Introduction

The creative and cultural sector has been recognised since the mid-1990a as making major contribution to the UK economy and as a sector which many young people aspire to enter (DCMS, 1998)[1]. Because New Labour assumes that qualifications are the 'magic bullet' that guarantees employability in the knowledge economy (Keep, 1999), the government has concentrated on strengthening academic and vocational qualifications in order to support learners' aspirations and employability in the sector (DfES, 1997; 2004)[2]. Recent research has shown, however, that academic and vocational qualifications struggle to facilitate access and learning and employability in the creative and cultural sector, because employers are not convinced that graduates have developed, or that the Advanced Apprenticeship Programme (AAP) develops, the forms of 'vocational practice', that is, combination of knowledge, skill and judgement which they are looking for (Guile, 2006).

In the case of the vocational qualifications, specifically the focus of this article – apprenticeship uptake is sluggish. This is partly because the government rhetoric about the flexibility of the AAP amounts to little more than an opportunity for employers to tailor the AAP Blueprint, rather than to design apprenticeships according to their needs. These concerns are compounded because many employers perceive the mandatory qualification outcomes in the AAP's blueprint – National Vocational Qualifications (NVQs), Technical Certificates (TCs) and Key Skills (KSs) as serving 'educational' goals because they are promoted by the DfES to enhance academic progression, rather than as genuine attempts to develop the sector-specific vocational knowledge and skill that they feel it is important for apprentices to develop (Okumoto, field notes). This reluctance to get involved with the AAP does not mean that employers in the creative and cultural sector are un-interested in training at Level 3, rather that they are distancing themselves from the existing emphasis in the AAP on NVQs, TCs and KSs as well as the administrative burden of participating in the programme. They would prefer, as our research and research from organisations such as *Skillscene*[3] who provide education and training support to the performing arts sector has shown, to design

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[1] The UK is ranked third in the creative economy behind America and Japan. The UK's creative and cultural sector generates revenues of around £115 billion and employs 1.3 million people. They contribute over £10 billion in exports and account for over five per cent of Gross Domestic Product (GDP) and, moreover, output from these sectors grew by more than twice that of the economy as a whole in the late 1990s DCMS, 2001).

[2] *Skillset*, *C&C Skills* and *e-skills UK* are currently developing the following qualifications for their respective sectoral niches. They are: 'General Qualifications' that aim to promote awareness about the creative and cultural sectors – such as GCSE and GCE A levels; 'Career choice Qualifications' that aim to inform and support career choice by offering practical or 'taster' opportunities – such as through the 14-19 Diplomas; and, 'Preparatory Qualifications' that aim to prepare learners for entry to employment such as the Advance Apprenticeship Programme and Foundations Degrees.

[3] 3 Skillscene is an industry-led organisation which aims to encompass and support skills development in the live arts. Skillscene is developing a modular qualifications framework to recognise work-based learning, ranging form basic entry level through to degree level and beyond (www.skillscene.com/about.htm).

'apprenticeships' in accordance with their own principles of skill formation, skill transfer and employability.

To understand why many employers in the creative and cultural sector distance themselves from the AAP, the paper compares and contrasts the AAP with the 'Technical Apprenticeship' (TA) that has been developed by Birmingham Repertory Theatre (Rep) through the auspices of 'The Last Mile' Project[4]. We start by tracing the changing notions of skill formation, skill transfer and employability that underpin the AAP, highlighting the very different interpretations of apprenticeship permitted within national apprenticeship framework. Next, we draw on material from our study of the TA to outline its approach to skill formation[5]. We then draw on a number of ideas and concepts from philosophy and sociocultural and activity theory to compare the two models of apprenticeship. Finally, we conclude by raising a number of questions and issues as regards the future development of apprenticeship in the creative and cultural sector and more widely in the UK.

Apprenticeships in the UK: from the industrial-relation via market-led and social inclusion models

To set the scene for our comparison of the AAP and Birmingham Rep's TA, we start by offering a brief overview of the development of apprenticeship in the UK which we describe this as a shift from an 'industrial relations' (I-R) model via a 'market-based' (M-B) model to a 'social inclusion' (S-I) model. In tracing the shifts we are primarily highlighting the changing assumptions about skill formation in apprenticeship, rather than providing a comprehensive account of all the features of apprenticeship associated with each model[6].

Industrial-relation model
During the post-war period, apprenticeship in the UK was an integral part of the national industrial relations framework. One of its main characteristics was that it functioned as a part of the 'collective *laissez-faire*' system of that era, in other words, 'the fluctuating mix of market forces, collective organisation and industrial conflict' (Ryan 1999, p. 41). The national

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[4] *The Last Mile* is a £13 million project funded through the EU's EQUAL Programme. It is looking at inclusion in the creative and cultural sectors in the following regions in the UK: Cumbria, London, Birmingham, Manchester, Sheffield, Slough, with special reference to the Black and Minority Ethnic population. The Birmingham Rep's budget for the TA was £271,762 over two years (Stuart Rogers, February 2007). This covered the cost of a Project Coordinator, wages for the apprentices, recruitment etc.

[5] The major method of data collection was semi-structured interviews, which included one-to-one interviews with six apprentices, six Head of Departments and the Project Co-ordinator, and group interviews with the apprentices and the Head of Departments over the two year period. In addition to interviews, apprentices were observed in the workplace. Interviews were conducted at around every quarter of the year, and extra meetings were held with the Project Co-ordinator whenever necessary. All interviews were recorded, summarised, and analysed thematically.

[6] See Gospel (1998) and Ryan & Unwin (2001) for a discussion of the changing industrial relations and funding issues as regards apprenticeship.

'culture of voluntarism' (Green, 1990) meant that successive governments were reluctance to impose legal obligations on employers to train and this, coupled with 'feeble public support for technical education, weak employer associations, marked social class divisions and low status for manual skill', resulted in the UK never developing strong institutional structures for VET (Boreham, 2004; Ryan, 2000).

The main features of skill formation in apprenticeship in the I-R model was a combination of 'work experience' and 'job training' and both were 'geared to helping apprentices to acquire a trade' (Ryan 1999, p.41). This combination of experiences enabled apprentices to progress along the continuum from novice to master work experience immersed apprentices into an occupational culture through a 'modeling' relation between those already adept in a craft/technical area and new initiates and study at a local college of further education enabled them to acquire craft or technical qualifications (Ryan and Unwin, check date)[7]. Skill formation generally took this form in apprenticeship in most countries in the post-war era because, on the one hand, the internal structure of craft (Gamble, 2001) and technical knowledge (Layton, 1993) was assumed to have a 'tacit nature' and was therefore acquired best through seeing a master perform the activities of the craft and/or technical field and thereby catching the implicit knowing of the vocation (Kvale, 1997). On the other hand, a recognition that apprentices needed access to scientific and technical knowledge which they could not acquire 'on-the-job' (Ryan *et al*, 2006).

In the stable economic conditions that prevailed in the UK until the early 1970s, , the combination of rites of passage (i.e. socialisation into workplace and adult roles) and learning a craft or technical trade tacitly was deemed to constitute the necessary and sufficient conditions for skill formation (Fuller & Unwin 1998, p. 154). At that time there was little discussion about either the need for flexibility at work or the transfer of skill by policymakers and researchers. This was partly because it was generally assumed that craft and technical work was similar in different companies, and partly because the debate about transfer in learning theory had not yet surfaced in the literature on apprenticeship. Consequently, there was an implicit assumption that the transfer of knowledge and skill from one context to another was a fairly un-problematic process and that jobs were 'for-life'.

