

Rapid Review of Research on Apprenticeships

June 2008

Of interest to everyone involved with
Apprenticeships

Rapid Review of Research on Apprenticeships

For:

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Faculty of Business and Law
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EXECUTIVE SUMMARY

- The Leitch report (2006) argued that a significant expansion in structured training provision is needed to ensure competitiveness with other economies in a market of rapidly developing skills. The Government has committed to increase spending to £1 billion by 2010/11 to support apprenticeship expansion and quality improvement. Over the 10 year period from 2001/02 to 2010/11 more than 900,000 young people and adults will have successfully completed their apprenticeship with 130,000 in 2010/11 alone.
 - A new dedicated National Apprenticeships Service was announced early in 2008, designed to ensure that:
 - apprenticeships become a mainstream option for 16 to 18 year olds, with around one in five of all young people undertaking an apprenticeship within the next decade
 - action is taken to boost the supply of apprenticeship opportunities, through a more flexible and responsive model for apprenticeship frameworks, incentives payments to targeted businesses, an apprenticeships credit delivered via skills accounts, and improving public sector supply of apprenticeship places
 - the value of Apprenticeships rises by providing a national matching service, and high-profile events celebrating the achievement of apprentices; and
 - more is done to improve equality of opportunity and access, through positive action to encourage young women and young men to consider apprenticeships traditionally limited to one gender.
 - The review of literature found that much of the contemporary evidence on apprenticeships relates to employers, possibly partly as a reflection of the Government's ambition to make skills demand-led, but also perhaps because one of the key issues driving forward apprenticeships is the imperative need to engage employers in the whole process.
 - There is also a body of evidence about the economic benefits of apprenticeships but not so much on the detail of delivery, e.g. capacity to meet demand, flexibility, content, quality and so on.
 - Research from the LSC found that employer participation is growing; encouraged by the limited availability of skilled labour and the generally high levels of satisfaction with the Apprenticeship programme. Business needs dominate employers' views of their future involvement in the programme but most expressed interest in recruiting apprentices aged 25 or more, where off-the-job training would be completed and the learner would subsequently be recruited by the company.
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- Research by Miller (2007) addresses how employers are currently involved; the barriers that exist to engagement. Barriers include, firstly, perceptions of a lack of value, interest or knowledge, in essence that such activities are peripheral to business. Secondly, competition and costs, especially for the vast majority of small- or medium-sized firms who can ill-afford 'today's apprentice, being tomorrow's competition'. Bad experiences with individual apprentices and insurance, health and safety concerns can also mitigate against employer engagement.
 - Ryan et al suggest the technical content of the associated vocational qualifications in Advanced Apprenticeships can strongly influence employer participation. Employers who value the associated vocational qualifications are more likely to participate in AA than those who do not.
 - Research commissioned by DfES suggests that while the differences in returns to academic qualifications between sectors are large, the returns to vocational ones differ even more substantially across sectors. The authors suggest this may reflect either the lack of portability of qualifications and/or the large number of vocational qualifications on offer making it difficult for employers to ascertain true value.
 - A Trade and Industry select committee report argues that creative and cultural sectors lag significantly behind both traditional (e.g. engineering, manufacturing and construction) and new apprenticeship sectors (e.g. business administration). It argues for a shift in policy to recognise that people can be apprenticed through the accredited route (via qualifications), by the industry-recognised route (via non-accredited activities such as placements, internships and master classes) and via the network route (designed to develop creative capability and capacity within a region and presupposes non-accredited activities).
 - The Nuffield Review, led by Oxford University, produced two papers focusing on apprenticeship in January 2008. In Issues Paper 3, Apprenticeship I: Prospects for Growth, the review argues that apprenticeship as a whole is 'a mixed bag', featuring strongly in traditional sectors like engineering, construction, manufacturing and catering, but making "little impact" elsewhere.
 - In Issues Paper 4, Apprenticeship II: A high-quality pathway for young people? the review considers whether a balance can be struck between making apprenticeships attractive to employers, while at the same time ensuring that such programmes provide high-quality training for young people. It asks whether further incentives are needed for employers in the private and public sectors to persuade them to offer apprenticeship places, especially as there are already not enough places to meet demand.
 - The Review believes a wider debate needs to take place, focusing on what apprenticeship is and who should benefit. It believes this is a matter of urgency given the amount of public money being invested in apprenticeships. The paper also points out that if the apprenticeship system is to be attractive for employers, the schemes need to be
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flexible, and shorter than they were in the past, but warns that the system is currently 'weakly regulated' with no guarantee for young people that they will benefit from it.

- A report by the Quality Improvement Agency in 2007 entitled "Assessing the reasons for improvements in Apprenticeship completions" found that five main factors were consistently identified by those participating in the research as having been particularly important in improving full framework completions:
 - recruitment processes
 - quality management and assurance systems
 - the pattern of programme delivery, including the front loading of taught and tested elements
 - employer involvement
 - staff reviews, recruitment, team building and ongoing professional development.

 - In 2007 the Trades Union Congress (TUC) urged the Government to enhance minimum pay rates for apprentices in a report entitled "Decent Pay for Apprentices. The TUC reported that female apprentices are paid on average 26% less than their male counterparts. With this research and its own targets in mind, the Government announced in March 2008 that it was to review the current apprentice exemptions from the National Minimum Wage.

 - Research by the Skills for Business Network in 2007 made a number of recommendations to remedy some of the gender segregation issues highlighted in a number of evidence papers. It argues that Sector Skills Councils will need strategies in place to demonstrate to employers the risks of not recruiting a diverse workforce when the numbers of school leavers are falling, when they will be in competition with new and emerging industries. They will need accurate Labour Market Intelligence (LMI) and monitoring systems and procedures in place to implement these strategies.

 - A report by the Learning and Skills Network (2006), commissioned by the LSC, identifies a number of challenges for the design and delivery of apprenticeships, in particular the creation of a strong brand:
 - a lack of employer demand and commitment to the idea of ownership, including limited take-up by SMEs
 - cultural issues within business sectors relating to established working practices and recruitment preferences within particular sectors
 - problems relating to the participation and successful achievement of apprenticeships by young people, resulting from candidates being poorly equipped educationally and attitudinally to complete programmes, as well as gender and racial barriers to participation;
 - issues relating to the appropriate content of apprenticeships, including concerns about a lack of underpinning technical knowledge.

 - The LSC's final report of its Research into Expanding Apprenticeships (2007) concluded that
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- Around a third of non-participating employers said that it was very or fairly likely that they would consider participating. Given that these employers represent the largest slice of the market, this is potentially the most significant area into which to expand the programme.
 - Colleges and training providers are a key part of making the Apprenticeship market work.
 - Most employers approach the programme from the perspective of their own specific training needs, rather than from the perspective of securing placements on particular training programmes. They are usually not specifically interested in recruiting an apprentice, but are looking for a training programme that will address their workforce development needs.
 - Employers will be more likely to respond to an offer of a comprehensive training package that can address all of their training needs, than they will to a call to increase the take-up of apprentices.
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- From existing research, it is possible to identify a number of areas where further investigation would be of benefit in supplementing the evidence base. Any new research needs to be undertaken within the context of the changing policy environment, in particular taking into account the Leitch Review; the focus on demand-led education and training; the proposed expansion of the apprenticeship programme; and the increases in the staying-on age for education and training. Potential areas for further research include:
 - Stakeholders – providers, employers, apprentices
 - Overarching issues – the ‘apprenticeship route’, cultural attitudes, quality and equality
 - Specific issues – implications for delivery to over 25s.
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1 INTRODUCTION AND BACKGROUND

The Policy Research Institute at Leeds Metropolitan University was asked by the Learning and Skills Council (LSC) to provide a 'rapid review' of research evidence pertaining to Apprenticeships. This was commissioned in the wake of the Government handing responsibility for the new National Apprenticeship Service to the LSC in January 2008.

