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Continuity and Change in Apprenticeship Systems: A comparative study between Scotland and Germany

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Abstract

Apprenticeship models in Germany (Dual System) and Scotland (Modern Apprenticeships) are compared with a particular focus on issues of continuity and change. The German model of apprenticeship is comprehensive in coverage of occupations, highly regulated and held in esteem by young people. However, it is undergoing a transition and may require greater flexibity in modular structures or through creating greater differentiation. In contrast, apprenticeship in Scotland is highly fragmented, voluntarist and held in low esteem by young people. The Modern Apprenticeship is an opportunity to revitalize this apprentice culture; however, this is likely to require a legislative framework and a more consensual style of governance.

Introduction

There has been a renewed interest in the apprenticeship model as a pathway to work-based education and training for young people. The UK Government continues to support the expansion of Modern Apprenticeships as a key component of their lifelong learning policy. While, elsewhere in Europe apprenticeship remains the dominant transition route to intermediate skills in Germany and Austria. However, the notion of what constitutes an apprenticeship is changing as new industries emerge and greater flexibity is required within the workplace. This paper examines the impact of policy developments within this important field by comparing apprenticeship models in Germany (Dual System) and Scotland (Modern Apprenticeships). The central focus of this study explores the issues of continuity and change. The discussion is structured around a number of themes: the basic organisation of apprenticeships within each country; the historical context; the underlying vocational principles; links to the labour market and the current reforms within the systems. It is recognised at the outset that international comparative studies have their limitations and often draw simplistic conclusions from what are complex cultural and structural socio-economic and political systems. However, lessons can be learned from taking a comparative perspective on issues and allowing internal assumptions and predispositions to be questioned.

Basic Organisation of the VET System in Germany

Training based on what is referred to as the Dual System (described below) is still the major non-academic route for German school leavers giving them formal access to the labour market as a skilled worker, craftsman or clerk (Bynner and Roberts, 1991). The system recruits between two thirds and three quarters of the 16-to-19-year-olds and thus contributes to limiting the number of unskilled employees to a constantly low proportion in the German labour market (Büchtemann et al. 1993; Greinert, 1994). Dual apprenticeships exist in nearly all branches of the German economy including the professions and parts of the civil service whereas, in Scotland, they only form a marginal sector within the vocational training systems. In 1999, some 630,000 young people in Germany took up an apprenticeship (for figures see Bundesministerium für Bildung und Forschung, 1999). More than 1.6 million young people (40% of whom are female) are learning their trades through the Dual System which can be described as follows:

- It is an alternating training structure – which means that training takes place in a company providing the apprenticeship and in a compulsory vocational part-time school (which accounts for one to two days of the weekly training provision).

- The German system is rooted in an occupation-orientated or genuinely vocational training culture: Vocationalism in the German meaning of the term stands for integral qualifications based on uniform training schemes and highly standardised examination procedures (Benner, 1977). Training is workplace-led and predominantly practical, stressing the importance of work experience during the training period.
- The Dual System is determined by the involvement of the federal and state administration which makes occupational standards and conditions of skilled apprenticeship legally enforceable as well as marketable (Raggatt, 1988). At the same time, the German training culture (Brown & Evans, 1994) is based on the notion that vocational training should not only be interpreted as a contractual duty but also as an educational process.
- Finally, the fact that the state's function is actually restricted to securing quality standards in a predominantly formal manner makes the principle of consensus perceptively one of the long-standing parameters of dual training in Germany. This means that public and private as well as semi-private institutions have established various forms of cooperation within the system and, even more importantly, that the social partners normally take the initiative when it comes to defining a training ordinance (Benner, 1984).

Historical Aspects

Apprenticeship in Germany still represents the major route into skilled employment and its origins were originally established during the time of the German Empire. The Trade Act of the North German Federation in 1869 (Schlüter & Stratmann, 1985) confirmed freedom of trade and with it the private character of apprenticeship. For craft apprentices it merely stated that the apprentice was responsible to an employer whose task it was to instruct and employ him/her.