Market-led model
When the Conservatives came to office in 1979 the I-R model of apprenticeship was in a fairly parlous state not least because the number of apprenticeships had dropped from 243,700 in the late 1960s to 53,000 in the early 1980s (Unwin, 2005). The Conservatives had

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[7] The introduction of Industrial Training Boards in 1964 resulted in some attempts to improve the quality and consistency of apprenticeship training, but these were abolished soon after Margaret Thatcher came to power in 1979 (Unwin, 2000).

historically placed a very low value on vocational education and training (VET) and as such had little interest in reviving apprenticeship. This position was a manifestation of their firm belief that the State should not interfere with firm's education and training practices (Lawson cited in Hutton, 1995, p. 187). This active disinterest in VET was compounded by the prevailing criticisms against the I-R model voiced by amongst others the Manpower Services Commission (MSC). The MSC condemned apprenticeship's 'time-serving rituals', proclaimed that it needed to be replaced by a focus on measurable outcomes (Hodkinson and Bloomer, 2002) and argued that the knowledge-based approach to the vocational curriculum enshrined in FE Colleges had lost contact with the main purpose of vocational education – the development of workplace competence (Young, 2006).[8]

In parallel to these criticisms of apprenticeship, there was rising concern across the political spectrum that UK firms were uncompetitive in the current market conditions and would struggle to survive in the emerging highly competitive global economy. Probably, the most famous and influential encapsulation of this argument was Finegold and Soskice's (1988) thesis about the 'low-skilled equilibrium'. They argued that poor training for both managers and workers led the majority of UK companies to produce low-quality goods and services and resulted in a poor national economic performance. In the case of apprenticeship the remedy was, according to, Finegold and Soskice, to revitalise it as a vehicle for the skill development of the workforce and as a means for employers to upgrade their product and service strategy, and this presupposed the development of more robust social partnership structures in the UK.

The Thatcher government embraced Finegold and Soskice's argument that VET is central to economic growth but believed that the most effective incentive for companies to train is to help them to develop greater 'knowledge and understanding of their skill needs' because employers' voluntary commitment to training will 'yield better and more cost-effective results' than government prescriptions (DFE cited in Senker 1992, p. 3-4). To secure employer involvement, the Government introduced 'quasi-markets' to foster greater competition and to stimulate greater efficiency and quality between further education (FE) colleges and private training providers (Keep & Mayhew 1999, page, 2-3), established organisations, known at the time as Industry Lead Bodies (ILOs)[9], to represent employers and to actively involve them in the design of National Occupational Standards (NOCs), and contracted the development of NOCs to private sector consultancies because they had little

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[8] The Conservatives also faced another pressing agenda – rising youth unemployment. 'The government became seriously concerned about the political implication of high unemployment' and did not feel that apprenticeship provided a solution to this problem and instead chose to introduce an entirely new 'vocational initiatives' such as the Youth Training Scheme (YTS), later renamed Youth Training (YT) and pre-vocational initiatives such as the Certificate of Pre-Vocational Education to address youth un-employment (Senker, 1992).

[9] ILOs were subsequently replaced by National Training Organisations (NTOs) and Sector Skills Councils (SSCs).

faith in FE colleges ability to appreciate employers' needs.

Employing a methodology known as 'functional analysis', the consultants introduced a new principle into VET qualifications, namely the specification of competence by its 'outcomes rather than by the means by which the outcomes are achieved' (Miller, cited in Mansfield & Mitchell 1996, p. 103). This emphasis on workplace competence, that is, what an 'employee was expected to do, not what they needed to know' (Mansfield & Mitchell 1996, p. 93) had a number of consequences. First, it replaced the concept of skill formation, that is, vocational pedagogy with the notion that learning could be equated with the accumulation of units of competence (Barnett 2006). Second, it resulted in knowledge only being deemed to be relevant in vocational qualifications insofar as it 'underpinned performance' (Young, 2006). Third, asserted that the assessment was an emancipatory process because it was based on a detached observation of workplace performance: 'based on assessments of the outcomes of learning', NVQs can be achieved 'independently of any particular mode, duration or location of learning' (NCVQ and ED cited in Burke, 1995, p. 63).

In light of the conventional wisdom of the time that employability in future depended on the acquisition of more flexible and less occupationally-specific skill sets (Reich, 1990), the consultants made a two-fold argument about the relevance and transferability of NVQs. First, that it was possible to identify common skills in different work areas, those skills could be included within common functional NVQ units, and that these units were applicable in different sectors. Second, that people mainly learn by copying or imitating accepted patterns of workplace performance. Taken in combination, these assumptions about human behaviour led the consultants to conclude that:

> people would be able to transfer from occupation to occupation through the achievement of common units and elements of competence, which would offer coherence in the national system of NVQs (Mansfield & Mitchell, 1996, p. 237).

These assumptions became the cornerstone for the revitalization of apprenticeship in the form of the Modern Apprenticeship (MA) and continue to have a significant influence on the design of the AAP.

The MA was launched in 1994 as a new market-led and outcomes-based scheme to provide employers with skilled intermediary level workers (Gospel, 1998; Steedman *et al*, 1998). The MA was characterized from the outset, however, by a number of tensions. One tension was between the behavioural assumptions about learning that underpinned NVQs and the cognitive assumptions which underpinned ideas about the value of core (now key) skills such

as literacy, numeracy, Information Technology, problem-solving, team working etc, in education and in the workplace. The former emphasized conformity to a pre-given standard while the latter were assumed to offer employers, employees/learners a 'shared language' to facilitate the transfer of competence from one context to another (Mansfield & Mitchell, 1996, p. 236) and to support higher level study and progression into higher education (Gospel, 1998, p. 442-3). Another tension was between the idea that knowledge was only relevant in vocational qualifications to the extent that it underpinned competence and the widespread recognition that this was an unduly narrow conception of the role of knowledge in the context of a knowledge economy (Fuller & Unwin, 2002; National Skills Task Force, cited in DfEE, 2000; Modern Apprenticeship Advisory Committee, 2001). Thus, the MA was forever trying to square the circle between the then Conservative government's desire to reassure employers about the standard of competence represented by NVQs and the government's concern to prepare develop a less occupationally-specific and more flexible workforce. Furthermore, the tension between knowledge

Social inclusion model

Against this background, New Labour announced not long after its election 'a further reform and expansion of the work-based route as the primary vehicle for "upskilling" new entrants to the UK workforce' (Payne, 2002, p. 264; p. 266). The government's underlying intention was to reduce the population of 'status zero' (those young people not in education, employment or in receipt of benefits) (Payne, 2002, p. 266) by putting them into work-based training. This new policy focus meant that apprenticeship was now expected to play a major part in combating 'social exclusion'. The strategy, as Fuller and Unwin (2003b, p. 22) observe was:

> a continuation of the same policy of social inclusion which has governed youth training schemes since the early 1980s. The strategy has been to concentrate on volume, in terms of apprentice numbers and participating sectors, rather than on skill formation in those sectors which might be said to be important for economic growth.