The review draws together the findings from a range of research reports, both commissioned research and academic; whilst considering evaluations and policy papers from national government and relevant quasi-public sector agencies. The review also considers evidence on apprenticeships from other UK home nations and a selection of comparative papers from overseas.

Given the broad subject heading and the evolving policy frameworks at the heart of government, this research focuses on more contemporary research, with the vast majority of evidence emanating from studies undertaken in the last two or three years.

1.1 Defining Apprenticeship

“Apprenticeships combine the development of theoretical knowledge about a particular occupation or range of occupations with practical experience gained from doing the job. Apprenticeship training should lay the foundation for occupational competence and the capacity to add to this as required throughout working life.” (Macleod and Hughes 2006)

Macleod and Hughes (2006) observe that in the UK there is no commonly agreed definition of what constitutes an apprenticeship. Definitions have been proposed by those from academic research and policy development arenas. Such definitions include the following:

The Modern Apprenticeship Advisory Committee (2001) (or the “Cassels Committee”) proposed a number of defining elements of an apprenticeship as a form of personal development which should:

- include an agreement by an employer to train a person, using the practices, equipment and personnel of his or her enterprise in doing so
 - use a mixture of on-the-job and off-the-job learning
 - lead to public recognition on completion that the apprentice has achieved proficiency in a trade, profession or occupation.
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Ryan and Unwin (2001) describe apprenticeship as:

“a structured programme of vocational preparation, sponsored by an employer, juxtaposing part-time education with on-the-job training and work experience, leading to a recognised vocational qualification at craft or higher level, and taking at least two years to complete, after requisite general education”.

Fuller and Unwin (2003) add another element; they argue that a crucial element is the sharing of costs between the employer (paying the apprentice’s wages) and the state (funding the qualification components).

The website of the former Sector Skills Development Agency¹ defines apprenticeships thus:

“An apprenticeship is a nationally recognised training programme combining real work with learning and training, both on and off the job. An apprentice may receive a wage, whilst training and working towards the full apprenticeship. If an apprentice does not receive a wage they will receive an allowance from the government. All apprentices on a level three will be paid by their employer”.

It adds:

“An apprenticeship is available to anyone from the age of 16, subject to minimum entry requirements and is often available at both level 2 (equivalent to five or six GCSEs, grades A to C) and 3 (equivalent to three A levels).*

Apprenticeships are available in all nations of the UK but may be recognised by a slightly different name (e.g.) in Wales an apprenticeship will be referred to as a foundation modern apprenticeship (level 2) or a modern apprenticeship (Level 3).

The apprenticeship programme consists of a number of component parts. Through the programme an apprentice will develop and demonstrate their knowledge and skills and prove their occupational competence whilst also demonstrating that they have met the standards in key skill areas such as numeracy, literacy and communication. The remaining part of the apprenticeship is being aware of, and having an understanding of employment rights and responsibilities. Whilst these individual parts may be assessed separately, only when all parts are successfully achieved will an apprentice receive an apprenticeship certificate”.

¹ www.ssda.org.uk

1.2 The Evolution of Apprenticeships

Apprenticeships evolved as a formal contractual arrangement in the medieval period, originally offered in only a few trades and regulated through legally binding indentures covering obligations and roles of both masters and apprentices. That range of trades had broadened significantly by the nineteenth and early twentieth centuries, especially in the engineering and shipbuilding industries. The peak of apprenticeship followed the Second World War, and was characterised by a strong relationship between apprenticeship and community (Fuller and Unwin 1999). Contractual time-served apprenticeships were drawn up with trades unions with a specified length of time that an apprentice should serve. These apprenticeships were generally the responsibility of employers and remaining guilds or employers' associations and subject to very little state intervention or support.

In September 2007 Sarah Vickerstaffe at the University of Kent reflected on the historical experience of the apprenticeship model. The research comprised in-depth interviews with people who undertook apprenticeships between 1944 and 1982. The discussion concludes that a key feature of good apprenticeships in the post-war period was that they offered a sheltered and extended period in which the young person was able to grow up and become job ready.

By the start of the 1960s, policy-makers and employers were beginning to question the model of apprenticeship on the grounds that:

- they appeared to exclude women
- the 'time served' approach was favoured over standards, and
- they were not keeping up with the changing demands arising from industrial and technological advancement.

Therefore, between 1960 and 1994 many new initiatives were developed to address some of the issues related to traditional apprenticeship. The Industrial Training Boards set up under a 1964 act established among other things a tripartite approach to designing and managing apprenticeships which lasted for over 15 years. The ITBs also addressed to some extent the identified weaknesses listed above. Other national and cross sector initiatives such as TVEI (Technical and Vocational Education Initiative), CPVE (Certificate of Pre-Vocational Education) and Youth Training also influenced apprenticeships. These schemes however, often became associated with cheap labour, social engineering and the massaging of employment statistics (Ryan and Unwin 2001) leading to a perceived reduction of status for vocational educational training.

Other factors leading to the decline in what had made traditional apprenticeship economically and socially possible included:

- the decline of the manufacturing industry in Britain in the mid-to-late 1970s
- the disappearance of key legislation
- the decline in membership and influence of trades unions
- weakening of contractual agreements
- the falling demand for goods produced by the apprentice trades.

These factors combined to make employment after apprenticeship more uncertain, particularly under a climate of increasing unemployment during the late 1970s and 1980s (Ryan and Unwin 2001). As a result there was a severe decline in apprentice numbers, from 171,000 in 1968 to 34,500 in 1990. Despite this, however, apprenticeship has remained comparatively robust in a few sectors such as manufacturing, construction, engineering and catering.

During the early 1980s there was considerable debate about vocational qualifications. The DeVille Report (MSC, 1986), proposed a new qualifications framework leading to the formation of the National Council for Vocational Qualifications (NCVQ) and the introduction of the National Vocational Qualification (NVQ) system with its Levels 1–5. Candidates were required to demonstrate their competence against performance criteria and knowledge statements within specific job or task areas. “NVQs were designed according to occupational standards defined by the industrial sector concerned, and expressed as occupational outcomes using similar conventions. Assessment of the competence of an NVQ candidate was, as far as possible, to be designed around observing real practice in the workplace” (Macleod and Hughes, 2006). NVQs had three significant influences on the operation of apprenticeships. The first was to reduce the need for fixed time periods through an emphasis on achievement of specified standards. The second was opening the possibility of both different routes and sources of recruitment; for example unemployed adults or those changing careers; into jobs and occupations traditionally associated with apprenticeships and so limiting the (actual and apparent) exclusivity of apprenticeships as entry to employment mechanisms. Finally, both of these had the effect of increasing the possible and actual age of entry to an apprenticeship.

Modern apprenticeships were introduced in 1994 for 16–24 year olds initially in fourteen industrial sectors, expanded later to over 80 different sectors. They were designed to ensure that apprentices had employed status from the start. At that time they were offered at two levels: Foundation Modern Apprenticeship (with NVQ level 2) and Advanced Modern Apprenticeship (with NVQ level 3 and Key Skills). The Technical Certificate was introduced in 2001.

