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**THE REVIVAL OF APPRENTICESHIP TRAINING  
IN BRITAIN?**

H. GOSPEL

## **ABSTRACT**

This article examines the attempt to revive apprenticeship training in Britain in the 1990s in the form of the Modern Apprenticeship. Drawing on historical and comparative examples, it puts this attempt into a broader context. The design and operation of the Modern Apprenticeship are assessed. While some optimistic conclusions are drawn, there are worries in terms of the quantity and quality of training under the initiative. The Modern Apprenticeship is seen as being probably the last opportunity in Britain to revive the employment-based route to initial training.

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H. GOSPEL

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# **THE REVIVAL OF APPRENTICESHIP TRAINING IN BRITAIN?**

Howard Gospel

This article examines the attempt to revive apprenticeship training in Britain in the 1990s. Traditionally apprenticeship had been the main formal method of training for manual workers and the principal means whereby intermediate skills were formed. However, from the late 1960s, apprenticeship training had declined. During the 1980s employers did little to sustain apprenticeships, and the Conservative government was suspicious of a form of training which it associated with trade unions. From the early 1980s, there was a growing discussion as to how far Britain lagged behind major competitors in terms of skill formation, especially at the intermediate level. In a significant change in policy in autumn 1993 the then Conservative government announced the Modern Apprenticeship.

The first section of the article provides some definitions and a framework of analysis. The second section puts apprenticeship training into an historical and comparative context. In the next two sections the design and operation of the Modern Apprenticeship are considered. Finally conclusions are drawn and policy implications are considered.

## **1. THE ORGANISATION OF TRAINING**

Training may be organised in a number of ways. First, it may be co-ordinated and financed through the market. In other words, market forces of supply and demand determine training decisions, such as the decision to become or to take on a trainee. Markets, however, differ. Some are largely unorganised and competitive in the classical free market sense. In these markets, training decisions are mainly shaped by price signals, and the expectation is that attachment between trainees, qualified workers, and firms will usually be short term. Other markets are more structured and regulated. These

include occupational labour markets where customary practices and intermediate institutions, such as trade unions and employers' associations, regulate market forces (Kerr, 1954). Here, pure market forces are more muted; training tends to be in occupational skills which are usually certified in some way; and mobility takes place according to the rules of the occupational market. Second, training may be co-ordinated more within the organisation. In other words, the amount and type of training are determined according to administrative criteria and needs within the internal labour market of the firm. External price signals are less important and the expectation is that there will be less external mobility (Doeringer and Piore, 1971). In this case, training is likely to be more specific to the interests of the firm. Third, training may be organised and funded by the state. In this case, it may be provided in schools and colleges and financed to varying degrees by government grants. Here training is likely to be of a more general nature and usually needs to be supplemented by work-based experience. The degree of state involvement may differ considerably. It may be essentially auxiliary and supportive of market- and firm-based training or more interventionist and directive in nature.

In practice these three types will often overlap, and there will usually exist combinations of market-, firm-, and state-based arrangements. There are also intermediate forms of training where, for example, otherwise competing firms may cooperate within a market to organise training on a multi-employer basis. As we will see, each form of training has its costs and benefits. However, the equilibrium between different forms is often a difficult one to maintain: in particular, highly socially constructed arrangements, such as occupational labour markets, may be undermined by growing market forces, by internal company provision, or by increasing state intervention.

Apprenticeship is here defined as a method of employment and on-the-job training which involves a set of reciprocal rights and duties between an employer and a trainee (usually a young person); the employer agrees to teach a range of skills, usually of a broad occupational nature; in return the apprentice agrees to work for an

extended period at a training wage which is low compared to the qualified worker's rate, but which rises periodically until the apprenticeship is completed. In the early stages, the pay and training which the young person receives exceeds the contribution to the firm by way of productive output; in the later stages, the relationship is reversed. In this way there is some sharing of the costs of training. On completion, the skilled worker expects to receive a higher wage than the non-apprenticed worker, and this constitutes an incentive to complete the apprenticeship. For apprenticeship to be viable, the parties must live up to the terms of the agreement with sufficient frequency. In addition to its economic function, apprenticeship performs a broader function of socialisation into the trade and the world of work. In modern times, productive work and on-the-job training have come to alternate with off-the-job training in an educational institution often partly financed by the state.

As thus defined, apprenticeship has elements of market-, firm-, and state-based training. Thus, market forces play a part in determining the employer's decision to take on an apprentice. Crucially apprenticeship has usually been based on more regulated markets where intervening institutions shape rules governing the apprenticeship. In this respect, the expectation is that the apprenticeship will involve training in broad skills which are transferable in the occupational market. Apprenticeships are usually served within one firm and so, for a time at least, the apprentice is part of the firm's internal labour market. There may thus be a pull towards training in firm-specific skills of more immediate advantage to the employer. Also, over time, apprenticeships have come to overlap with state co-ordination of training in a number of ways: apprentices may attend colleges for off-the-job training; their training costs and even wages may be subsidised by the state; and the form of apprenticeship may be subject to legislative requirements. Again it should be stressed that the equilibrium between these various elements is a difficult one to maintain. A shift in emphasis may undermine the balance and change the essential nature of apprenticeship.