From 1881 onwards policy became directed to revising the liberalist trade law (Winkler, 1976). The 1897 Craft Protection Act (Schlüter & Stratmann, 1985), although it did not prescribe the master's certificate as a training prerequisite, revived some of the traditional apprenticeship regulations. The newly established Chambers and Guilds were to become involved with training matters and to hold examinations for journeymen and masters. The Act also made provision for the technical qualification required for the training of apprentices by confining it to skilled journeymen of at least 24 years of age who had either served a three-year apprenticeship or pursued their trades for at least five years as independent artisans. Indentures became general practice in the craft sector as well as the three-year training period, at the end of which the apprentice should have the opportunity to take his/her examination (Stratmann & Pätzold, 1984).

The 1897 Act generated the corporatist framework typical of the Dual System today. In 1908, the protectionist forces accomplished another partial success when the right to train apprentices was actually restricted to examined handicraft masters (Winkler, 1976). In 1953, a new comprehensive Handicraft Act summarized the preceding handicraft legislation by making provisions affecting vocational training. After the First World War industrial employers' organisations also started to work out occupational profiles which became the precursors of present training ordinances. From 1930, the Chambers of Industry and Commerce began to hold exams for skilled workers, which until then had been the exclusive right of the Handicraft Guilds and Chambers. In due course, industrial employments and apprenticeships had to be systematized and classified. The distinction between skilled, semi-skilled and unskilled occupations was to determine the framework for apprenticeships in industrial firms for more than thirty years. The passing of the Vocational Training Act in 1969 ended the divergent developments in the craft and the industrial sector.

The Vocational Principle and Schemes of VET

The vocational or occupational aspect of training is reflected through the structural features of the Dual System. It incorporates a specific quality of didactical as well as institutional training arrangements which define the application requirements for qualified labour (Kutscha, 1992). A number of key characteristics of the term 'occupations' need to be understood more fully when considering the 'Dual system':

- When we talk about occupations we usually think of more or less complex combinations of special achievements, which are institutionally fixed and characterised by the use of related qualifications typical of the respective occupation. Therefore they are designed to fulfill the functional requirements of the division of labour (Zabeck, 1991).
- Occupations are integrally structured: They consist of relatively job-independent but nonetheless job-relevant patterns of labour whose branch and individual value is determined by being offered on the labour market as containing special qualities (Beck, Brater & Daheim, 1980).
- Occupations exist not only as gainful or grown-up employment but as skilled occupations; that is, they are the starting point as well as the target of the training process, whose organisational picture (Brater, 1981) is standardised by state statutes and thus significantly removed from the limitations and functionalisation of individual firms.
- State-standardised skilled occupations are the framework of a standardised training course of set duration in which the quantity and quality of the acquired skills and knowledge is supervised and validated through intermediate and final examinations as well as certified in a way acceptable to the market. The conditions of skilled apprenticeship hence are closely linked with the prerequisite of homogeneous training schemes based on governmental training ordinances.

The mandatory content of a training ordinance are specified in the Vocational Training Act of 1969. It must contain:

- the name of the skilled occupation
- the duration of the training period
- the skills to be provided by the company in the course of training
- a specification of the syllabus to be followed for the purpose of imparting the relevant abilities and knowledge, and finally
- the examination standards.

The principle of 'exclusiveness' makes sure that training ordinances represent the only route by which young people move into skilled employment. Moreover, training for a recognised trainee occupation shall be given only in accordance with the relevant training regulations. Initial training in occupations other than recognised trainee occupations shall not be provided for young persons under 18 years of age unless it is intended to prepare them for a subsequent course of instruction. The ideas behind these strict principles are based on the conviction that the training course should provide a range of occupational skills which are marketable beyond the training company itself (Beck et al., 1980).

The procedure which leads to training ordinances claims to be 'reality-based' and tries to take account of newly developing job requirements stimulated by organisational and technological changes. Since the passing of the Vocational Training Act, some 250 recognised skilled occupations have been based on new training ordinances following the vocational principle. They apply to 97 % of all apprentices (Benner, 1977).

