides a tool for analysing the highly variable forms of apprenticeship experienced by individuals in different organisational contexts. Identifying the pedagogical and organisational features that give apprenticeships their more or less expansive character offers a lens through which to think more generically about how the development of expertise for the professions can be supported in contemporary institutional and occupational scenarios.

In considering these issues, we have tried to respond to Fenwick et al's important question about how the necessary stability for 'maintaining continuity in professional work' can be achieved by suggesting that an apprenticeship approach is part of the answer. Writing over twenty years ago, Streeck (1989: 99) pointed out that:

... 'pre-modern' institutions with their higher mutual interpenetration of functions and social arenas often seem to perform better in a period of change and uncertainty than 'modern', functionally differentiated institutions.

Apprenticeship has proved itself to be a resilient model of learning that has continued to adapt from its 'pre-modern' origins in response to changes in work and the way it is organised, as well as to social and cultural change. As a labour market institution, to use Streeck's term, apprenticeship could provide a more robust model for supporting the development of occupational and professional expertise, particularly now given the volatile nature of many professional settings. As we noted at the start of this chapter, an apprenticeship approach does underpin the way professional expertise is developed, particularly in fields such as medicine, law, teaching and music, though this tends to be implicit rather than explicit. An 'apprenticeship turn' in relation to the development and support of early career professionals would bring both the individual and organisational dimensions of the apprenticeship model into play, thus effecting workplace as well as individual transformation.

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