## **2. BACKGROUND**

In the decade or so after the Second World War, apprenticeship still provided the British economy with an adequate supply of skilled labour of a reasonable, though also variable, quality (Broadberry and Wagner, 1996). In contrast to Germany, however, it had not extended much beyond traditional areas of male work in manufacturing and building trades. As it developed in Britain, it assumed the following broad characteristics. It was usually based on some sort of formal or informal agreement and lasted for a period ranging up to seven years, reducing to five in the 1950s, and to between three and five years by the 1960s. After abuses during the interwar period, when apprentices were often used as a cheap labour, the tradition largely prevailed that apprenticeship should provide training in broad skills which were transferable in the occupational market. This suited the apprentice who knew that there would be wider job opportunities. It suited the employer who, in Britain, often still required traditional skills and who needed to know the currency of skills in the external labour market. It also suited the trade unions since a long period of training in all-round skills (especially when combined with quotas on numbers) restricted the supply of labour, rendered members mobile, and underpinned wage rates. Over time, increasing provision came to be made for alternating off-the-job training in technical colleges. Allied to this, apprentices slowly came to receive formal qualifications, in particular City and Guilds (C&G) or Business and Technology Education Council (BTEC) certificates. Regulation through collective bargaining was either by informal custom and practice at workplace level or by more formal agreements at industry level, though these were usually minimal and were not legally binding.

From the early 1960s onwards, there were growing criticisms of apprenticeship training by employers and policy makers. The main charges were that apprenticeship was exclusive in that it was restricted to young males in certain trades; it involved a large amount of time-serving and time-wasting rather than training to standards;

and it perpetuated outdated restrictions and demarcations (Williams, 1963; Donovan, 1968, pp.85-93). In these circumstances there began a series of reform initiatives by governments, employers, and trade unions. The 1964 Industrial Training Act, and the related Industrial Training Board (ITB) and levy-grant system, supported apprenticeship training by seeking to spread the costs more equitably between employers. Some ITBs, such as those in engineering and chemicals, helped reform apprenticeships by developing modular training, by increasing off-the-job training, and by introducing new standards to replace time-serving (Senker, 1992, chapter 2; Senker, 1996).

Though such reforms were implemented through the 1970s and into the 1980s, progress was uneven between and within industries. Moreover, there was very little success in extending apprenticeships to occupations. In retrospect, an opportunity was probably missed, and the British system of apprenticeship was not fundamentally reformed in the way it was in Germany at that period.<sup>1</sup> Also, by this time, in Britain, apprenticeship training was also overtaken by other major changes.

In the context of rising youth unemployment, governments introduced a series of new 'schemes' to provide training for jobs. The most significant of these, introduced in 1983, was Youth Training (YT). Under this scheme, trainees were paid a government allowance and did not necessarily have employed status. In retrospect, YT may have spread formal training to many who would never have done an apprenticeship. However, the scheme was very much introduced to alleviate youth unemployment, and much of the training was to a low level. As a result it gave state-based schemes a bad reputation with both young people and employers. Some firms which traditionally had apprenticeship programmes replaced these with cheaper YT trainees. Others used YT as a screening device and later upgraded selected trainees to apprenticeship status. By the late 1980s, approximately two-thirds of first-year apprentices were on YT (Payne, 1995, p.78). Simultaneously, therefore, YT both supported apprenticeships by providing subsidies and undermined them by providing a state-based alternative (Jones, 1988; Stevens,

1994).

During the 1980s and early 1990s there was a series of other Conservative government initiatives which had a profound effects on the system of vocational education and training. In terms of education, government sought to encourage vocationalism in schools and to increase staying on: the former had limited effect; the latter contributed to the considerable increase in participation rates (Green and Steedman, 1996). In terms of training, most of the tripartite ITBs and levy arrangements were replaced with a voluntary, employer-led system of Training and Enterprise Councils (TECs), local groupings of private sector employers, charged with co-ordinating training and implementing government schemes. At sectoral level, Industry Training Organisations (ITOs), again largely employer-dominated, came to replace the former training boards. In line with market-based ideas, measures were introduced to reduce pay and benefits for young people; private training providers were encouraged; and credits are given to young people to be exchanged for approved training. In a major reform of the qualification system, from 1986 onwards, a new system of National Vocational Qualifications (NVQs) was introduced. This created a framework of standards based on 'competencies' or the ability to perform work tasks. The intention behind this was to create a nation-wide and rationalised system of transparent and transferable qualifications, from level 1 at the bottom up to level 5 (degree level) at the top (Jessup, 1990; Beaumont, 1995) According to critics, these have had a largely negative effect on the quality, and little effect on the quantity, of training (Smithers, 1993; Robinson, 1996). In addition, General National Vocational Qualifications (GNVQs) were introduced to provide a vocational alternative to the traditional academic A levels for those staying on at school.<sup>2</sup>

## FIGURE 1

### Apprentices as a Percentage of Employment Manufacturing, Engineering, Construction, Services

— - — Construction, ---- Engineering, —— Manufacturing, - - - Services.

Source: DE figures 1964-90; LFS figures 1979-96. Engineering covers metal goods, engineering, vehicles. Manufacturing covers engineering and other manufacturing. Services covers distribution, hotel and catering, transport, communications, banking and finance, public sector, and other.

During these years, the decline in apprenticeships, which had started in the late 1960s, continued. Figure 1 presents statistics from the Department of Employment (DE) for 1964-90 and the Labour Force Survey (LFS) for 1979-96. The two series are different in that the former was based on employer-reporting in an administrative count, while the latter are based on self-definition in a survey. Both series have their limitations, especially since the former excluded



many YT trainees, while the latter has tended to include them and to overstate numbers. The most precipitous falls in apprentice ratios were in the late 1960s and early 1970s, in the early and mid-1980s, and again most dramatically in the early and mid-1990s. For later years we also have the Youth Cohort Studies: these show that the proportion of 16-18 year olds in apprenticeship fell between 1989 and 1992 from 14 to 9% (Payne 1995, p.3).