These Modern Apprenticeships aimed to “increase the stock of young people trained to intermediate or technician level, and improve the image of government-supported training” (Macleod and Hughes, 2006). They were perceived in many ways as being similar to the preceding Youth Training Schemes and were also seen as having few opportunities for off-site learning or structured learning on the job. However, there was commitment to them from within those industries with strong traditions of apprenticeship.

There have been a number of policy and design changes to Modern Apprenticeships since 1994. The necessary NVQ qualifications were seen principally as competence-based rather than knowledge-based. This criticism of a lack of underpinning knowledge in the apprenticeship programme was recognised in the *2000 DfEE Review of Modern Apprenticeships*, which has since been addressed through the introduction of a requirement for technical certificates. These certificates would be delivered through a taught programme of off the job learning. However, by 2005 the Technical Certificate had effectively become optional and as the Select Committee on Economic Affairs states:

“in a number of sectors there is now no separate assessment of the knowledge-based element outside of the NVQ. The then Secretary of State defended this development, arguing that it was merely a matter of eliminating duplication which occurred as a result of the Technical Certificate specifying what was already in the NVQ. However, the Institute of Directors deplored the downgrading of the Technical Certificate” (Select Committee on Economic Affairs 2007 p37)

The Modern Apprenticeship Advisory Committee, which reported in 2001 (known as the Cassels Report), made a number of recommendations including:

- increasing apprenticeship numbers so that by 2004, 28% of young people would start on the programme by age 22, and that by 2011 this figure should increase to 35%
 - creating a national framework for apprenticeship which makes clear the basic content and expected duration of apprenticeships, together with the commitments and responsibilities of principal parties
 - the importance of capturing achievement in widely recognised diplomas issued by National Training Organisations (NTOs) and progression routes to higher education
 - support for employers who arrange whole apprenticeships and introducing apprenticeship agents for those who do not have the capacity to take on all aspects of apprenticeship
 - re-defining Modern Apprenticeships as Foundation Modern Apprenticeships (Level 2) and Advanced Modern Apprenticeships (Level 3)
 - entitlement to a Modern Apprenticeship place for all 16–17 year olds with 5 GCSEs at A–G.
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Macleod and Hughes (2006) observe that Modern Apprenticeships were “increasingly seen as the major programme within government supported work-based learning programmes, with the ambition that they should replace NVQ-only and Lifeskills programmes for young people”. The Cassels Report did recognise that some young people would need training before an apprenticeship if they were to ‘survive’ at that level and therefore Entry to Employment programmes were developed to ensure that no young person starts an apprenticeship without the necessary entry skills. This enabled providers to offer potential apprentices more appropriate learning programmes.

The National Skills Strategy was launched in July 2003 (DfES) in the shape of the White Paper “21st Century Skills”. It set out the Government’s agenda for the reform of qualifications and training programmes. It proposed an “end-to-end” review of apprenticeships, led by the LSC, which analysed the processes that link outcomes for trainees at one end with the underlying policy at the other.

Modern Apprenticeships subsequently became known simply as ‘Apprenticeships’ at Level 2 and ‘Advanced Apprenticeships’ at levels above that. One of the key developments following this review was the introduction of Young Apprenticeships for 14–16 year olds initially in engineering, automotive industries, business administration, logistics, the arts and creative industries. The upper age limit for apprenticeships was also abandoned.

In March 2005, the Department for Education and Skills published a skills White Paper which built on the government’s first national Skills Strategy in July 2003. It placed a strong emphasis on the role of employers, signalling a policy shift towards “demand led” skills, whilst also aiming to help individuals gain the skills they need to be “employable and personally fulfilled”. The main proposals laid out in ‘Skills: Getting on in business, getting on at work’ included the following:

- The National Employer Training Programme (NETP), a package of fully funded, flexible training in the workplace in basic skills and Level 2, designed for employers and delivered to suit their operational needs
 - Sector Skills Agreements, providing a means whereby employers and employees in each sector can identify skills and productivity needs, the action they will take to meet those needs, and how they will collaborate with providers of education and training so that skills demand can directly shape the nature of supply.
 - Skills Academies, a new network of specialist colleges and training providers. They were introduced to try and prepare young people and adults for successful employment in each major sector of the economy. The Government said that “they will form world-class centres of excellence, sector by sector, and help raise the status and value of vocational education and training”
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- Pilots to support vocational training at level 3, technician, craft and associate professional level skills. These are higher-end technical qualifications that have been identified as being in great need.

The following is a summary of the measures designed to help individuals:

- Free tuition in the basic skills of literacy, language and numeracy under our successful Skills for Life programme.
- Free tuition in employability skills (up to NVQ Level 2) by rolling out nationally the new Level 2 entitlement being trialled in the North East and South East regions.
- Support progression to NVQ Level 3 and beyond, including increasing the number of Foundation Degree places to 50,000 by next year;
- A new one-stop telephone and on-line advice service helping adults make decisions about their careers and training needs.
- National screening and access to free training in basic skills for Jobcentre Plus clients
- A new Skills Coaching service for adults out of work to help them gain the skills and training they need
- A new Learning Option giving financial support for training to help those Jobcentre Plus clients for whom skills gaps represent a primary barrier to employment.

1.3 The Current Policy Context

The Leitch Review (HM Treasury, 2006) was commissioned by Gordon Brown to assess the UK's skill needs to 2020 and to recommend the actions needed to achieve this. The report identified skills as one of the most important drivers of a successful economy and a just society and called for a step change in the major instruments of vocational training, including further education (FE) provision and apprenticeships. The report's underpinning aims are to develop 'economically valuable skills' - promoting the acquisition of skills that are relevant and valuable to individuals, employers and the economy. It argued that a significant expansion in structured training provision is needed to ensure competitiveness with other economies in a market of rapidly developing skills. The targets it suggests are equivalent to more than every second adult acquiring a higher-level qualification than they currently possess across all skill levels. It recognised that the scale of the recommended increase in apprenticeships is unprecedented and will be a formidable challenge.

A new Department of Innovation, Universities and Skills (DIUS) was also established with the remit of implementing the Leitch agenda. DIUS published "*World Class Skills: Implementing the Leitch Review of Skills in England*" in July 2007. It established the new UK Commission for Employment and Skills and the reform, re-licensing and empowerment of Sector Skills Councils (SSCs) as well as focusing on Train to Gain. Among its initiatives it:

- introduced measures to stimulate more responsive public provision
 - proposed establishing an adult careers service,
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- introduced the 'Skills Pledge'
- encouraged higher education to work more closely with employers
- sanctioned substantial qualifications reform.
- agreed a range of measures to closely integrate employment and skill services.

The Government has committed to increase spending to £1 billion by 2010/11 to support apprenticeship expansion and quality improvement. Over the 10 year period from 2001/02 to 2010/11 more than 900,000 young people and adults will have successfully completed their apprenticeship with 130,000 in 2010/11 alone.

Further increases included a right to free basic skills training and to a first full Level 2, with enough funding for 3.6 million and 800,000 learners respectively. It also provides for an additional 500,000 places at Level 3 (a 150% increase from 2007). The government also announced its proposals to embed skills development in a reformed welfare-to-work programme; increasing employability and building sustainability and progression into moves from welfare into work.