Most training schemes are termed as 'Mono Occupations' (type 1) which do not allow specialisation, let alone a differentiation of training time or training content. It is assumed that a broad base of elementary vocational qualifications supports a maximum of flexibility and mobility between different workplaces and firms. 'Specialised Basic Occupations' (type 2) are also permitted within the dual system. Specialisation in this context only takes place after an initial training period of normally one year which is common to a range of related occupations.

Finally, 'Staged Training Courses' (type 3) in the Dual System are based on the assumption that the qualification at each level should be uniform and marketable by representing an occupational standard, not just a bundle of specific competences.

Links of VET to the Labour Market

The proportion of apprentices amongst all employees in the German economy is around 5%. The distribution of apprentices by company size shows little variation, although smaller companies on average tend to take a larger proportion of trainees. In 1997, 51.7% of apprentices received their training in companies with up to 50 employees while 48.3% trained in firms with a workforce of more than 50 (Bundesministerium für Bildung und Forschung, 1999). In all some 50% of German companies possess the qualifications needed to take apprentices, which does not mean that all these firms actually take part in the Dual System: In 1997, 31% of all German companies offered apprenticeships to the market (Bundesministerium für Bildung und Forschung, 1999).

Although 612,771 new training contracts were issued in 1998, an increase of more than 25,000 in one year, nearly 36,000 school-leavers could still not find a company that was prepared to train them. On the other hand, it is interesting to note that in September 1998 vacant training placements numbered more than 23,000 (Bundesministerium für Bildung und Forschung 1999). According to the new Vocational Training Report, presented by the Federal Government on April 12th, 2000, the situation in the training market one year later has only improved due to state subsidies. It is apparent from this that Germany's VET system remains exposed to structural and regional frictions as well as pressure from external developments. Unemployment as Germany's major social and economic problem certainly produces particular strain for the training system. Although the training system and the employment sector are bound by a strong professional or vocational link (Maurice, 1993; Konietzka and Lempert, 1998; Deissinger 1998), career opportunities in the nineties, even if grounded in skilled training, were clearly more exposed to labour market restraints than in former decades (Timmermann, 1994). The Federal Labour Office reports that youth unemployment (under 25) rose from 8.5% in 1993 to 12.2% in 1997, and it is now at 10.1%. There are dramatic differences regionally: whilst in Bavaria, in 1998, the rate was 6.8%, Berlin reported 21.3% unemployment. In general, unemployed people under 25 suffered unemployment for a shorter period than the average unemployed person. This does not compensate for the fact that, in 1997, some 27% of apprentices became unemployed immediately after the end of their training course (Bundesministerium für Bildung und Forschung, 1999).

Reform of Apprenticeships in Germany

Scepticism in German discussions has become centred around the question whether modular principles are generally compatible with the organisational features of the Dual System as well as with the didactical pattern and pedagogical understanding underlying training arrangements (Deissinger, 1998 and 1999). One of the most serious problems for Germany is the integration of those school leavers who are not capable of meeting employers expectations as well as coping with training standards laid down in the training ordinances. It is estimated that every year some 100,000 young people leave general education without a formal qualification (Beckers, 1998). The situation for these young people is currently determined by at least three structural factors:

- With the emergence of the new technologies and the disappearance of old-established training occupations, the lower segment of skilled practical work has been shrinking in quantitative terms. In a globalised economic environment this means that income and career opportunities for young people with few or no general or vocational qualifications are bound to decrease.
- The new occupational profiles, however, that have been designed and decreed in the past fifteen years prove to be too demanding for 'weaker' learners. Consequently, companies become more and more selective as they act in a training market where the supply of training places regularly fails to meet the demand.
- Regional diversity, which has always led to imbalances in Germany's training statistics, seems to aggravate the situation as young people looking for an apprenticeship placement in the east of Germany (the new federal states) have to find their way into a labour and training market which is tighter and less accessible than in the western states.