There are various explanations for the long-term decline in apprentice numbers. On the supply side, it might be argued that young people have become less willing to start an apprenticeship, preferring to stay on at school and proceed to college or university. This would certainly correlate with the large decline in apprentice numbers in the early 1990s. However, there is no clear evidence that apprenticeships became less attractive from the late 1960s onwards, and it is not the case that all young people wish to stay on at school or go to university. On the demand side, it has been argued that technical change and the contraction of traditional trades reduced the need for apprentices. Clearly some trades, for example in printing, have disappeared or declined. However, after correcting for employment within each sector, the decline is still evident. On the part of trade unions, it has been suggested that the reduction of union power and the coverage of collective bargaining removed a support for apprenticeship training. This explanation has some credibility, but again it has problems: in particular, apprenticeship decline in Britain does not correlate closely with union decline. Unions are important in supporting apprenticeship arrangements, but, by themselves, they have insufficient power to initiate or sustain them. On the part of employers, and more convincingly, it has been suggested that, from the late 1960s onwards, companies became less willing to take on apprentices for various reasons. Given higher apprentice wages, longer periods of training, and shorter periods of productive work, the cost of apprenticeships rose (Ryan, 1993). The failure thoroughly to reform the system made this form of skill preparation increasingly unattractive to employers in the context of changing technologies and markets. From the mid-1970s, with growing product market uncertainties and rising levels of

unemployment, many firms took the short-term option of not training and recruited labour from the external market. Where entry training was unavoidable, some employers looked to informal, in-house arrangements; others looked to state-sponsored YT schemes. In this way, both employer commitment and broad coverage were attenuated. Finally, it must be added that, from the early 1980s, government distrusted apprenticeship training and removed supports such as the ITB system. Various government reports in the early 1980s stressed the negative aspects of apprenticeship — its association with craft unions, time-serving, and restrictive labour practices (Central Policy Review Staff, 1980, pp.17-19; Manpower Services Commission, 1981). In this way, free market forces, firm-based arrangements, and state interventions upset the balance on which occupationally-based apprenticeships depended.

When viewed comparatively, it is well known that apprenticeship has remained stronger in Germany and surrounding countries such as Austria and Switzerland, where it also covers a wider spread of occupations. In these countries it is underpinned by a legal framework and state support, inter-firm regulation through employers' organisations and chambers of commerce, and employee involvement through trade unions and works councils. It is true that, in recent years, there have been some pressures on these arrangements, reflecting rising costs and perceived rigidities in the eyes of employers and the increasing attractiveness of more academic routes to young people (Casey, 1991). However, in the early 1990s, in Germany, the system still covered around 5% of the labour force. In Australia, up until recently, apprenticeship has also remained significant, covering over 2% of the labour force. Here, it has traditionally been supported by an industrial relations system which enshrined legally binding awards throughout a whole industry or occupation. By contrast, in Britain, apprentices represent less than 1% of the employed labour force (Gospel, 1994). Over the years, various attempts have been made to revive apprenticeship training, for example in France, Spain, Italy, and the US, where it had also declined. However, and ominously for Britain, this has been without great success (Organisation for Economic Co-operation and

Development, 1994; Finegold, 1993).

This was the context within which, in 1993, the Conservative government announced a reversal of its attitude to apprenticeship training and, in a major new initiative, launched the Modern Apprenticeship.

### **3. THE DESIGN OF THE MODERN APPRENTICESHIP**

The Modern Apprenticeship was designed to incorporate both traditional and new features. The term apprenticeship was revived, since it was thought to have more positive than negative connotations in the minds of employers and young people. In particular it was seen to signify quality training and long-term commitment. The main elements of the Modern Apprenticeship, as developed in various blueprints, contained the following (DE, various dates).

In the first place, on the lines of traditional apprenticeships, the design stipulated that there should be a written agreement or 'pledge' between the employer and apprentice, specifying rights and obligations. This agreement was to incorporate the training to be provided, qualifications to be attained, and a commitment to completion.<sup>3</sup> As such it was intended to signify a mutual and long-term pledge to a significant period of training, outlined in a training plan specifying methods, stages, and outcomes. The agreement was to be underwritten by the local TEC, with the requirement that, should the employer cease trading, the TEC would find alternative training. A corollary of the employer-based arrangement was that the young person should have employed status during the apprenticeship, and this was seen as a way of signalling employer commitment and a means of attracting young people. Crucially, given employed status, the apprentice was to be paid a wage, to be determined by the employer and young person.

Second, and also fundamental to the design, the Modern Apprenticeship was linked to an industry-wide framework based on NVQs. The proponents saw the movement towards competency-

attaining as a crucial and efficient way of avoiding time-wasting and assuring consistent quality outcomes. Though no time periods were specified, the expectation was that the average apprenticeship would last for about three years. Within the NVQ framework, the training was to be to level 3, adjudged the equivalent of two A levels. There was also a suggestion that some apprenticeships might impart technician, supervisory, and managerial skills. To the NVQ target of task-related competency were added so-called 'core' or 'key' skills (numeracy, communication, IT, problem solving, and personal skills such as teamworking). These were intended to ensure a broader educational base for the apprenticeship and might be taken from GNVQ core skill units. The off-the-job training element was to be provided by further education colleges and private providers, on a day- or block-release basis. It was also envisaged that the training should provide a foundation for movement between routes and progression up the NVQ ladder and on to higher education. In similarity to traditional apprenticeships, the Modern Apprenticeship was, therefore, to provide preparation in broad skills capable of being transferred in the occupational labour market. In contrast to the traditional apprenticeship, it was also to provide a broad educational base and the possibility of movement between routes.