The Select Committee on Economic Affairs produced a report in July 2007 *Apprenticeships: A key route to skill* which identified that “*the UK has an excellent record in higher education but a poor record in providing skills for the rest of the population. The result is unnecessarily low productivity and low wages for many, to the detriment of the economy, as well as needless disaffection among the young*” (Select Committee on Economic Affairs 2007 p5). The report stated that there has been “*no discernible consistent purpose in government policy on apprenticeships, apart from a desire to increase numbers in training and—very recently and belatedly—to increase numbers completing*” (Select Committee on Economic Affairs 2007 p35). It states that there had been failure to follow through initiatives in four crucial areas specifically:

“broadening and strengthening the content of the apprenticeship framework; engaging employers; progression within apprenticeship and from apprenticeship to Foundation Degree; and improving the basic skills of numeracy and literacy of school leavers” (Select Committee on Economic Affairs 2007 p35).

To address these issues, the report recommended renovating and expanding the existing apprenticeship system. It identified the particular issues and their solutions as follows:

- Many young people leave school without the basic functional literacy and numeracy required for apprenticeship. Early action by the Government is needed to improve this situation.

- Many schools also fail to inform many students about apprenticeship. By the age of 14, all school pupils should be fully informed about the opportunities provided by apprenticeship.
- Problems also surround the apprenticeship programmes themselves. The Government has given individual employers too little involvement in how apprenticeships are run, rendering them little more than passive partners. Employers need to be at the centre of apprenticeship provision. Within five years, all Government funding for apprenticeships should go directly to employers, rather than through training providers as happens today.
- Apprenticeship schemes have suffered from too much emphasis on quantity over quality. Completion rates for advanced apprenticeships remain unacceptably low. Progression through the different levels of apprenticeship and on to higher education also needs to be greatly improved.
- Successive Governments, not least the present Government, have provided poor leadership in tackling these problems. They have unveiled a stream of policy initiatives. But most have failed to deliver. These failures stem from poor implementation, frequent re-organisations, and the absence of a single Government body to take responsibility for apprenticeships.
- The result is that millions of young people have missed vital chances to improve their skills and earnings, representing a serious economic loss to the country. As an important step towards preventing millions more from losing out, we urge the Government to establish a new and powerful unit, reporting directly to a cabinet minister, to 'own' and take responsibility for apprenticeship.

(Select Committee on Economic Affairs 2007 p5).

In January 2008 the Government released two key publications:

- Ready to Work, Skilled for Work: Unlocking Britain's Talent, and
- Apprenticeships: Unlocking Talent, Building Skills for All. The Government's Strategy for the Future of Apprenticeships in England.

Jointly published by the Department for Innovation, Universities and Skills (DIUS), and the Department for Work and Pensions (DWP), Ready to work, skilled for work describes the partnership Government wants to forge with employers to meet the skills challenges detailed by Leitch. The Government expects employers to increase their investment in the skills of their employees, and in return can expect a central role in driving the changes they need.

The Apprenticeships Review was conducted jointly by DIUS and the Department for Children, Schools and Families (DCSF), the Cabinet Office and the Learning and Skills Council (LSC). The review sets out a wide range of steps to improve and expand the Apprenticeships programme, stretching existing aspirations.

These two publications build on the paper *Opportunity, Employment and Progression: Making Skills Work*, published in November 2007. That document focused on the support Government gives to individuals whereas the latter documents focus on meeting the demand side of skills for the benefit of employers, the labour market and the wider economy. The

The Government has committed to increase spending to £1 billion by 2010/11 to support apprenticeship expansion and quality improvement. Over the 10 year period from 2001/02 to 2010/11 more than 900,000 young people and adults will have successfully completed their apprenticeship with 130,000 in 2010/11 alone. It sets out a wide range of initiatives that aim to improve apprenticeships including establishing a National Apprenticeship Service (NAS) to oversee the programme, and creating a 'matching service' to help employers fill apprenticeship vacancies.

The modified apprenticeship is currently offered at level 2 and advanced apprenticeship at level 3 with significant variations of delivery at both the sectoral and regional level. The Nuffield Review (2008) attributes this 'mixed bag' effect partly to the "fast-changing types of work that have emerged, such as in the ICT (information and communication technologies) industry, where both young people and employers may find faster, more effective progression through a non-apprenticeship route".

1.4 Latest News on Apprenticeships

In January 2008 the Secretary of State at the Department of Industry, Universities and Skills made an announcement in the House of Commons which summarised the Government's stance on apprenticeships and signalled the way forward for delivering some of the Leitch ambition. This statement reads as follows:

"The Government want to build on the success of the current apprenticeship programme and has undertaken a review of apprenticeships in England. This review carried out jointly with my right hon. Friend the Secretary of State for Children, Schools and Families, is being published alongside the Command Paper today.

The report, "World Class Apprenticeships: Unlocking Talent, Building Skills for All", sets out a wide range of steps which will improve apprenticeships for the future and ensure that an apprenticeship place is available for all qualified young people by 2013 and as part of raising the participation age in learning to age 18. There is a particular focus on how we can work with employers, through a new dedicated national apprenticeships service, to expand the opportunities to young people and adults. Key measures from the review are:

- we want apprenticeships to be a mainstream option for 16 to 18 year olds, and will ensure that by 2013 every suitably qualified young person who wants to take up an apprenticeship place will be able to do so.*
- as we grow a high quality programme on this scale, taking up an apprenticeship may become attractive to even more young people. We will maintain our commitment to*

meeting the demand from suitably qualified young people, so that if more come forward we will work with employers to expand the programme further. On this basis, we anticipate that around one in five of all young people will be undertaking an apprenticeship within the next decade, so that an apprenticeship place will be a mainstream post-16 option;

- *a focused delivery system, including a separately branded 'National Apprenticeships Service' with end-to-end accountability for the apprenticeships programme, a dedicated field force to support employers and learners, and appointment of a director of the service to lead and champion at the most senior level;*
- *strengthening the apprenticeship experience, by improving the apprenticeships blueprint to set out the rights and responsibilities of employer and apprentice and include a signed apprenticeship agreement;*
- *action to boost the supply of apprenticeship opportunities, through a more flexible and responsive model for apprenticeship frameworks, incentives payments to targeted businesses, an apprenticeships credit delivered via skills accounts, and improving public sector supply of apprenticeship places;*
- *a drive to change the culture around the value of Apprenticeships by providing a national matching service, and high-profile events celebrating the achievement of apprentices; and*
- *more to improve equality of opportunity and access, through positive action to encourage young women and young men to consider apprenticeships traditionally limited to one gender and ensure that contractual wage regulations set by the LSC are fully enforced.*

The review will be followed by the publication of draft legislation later this year”.

2 REVIEW OF RESEARCH

The following sections move on from the historical analysis and policy context and onto a summary of published research in key areas surrounding apprenticeships. Among the key issues to consider in the research brief were employer engagement, quality, progression and wages, the supply side (training providers), gender issues and equal opportunities.

The review of literature found that much of the contemporary evidence on apprenticeships relates to employers, possibly partly as a reflection of the Government's ambition to make skills demand-led, but also perhaps because one of the key issues driving forward apprenticeships is the imperative need to engage employers in the whole process.

There is also a body of evidence about the economic benefits of apprenticeships but not so much on the detail of delivery, e.g. capacity to meet demand, flexibility, content, quality and so on. Nonetheless, some of these issues are covered in the main section on employer engagement.

2.1 Employers

2.1.1 Employer Engagement

A starting point for examining current employer engagement is the January 2008 *LSC Research into Expanding Apprenticeships* whose aim is to provide an understanding of employers' and learners' attitudes towards the Apprenticeship programme. This sets out to understand better the factors behind the demand for Apprenticeships and consider how policy changes might encourage their expansion (*LSC 2008*). Using a combination of case study and survey methods the research finds that employers engage with the Apprenticeship programme for three main reasons: to develop the future workforce; to 'grow their own' recruits in their way of operating; and to support their recruitment activity.