Apprenticeship was defined in the *Blueprint for Apprenticeships* (2005) as 'a model for a holistic learning process', which 'should be directly accessible to those from age 16 who possess the required entry criteria' (LSC, 2005a), and offered as Level 2 and Level 3 qualification. By learning the Blueprint meant, that apprenticeship would serve an educational purpose as 'an alternative progression route from school to higher education' and a vocational purpose as a method of developing a 'wide range of job-specific and transferable learning' (LSC, 2005a), rather than as a model of skill formation within specific occupational areas. Furthermore, the inclusion of Technical Certificates (TCs) in the Blueprint *to ensure that the knowledge-based elements of NVQs were formally taught and tested was primarily a strategy*

to support progression, rather than as a strategy to develop an occupationally-specific knowledge base (Barnett, 2006).

Learning through apprenticeship

Despite the Blueprint's rhetoric about the educational and social value of apprenticeship, the lack of any guidance to employers about skill formation and the reliance on qualification outcomes as indicators of learning and employability has continually dogged apprenticeship since the inception of the MA. There is a considerable volume of evidence that a considerable number of firms choose to use funding for apprenticeship to perpetuate a modern version of the low-skill equilibrium, rather than to up-skill their product and service strategies through the introduction of innovative modes of skill formation. Fuller & Unwin (2003; 2004) have consistently demonstrated the marked difference between those employers who provide 'expansive' apprenticeships, that is, rich and varied environment for apprentices to learn-on-and-off the job so as to broaden and deepen their knowledge and skill as opposed to 'restrictive' apprenticeships where employers elect to engage in the most limited way possible with the elements of the blueprint, often with the result that apprentices fail to complete (Fuller & Unwin, 2003a; 2003b). More recently, Ryan *et al* (2006) have highlighted considerable sectoral variations as regards the education and training component of apprenticeship, in particular, the significant differences in the engineering and telecommunications sectors to the amount of time allocated to education and training and the greater degree of attention given to skill formation compared with the retail sector.

Nevertheless, despite many employers' un-doubted commitment to designing and expansive apprenticeships to enhance their product and service strategies, this model of skill formation has primarily been developed in accordance with the existing apprenticeship frameworks rather than on the basis of different principles. Because the funding for the Blueprint precludes any deviation from its mandatory elements, employers who want to develop alternative models of apprenticeship are forced to self-fund their ambitions or to seek funding from alternative sources. We now consider such a development.

Birmingham Rep's Technical Apprenticeship (TA)

Background to the TA

Birmingham Repertory Theatre (The Rep) was the first repertory theatre[10] in England established in 1913. Up to the mind-1980s most repertory theatres employed their own artistic director, technical and production staff and a small company of actors. Nowadays, repertory theatres tend to audition for each production separately and present a season with each play

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[10] Historically, repertory companies toured the UK offering programmes of production in which the same group of actors performed in different plays that alternated with each other (Rowell & Jackson, 1984).

generally having an unbroken run of between three and six weeks[11].

The mission of the Rep is:

> To develop, produce and present a range of theatrical experience of international quality that will entertain, enlighten and engage with the maximum number of people of all ages and communities from Birmingham and the surrounding region (Stuart Rogers, Executive Director, interview, May 2005).

It has adopted this strategy:

> To fill in the gap in the market in Birmingham and the West Midlands in terms of theatres. Birmingham hasn't traditionally seen a wide range of contemporary plays (Stuart Rogers, interview, May 2005).

In pursuing its mission, one of the obstacles Birmingham Rep in common with other repertory theatres, has faced had been 'a shortage of technical staff' (Stuart Rogers, interview, May 2005). Aware of skill shortages in theatre, broadcast media and outside events, Birmingham City Council's Economic and Development Department invited the Birmingham Repertory Theatre to participate in *The Last Mile* (TLM) Partnership. One of the attractions of TLM, for the Rep, was that it was funded through the EU EQUAL Programme. This gave the Rep access to European Social Funding (ESF) and therefore the freedom to design a bespoke two-year apprenticeship which reflected its interests and values rather than having to work within the strictures of UK apprenticeship frameworks[12]. The Rep felt that the former was not suitable:

> because it was more bounded by the rules of the education sector then by the rules of the industry… its inflexible time frame would not allow apprentices full immersion in theatre life (Stuart Rogers, interview, August 2006).

The aim of the TA[13] is to create a modern culturally diverse and inclusive traditional craft apprenticeship which reflects the realities of the new work context in which it operates. To realize its vision, the Rep appointed a Project Coordinator, John Pitt who had worked as Production Manager previously in the Rep as well as having extensive knowledge and

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[11] The gradual institutionalization of such companies in towns and cities in the UK throughout the last century resulted in the emergence of a national system of repertory theatres There are approximately 40 producing theatres across the UK, of which Birmingham Rep is one of the largest (Rep Homepage).

[12] The Rep decided to design its own apprenticeship on the cusp of the publication of the Blueprint for the AAP. It criticism of the then framework for the Modern Apprenticeship still apply to the AAP.

[13] Six occupational areas covered by the TA were: Wardrobe, Wigs and make-up, Lighting and electrics, Sound, Stage technician and Stage management. The apprentices appointed to the scheme had a mix of Level 2 and 3 qualifications.

experience in training and development. The nature of the production in the theatre industry, as John notes, has changed profoundly over the last 20 years because there are:

> fewer reps and increasing co-productions. It's not about having a permanent company of stage management, actors or technicians. We are bringing in shows, co-producing or a show starts somewhere else or not building them all – shared-around. So, the need for having large numbers of permanent staff is no longer an option. Also, there are often less productions to build, you keep much less core technical staff within the building, and hire freelancers and casuals when required (John Pitt, interview, October 2005).

Thus, the Rep in common with many other parts of the creative and cultural sector is characterised by a 'project culture' (Bilton, 2007, page 27). In its case, this new work context means that taking:

> something as cumbersome as NVQs is just not practical. There is no time. When the show goes on, people are working from nine to nine and on weekends, and when the show is running, there are performances sometimes two times a day, five days a week (John Pitt, interview, October 2006).

It is essential, according to John for apprentices to be 'immersed in theatre life', that is, involved in every stage of mounting a production. Consequently, it is utterly impracticable to release apprentices to attend courses in FE colleges or private training providers that have a fixed pattern of attendance or to try stop and assess apprentices' competence in the middle of a production. To do so would deny the apprentices the opportunity to develop key aspects of vocational practice which not necessarily surface again within the life span of a production.

'Vocationality' and 'work flow' as the basis of skill formation

John invokes the notion of 'vocationality'[14] as the glue which holds the work experience and off-the-job training together, as he observes: 'It is vocationality which makes apprentices employable as freelancers who aren't pigeonholed', and therefore, the TA aims 'to keep vocationality as close as possible' (John Pitt, interview, October 2005). By vocationality, John means grasping the reasons for and relationships between the production and directorial strategies required to put on a production as well as the development of the specific forms of vocational practice so as to contribute effectively to that production. Thus, the Rep tried to strike a 'balance in the TA between sending apprentices off to attend courses arranged by the Rep but not so that they missed what is happening here' (John Pitt, interview, October 2005).