Third, in terms of coverage, the expectation was that most Modern Apprentices would be 16-17 year olds. As the design developed, a so-called 'Accelerated Modern Apprenticeship' was later added for 18-19 year olds who already possessed GNVQs or A levels, with the expectation that these could achieve level 3 in eighteen months. Thus, just as Modern Apprentices might move into higher education, so others might also switch into the programme from further studies at school or college. This aspiration for greater flexibility complemented the emerging notion that there should be alternative, but inter-linking, pathways within the British system (Department for Trade and Industry (DTI) 1994). Also, in terms of coverage, from the outset, the aim was that the Modern Apprenticeship should operate in a wider spread of industries and occupations, beyond those which traditionally had this form of training. In this respect the initiative sought to extend

apprenticeships on the lines of the German system. In addition, they were to offer opportunities to females and ethnic minorities who in the past had not done apprenticeships and who often had inferior access to training.

Fourth, a fundamental aim was to give ‘ownership’ to industry, which, in reality, as with other Conservative reforms, meant giving leadership and control to employers. This was seen as necessary to establish employer commitment and to avoid the appearance that this was yet another government scheme for the unemployed. Thus, the employer-led ITOs were to design the framework and employer-led TECs were then to organise delivery at the local level. Further education colleges, traditional certifying bodies, and trade unions were assigned a lesser role. Within the framework, employers could adapt programmes to their own particular company circumstances. Crucially, in terms of financing, the employer would pay the apprentice’s wage and bear a part of the training cost.

Finally, though the main costs were to be borne by the employer, it was announced that government funds were to be made available to finance the development of the system and to contribute towards the cost of off-the-job training. This established the important principle of state support for part-time education and training for employed young people. The funding mechanism was in part to be via Youth Credits (YCs) which became an integral part of the proposal. It was felt that market-exchangeable credits would boost the motivation of young people to train and the willingness of employers to take on trainees. The money was to be channelled through the TECs which were to agree actual funding levels with the training provider or employer, thus allowing for local flexibility.

#### **4. MODERN APPRENTICESHIPS IN PRACTICE**

To date over 70 sectors (covering the majority of British industry and commerce) are operating or developing Modern Apprenticeship programmes. Some, such as in engineering and electrical contracting, were able to build on well established arrangements;

others, such as in retailing, IT, and business administration, had a bigger task to develop frameworks from scratch or from existing loose qualifications or from YT arrangements. In early 1996, the Accelerated Modern Apprenticeship was merged into the main programme. Employers had found two lots of funding arrangements bureaucratic; there was a concern that a foreshortened programme would undermine the credibility of the initiative; and, as it turned out, apprentices were proving to be older than had been anticipated (Ernst & Young, December 1995).

It is unclear how much money has been put into the programme by government and how much is paid out to employers by way of subsidy for training. In 1994, it was stated that over £1.35bn would be made available over 3 years to develop the frameworks and to pay for off-the-job training.<sup>4</sup> Without access to internal data, it is impossible to say how much new money has been spent, but it is clear that funding was diverted from other schemes such as YT. As to the subsidy to employers, given devolution to TECs, this varies between localities and occupations. The Department for Education and Employment (DfEE) sets target numbers for TECs which in turn decide how much they will spend on which programmes. TECs thus have some latitude as to whether, for example, they seek to fund more engineering and IT places which may be difficult to fill or more hairdressing and retailing apprenticeships which may be easier. Employers would seem to have limited input in this process. On average government funding covers about £6,000 **per capita** of the average gross cost of £25,000 of a three year apprenticeship (Financial Times, 24 March 1997). In other words, it can be as much as twice the YT subsidy. However, as we will see below, it may be insufficient to attract employers in some sectors where the cost of the off-the-job training is high.

To date, we can draw on a number of surveys which provide a broad picture of the early Modern Apprenticeships. These were commissioned by government and provide a somewhat optimistic review of developments (Ernst & Young, various dates).

In terms of recruitment, there was some initial fear that young people would be insufficiently interested because of the stigma of

government schemes and a growing preference for the school-based route. Indeed, in some localities in engineering, it has proved difficult to fill places. However, in most cases, it has been relatively easy to recruit, and the average level of educational attainment of the early intake has been high and has included many who might have stayed at school or gone to college.<sup>5</sup> However, there has also been considerable switching from YT, with over 40% having been on that scheme. If numbers are to increase in the future, while still maintaining quality, more will need to be taken from the 'staying on' group or the YT group itself will have to be upgraded. The average starting age of the Modern Apprentices has been over 17 years, perhaps reflecting a desire of employers for high educational standards. Unfortunately, equal opportunities objectives do not seem to have been met with only 3% coming from ethnic minorities and with 39% being female and mainly concentrated in traditional female jobs.<sup>6</sup>