Against this background, reforming the system by modifying and extending the range of formal training opportunities appears at first glance as a reasonable strategy to avoid youth unemployment due to the partial failure of the VET system. However, whereas upgrading the system by offering new exacting training schemes has been enforced in the past two decades, the lower end of the qualification ladder has been neglected. One of the more recent innovations has been carried out in the Information Technology (IT) occupations which now cover a so far neglected segment of the labour market. It can be assumed that these occupations, among others, will most definitely exclude substantial numbers of young people who fail to reach a certain educational standard. The problem Germany faces at the moment thus consists of a more and more socially segmented training market. At the same time school-based forms of work

preparation seem to be gaining importance as a 'catch-all' for unsuccessful school leavers. It may thus be argued that the crisis of the Dual System appears first and foremost to be conditioned by the labour market and other external factors rather than by qualitative problems or structural inflexibility of the system itself.

A key question is how Germany's vocational training system ought to react with respect to the problem of integrating the weaker learners or those belonging to the so-called problem groups. From an institutional and didactical point of view three ways are conceivable:

- The first approach could be to dissolve existing occupational patterns by establishing a modular system with variable access opportunities and flexible levels of qualification standards. England and Scotland with their respective certification systems have established a competence approach linked to modularisable qualifications defined by employers and assessed in the workplace (Hodgson/Spours, 1997; Steedman, 1998; Deissinger, 1999; Pilz, 1999). This system has been designed to substitute traditional qualifications that were criticised as obsolete and also to reduce the academic and vocational divide. However, NVQs have been criticised as being behaviouristic and reductionist (Hyland, 1995). There are serious doubts, therefore, whether a modular approach of this radical kind could form part of an alternative to traditional apprenticeships in Germany (Deissinger, 1998).
- On the other hand, implanting modules within courses of training as didactical elements must not necessarily mean discarding the occupational orientation of skill formation (Euler, 1998; Kloas, 1997). It will be crucial, however, that vocational profiles which through a modular concept offer more flexibility in terms of training content become accepted by the labour market in the long run. This clearly requires combining the notion of quality control with a strong will to keep the number of profiles or names of occupations comparatively low. The advantageous effects of such a strategy could be that the modernisation of training content would become easier by inserting revised modules into the schemes and that re-training could be more clearly linked to initial VET. This reform option would firstly contribute to adapting the training system to technological developments, but could also help companies to train young people according to firm-specific needs. Therefore it would acknowledge specialisation and modernisation requirements. The Information Technology (IT) schemes are a recent example of this approach to modularisation: here the training contract can be specified in terms of an optional module in year three of the training course. This comes close to the so-called Satellite Model developed by the German Chamber Association. It is the view of the Chambers that there ought to be 'three freedoms' for companies when agreeing a training contract: (i) reducing the training length down to a minimum of 2 years; (ii) inserting both optional and additional modules into the training process which remains based on fundamental skills for everybody learning this occupation; (iii) bringing more flexibility to examination procedures (Deutscher Industrie- und Handelstag 1999). The problem is that these freedoms, however, imply that training in a specific occupation could become individualised to such an extent that the needs of companies are rated more highly than the vocational quality of the training scheme.
- A third way to bring more flexibility into the Dual System could be to increase the number of formal levels at which vocational qualifications are obtained. Providing more flexibility by paying more attention to the educational achievements of young people seems, at least at first glance, more agreeable among interest groups involved in German vocational training policy than a plain modular approach. One future reform option could therefore be to supplement the so far uniform training schemes by offering an extra set of formal qualifications for the more able learners (Pahl/Rach, 1999). At the other end of the qualification ladder, differentiation could lead to special training courses for weaker learners including new stage-structured training schemes. The social partners are currently debating the topic of shorter training periods. By stressing the standards of training and aspects of quality, the German trade unions and the craft workerks combine in their efforts to preserve the traditional occupation-based pattern within the Dual System: Whereas trade unions have always feared that low-standard training would automatically lead to new wage structures (Kuda, 1996), the craft workers expect that the occupational principle could be at peril if, for example, the so-called small journeyman certificate were introduced. In the industrial sector, however, two-year training courses would be welcomed although demand here is not universal (Zedler, 1996). The General Secretary of the Federal Institute of Vocational Training has made it clear that differentiation should not mean giving up the totality of a skilled occupation (Pütz, 1997). Also, one of the most recent statements of the Federal Minister of Education and Research underlines that less exacting occupations should require three-year courses and would therefore not establish a "second class" Dual System.