Employer participation is growing; encouraged by the limited availability of skilled labour and the generally high levels of satisfaction with the Apprenticeship programme. Business needs dominate employers' views of their future involvement in the programme but most expressed interest in recruiting apprentices aged 25 or more, where off-the-job training would be completed and the learner would subsequently be recruited by the company.

Issues highlighted are a lack of employer awareness of the scheme and common employer perceptions that young people are not always work-ready on leaving school, which adversely affects recruitment, especially of 16- and 17-year olds. The report finds little evidence that employers are hiring migrant workers at the expense of apprentices but there is strong

evidence of unmet demand for apprenticeships from individuals, with 25% of learners unable to secure an employer or training provider. Colleges and training providers are a key influence and need to be more prominent in promoting employer engagement in the Apprenticeship programme, and in supporting interested young people to secure placements. Policy and resources need to focus on joining up the work of training organisations to offer better responses to the varied needs of employers.

An earlier study on employer engagement in Modern Apprenticeships is that of *Hughes and Monteiro (2005)* whose interviews cover 33 participating employers across 6 sectors. Many employers have a long-standing involvement with government-supported apprenticeship schemes and partly reflect the currency that a national qualification offers. The primary motive is to improve the company's training performance but the extent of engagement and resources are strongly linked to company size and the relationship with the training provider. Key skills are cited as the most frequently quoted reason by employers for non-completion of the framework, although non-achievement does not necessarily result in termination of a trainee's employment.

The study also evaluates the organisation of the modern apprenticeship programme. Many employers and training providers are adopting more rigorous approaches to recruitment, including using 'tasters' or work experience as a sort of probation period prior to taking on apprentices, a feature subsequently taken forward by the LSC. Employers and providers also favour an integrated induction process. Overall many employers feel that the quality of the modern apprenticeships scheme has improved in recent years with the most positive responses coming from employer-providers that deliver all components of the framework as an integrated package in the workplace. Some employers feel that the administration associated with keeping learner records is still too complex.

Few employers provide opportunities for their staff who are involved with delivering the apprenticeship, either through training, supervision or mentoring, etc., to develop their teaching and coaching skills. The exception is within the hairdressing and beauty therapy sector where industry-based schemes have existed. Moreover, many employers across the sectors are unclear about available progression routes from apprenticeships, say, into foundation degrees.

The issue of key skills is highlighted in a paper by *Ryan, Gospel and Lewis (2006a)*, part of whose focus is on the contribution to national educational objectives within large employers' apprenticeship programmes. The paper also considers the extent of the employer's responsibility for its apprenticeship programme, seen as indicative of training quality.

The authors argue that concerns over the quality of training within the advanced apprenticeships programme have led the government to target increases in the educational content of apprenticeships. These measures also contribute to the wider policy goal to make apprenticeship part of a 'vocational ladder' within the education system. The research focuses on interviews with 30 training-related managers in 17 large employers, covering in total 1072 apprentices. In areas such as engineering, telecommunications and electrical contracting, apprenticeship already functions as part of a ladder of educational progression so here the issue is not so much educational content as the paucity of places. Overall the findings suggest few employers support an increase in the educational contribution of apprenticeship, whether technical or general, even in sectors in which that contribution is currently minimal such as construction or retailing.

With regard to whether employers show commitment to the apprenticeship vision via responsibility for organising and operating their own programmes, the authors find considerable variety. No simple relationship exists across employers and sectors between the outsourcing of programme components and such attributes as apprentice recruitment, status and the employer's investment in each apprentice. However, within traditional sectors, sponsorship by a large employer means a substantially greater investment in each apprentice than that by a specialist training provider.

Employer engagement is influenced by such investment levels and the net costs of apprentices, as featured in the work of *Hogarth and Hasluck (2003)* and *McIntosh (2007)*. Since 1994 the Institute for Employment Research (IER) has conducted a series of studies to estimate the costs borne by employers in training young people to a recognised NVQ standard. The third of these by Hogarth and Hasluck is concerned with employer training provided under the Modern Apprenticeship (MA) programme, whether this leads to an NVQ level 2 (Foundation Modern Apprenticeship (FMA)) or NVQ level 3 (Advanced Modern Apprenticeship (AMA)).

The study examines the contribution of government funding through the LSC to the cost of MAs; the effect that funding has on the volumes of young people being trained; and the structure of the training offered. A detailed breakdown of costs is provided for MA frameworks in engineering; construction; retailing; business administration; and hospitality. With engineering and construction the gross and net costs of apprenticeship training are high, especially for AMAs, and only partially offset by MA funding. With FMAs employers in business administration and hospitality incurred the highest gross costs but tended to break even with regard to costs and benefits because of factors such as the amount of off-the-job training involved, wages paid to apprentices and their employment status. The study

indicates a wide variation in net costs across industries and training frameworks and also between individual employers.

McIntosh develops the 40 firm sample data of Hogarth and Hasluck to evaluate information on costs to the individual, employer and the state in a cost-benefit analysis of apprenticeships. The study finds wage returns for apprentices are substantially higher than for other vocational qualifications; that returns are rising, especially for Modern Apprenticeships, and that differentiating between men and women significant wage returns are observed for women for the first time in a study of apprenticeships in the UK. The paper compares the lifetime benefits of completing various apprenticeships or vocational qualifications in terms of higher wages and employment relative to the costs to all parties of delivering the qualification. Large surpluses of benefits over costs are observed, in terms of positive net present values (NPVs), especially for Modern Apprenticeships (£105,000 at level 3 and £73,000 at level 2).

The broader issue of employer engagement in 14-19 education and training, not just via apprenticeships, is considered by *Miller (2007)* who addresses how employers are currently involved; the barriers that exist to engagement; and why more employers should be engaged. Involvement can include: offering work placements; speaking about their organisation, sector or experience; mentoring; specific schemes (e.g. Community Engineers, Young Enterprise); and apprenticeships. Barriers to engagement include, firstly, perceptions of a lack of value, interest or knowledge, in essence that such activities are peripheral to business. Secondly, competition and costs, especially for the vast majority of small- or medium-sized firms who can ill-afford 'today's apprentice, being tomorrow's competition'. Bad experiences with individual apprentices and insurance, health and safety concerns can also mitigate against employer engagement.

2.1.2 Benefits to Employers

Miller highlights the generic benefits to employers of involvement in education and training, namely that young people can become eventual long-term employees while employers can influence the quality of skills supply, offer development opportunities for their own staff and fulfil corporate social responsibility objectives. However, the business case for apprenticeships is more fully developed in reports of the *Apprenticeships Task Force (2005)*, the *BCC Skills Taskforce (2006)* and the CIPD (see *Ryan et al 2006*).

The Apprenticeships Task Force (ATF) was established in 2003 to increase employer involvement in Apprenticeships and to reflect on the changing needs of employers and young people. The 2005 report draws on business cases developed by members and new research from the Institute of Employment Research to demonstrate that:

- Apprenticeships improve business performance by making contributions to competitiveness, profitability, productivity and quality;
- The net costs of Apprenticeships training are frequently lower than those involved in training non-apprentices and the productivity of apprentices enables employers to recover much of the costs involved;
- Apprentices more easily adopt company values, are more likely to remain with the employer than non-apprentices, and become part of a wider pool of talent available to all employers in the sector;
- Increasing the diversity of the Apprentice workforce has significant business benefits, as well as providing clear progression routes from Apprentice to higher levels in the organisation.