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[14] John's use of the term 'vocationality' has many affinities with our concept of vocational practice. It is an explicit recognition that wig making, costume making etc are best learnt as situated forms of practice, in the case of the Rep as part of the experience of putting on a play, and also forms of vocational practice that have to be supplemented by grasping the diverse disciplinary knowledge that is an integral part of this practice.

The first step was to embed the TA in everyday 'work flow' of the Rep, that is, the logical sequence of activities that have to occur to ensure the success of a production (see Diagram 1. **Kaori, insert here – Word problem, will sort out next week**). This goal was accomplished by allocating apprentices 'to the Departments for a couple of months as workers, soaking up everything coming in (John Pitt, interview, October 2005)' to provide them with an opportunity to observe and engage with their specific vocational practice and its relationship to other vocational practices. The second step was for John to act as the apprentice's mentor so as to provide them with opportunities to explore their progress, their relationship with the HoD and other members of the Rep in a supportive and non-judgemental way as wellas pastoral advice as regards housing, financial management etc to help them to swiftly settle down (John Pitt, interview, October 2005). The third step was to broaden HoDs' - who are technical experts in their respective field, work roles so that they assumed responsibility for overseeing apprentices learning and development whilst the apprentices were in their departments. Finally, to introduce a framework to ascertain the development of the apprentices' vocational practice based on learning outcomes for each vocational area.

Generally, 'learning outcomes' are defined as:

> Statements of expected achievements that cover practical skills and competencies, knowledge, cognitive and intellectual skills, personal skills, attributes and qualities at different levels of complexity and across different contexts and situations. These outcomes can be specified in detail or in general statements and are usually accompanied by criteria for assessing them (Ecclestone 2005: 112).

In contrast, the learning outcomes for the six vocational areas in the Rep were kept as broad as possible to allow revision and alteration and they did not have explicit assessment criteria. To take an example of Wigs and Make-up, apprentices are provided with a general job description of this vocational field and the learning outcomes that will help them and their HoD to chart their progress:

A selection from the job description for Wigs and make-up and the associated learning outcomes
Hair-dressing to head dressing using wigs, and hair pieces; or perhaps face changes from clowns to animals to Munchkins! Wigs and make-up are the true companion to costumes in portraying a character whether as the result of days of patient wig knotting or a quick slap of face paint to accompany a quick costume change.

- An understanding of design and its interpretation into wig and make up production
- A knowledge and understanding of the needs of wig making and make up
- An awareness of how to select correct materials from a given design and how then to acquire those

materials

- A range of techniques in wig making to a varying degree of complexity
- A range of techniques in make up to a varying degree of complexity
- Be able to make alterations to existing wigs
- Be able to dress and maintain wigs during a run of performances
- Proficiency as a wig assistant and make up artist during a performance
- Understand and demonstrate the organisation and documentation for purchasing, hiring, borrowing and returning of wigs

The Rep's learning outcomes do not have assessment criteria comparable to NVQs is because they see the development of vocational practice as being embedded in a series 'duty-bound relationships' (Interview, John Pitt, April 2006), that have a longstanding history in Birmingham Rep (and for that matter other repertory theatres). These relationships serve a number of purposes. Formatively, they provide the context for flexible coaching and mentoring to help the apprentices develop their vocational practice. On some occasions this took the form of designated feedback sessions on other occasions others prefer giving comments *in situ*. Summatively, the duty-bound relationships underpin the awarding process of 'Certificates of Competence' (CoCs) by HoDs. The CoCs are awarded when a HoD feels that they could justify to John, and by extension to the wider vocational community to which they belong, that an apprentice has demonstrated appropriate skill development with respect to one of the learning outcomes.

This system dovetails neatly with the Rep's guiding principle that assessment of learning should complement work flow, involve HoDs and have industry-wide recognition. As John explains:

> The nature of the business is so diverse from one play to another and the theatre is too fast moving and too busy to actually go through that paper exercise (i.e. NVQ assessor-verifier approach) the whole time (Interview, April 2006).

Thus, the Rep has authorized HoDs to issue CoCs when apprentices are deemed to have reached the appropriate standard. Their central role in validation helps to convince 'other people [in the industry] to know that apprentices trained here would be skillful and industry-ready (John Pitt, interview, March 2006)'. The other means of charting development is that apprentices use a portfolio to document the development of their vocational practice. The 'balance between the organic nature of the apprenticeship [practice] and the documentation [knowledge] (John Pitt, interview, April 2006)' is considered crucial in the TA because apprentices' portfolios as well as their CV help them to secure further employment: 'The

basis is there will be people going from hereafter with a lot of skills gained at one of the most high-profile producing theatres in the country (John Pitt, interview, October 2005).'

'Vocationality 'and 'work flow' as the basis of transfer and employability
A number of learning strategies were employed to deepen and extend the apprentices vocational practice throughout the duration of the production and during the 'dark periods' between productions. First, John, in conjunction with the HoDs, identified the content for a 'teaching' curriculum for the apprentices (Lave & Wenger, 1991). One priority was the provision of Health and Safety (H&S) courses. These courses often amount too little more than list of 'do's and don'ts' in the workplace. The Rep in contrast used the term health and safety metaphorically to refer to developing an understanding of the whole work context, the different specialisms required in the theatre, their relationship to one another, and the potential problems that may arise and how to avoid them occurring or to deal with them if do arise.

The bespoke aspects of education and training were agreed after several months in a series of three-way meetings between an apprentice, the HoD and John. Prior to these meeting, the HoDs and John had gleaned important insights about the apprentices learning and developments needs from a series of informal discussions that they had held with apprentices. Draft learning and development plans for each apprentice were drawn up by John, in consultation with HoDs and apprentices, apprentices were either released to attend courses or specialist trainers invited into the Rep at times that it did not clash with the production process (John Pitt, interview, January 2006). These courses tended to combine occupationally specific knowledge and skill with a broader engagement with the work process, as John observes, 'this was the bit they found useful – learning about some of the other areas'. For John, the development of this wider understanding of apprentices work role in relation to the other areas of work within a theatre 'is the basis of transferable skills' (Interview, October 2006).

Second, John and the HoDs established a 'learning curriculum' for the apprentices (Lave & Wenger, 1991) which reflected not only the Rep's flat hierarchical management culture, but also the very supportive working relationships that existed within and between departments. The hallmark of this curriculum was the opportunity for apprentices to be 'legitimate peripheral participants' (Lave & Wenger, 1991) within their own department and 'boundary crossers' (Tuomi-Gröhn & Engeström, 2003) between departments, so that they could try out the techniques that they were learning and grasp the connections between different forms of vocational practice. As the Lighting apprentice clearly explained:

> If there is no communication, no show…. if you do something wrong, they [the HoD and other members of the Department] just tell you – 'why are you doing that for? Think about it. What's going to happen? What does it look like?' Or, they will let you make a mistake, and ask, 'why did that mess up?' (Interview, September 2006).

Apart from developing the technical aspects of vocational practice, the learning curriculum also developed the confidence and insight to communicate with all professionals working in the theatre. As the Stage Management apprentice observed:

> Books don't teach how to deal with people – when you've got actors and designers who are not happy (Interview, September 2006).