There is no final answer as to the potential design of new training schemes, be it for the sake of weaker learners or employers' flexibility demands. It will certainly depend on the extent to which modular principles penetrate into the German system. The three options indicate that modularisation can adopt different forms. Therefore it seems feasable to alter vocational courses along the line of a differentiation model (option 2). However, while optional supplementary modules

linked to different stages of training would also be compatible with the occupational principle (option 3), a fragmentation concept (option 1) as in the British systems would be a break with a long-standing tradition of VET (Deissinger, 1999; Pilz, 1999). Hence any reform option will have to be measured against its potential effects on the principle of occupational or vocational orientation and its social function (Kutscha, 1998; Adler/Lennartz, 2000) as it has to be harmonised with the traditional notion of quality control and marketability of qualifications. More clearly, however, any reform will also have to prove whether it will encourage employers to offer training in the lower stratum of the training system.

Basic Organisation of the VET System in Scotland

With the establishment of the Scottish Parliament there has been a renewed drive to increase participation rates in post-16 education (Scottish Office, 1998 and 1999). Although the initial focus of these policy initiatives has been the expansion of full-time education (the Age Participation Index for Higher Education stood at 47 % in 1996/97) there is a realisation that a viable work-based education route to the acquisition of skills is vital to the economic competitiveness of the country. This is acknowledged in the 'Home International' comparisons (Raffe et al, 1999) and in recent ESRC research in Lifelong Learning (Bamford and Schuller, 1999). There is also evidence to suggest that a properly resourced work-based learning route would provide a more cost-effective alternative to full-time initial vocational education (Ryan, 1998).

A priority area is the creation of a quality work-based vocational track primarily aimed at 16-19 year olds but also, eventually, including those working at foundation and intermediate skill levels (Evans et al, 1998). The number of traditional apprentices in Scotland has fallen sharply since 1979 (Gospel, 1997) with the decline of manufacturing and the growth of participation rates in post-16 full-time education. It was estimated that in 1995 10% of school leavers remained in apprenticeship schemes 1.5 years after leaving school (Hartkamp and Rutjes, 2000). Over two thirds of these apprentices were in skilled manual occupations, the majority within craft categories. By the mid-1990's the apprenticeship route continued to be an exclusive entry point to work only in the building, metal and electrical industries. The average age of apprentices was 17 years with the vast majority being males with educational backgrounds largely determined at lower secondary school level. The apprentices earned on average 60% of adult workers' earnings.

It was against this background of decline in traditional apprenticeships that the Government introduced a Modern Apprenticeship scheme under the Skillseekers

programme in 1996. This new policy initiative in work-based education can be characterised as voluntarist and devolved. The emphasis is on occupational standards driven by employer groups and supported by semi-independent state bodies (Local Enterprise Companies in Scotland). As Unwin (2000) points out there are no typical apprentices when considering age, gender, remuneration, skill requirement or entry level qualifications. Until recently a common feature of Modern Apprenticeships was the requirement to study for a Scottish Vocational Qualification (SVQ) at level 3. However, emergent apprenticeship models are now combining old and new vocational awards (Higher National Certificates and SVQs) at level 3.

It is possible to identify a number of common threads in the array of Modern Apprenticeship (MAs) models that exist in Scotland:

- the age of those commencing MAs is increasing, particularly for women
- the state funds the 'off the job' component and requires a 'contractual relationship' from the parties involved
- the new service sector is slowly establishing a foothold in MA training
- more small to medium sized organisations are likely to be involved in the delivery of MAs
- there are serious concerns about completion rates for those embarking on MAs (CBI, 2000)

The Scottish Council of National Training Organisations (NTO) estimates that there are currently 13,000 Modern Apprenticeships in Scotland operating across 65 apprenticeship frameworks. The majority of apprentices continue to work in the traditional areas of Construction, Engineering, Motor Vehicles, Administration and Retail. The Local Enterprise Companies (LECs) fund over 95% of these apprentices. This level of take-up of apprenticeships is disappointing and falls short of the projected 20,000 predicted by the Government to be in place by the end of the first term of the Scottish Parliament.