Other research for the ATF by *Fuller and Unwin (2004)* involving 16 interviews with senior employer representatives on the Modern Apprenticeship Taskforce covered nine themes, one of which was the rationale for being involved in the MA. The reasons cited included:

- to counter an ageing workforce;
- to increase skill levels;
- to recruit a more diverse range of people
- to motivate staff (via investment in training)
- to help embed organisational culture and values
- to provide alternative and progressive routes for young people and open up access to different sectors
- to demonstrate social responsibility

The British Chambers of Commerce represents over 100,000 businesses in the UK, for whom skill shortages are a major barrier to growth and productivity. The Skills Taskforce was

established in 2005 to consider the business view of government policy on skills and its implementation, in relation to both young people's transition from education to employment and training of the adult workforce.

The BCC 2006 report endorses the ATF view that business is very supportive of Apprenticeships and of policy improvement to expand the system. However, while employers are content to support the system by paying wages, conducting on-the-job training and releasing apprentices for training off-site, some employers feel the system is insufficiently market-driven and that the NVQ element of the Apprenticeship is too lightweight and does not fully reflect business needs. Moreover, the system needs to be more responsive to skills gaps in regions and localities yet be consistent in its application. The BCC also argues that the government needs to address the high failure/low completion rate of Apprenticeships and give more encouragement to smaller companies to participate in schemes such as Group Training Associations when delivering apprenticeships.

The 2006 papers by *Ryan et al*, and *Winkler* stem mainly from a CIPD-sponsored project, *Large employers and apprenticeship training (Ryan et al, 2006c)*, which examines:

- The level of large employers' involvement with Advanced Apprenticeship (AA) programmes as a source of intermediate skills;
- The amount of apprenticeship training that is provided by large employers without any link to the formal AA scheme and the associated subsidies;
- Large employers' views on apprenticeships;
- Whether the confidence that government, and recently the Modern Apprenticeship Advisory Committee, place in employer-sponsored apprenticeship is warranted, and how this may vary across sectors.

The research draws primarily on face-to-face interviews with learning and development managers in 30 large organisations, including Rolls-Royce plc, BT Retail, Selfridges & Co and Leicester City Council. The research focuses on two sectors with strong historical associations with apprenticeship programmes (engineering and construction) and two 'newer' areas (retailing and information and telecommunications technology). The authors find that apprenticeship does function outside the AA programme, but only to a limited extent and mainly involuntarily.

In terms of employer benefits, the research suggests that apprenticeships offer scope for improving the selection and socialisation of young people into the organisation's culture as prospective long-term employees and hence a reduction in labour turnover. In so doing the traditional links between apprenticeships and the occupational labour markets have been weakened; those to internal, large company, ones have been strengthened. Accordingly for some large employers these advantages can outweigh the higher cost involved than in

'upgrade training'. Winkler observes that while the overall number of apprentices is low, employers can clearly benefit from the introduction or expansion of apprenticeship training where skilled staff are difficult to recruit or where upgrade training cannot provide sufficient vocational knowledge.

However, linked to this, Ryan *et al* suggest the technical content of the associated vocational qualifications in Advanced Apprenticeships can strongly influence employer participation. Employers who value the associated vocational qualifications are more likely to participate in AA than those who do not. The research suggests that the benefits of apprenticeships to businesses could be better communicated by government, for example, most employers are not aware of the extent to which the content of Advanced Apprenticeships can be tailored to meet their needs.

In part the latter reflects the finding that approximately half of large employers do not take responsibility for organising and operating the programme, but rather depend on external providers. However, those that do often see a major reputational benefit from running their own programmes. *Philips (2007)* cites the case of BT, where about 1000 of the 100,000 strong workforce participate in one of their three-year schemes and quotes the head of the BT apprenticeship scheme who says the key business benefits of taking on apprentices include "using the enthusiasm and desire of somebody at the very beginning of their career to get them to behave and perform at the standard the company needs them to perform".

Bashford (2006) suggests that employers will benefit from apprenticeship schemes provided they realise the unique challenges of employing young people of school-leaving age, have clear guidelines as to what is expected by both parties, offer a support framework and are involved in careful monitoring of delivery of training courses. The article cites schemes at BAE systems, Carpeting Merseyside and Improve, whose Development Director believes too many employers are unrealistic about the skill levels of young people starting work. Apprenticeships are more akin to a journey where the person becomes 'job capable'; a process that may include educating the apprentice about punctuality and basic computer and communication skills.

The paper suggests five reasons to embrace apprenticeships:

- Improved productivity – people have skills and knowledge to do the job better and work more effectively
 - Motivated people – young people have a chance to learn new skills relevant to their future career and motivate them to work harder and develop loyalty
 - Relevant training – designed by businesses to meet industry-specific needs
-

- Cuts out skills shortage – taking on apprentices allows the acquisition of specialist skills to stay competitive
- Easier recruitment – offering apprenticeships shows a willingness to invest in the workforce

It suggests that smart employers are realising that, with the large sums allocated to promoting apprenticeship frameworks across industries and the drive to improve work-related learning, apprenticeships will grow in value.

MacGregor (2007), citing the construction industry, argues that in addition to any business case for taking on apprentices, practical advantages frequently mentioned in the sector include help with increased workloads and that training apprentices offers a company skilled, safe workers who understand the need of the client base and work to standards. It also demonstrates a commitment to training and local employment often required by public sector contract conditions. For smaller businesses it can offer opportunities to consider long-term succession planning.

2.1.3 Evidence from Various Sectors

Cross-sectoral studies are important to highlight best practice, sector trends and also to understand employers' skills needs with a view to delivering productivity gains to boost the UK's competitiveness.

Within this broad context in 2002 the DfES launched the Skills for Business network (SfBN), a UK-wide network of employer-led Sector Skills Councils (SSCs) supported and directed by the Sector Skills Development Agency (SSDA). The latter commissioned *Dickerson and Vignoles (2007)* to provide the first systematic evaluation of the variation in the distribution of, and returns to, qualifications using sectors defined by the 25 Sector Skills Councils.

Using data from the Labour Force Survey (LFS) for 2000-2004 it estimates the proportion of the workforce in each SSC holding qualifications based on the five tier National Qualifications Framework (NQF), differentiating on the basis of gender and academic/vocational levels. It also estimates earnings premiums accruing to different qualifications. The sector data is analysed under three main headings: the utilisation of low-, intermediate- and high-level skills; skills mix and evidence of shortages/surpluses with particular reference to vocational skills; and gender differences.

As such this important work adds to national aggregate evidence with the authors suggesting that the emergent differentials reflect the relative supply and demand for skills between SSCs. Among the findings the analyses suggest that the returns to intermediate and, especially higher level skills in the UK remain quite substantial while that for lower level skills

is negligible. However, while the differences in returns to academic qualifications between sectors are large, the returns to vocational ones differ even more substantially across sectors. The authors suggest this may reflect either the lack of portability of qualifications and/or the large number of vocational qualifications on offer making it difficult for employers to ascertain true value. The report points to areas for further research including a better understanding of the nature of low level vocational qualifications and their labour market value and also to unravel the supply/demand situation with regard to level 3 vocational qualifications.