Another feature of the learning curriculum was a programme of limited work rotation and visits to other theatres and events across the country, for instance, apprentices visited the Association of British Theatre Technicians exhibition which exhibited lighting and sound equipment as well as front and back stage in other theatres. John believes that such rotations and visits enable apprentices to locate their understanding of vocational practice in a wider context and lay the foundation for them to transfer their knowledge and skill into other theatrical contexts:

> I want to give them the widest scope possible – some transferable skills and to have the knowledge to be able to cope, as well as being a specialist in their own field. They will have some practice – the Lighting apprentice will go to Sound for two weeks to learn how it works. There is and will continue to be quite a lot of internal cross-fertilisation going on. . . . Once apprentices gain the balance between practice and theories and between specialisation and transferability, they will be industry-ready as a freelancer with confidence (John Pitt, Interview, April 2006).

'Specialisation and transferability' are, for John, the prerequisites as regards securing permanent or temporary employment in the contemporary theatre industry:

> the REP is one of the biggest producing theatres in the country. There aren't many places like it, which is why again, this recognition we have to give them through those transferable skills to be able to go into a very very diverse industry from the start, i.e. television, exhibitions, events, small-scale touring, and theatres of course! (Interview, October 2006)

The importance and appropriateness of on-the-job training based on the principles of vocationality, work flow and team-working was also affirmed by the HoDs. This kind of scheme is suited for theatre as 'most areas in theatre are hands-on experience and on-going' (Head of Stage management, interview, September 2006)'.

Any experience is good…. Sometimes you have five minutes; some times you have four shows going on…. it could be a good learning curve for them. It could be a coincided situation any time. You never have six weeks to do anything really. If they leave till the last minute, they are going to be stuck – they have learned that already (Head of Lighting, interview, February 2007).

Through everyday vocational practice enhanced within team-working, the apprentices were gradually deemed to be vocationally competent:

I think after 18 months, we ended up relying on the apprentice within the Department. … They become a part of the team. When they do other things, you miss them, although they need to have those experiences to do other things on their own (Head of Wardrobe, interview, February 2007).

Furthermore, the HoDs, like John Pitt, were confident that the TA had fostered the apprentices' industry readiness. One HoD indeed pointed out the difference between his apprentice and someone externally hired over the Christmas period:

I had to hire someone alongside my apprentice…. This person was well-qualified. She didn't have much experience but had a right attitude. But when the show was up and running, it turned out that my apprentice was more confident and practical and had more knowledge and could adapt quicker (Head of Wigs and make-up, interview, February 2007).

At the same time, HoDs' expectations over the apprentices were high:

It would be good that they go out and get a job and come back here – as a full-time member of staff. That would be excellent! Everywhere you go, things work different with different mentality (Head of Sound, interview, February 2007).

That allows them to learn how other places work (Head of Stage technician, interview, February 2007).

All HoDs were in favour of running this kind of scheme again, although they emphasised the need to revise its planning and organisation (Interview, February 2007).

Given the people that we are supposed to be targeting, they are not necessarily academically achieved, so it [classroom environment] might put them off (Head of Sound, interview, February 2007).Kaori, this is a real 'hostage to fortune' statement even though it is true, le'ts

Comparison of the AAP and the TA

Principle of skill formation

The ObET replaced the idea of skill formation in apprenticeship frameworks and in VET with the idea of a performance outcome. This notion was, in turn, based on two assumptions. First, that vocational practice can effectively be disembedded from the immediacy and idiosyncrasy of its particular context of origin and from the experience and character of the apprentices in which that practice actually resides. Second, that it is possible to encapsulate the key elements of workplace performance in decontextualised and depersonalised statements of competence. The net effect was, as we have seen, that the concept of judgement was totally eviscerated from workplace performance and the concept of knowledge was separated from competence. Knowledge was only deemed to be relevant to workplace performance to the extent that it underpinned competence and therefore did not necessarily need to be formally taught to apprentices.

The seal of success of ObET was assumed to lie in the predictive power provided by the new national system of 'interpretation-immune'[15] - 'can do' assessment, that provided objective, generalisable and replicable evidence of competence. From now on – and in contrast to the holistic and un-differentiated notions of vocational practice associated with the I-R model of apprenticeship, the new outcomes-based vocational qualifications could be presented to both employers and the employees as a mode of education and training that possessed real productive efficiency in the workplace and emancipation in working lives. It offered the comforting illusion to employers it was possible to increase the efficiency of human performance in the workplace by insisting that people did not deviate from NVQs stated performance outcome descriptions, and to employees, that the accumulation of units of competence constituted evidence of the capability to perform effectively at higher levels in any context. Against this new standard, older conceptions of occupationally-specific forms of vocational practice and less differentiated vocational qualifications were deemed hopelessly outdated and inadequate, and concerns for workplace pedagogy were dismissed as a hangover from the previous liberal vocational era (Mansfield and Mitchell 1995).

In contrast, the TA has restored the principle of skill formation to apprenticeship. Although

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[15] Dunne & Pendlebury coined this term in relation to their critique of the principles of 'technical rationality'. I have borrowed it because it is consistent with the line of my critique of the ObET.

the TA has followed the ObET tradition of discarding time-serving notions of apprenticeship, it retains an explicit recognition of the relationship between practice and context. Thus, from the Rep's perspective, knowledge is an integral feature of vocational practice because knowledge is inextricably, to appropriate Dunne & Pendlebury's phrase, 'invested in action', rather than some disembedded entity that is learnt separately from and then applied to practice. Apprentices constantly bring knowledge, that is, a mix of theoretical, technical and operational ideas and notions into play when dealing with the 'here and now' situations which they are faced with in the theatre. This is because they have to ascertain whether a situation is perfectly standard and typical and therefore similar to those one which they have encountered previously, or whether the situation deviates in some significant respects and therefore is not covered by well-known and rehearsed procedures. Thus, the Rep's model of skill formation restores the link between knowledge, experience and judgement to vocational practice that was eviscerated by the introduction of NVQs[16].

This highly contextualised definition of judgement does not mean that the Rep is advocating that judgement is developed through some form of maverick activity in the theatre where individuals totally disregard existing knowledge codified in rules and protocols or advice from their HoD, not least because without recourse to these individuals would struggle to recognise the typicality or otherwise of the situation facing them. The Rep starts from the premise that judgement is developed through apprentices learning to mediate the general and particular aspects of vocational practice and bring them into some 'illuminating connection' with one another (Dunne & Pendlebury, , p. 198). This process of mediation to support the development of and exercising of judgment presupposes not only that apprentices are provided with opportunities to, and support to, develop the ability 'read' particular situations, for example, the example of the electrician learning to hang a light, but also contexts where they are able to take, under supervision, modestly acceptable risks in the workplace. Such contexts help apprentices to gradually develop the personal resourcefulness to accentuate knowledge with relevance, appropriateness and sensitivity to context.

Clearly the notion of acceptable risk implies that access to workplace experience where it is less easy to predict the final result is central to the development of such resourcefulness. This does not mean that the Rep is by any stretch of the imagination advocating that 'raw experience' is a sufficient condition to develop judgement. The provision of a teaching and learning curriculum, supplemented by John's role as coach and mentor to the HoDs and apprentices, provides a rich range of support to assist apprentices to apply the knowledge which they have acquired through talking and working alongside their HoD, through their

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[16] By judgement we interpret the Rep to mean, the ability to recognise situations, cases, or problems, rather than attempting to impose the procrustean application of a general rule (Guile, forthcoming).

own self-directed learning or from the periods of work rotation or visits to other theatres.