In terms of employment status, 95% are employed, with the main exceptions being in childcare, business administration, and engineering construction. Pay has varied from £29.50 (the YT allowance) to a maximum of £165 a week for some apprentices in engineering, with the average being £76. The highest average has been in engineering (£88) and chemicals (£83) and the lowest in childcare (£41) and business administration (£45) (Ernst & Young, February 1995, p.18). Marsden and Ryan (1995) argued that, as an incentive to employers, Modern Apprentices should not have employed status and should be paid a low trainee allowance as in Germany. However, in the British context, given the past history of YT, employee status would seem to be necessary to attract and retain apprentices. Certainly the various surveys show that the absence of employed status was a significant disappointment to apprentices (Unwin and Wellington, 1996). As to the wage, Marsden and Ryan suggested that this should be set somewhere between the low allowance of YT and the higher wage associated with some traditional apprenticeships, where a select few could earn rates exceeding £100 per week. In their terms, the average would seem to be about right, though still with some high wages in

engineering.<sup>7</sup>

In most firms (82%) there exist formal agreements, with training plans (74%) outlining stages, off-the-job training, and outcomes (Ernst & Young, October 1995). In a few instances, as in some chemical and engineering companies, off-the-job training involves the whole of the first year in college, though in these cases the absence of workplace involvement can be a disappointment to the young people concerned (Unwin and Wellington). Unfortunately, it is not yet possible to say what percentage obtain a permanent job on completion, either with their employer or with another employer.<sup>8</sup> This will clearly be a crucial test of long-term success.

The overall conclusion from these surveys has been that more than two-thirds of participating employers expressed a willingness to take on more Modern Apprentices and said they would recommend the programme to other employers. In addition, there would seem to be high levels of satisfaction among apprentices with their programmes (Ernst & Young, October 1995). It is necessary, however, to go beyond these largely optimistic survey results and consider the quantitative and qualitative outcomes in more detail.

From a quantitative point of view, there are confusions and contradictions in stated targets and actual numbers on the Modern Apprenticeship. It was envisaged that between 60,000 and 70,000 Modern Apprentices would qualify annually. It was clearly envisaged that there would be at least 150,000 Modern Apprentices at any one time.<sup>9</sup> Another statement, however, put the target figure as high as 200,000 (Bayliss, 1994, p.24). A further stated objective was, from a 1992-93 base, to treble the number of young people on government supported training achieving NVQ3 by the end of the decade.<sup>10</sup> While the main objective was to provide skills at the intermediate level, other more ambitious aims were expressed in terms of providing technician, management, and entrepreneurial skills (DE, *Insight*, 29 and 30, Spring and Summer 1994; DTI, 1994, p.39).

In practice, the figures in Table 1 suggest a more mixed outcome. Up to March 1997, there had been 93,500 Modern Apprentice starts in England. On this basis and given a drop-out rate



of 15%, it will take until the turn of the century before the stock target is reached. If reference is made to Figure 1, the beginning of the Modern Apprenticeship has not arrested the fall in apprentice numbers. As already suggested, a significant proportion of Modern Apprentices have switched from YT places, as is shown by the falling proportion of the 16-18 age group on YT since the launch of the Modern Apprenticeship.<sup>11</sup> A breakdown by sector reveals some further problems. Over half of all Modern Apprentices are in traditional sectors — engineering (19.4%), construction and electrical contracting (14.3%), vehicle repair (8.5%), and hairdressing (7.6%). The only large new sectors are business administration (14%), retailing (7.4%), health, social, and child care (7.2%), and hotel and catering (6.3%). Disappointing must be sectors like IT (1.4%), chemicals and related (0.8%), textiles and clothing (0.3%), and telecommunications (0.1%) — though some of these would claim that their programmes are very new.<sup>12</sup>

**TABLE 1**

**Modern Apprentice, Total Starts, England, to end October 1996**

	<b>Total Starts</b>	<b>Per Cent</b>
Accounting	1206	2.1
Agriculture	558	1.0
Air transport	132	0.2
Bus & coach	170	0.3
Business administration	8121	14.0
Chemicals, polymers	481	0.8
Construction	5231	9.0
Electrical Installation	3071	5.3
Electricity	110	0.2
Engineering	11233	19.4
Steel	100	0.2
Hairdressing	4430	7.6
Estate agents	151	0.3
Health, social, child care	4162	7.2
Hotel & catering	3626	6.3
Information technology	838	1.4
Motor industry	4927	8.5
Road haulage	121	0.2
Printing	525	0.9

Furniture	169	0.3
Retailing	4298	7.4
Travel	872	1.5
Textiles & clothing	180	0.3
Sports & recreation	389	0.7
Others (38 industries)	2849	4.9
Total starts (71 industries)	57,934	100

Source: DfEE, December 1995 and September 1996. Engineering covers engineering manufacturing, marine, and services; construction covers building, engineering construction, plumbing.

Some firms have used the Modern Apprenticeship to re-enter apprenticeship training; others have used it to introduce apprenticeship for the first time. However, many firms have merely substituted Modern Apprentices for apprentice places they would have funded themselves anyway or which would have been supported in the first two years by YT. In engineering, for example, leading firms such as Ford, Rover, Rolls Royce, and British Aerospace had apprentice schemes and renamed as many as they could on such programmes as Modern Apprentices. Similarly, in construction, many employers who funded the first two years of training under YT have now moved to the Modern Apprenticeship or switched YT trainees on to it. It is a concern that an unknown (but probably significant) number of apprentices should be of this kind. Overall, by the turn of the century, apprentices (Modern and otherwise) will probably constitute only around 10% of the 16-18 cohort, in effect little or no increase over a 1992-93 base.<sup>13</sup>

In terms of qualification outputs, some tentative conclusions may be drawn. In the past, some traditional apprenticeships had only reached the equivalent of NVQ level 2 and only 11% of YT leavers had attained NVQ level 3 or 4 (Robinson 1996, p.19). Moreover, the prototype surveys showed that 58% of participating employers had not in the previous year trained young people to NVQ level 3 or its equivalent (Ernst & Young, October 1995). The Modern Apprenticeship may therefore raise the level of qualifications and it adds new 'key' skills to apprenticeship programmes. However, given the numbers cited above, it is unlikely

to treble the numbers gaining qualifications at level 3 by the turn of the century. It is even less likely to have a significant effect on higher level technician and supervisory skills at level 4.