Shirley et al (2006) also consider a range of sectors; in this case how delivery of the most common apprenticeship frameworks in 10 selected sectors might be improved by further integration. The methodology involved focus groups of practitioners from each of the sectors. The project demonstrates great diversity in delivery models and training ethos in different sectors within the national apprenticeship system, for example, where there is a long tradition of apprenticeships, as in engineering and construction, apprentices have regular, scheduled periods of off-the-job training to cover 'non-practical' aspects of the framework. Elsewhere, as in retail, all elements of the framework are covered at work supported by regular visits by staff from the training provider. Moreover, the overlap between the NVQ knowledge requirements and the content of the technical certificate varies between sectors. The need for increased commitment and engagement by employers is a recurrent theme; increased integration is only feasible with more participation by employers in delivery.

The report makes proposals on how further integration could benefit the delivery of apprenticeship schemes in several sectors; the most common themes deal with the integration of key skills elements and e-learning; some relate to specific sectors. It also refers to funding and other implications for the QCA and SSCs.

Fuller and Unwin (2007) investigate good practice in contemporary apprenticeships by evaluating two contrasting sectors: "engineering" with its long tradition of apprenticeships; and "business administration" with its more recent involvement. Two organisations from each sector were selected from those gaining the highest grades in the formal inspection of apprenticeship provision by the Adult Learning Inspectorate. The findings echo those of *Shirley et al (2006)*, in so far as effective apprenticeships are strongly associated with organisational commitment; manifest in concerns with the individual's long-term as well as job-specific development and programmes that ensure apprenticeships participate in a wide range of co-ordinated and progressive work and learning opportunities. However, the results also provide a reminder of external constraints affecting different sectors; one Council involved in "business administration" apprenticeships was reconsidering its involvement

following the Government's decision to change training allowances in favour of means tested Education Maintenance Allowances (EMAs). Elsewhere an "engineering" company's training was threatened due to a transfer of some manufacturing to China.

Earlier reference was made to the findings of *Hogarth and Hasluck (2003)* that examined funding and the gross and net costs of apprenticeship training across sectors, citing the high cost of that in engineering and construction. However, maintaining the future technological and economic competitiveness of such sectors within the global economy depends on skills and apprenticeship development, especially in higher value added operations. Two publications that illustrate concerns with this at the micro- and macro-level respectively are that of *Johnson (2005)* and the *Trade and Industry Committee (2007)*.

Johnson's focus is apprenticeships in the context of the London Olympics where a shortage of skilled personnel in the construction and hospitality industries could compromise preparations for the 2012 games and the overall long-term regeneration of the Olympic site itself. Moreover, the difficulties now of obtaining construction workers and chefs in London underline potential problems ahead. Accordingly, the article argues that work-based learning and an increased intake of apprentices in the hospitality and construction sectors are needed urgently. However, the author is critical of government cutbacks in work-based learning funding in favour of EMAs and in the way apprenticeships are marketed. With the latter he argues that there is too much focus on the entry level roles of the apprentice, with little or no information on the senior managerial roles for which apprenticeships are the starting point, essential for securing high calibre candidates. Hospitality needs to be seen not just as a job for the Olympics but a career for life and if work-based learning is needed for the success of the Olympics, then it is needed now.

On a broader macro-scale the Trade and Industry Committee's report provides an important examination of the implications of skills issues facing UK manufacturing and in the light of the Leitch Report. The Committee notes that the traditional perceptions of, and distinctions between, manufacturing and service sectors are becoming blurred as areas such as design, logistics, after-sales and marketing have become important elements in product added value. In turn the composition of the skills mix in manufacturing is changing. The report emphasises that despite the *relative* decline in favour of services, manufacturing has grown in *absolute* terms since 1986, hence investing in manufacturing skills and apprentices is of vital importance to the UK economy. Moreover, even if overall employment in specific industries is in long-term decline, 'replacement demand' will remain important for the foreseeable future. Hence, skills policy should not focus merely on 'new' manufacturing industries.

Evidence presented to the Committee indicates that the incidence of skills shortages ranges widely across different manufacturing sectors and industries. Some, such as food and drink manufacturing, experience far fewer problems than the economy as a whole. Others such as metals- and wood-based manufacture are left with many unfilled vacancies due to skills deficiencies.

With specific reference to Apprenticeships the Committee welcomes the improvement in the number of Apprenticeship places and completion rates. The government should work towards the Leitch target of 500,000 places by 2020 but only insofar as this reflects genuine demand in the labour market and meets the needs of specific industries. The Committee also argued that in view of concerns over vocational qualifications, Government should make the accreditation of Apprenticeships more robust and relevant to the needs of employers by including them within the SSC-led process for developing and approving vocational qualifications.

In examining the diverse creative and cultural sector *Guile, D. (2006)* challenges conventional orthodoxy that the government is the sole architect of the education and training system and that qualifications are a panacea for securing employment. He advocates a less-qualification driven and more multi-faceted approach to learning and development in this sector. In particular this implies less emphasis on creative apprenticeships and more on supporting people to 'be apprenticed' in a variety of ways.

The paper shows that creative and cultural sectors lag significantly behind both traditional (e.g. engineering, manufacturing and construction) and new apprenticeship sectors (e.g. business administration). It argues for a shift in policy to recognise that people can be apprenticed through the accredited route (via qualifications), by the industry-recognised route (via non-accredited activities such as placements, internships and master classes) and via the network route (designed to develop creative capability and capacity within a region and presupposes non-accredited activities).

Guile (2007) also published a comparison of the Advanced Apprenticeship Programme and the Technical Apprenticeship, which was developed by Birmingham Repertory Theatre. The paper raised a number of questions and issues with regard to (1) the future development of apprenticeship in the cultural sector in the UK and overseas, and (2) the concept of vocational practice in vocational education and training.

2.2 Other Key Issues for Apprenticeships

2.2.1 Quality

The Nuffield Review, led by Oxford University, produced two papers focusing on apprenticeship in January 2008. In *Issues Paper 3, Apprenticeship I: Prospects for Growth*, the review argues that apprenticeship as a whole is ‘a mixed bag’, featuring strongly in traditional sectors like engineering, construction, manufacturing and catering, but making “little impact” elsewhere. It argues that the apprenticeship system is competing with other flagship government policies, notably the expansion of higher education to those who have traditionally entered work-based routes and the introduction later this year of the new diplomas. The shrinking size of the age cohort could also have an effect on the numbers opting for apprenticeships, as schools, colleges and work-based education providers compete for a decreasing pool of pupils.

The paper discusses strategies to promote apprenticeships and the possible barriers to implementing them: re-branding existing activity, widening the appeal of apprenticeship schemes to non-traditional applicants, and the setting up of a national ‘clearing house’, on the UCAS model, to match unfilled apprenticeship places with the qualifications of interested individuals.

The paper stresses the importance of apprenticeships, which it says have ‘a vital role’ in addressing skills shortages, and suggests that with the right strategies in place apprenticeship might contribute to increasing participation rates of 17-year-olds in education and training to 90 per cent by 2015.

In *Issues Paper 4, Apprenticeship II: A high-quality pathway for young people?* the review considers whether a balance can be struck between making apprenticeships attractive to employers, while at the same time ensuring that such programmes provide high-quality training for young people. It asks whether further incentives are needed for employers in the private and public sectors to persuade them to offer apprenticeship places, especially as there are already not enough places to meet demand.

The Review believes a wider debate needs to take place, focusing on what apprenticeship is and who should benefit. It believes this is a matter of urgency given the amount of public money being invested in apprenticeships. The paper also points out that if the apprenticeship system is to be attractive for employers, the schemes need to be flexible, and shorter than they were in the past, but warns that the system is currently ‘weakly regulated’ with no guarantee for young people that they will benefit from it. Also highlighted in the paper is the challenge of expanding the system to include those sectors with little tradition of

apprenticeship and those sectors, such as construction, where the business model has changed.