Getting the balance right between these forms of support is crucial for a number of reasons. Each practice field in the theatre has a specific texture of its own and is also intimately connected to other practice fields. It is essential, therefore, that apprentices understand this relationship theoretically and practically because decisions about appropriate course of action in one field presupposes an understanding of the consequences of that action for people working in another field. Seeing connections between work areas and anticipating the implications of one's actions for other presupposes the development of a mode creative insight that is totally foreign to the thinking which informed the development of the NVQ frameworks. Developing such creative insight, as the Rep has recognised, presupposes that apprentices have regular opportunities to boundary cross between different practice fields in order to appreciate the way in which a directors' vision inevitably influences the deployment of vocational practice.

Transfer for employability

Two very different notions of transfer were, as we saw earlier, built into successive apprenticeship frameworks one based on the principles of behavioural psychology and one based on the principles of cognitive psychology. In the case of the former, the consultants responsible for designing NVQs advanced a two-fold argument that NVQs constituted evidence of the ability to transfer skill. They maintained that human beings are, in effect, sentient creatures who primarily learn through imitation and repetition; and that work consists of different levels of routinised tasks. Thus, it follows that what was accomplished on one context could easily be accomplished in another context. This assumption led the consultants to adopt an agnostic stance towards workplace pedagogy, that is, the learning environments, processes and relationships in which people developed requisite forms of competence. In the case of core/key skills, their introduction into apprenticeship framework was the result of a long-standing article of faith on behalf of some researchers (Oates) and policymakers (DfES) that generic skills such as literacy, numeracy and the ability to use IT to retrieve and filter information are transferable across different work-contexts and constitute the basis of learning at higher levels. The basis for such assumptions is found in the way in which ideas from cognitive psychology have been appropriated to justify the value of generic skills (Prawat, 1991, p. 3). The proponents of generic skills have claimed that these skills are abstract, universal and unproblematic in nature and rely on basic cognitive processes which we use in our daily lives as much as at work or in education. From this perspective, the 'trick is to figure out a way to teach them effectively' so that people can transport between contexts (Prawat 1991, p. 3).

Both notions of transfer have proved to be problematic, albeit for slightly different reasons. In eradicating that what is distinctive about human beings is that we are sapient creatures who learn through responding to reasons, the NVQ system severed the link between the organisation of work, workplace pedagogy and the development and transfer of competence (Guile, forthcoming). Yet, as numerous studies have demonstrated, learning environments and learning processes are critical to the development of workplace competence in general (Billett, 2001; Boreham *et al*. 2003; Darrow, 1991; Eraut, 2004) and to the development of expansive rather than restrictive modes of competence in particular (Fuller & Unwin, 2004).

Moreover, the oft-repeated argument that generic skills such as numeracy, literacy, and IT can be taught as stand-alone skill separate from subject-matter and transferred un-problematically into other settings has proved to be very hard to confirm in educational and in work-based settings. In the case of the former, it has been shown that generic thinking skills do not readily transfer and that the programmes with the best track record for transfer tend to be ones that make a concerted effort to connect general thinking skills to subject-specific matter (Raizen, 1991). In the case of the latter, researchers have demonstrated that core/key skills are forms of 'situated practice' (Wolf, 1991) and that unless learners are provided with opportunities to 'progressively resituate' such skill in different contexts, the claims about core/key skills are purely rhetorical (Guile & Young, 2003). Curiously, this consensus about the absence of any firm evidence to justify policymakers' faith in core-key skills has largely gone unheeded by policymakers in the UK, USA and North America.

The issue of transfer is central to the Rep's approach to apprenticeship. Instead of making assumptions about the regularity of human behaviour in the workplace or the value of developing generic cognitive processes, the Rep started from the premise that the transfer of skill across theatrical or equivalent contexts such as broadcast media (i.e. television) and outside events (i.e. live productions) involves multiple interrelated social, cultural and organisational processes. Although the Rep articulated their ideas about transfer in highly idiosyncratic terms, for example, vocationality, it is possible to use concepts and ideas from socio-cultural and activity theory to make their implicit assumptions about transfer explicit. Beach's (2003) concept of 'knowledge propagation' is particularly helpful because it combines Lave & Wenger's (1991) insight as regards the situated basis of learning as well as Cole's (1996) insight from Cultural Historical Activity Theory about the trans-contextual (i.e. 'supra-empirical') nature of knowledge and skill.

The concept of knowledge propagation is based on a number of interrelated premises. The first premise is that the process of generalisation is central to transfer (or in Beach's (2003, p.) terms 'consequential transition'), and that forming generalisations presupposes grasping

the relations and processes that relate individuals to the social organisation of which they are apart (Beach, 2003, p.). This idea stands in stark contrast to the behavioural and cognitive assumptions of apprenticeship frameworks which assume that the physical or mental task constitutes the basis of transfer. From this perspective, it is apprentices' ability to 'do something' – perform a workplace task or a cognitive process that constitute the basis of being able to do so in another context. For Beach, it is the relationships and processes that relate individual and organisations that constitutes the basis of apprentices being able to form a generalisations about their practice, and to use the knowledge of how they formed the generalisation to help them to form new generalisations to transfer that practice to another context. Translated into the context of the Rep, it is the pedagogic relationships and processes created between apprentices, HoDs and John Pitt that establishes the context for apprentices to visualise, for example, how to hang lights in plays, pantomimes and musicals, and thus to begin to generalise about how to hang lights in other contexts.

The next two premises are related to one another. First, that as people begin to engage with the knowledge invested in practice and its associated artefacts, for example, different types of wigs, costume manuals etc they start to develop a specific vocational identify (Beach, 2003, p.). Second, the more that people are able to move or in Beach's terms 'boundary cross' (2003, p.) between different theoretical and practical activities, they are more likely to develop the capability to form broader and more encompassing generalisations about their field of practice and its relationship to other vocational practices. Once again, translated into the context of the Rep, it is the insights generated by communicating with members of other work teams, participating in work rotation schemes and visiting other theatres and deepening these insights through the content provided by a teaching curriculum, that enables the apprentices to understand their own practice and its relation to other practice fields.

The preceding analysis highlights that the Rep's model of occupationally-specific skill formation and transfer is not an attachment to a set of hopelessly outdated and inadequate ideas from a bye-gone era. Rather, it is based on a principle that is central to facilitating transfer in the creative and cultural sector and, arguably, in the global knowledge economy as well, namely the development of the creative insight to see connections between work areas and to anticipate the implications of their actions for others.

The above notion of transfer is completely foreign to the Blueprint's discourse about transfer and employability. That document rests on the neo-liberal notion that accreditation is central to employability in the global knowledge economy. The Rep operates, however, with a rather different conception of employability. Although the Rep clearly acknowledge the impact of market forces on the nature of productions in the modern theatre, Stuart Rogers and John Pitt

temper their observations about their impact with a recognition that the national system of repertory theatres operate in market conditions that are characterised by strong employment networks and duty-bound relationships.