It can be argued that the apprenticeship model remains a fragile and unpopular route to work-based education in Scotland. Policy initiatives have favoured the full-time education choice and priority has been given to the expansion of higher education provision particularly for lower social class groupings.

Historical Aspects

In Scotland there has been a long history of apprenticeship training in the heavy engineering and construction sectors. However, the socially constructed

experience of 'serving your time' as an apprentice was highly variable and often enacted within the culture of sectarianism and gender discrimination associated with the traditional craft trades. The various waves of inward investment by American, European and South East Asian companies in the light engineering, oil & gas and electronic industries accelerated the anti-collectivist human resource management culture and further eroded the status of craft unions and the traditional apprenticeship model of training (Knox and McKinlay, 1999). Finally, the move away from manufacturing to a service-based economy is more pronounced in Scotland, further stimulating the development of different forms of learning embodying the new employment relationships of a knowledge-based society.

The Vocational Principle and Schemes of VET

There is a wealth of literature on the richness of learning that can occur in the workplace (De Jong, 1997). The expansion of full-time tertiary education, the growth in government funded agency programmes and the decline in apprenticeship training have all tended to marginalise the workplace as a location for legitimate learning (Billett, 1992). In contrast the theoretical developments in the field of cognitive psychology (Lave and Wenger, 1991) emphasise the legitimacy of learning within authentic productive environments. In Scotland, a number of work-based initiatives: Scottish Vocational Qualifications; Investors in People; Modern Apprenticeships and, more recently, the New Deal have been launched in an attempt to redress the balance, firmly rooting learning and development processes in the workplace.

In work-based vocational education we are encouraged to think of learning as occurring within and between 'learning zones' (Deissinger, 1996) and involving spatial and temporal dimensions that go beyond context or background and explore the possession or ownership of learning spaces (Gray, 1999). This, in turn, involves multiple actors in a socially constructed environment where the instructor plays a key role in the transformation of learning (Engestrom, 1994). This does not deny the need for a structured learning process but rather reasserts the importance of the productive nature of work itself as integral to skill and knowledge development and social learning (Fuller and Unwin, 1998 and Ainley and Rainbird, 1999). These important theoretical developments in pedagogy are integral to the growth of Modern Apprenticeships. However, it can also be argued that the methodogical tools at our disposal as researchers are inadequate to fully understand and explain the wider and often more complex issues associated with apprenticeships and youth transitions. The literature on vocational education rarely takes account of the wider social and economic policy dimensions of youth and parenting (Jones and Bell, 1999), while methodologies have often become

over dependent on individualistic approaches to research and thus fail, at times, to capture the wider network of kinship relationships that are significant in enabling the enactment of learning (Ahier and Moore, 1999).

Links of VET to the Labour Market

Scotland has a population size commensurate with other northern European countries (5million). It is in European terms a small player and dependent on the vageries of the global economy. The manufacturing workforce now stands at 16% of the overall labour force. Many of the new growth companies are low skill assembly plants (e.g. electronics) or offices employing highly routinized skills (e.g. call centres). The high skill sectors are increasingly in the service sector (Health, Education and Software) and require degree level qualifications. Intermediate level jobs are being squeezed within this high/low skill equilibrium. The craft and related occupations (13% of the working population) are in decline and increasingly to be found in small enterprises (23% of craft and related workers are self-employed). The demand for traditional apprentices is limited, while those who have 'served their time' in the older industries of shipbuilding and heavy engineering have long ago been absorbed within transitional sectors (e.g. Oil and Gas).