From a qualitative point of view, there are also mixed conclusions. Undoubtedly, the Conservative government saw the Modern Apprenticeship as a major qualitative initiative and a reestablishment of the 'gold standard' of work-based training in Britain (DE, Employment Gazette, April 1994, p.99).

On the plus side, as already stated, the new apprenticeship has obviously established credibility with young people and the educational attainment of the early intake has been good. As to the content of training, the introduction of the Modern Apprenticeship, with associated NVQs, has given some industries an opportunity to re-think the content of youth training. Of course, in some sectors, this has meant building on firm foundations. For example, in chemicals, training to standards, multi-skilling, and greater integration with further education had been introduced in the 1980s. In the travel sector, the industry had already developed new arrangements in the early 1990s. By contrast, in other sectors, there has also been an upgrading and extension of training along with the move to Modern Apprenticeship. For example, in IT and retailing, new frameworks have been constructed. In addition, the emphasis on more standardised systems may have led to greater transparency and transferability. In this respect, the Modern Apprenticeship is better than informal on-the-job upgrading which is uncertified, difficult to transfer, and likely to lead to a waste of skills (Marsden, 1995). It is also an improvement on some traditional apprenticeships where levels and outcomes could vary considerably (— though, as we will see, the Modern Apprenticeship may also allow considerable variation). The new apprenticeship may also be positive in that it provides a stepping stone and basis for further training. For example, it is being used in this way in retailing where some large supermarkets, such as Sainsburys, are using it for progression to management positions (Industrial Relations Services, June/July 1995). At Rover, the Modern Apprenticeship offers the possibility of switching between craft, technician, and student

schemes in a way which was not possible under traditional apprenticeships (Huddleston, 1996).<sup>14</sup>

On the debit side, there are criticisms of the quality of training, related primarily to the NVQ framework, the quality of trainers and assessors, and the funding arrangements. First, it has been claimed that the NVQ approach stresses the ability to perform a set of tasks at a given point in time rather than a fuller understanding of the context of the trade and its broader theoretical underpinning (Smithers, 1993; Senker, 1996). Second, it has also been argued that national competency frameworks cannot take account of the variability of contexts in which tasks are performed, except by becoming increasingly abstract and complex (Wolf, 1994). This in turn makes the framework less and less intelligible to employers who then lose confidence. Third, there are problems in terms of tuition and assessment and therefore of quality assurance with the present system. In most British firms there does not exist the class of experienced trainers and Meisters who, for example, are a key part of the German system. Fourth, testing relies extensively on the assessment of practical work, carried out mainly by internal assessors, though subject to having been certified and subject to standards set by the ITO concerned. Such assessors, however, may not be well qualified to assess key skills and, moreover, may be inclined to push their own trainees through. This may then result in outcomes varying from company to company. As a consequence, the consistency and transparency problems of the old system may persist. Finally, the funding regime is also problematic. Funding for off-the-job training is output-related in that trainers receive payment on attainment of competency by trainees. This creates a moral hazard problem in that it provides an incentive to permit sub-standard candidates to progress (Hodkinson and Hodkinson, 1995).

In the light of these criticisms, changes and adaptations have been made by government and employers. In an attempt to increase the broader educational base of the Modern Apprenticeship, so-called 'key' skills were included to provide broader theoretical underpinnings and understandings. However, there is great variety in how these are delivered and whether they are certificated; there is

also concern among employers with the size and funding of this component. Belated attempts have also been made to simplify and improve assessment of NVQs and key skills with more rigorous external testing. Faced with deficiencies in content, firms have also been adapting the frameworks in various ways to make them more relevant to themselves and also sometimes more demanding. Thus, for example, Ford requires a broader content to ensure standards and multi-skilling (— unlike most firms, it has also retained a 4-year time-based format and also guarantees a job on completion (People Management 23 March 1995:35). A number of sectors, such as engineering, chemicals, and bus maintenance, have maintained traditional qualifications such as C&G or BTEC alongside NVQs to ensure that knowledge and understanding are sufficiently wide. In electrical contracting, the industry has insisted on the continuation of C&G and its own testing standards. In other cases, adaptations may be less benign and may result in downward variability and reduced transparency. In hotel and catering, for example, the NVQ system has been simplified to allow freedom for employers to adapt the programme to meet their requirements, and big firms tend to take a pick and match approach (Personnel Today, 14.3.1995; Training, October 95, p.4).

## **5. ASSESSMENT AND CONCLUSIONS**

The Modern Apprenticeship is a major attempt to revive the occupational labour market route to vocational education and training for intermediate skills in Britain. It is also an attempt to extend this system of alternating employment-based experience and vocational education into new areas. To assess its broader significance and likelihood of success, it is useful to revert to the three-fold typology set out in the introduction and to return to the broader historical and comparative context.

The occupational labour market route, with apprenticeship at its core, has certain advantages over both the firm-based and the state- or school-based routes. In comparison to the former,

apprenticeship offers the prospect of training in broad skills and the possibility of greater transferability. This in turn may produce a better allocation of skills in the economy and less wastage of skills when people move between jobs. It is true that internal labour market provision may encourage firms to invest more in the skills of insiders, since returns on training are less risky and skill formation can be integrated into the firm's human resource planning (Sako, 1991). However, internalised systems are exclusive of outsiders and may produce largely firm-specific skills. Where internalisation is uneven in coverage, as in Britain, it may create high-skilled islands within a low-skilled sea and fail to produce a positive effect on training levels throughout the economy (Marsden and Ryan, 1991; Gospel, 1992, pp.156-8).