The significant difference between the two positions becomes clearer if we use the terminology of social capital theorists to clarify the Rep's position. This allows us to see that the UK's national system of repertory theatres is characterised by the type of strong mutually self-supporting networks, high levels of trust amongst all levels of specialism and seniority, that many writers claim are hallmarks of the most successful industries in the knowledge economy (Green *et al*, 2006). It is the strong tied associated with these webs of relationships and networks of trust that enables John Pitt's to claim with such confidence that the mere knowledge that an apprentice was 'trained' at Birmingham Rep will guarantee an apprentices' employability more than any nationally recognized qualification. In the context of policymakers' convictions about the role of educational qualifications in the global economy, John's claim may appear to be a deeply old-fashioned and even a regressive notion. Nothing could be further from the truth. It is a salutary reminder of two important issues. First, that the 'key skills' which will support the apprentice's employability are the mix of knowledge, skill and judgement developed through their immersion in the Rep's work flow, rather than NVQ or Key Skill accreditation. Second, the blueprint has not managed to strike the right balance between the accreditation of knowledge, skill and judgement for the creative and cultural sector.

Conclusion

The TA is a genuine, committed and far-sighted attempt on behalf of Birmingham Repertory Theatre to develop a model of apprenticeship that is appropriate for the type of project culture found in the modern repertory system and, arguably, elsewhere in the small and micro-business which characterize much of the UK (Bilton, 2007, page 27) and EU creative and cultural sector (KEA 2006, p. 91). What is radical about the TA is that the Rep has jettisoned the legacy of ObET in apprenticeship. Instead of starting with the outcomes (i.e. NVQs, Key Skills etc), the Rep has started with vocational practice (i.e. vocationality), the purpose and organisation of work (i.e. work flow) and workplace pedagogy (i.e. guided and extended participation). This approach reflects the Rep's passionate concern to develop apprentices to the highest industrial standard so as to ensure they are sufficiently 'skilled' to work in other theatres or elsewhere in the sector.

The TA presents a number of challenges to the Government's policy for apprenticeship becasue in its desire to make apprenticeship part of a vocational ladder within the education and training (E&T) system, the government has overlooked that:

- the actual purpose of apprenticeship is to develop vocational practice;

- the project-based nature of work in much of the creative and cultural sector requires a 'project-based' approach to education and training and that existing arrangements and funding patterns for on-and-off-the-job training are incompatible with this type of work;

- Key Skills and NVQs do not constitute evidence of the development of vocational practice in the creative and cultural sector.

We suggest that these challenges could be tackled in the following ways. First, the DfES should countenance modifications to the AAP Blueprint to allow employers to design models of apprenticeship which actually reflect their needs. This would introduce a slightly different twist to the notion of 'employer leadership' advocated by the Leitch report[17]. Instead of assuming that qualification blueprints are the definitive solution to employability in the knowledge economy and exhorting employers to train employees to higher qualification levels, the DfES should sponsor the development of innovative models of apprenticeship based on a clear articulation and specification of the principles of skill formation and skill transfer.

To ensure that employers do not interpret this new freedom as a license to create a host of new 'restrictive' apprenticeships, the government should pilot a national 'kite marking' system for alternative models of apprenticeship. This system should be based on clearly defined criteria for skill formation, skill transfer and employability so as to both develop the requisite form of vocational practice and to reassure policymakers that the new schemes are educationally robust and offer value-for-money. To ensure that education and employment issues are given parity in the design of these models of apprenticeship, it will be necessary to rebalance the role of employers, national intermediary agencies such as LSCs and SSCs and educational institutions in the formation and administration of E&T. The latter have been marginalized since the 1980s, nevertheless, as Fuller and Unwin amongst others have consistently demonstrated, the educational contribution is essential if pedagogic issues are to be restored to the centre of apprenticeship.

Second, the Treasury should re-think the funding regime for apprenticeship. At present despite all the references to the knowledge economy in successive Government White Papers, policymakers continue to operate with 'Welfarist' notions of labour markets, (i.e. that all

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[17] http://www.hm-treasury.gov.uk/media/523/43/leitch_finalreport051206.pdf.

employers will or can be persuaded to recruit regular numbers on an annually recurring basis) and 'Fordist' mechanisms to control the E&T system. The latter result in the government funding FE Colleges and private training providers on the basis of enrolling 'training volumes' and achieving 'training completions', rather than recognising that this accountability and funding model is completely at odds with the growth of project-work in the creative and cultural sector, let alone, elsewhere in the economy. A degree of relative autonomy should be restored to all stakeholders in the national E&T system so that LSCs, SSCs, employers and public and private sector training providers can design and pilot bespoke apprenticeships which reflect the needs of the sector.

In conclusion, it must be acknowledged that although we have based the preceding argument on the insights about skill formation and transfer for employability generated by the Rep's experience of running TA, the TA is by no stretch of the imagination the 'finished article'. Despite the Rep's undoubted commitment, it is on a steep learning curve as regards the design and implementation of its learning and teaching curriculum[18]. The former being much easier to design and control than the latter which was dependent on a much wider range of bespoke educational inputs than the Rep had originally envisaged. Regrettably, imminent changes in ESF funding mean that the Rep may be unable to consolidate the lessons of the last two years and to run a further scheme. From 2007 oversight of ESF funds passes to the LSCs who as 'delivery agencies' for government policy are unlikely to foster innovation (Keep, 2006, p.). Nevertheless, despite this caveat, the TA it is a much-needed example of the type of fresh thinking that is needed in order to design apprenticeships for the project-based work contexts that are spreading throughout UK and European economies.

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[18] Based on interviews with HoDs (Group interview with HoDs, February 2007) and John Pitt (Interview Feb 2007) at the end of the scheme , they acknowledged that it was much more difficult to organise training than they had originally envisaged. First, the limited information about external courses, coupled with competing demand on John Pitt's time, meant that the 'dark periods' could have been used more effectively to train the apprentices Second, the Rep underestimated the challenge of identifying/designing bespoke forms of training. On some occasions it was difficult to match training to apprentices' prior experience and on other occasions it difficult to 'recontextualise' disciplinary knowledge into practice fields (Barnett 2007, page ….).

References

Bates, I. & Dutson, J. (1995) A Bermuda Triangle? A case study of the disappearance of competence-based vocational training policy in the context of practice, *British Journal of Education and Work,* 8, 41-59.

Boreham, N. (2004) A theory of collective competence: challenging the neo-liberal individualisation of performance at work, *British Journal of Educational Studies,* 52 (1), 5-17.

Burke, J. (1995) Theoretical issues in relation to Jessup's outcomes model, in: J. Burke (Ed.) *Outcomes, learning and the curriculum: implications for NVQ's, GNVQ's and other qualifications* (London, Falmer Press), 55-82.

DfEE (2000) *Modern Apprenticeships: consultation document*. Available online at: http://www.dfes.gov.uk/ma.consultation/pdfs/maconsultation.pdf (accessed 14 February 2007).

DfES & LSC (2001) *Modern Apprenticeships: the way to work, the report of the Modern Apprenticeship Advisory Committee*. Available online at: http://www.apprenticeships.org.uk/NR/rdonlyres/0C689A33-9C24-433E-9891-E76E8EF4D8B2/0/CasselsReportMA_The_Way_to_Work.pdf (accessed 14 February 2007).

DES, DE & DTI (1985) *Education and training for young people*, (London, HMSO).

Ecclestone, K. (2005) *Understanding assessment and qualifications in post-compulsory education and training : principles, politics and practice, Second edition* (Leicester, NIACE).