The level of employment is currently buoyant in Scotland. The unemployment rate stands at 5.5%, the lowest level since 1977. Skill shortages are in the IT sector and employers report a demand for workers with basic levels of numeracy and literacy. There is also an over supply of graduates who are increasingly taking intermediate level jobs. In comparison with Germany, therefore, the demand for intermediate level skills is small and in decline.

Reform of Apprenticeships in Scotland

Experience from other European countries suggests that a single integrated apprenticeship framework can be established for young people entering skilled manual work and first level supervisory management positions. Such a framework would need to strike a balance between a high status entry route and inclusiveness and be able to accommodate differing levels of educational ability. The challenge would be to establish a reformed apprenticeship model in the new industries such as electronics, health, care, retail, financial services and hospitality. In comparison with Germany apprenticeship is too narrowly defined in Scotland. A target here would be to recruit 20% of the school leavers cohort (approximately 12,000 leavers per year) into apprenticeships. The first option for all young people would be to secure an apprenticeship with an employer and only when this is not possible to opt for a full time pre-apprenticeship scheme with an education college. It is recognised that in Scotland we have an economy

dominated by small to medium sized companies, many of which are in the service sector. It would therefore be necessary to establish a number of inter-company training centres to offer apprenticeships that would involve training in a firm, education in college and training in an off-site inter-company training centre.

The apprenticeship model would need to be based on a nationally recognised level 3/4 qualification. In Scotland, the most appropriate vocational education qualification would be the Higher National Certificate. This qualification should be recognised as an apprenticeship benchmark award. In addition, apprentices could undertake SVQ units in the workplace. The HNC has the advantage of providing a well-established route to higher education should this be desired and is also recognised as a credible qualification by employers (Canning, 1998 and 1999).

All young people embarking on an apprenticeship would be entitled to study leave at an educational college for a recognised national qualification. This study leave could be taken on a day release basis or as a block of learning. Employers would enter partnership agreements with Colleges, who would provide the education component of the apprenticeships. These learning contracts would indicate agreed standards of performance and support and guidance arrangements for young people. This proposal forms part of the Advanced and Foundation Modern Apprenticeship programmes in England and is embedded in employment legislation in the UK.

Comparisons between the apprenticeship models in both countries

The German model of apprenticeship is comprehensive in coverage of occupations, highly regulated and held in esteem by young people. However, it is undergoing a transition and may require greater flexibity in modular structures or through creating greater differentiation. In contrast, apprenticeship in Scotland is highly fragmented, voluntarist and held in low esteem by young people. The Modern Apprenticeship is an opportunity to revitalize this apprentice culture; however, this is likely to require a legislative framework and a more consensual style of governance.

It is important to acknowledge that the praxis of apprenticeship operates within a wider socio-economic system. In Germany, the Dual System is supported and, in turn, supports an Occupational Labour Market (OLM). In Scotland the Internal Labour Market (ILM) structures of organisations are designed to exclude the young from taking an active role in employment other than in low skill jobs. The twin policies of labour market deregulation and employer-led education and

training programmes combine to marginalise the importance of formal learning in the workplace. To counter this would require legislation by the state to raise the occupational standing of craft, technician and service workers. Although this type of active labour market intervention has been witnessed in the professions (e.g. Nursing and Social Work) there is no evidence of a similar move for the skilled manual worker.

A second and related issue to be addressed is the role of the various partners involved in constructing the socio-economic experience of apprenticeship. In contrast to Germany the Scottish notion of social partnership is too narrow and often restricted to the interests of the state and the employer. The young learner and the wider parental network that supports this learning (or significant others) are largely ignored in policy making. Thus the apprentice rarely has a 'voice' and is often characterised as an outcome statistic or data within a research study rather than someone central to the apprenticeship experience. Similarly, other social partners are marginalised both within the workplace (trade unions) and the locale of the situatedness of practice (Local Authority).

Finally, it is necessary to build upon the work of other researchers in the field and to learn from the lessons of other countries, particularly in exploring developments in modularisation in Germany and new forms of governance in Scotland. However, it is also important to guard against making oversimplistic comparisons between different socio-economic states and, just as importantly, to acknowledge the dynamic and continually changing nature of the apprenticeship model.

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