In terms of the school- or university-based route, it is sometimes suggested that, as a result of higher participation rates (with nearly two-thirds of 16-18 year olds now in full-time education and one-third proceeding to higher education), Britain has already gone down a state-based route to vocational education (Green and Steedman, 1996; Soskice, 1993). Further, it could be argued that this route offers the prospect of more equal access, better long-term national co-ordination, and broader training in numeracy, languages, and computing skills. However, the argument that Britain should go further down this route and that school, college, and university graduates should provide intermediate skills is ill-conceived for a number of reasons. First, there is a sizeable proportion of the youth cohort who do not wish to follow the classroom route. These need to be trained in those intermediate skills which are essential for a successful modern economy. Second, British schools, colleges, and universities are ill-equipped with staff and facilities to produce such skills, and this route cannot give the experience which is necessary for their acquisition. Third, such an approach removes the responsibility for training too far from the workplace and puts it in the hands of government which has other goals and calls on resources which may complicate training policy.

The occupational labour market route which the Modern Apprenticeship is attempting to re-create and extend has some real

advantages. It facilitates employer investment in potentially mobile trainees; it gives the responsibility for training to employers who should be well placed to assess relevant needs; and it is potentially flexible and responsive to market forces. It can provide training in all-round, portable skills, broadly oriented to technical change and in this sense is superior to YT (and to National Traineeships as this is to become). In turn the Modern Apprenticeship has potential advantages over traditional apprenticeships: it is less restricted by trade demarcations; it covers a broader spread of occupations; and it takes a more dynamic view of movement in to apprenticeship and progression out to continuing training and further education.

On the other hand, apprenticeship training has real costs for the employer. There is a payroll cost in terms of the gap between apprentice wages and their output and qualified workers' wages and their output. If under the Modern Apprenticeship, the period of productive work decreases, the cost to the employer will rise. There is also a tuition cost, which the Modern Apprenticeship reduces via the subsidy for off-the-job training. However, if the quantity and quality of training increases, this will not cover all the costs of off-the-job training. In addition, there are further costs in terms of on-the-job training, re-scheduling work, and time spent by skilled workers giving tuition. The opportunity cost of apprenticeship training lies in the fact that the employer might have recruited qualified labour in the external market and used resources for other investments such as in plant and equipment. The replacement cost is the cost of losing an apprentice to another employer who has not trained and who can therefore afford to pay a higher wage which must then be matched. Of course, these costs have to be offset against the cost of not training and recruiting from the external market. However, there are usually significant net costs of apprenticeship training.<sup>15</sup> The consequent danger is that the occupational labour market route will either succumb to external market strategies or to an unbalanced mixture of free markets, internal labour markets, and state provision. In turn, this can have significant negative consequences in terms of the quantity and quality of training. At the macro-economic level this can then lead to

bottlenecks in production and the bidding-up of wages, followed by deflationary policies such as has occurred periodically in Britain.

In the case of the Modern Apprenticeship, there are real strengths in its design — apprentice agreements, extension to new occupations, potentially greater transparency and transferability. There are also some promising indications as to its operation, especially credibility with young people. Some significant supports are also in place such as the TECs, industry frameworks, and state subsidy for off-the-job training. However, as we have seen, there are also real weaknesses; on the quantitative side these relate to up-take by employers, concentration in particular sectors, and numbers covered (— the Modern Apprenticeship only covers an elite of the employed 16-19 year old population); on the qualitative side these relate to the nature of qualifications and certification and to comparability of standards within and between sectors. These weaknesses are part of a broader problem of market failure and missing institutional links.

One of the main problems in terms of market failure lies with employers, since there are insufficient companies offering good quality apprentice places. For employers, the problems are the interrelated ones of high cost and free-riding. Even with government credits for off-the-job training, the costs of apprenticeship to the employer are not insignificant, especially in sectors such as engineering and chemicals where apprentice wages and training costs are high.<sup>16</sup> They are especially high when there is pressure to make skills more transparent and transferable, as is intended with the Modern Apprenticeship, since this increases the risk of poaching. As a consequence, there is a disincentive to take on apprentices and an incentive to make their training less transparent and more firm-specific, thus undermining occupational labour markets (Katz and Ziderman, 1990). Put another way, the problem is one of cost-sharing. Investment in general and transferable skills requires an element of cost-sharing between employers and trainees (Stevens, 1994). There are, however, limits to which the costs can be shared with the apprentice via lower wages and more productive work and yet still attract good candidates and provide quality training. Costs



could be shared more with the state via greater or more targeted assistance for the training or subsidy for the wage element. However, there are limits to which costs can be shared with the state and yet retain an industry-based system. The costs must therefore be shared more between a larger number of employers. If all or most employers share the costs of training, then no one employer need fear being at a competitive disadvantage. However, in Britain, the mechanisms for such cost and risk sharing between employers are inadequate.