Ellis, P. (1995) Standards and the outcomes approach, in: J. Burke (Ed.) *Outcomes, learning and the curriculum: implications for NVQ's, GNVQ's and other qualifications* (London, Falmer Press), 83-95.

Evans, K. *et al* (2006) *Improving workplace learning* (London, Routledge).

Finegold, D. & Soskice, D. (1988) The failure of training in Britain: analysis and prescription, *Oxford Review of Economic Policy,* 4, 21-53.

Fuller, A. (1995) Purpose, value and competence: contextualising competence based assessment in the civil aviation sector, *British Journal of Education and Work,* 8, 60-77.

Fuller, A. & Unwin, L. (1998) Reconceptualising Apprenticeship: exploring the relathioship between work and learning, *Journal of Vocational Education and Training,* 50(2), 153-173.

Fuller, A. & Unwin, L. (2003) Creating a 'Modern Apprenticeship': a critique of the UK's multi-sector, social inclusion approach, *Journal of Education and Work,* 16(1), 5-25.

Gamble, J. (2001) Modelling the invisible: the pedagogy of craft apprenticeship, *Studies in Continuing Education*, 23(2), 185-200.

Gospel, H. (1998) The revival of apprenticeship training in Britain?, *British Journal of*

Industrial Relations, 36(3), 435-457.

Green, A., Preston, J. & Janmaat, J. G. (2006) *Education, equality and social cohesion: a comparative analysis* (Basingstoke, Palgrave Macmillan).

Guile, D. (2006) Access, learning and development in the creative and cultural sector: from 'creative apprenticeship' to 'being apprenticed', *Journal of Education and Work*, 19(5), 433-454.

Guile, D. forthcoming.

Guile, D. & Young, M. (1999) Beyond the institution of apprenticeship: towards a social theory of learning as the production of knowledge, in: P. Ainley & H. Rainbird (Eds.) *Apprenticeship: towards a new paradigm of learning* (London, Kogan Page), 111-128.

Hodkinson, P. & Bloomer, M. (2002) Lifelong careers: conceptualizing lifelong work-based learning, in K. M. Evans, P. Hodkinson & L. Unwin (Eds.) *Working to learn: transforming learning in the workplace* (London: Kogan Page), 29-43.

Huddleston, P. (1999) Modern Apprenticeships in college. So what's new?, in: P. Ainley & H. Rainbird (Eds.) *Apprenticeship: towards a new paradigm of learning* (London, Kogan Page), 176-190.

Hutton, W. (1996) *The state we're in* (London, Vintage).

Jessup, G. (1995) Outcome based qualifications and the implications for learning, in: J. Burke (Ed.) *Outcomes, learning and the curriculum: implications for NVQ's, GNVQ's and other qualifications* (London, Falmer Press), 33-54.

Jones, L. & Moore, R. (1995) Appropriating competence: the competency movement, the New Right and the 'culture change' project, *British Journal of Education and Work,* (8), 78-92.

Keep, E. & Mayhew, K. (1999) The assessment: knowledge, skills, and competitiveness, *Oxford Review of Economic Policy,* (15), 1-15.

Kvale, S. (1997) Research apprenticeship, *Nordisk Pedagogik*, (17), 186-194.

Lave, J. & Wenger, E. (1991) *Situated learning: legitimate peripheral participation* (Cambridge, Cambridge UP).

Layton, D (1993) *Technology's Challenge to Science Education*, Buckingham: Open University Press.

Levy, M. (1995) Work-based learning and outcomes, in: J. Burke (Ed.) *Outcomes, learning and the curriculum: implications for NVQ's, GNVQ's and other qualifications* (London, Falmer Press), 228-243.

LSC (2005a) *Blueprint for apprentices*. Available online at: http://www.apprenticeships.org.uk/NR/rdonlyres/A28D2CFF-725E-4D00-9110-429A77CCA2C6/0/ApprenticeshipBlueprintFinalV215Sep05.pdf (accessed 14 February 2007).

LSC (2005b) *Requirements for funding work based learning for young people*. Available

online at: http://readingroom.lsc.gov.uk/lsc/2005/funding/streams/requirements-for-wbl-young-people-2005.pdf (accessed 14 February 2007).

Mansfield, B. & Mitchell, L. (1996) *Towards a competent workforce* (Aldershot, Gower).

Oates, T. & Harkin, J. (1995) From design to delivery: the implementation of the NCVQ Core Skills Unit, in: J. Burke (Ed.) *Outcomes, learning and the curriculum: implications for NVQ's, GNVQ's and other qualifications* (London, Falmer Press), 182-200.

Payne, J. (2002) Reconstructing apprenticeship for the twenty-first century: lessons from Norway and the UK, *Research Papers in Education,* 17(3), 261-292.

Raffo, C., O'Connor, J., Lovatt, A. & Banks, M. (2000) Attitudes to formal business training and learning amongst entrepreneurs in the cultural industries: situated business learning through 'doing with others', *Journal of Education and Work,* 13(2), 215-230.

Reich, R. (1991) *The work of nations: preparing ourselves for 21st-century capitalism* (London, Simon & Schuster).

Rowell, G. & Jackson, A. (1984) *The repertory movement: a history of a regional theatre in Britain* (Cambridge, Cambridge UP).

Ryan, P. (1999) The embedding of apprenticeship in industrial relations: British engineering, 1925-65, in: P. Ainley & H. Rainbird (Eds.) *Apprenticeship: towards a new paradigm of learning* (London, Kogan Page), 41-60.

Ryan, P. (2000) The institutional requirements of apprenticeship: evidence from smaller EU countries, *International Journal of Training and Development,* 4(1), 42-65.

Ryan, P. & Unwin, L. (2001) Apprenticeship in the British 'training market', *National Institute Economic Review, October,* 70-85.

Ryan, P., Gospel, H. & Lewis, P. (2006) Educational and contractual attributes of the apprenticeship programmes of large employers in Britain, *Journal of Vocational Education and Training*, 58(3), 359-383.

Senker, P. (1992) *Industrial training in a cold climate : an assessment of Britain's training policies* (Aldershot, Brookfield, Avebury).

Stanton, G (2003) Briefing progression awards for City and Guilds Research Seminar on Vocational Excellence, City and Guilds, London, July.

Steedman, H., Gospel, H. F., Ryan, P. & London School of Economics and Political Science (1998) *Apprenticeship: a strategy for growth* (London, Centre for Economic Performance).

Stewart, J. & Sambrook, S. (1995) The role of functional analysis in National Vocational Qualificaitions: a critical appraisal, *British Journal of Education and Work,* 8, 93-105.

Tuomi-Gröhn, T. & Engeström, Y. (2003) Conceptualising transfer: from standard notions to developmental transfer, in: T. Tuomi-Gröhn & Y. Engeström (Eds.) *New perspectives on transfer and boundary crossing* (Oxford, Pergamon), 19-38.

Unwin, L. (2005) Creating knowledge and skills: the troubled relationship between company,

college and apprentice in UK apprenticeships, presented to the 6th Forum of AGBFN (German Network of Vocational Education and Training Research), Erfurt, Germany, September 19-20.

Young, M. & Gamble, J. (Eds.) (2006) *Knowledge, curriculum and qualifications for South African further education* (Cape Town, Human Sciences Research Council).