In countries where apprentice training is still strong such as Germany, Austria, Switzerland, and to some degree Australia, there are arrangements which have supported the system and helped share the costs. Crucial here are various forms of interfirm organisation and industry-wide arrangements. In Germany, local Chambers of Commerce and sectoral employers' organisations introduce an element of common purpose and pressure to support training and prevent free-riding. In Australia, industry-wide legally binding determination of wages and conditions also traditionally helped regulate apprenticeship training. By contrast, in Britain, the influence of employers' associations and interfirm training arrangements has declined over the last 20 years. Local TECs and industry ITOs (now to be called National Training Organisations) are in part an attempt to remedy this. However, their activities need to be better coordinated, and there may be a case for TECs merging with local Chambers of Commerce to provide a firmer foundation (Bennett, 1994; Marsden, 1995, p.109). To date, these various organisations have varied greatly in their ability to build multi-employer networks to support training.

Employee organisations have been little involved in the Modern Apprenticeship compared to the role they have played in Germany in constructing and enforcing that country's regulatory framework. The TUC welcomed the Modern Apprenticeship and some unions were involved in drawing up frameworks, especially in engineering, electrical contracting, printing, steel, and merchant shipping. Other unions, however, have felt insufficiently involved in the creation and running of the system. As has often been the case

in Britain, it is at workplace level that union involvement in monitoring and regulating arrangements has been least (Heyes, 1993; TUC, 1995). By contrast, in Germany, employee involvement plays a crucial role: at national level, unions participate in constructing apprentice arrangements and standards; at workplace level, statutory works councils monitor the application of apprenticeship rules. In the British context, this raises the policy question for management and government as to whether employee representatives should have the right to participate in, and agree, to company training arrangements.

In countries where apprentice training is strong, the state also plays a more central role, not as a provider of training schemes, but in ensuring an adequate legal and regulatory framework. In Britain, apprenticeship training in the modern era has never had legal support, and in the 1980s statutory institutions such as ITBs were also removed. But, where regulation by employers' organisations and trade unions is weak, there may have to be more legal underpinnings either obliging firms to train or to share costs. Of course, attempts to share costs and prevent free-riding were tried under the levy-grant system. At the time, this was criticised by employers as bureaucratic and involving high administrative costs. Others have contended that it was given insufficient time to work and was undermined with the introduction of exemptions and changed government policies (Senker, 1992). At the present time, a return to such an approach does not have much appeal to employers or politicians. However, as the story of the Modern Apprenticeship suggests, it remains difficult to make an employer-led, laissez-faire approach succeed.

In conclusion, there are problems and contradictions in the design and operation of the Modern Apprenticeship. These are manifested in both the quantity of apprentices and the quality of training. On the other hand, there are some positive features and some signs that the programme is working. A good apprenticeship system has much to commend it where school- and college-based vocational education is inappropriate and where internal labour market provision is uneven. The Modern Apprenticeship is probably

the last opportunity in Britain to revive the employment-based route to training and to create effective occupational labour markets for many intermediate skills. It would be a great shame if this were to be a missed opportunity.

## ENDNOTES

- <sup>1</sup> In West Germany, the 1969 Vocational Training Act (Berufsbildungsgesetz) reformed and extended the national framework and sought to upgrade training standards.
- <sup>2</sup> In fact, these already existed in the form of BTEC and other qualifications and these performed well.
- <sup>3</sup> Less explicitly, it might also state the employer's commitment to helping the apprentice find permanent employment, after successful completion and where a job was available.
- <sup>4</sup> This was for both the Modern and the Accelerated Apprenticeship (Insight, 29, Spring 1994).
- <sup>5</sup> 50% on the prototypes had 5 or more GCSE passes at C or above (compared to the national average of 43%) and 12% had completed an A level course. The good quality has been despite some feeling that schools (whose own funding is based on numbers staying on) may have discouraged those interested in this new work-based route.
- <sup>6</sup> Figures from MA Database.
- <sup>7</sup> The engineering average of £88 is lower than the average £107.12 for apprentices aged 16 to 19 as reported by the LFS. The lower amount for Modern Apprentices may reflect a lower age range and the fact that LFS apprentices are self-defined.
- <sup>8</sup> Initially at least, this should be high given the fact that the Modern Apprenticeship has been launched during a period of economic upswing.
- <sup>9</sup> As the Minister at the time rather unfortunately claimed, 'With

a crew of 150,000 Modern Apprentices, and government and employers on the bridge, Great Britain PLC will be on its way to a highly successful modern economy.’ (DE, Education, April 1994, p.246; DE, Insight, 30, Summer 1994).

<sup>10</sup> This base was 7% of YT leavers attaining level 3 or 4 (Robinson, 1996, p.19).

<sup>11</sup> The fall has been from 11 to 10%. DfEE, Education Statistics (1996, p.44). On the plus side, it would appear that the drop-out rate of 15% is better than on traditional apprenticeships where it is about 20 to 25%. The drop-out rate on YT is even higher. (Payne, 1995, pp.51-52).

<sup>12</sup> A more detailed analysis shows some surprising geographical distributions. Thus, Kent had 63% of its total in hairdressing while its neighbour Essex had none; Tyneside had 47% in retailing while its neighbour Teeside had only 7% (Observer 16 June 1996, citing unpublished operational DfEE data).

<sup>13</sup> In Spring 1992, the Youth Cohort Study showed that 10% of 16-18 year olds were on apprenticeships, two-thirds within the YT framework. This would total about 130,000. A target stock of 150,000 Modern Apprentices, with around 30% of them likely to be 19 or older, would constitute less than 10% of the 16-18 year old cohort. See also Payne, 1995.

<sup>14</sup> On the plus side, in engineering, a so-called all-age model has been constructed which allows the framework to be used for retraining and further training of older workers.

<sup>15</sup> For estimates of the cost of training to apprentice level see Jones (1986) and Hogarth *et al*, (1996).

16 *Ibid.*

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