Research published by the London Assembly entitled “You’re Hired: Apprenticeships in London, made a series of explicit recommendations to be taken up at national level. These included:

- The Learning & Skills Council should explicitly address, in its next Statement of Priorities, the need to overcome negative perceptions of apprenticeships through better promotion to employers such as:
 - counteracting negative perceptions about bureaucracy and other costs
 - promoting awareness of the benefits of using apprentices
- The government should not set a global numerical target for apprenticeships. The London Regional Skills Partnership, in consultation with the London Development Agency and sub-regional and sector Learning and Skills Councils, should set targets based on local/regional and industry-specific needs. The strategy of the Learning and Skills Council should reflect and support these locally-set targets.
- The Learning & Skills Council should explicitly address the need to overcome negative misconceptions about apprenticeships (such as that they are a last resort for students unable to get into other education or employment) through better promotion to young people and their families, such as:
 - positive presentation in schools of apprenticeship as one of the various possible paths to a skilled career
 - clear information, presented early enough in the school career for young people to consider options fully
 - realistic and clear information about challenges such as the work involved
 - potentially work experience and learning placements at an earlier age.
- The Learning and Skills Council should ensure that apprenticeship frameworks enable apprentices to change employers or training providers within the course – ‘portability’. For example, apprenticeships divided into separately-certified modules could enable a trainee to take up another place without losing credit for what they have learnt and achieved so far.

2.2.2 Retention and Progression

Non-completion of the full apprenticeship is a concern to all stakeholders and is seen as a major factor in the perceived quality of what is on offer. Almost half of all trainees on advanced apprenticeships did not complete a full level 3 qualification, yet it was never established whether this related to the content of the programmes, other structural or cultural factors, or the trainees themselves. Although the DfES end-to-end review reports on several factors pertaining to quality such as leadership, communications, engagement, capacity and so on, this is evidently a gap in our knowledge on apprenticeships and warrants further investigation as the Government promotes them under the Leitch vision.

The DfES end-to-end review of apprenticeships reported that young people found it difficult to engage with modern apprenticeships for several different reasons, including access and achievement issues for those not equipped to complete; racial and gender barriers to participation; and an innate desire to try out different options before settling down.

A report by the Quality Improvement Agency in 2007 entitled “Assessing the reasons for improvements in Apprenticeship completions” drew the following conclusions:

- In most cases, the impetus for change was a poor inspection report combined with a commitment from senior managers within provider organisations to improve.
- Five main factors were consistently identified by those participating in the research as having been particularly important in improving full framework completions:
 - recruitment processes
 - quality management and assurance systems
 - the pattern of programme delivery, including the front loading of taught and tested elements
 - employer involvement
 - staff reviews, recruitment, team building and ongoing professional development.
- National policies and initiatives, in particular those instigated by the LSC, were found to have had an important role to play in increasing completion rates but were evidently mediated by senior leadership teams before reaching the participants in this research.

Research by the Skills for Business Network in 2007 made the following recommendations on progression and completion in apprenticeships:

Improving Completion Rates

- Work needs to be done to ensure that those currently in learning have increased chances of achieving the full framework. Some SSCs with high numbers of existing apprentices are focusing on this activity rather than looking at high growth.
- They will need to work with Training Providers, Employers, Awarding Bodies and the Office for Standards in Education, Children’s Services and Skills to identify the reasons why apprentices do not achieve and take action to improve retention and achievement in the future.

Progression to Higher Education (HE)

- Demand has been identified for advanced and higher apprenticeships to fill skills gaps and shortages in technical roles. Young people who will be making choices between traditional routes into HE and a route through apprenticeships will need to be reassured that a pathway is available to them into HE, or higher level skills development should they choose.

- SSCs recognise the importance of putting in place progression pathways into HE for those young people who wish to have this choice and this activity is reflected in their high level plans for progression from apprenticeships to HE.
- SSCs will need to work in partnership with HE Institutions and Employers to determine the value and mechanisms for recognising apprenticeship frameworks as pathways to higher level learning and qualification and career progression.

A research project by Sheffield Hallam University (2005) investigated the trainees' perceptions of opportunities to progress to higher education. The findings show that employer support, time, finance and apprentices' perceptions of their own ability are the key factors that determine whether apprentices will progress to higher level courses. The research concludes that the key to success in progression is a consistent and comprehensive approach to Information, Advice and Guidance for the students.

The Nuffield Review, tackling the issue of low success rates, argues that too many young people are starting an apprenticeship without the prior attainment needed to complete what should be a rigorous training programme. Evidence from the Nuffield Review from the Youth Cohort Study in 2002 showed that 64% of trainees started advanced apprenticeships without a full level 2 qualification.

2.2.3 Wages and Returns

In 2007 the Trades Union Congress (TUC) urged the Government to enhance minimum pay rates for apprentices in a report entitled "Decent Pay for Apprentices. The TUC reported that female apprentices are paid on average 26% less than their male counterparts. With this research and its own targets in mind, the Government announced in March 2008 that it was to review the current apprentice exemptions from the National Minimum Wage.

The value of skills and qualifications is examined by Walker, I., and Zhu, Y., (2007) with a particular focus on the specific labour market benefits of qualifications to individuals. Using a Labour Force Survey data set from 1996 to 2005 rebased to January 2006 prices, they identify for various levels of qualifications, how much more you are likely to be in work compared to those with no qualifications; for each qualification, how much more you are likely to earn than workers with no qualifications; and how these benefits differ for men and women.

The analysis shows that qualifications pay; additional qualifications increase earning potential and also help in finding and sustaining work. Graduates continue to do well with the wage premium associated with a degree having been maintained in recent years. The employment and wage benefits associated with qualifications reflect the knowledge gained and its value in the labour market.

The research includes an analysis of the wage premium of Apprenticeships and found that there is a premium compared to those with no qualifications but for both men and women and the three geographic areas studied (Scotland, SE England, the rest of England and Wales) the wage premium associated with an apprenticeship is below that associated with a vocational level 3 qualification.

In 2007 the Sector Skills Development Agency, in conjunction with sector skills councils, the LSC and other partners, made some future projections on various elements of apprenticeship, including wages. Wage returns to individuals with higher levels of qualifications can be used as a measure of productivity benefit to the employer of the investment in that skilled worker. Using wage returns, one can therefore estimate the returns to the economy of increased investment in apprenticeships. Recent research for the DfES found returns to apprenticeships of up to 18% for men at Level 3 and 14% for women. Using these figures, an additional 400,000 apprentices by 2020 could generate up to £1.1 billion per year thereafter, or around £90 million per year over the 12 years to 2020.

McIntosh (2005) used Labour Force Survey data to estimate the average wage gains to individuals who complete an apprenticeship programme. The results suggested an average gain of 5-7% for men, but no benefit for women. A key finding from further analysis was the importance of acquiring level 3 qualifications with the apprenticeship.

A research report published by DfES in 2005 provides an in-depth analysis of average take home pay for apprentices across genders, sectors, occupations and qualifications. It also has evidence of working hours, training activity and longevity.

The Centre for the Economics of Education at LSE studied the rate of return analysis – the impact of education and training activity on earnings potential – across various sectors and concluded that there was a huge disparity by industry. It also concluded that NVQ qualifications yield “a respectably high return” if they are acquired through (modern) apprenticeships.

DfES published in 2007 a “Cost-benefit analysis of Apprenticeships and other vocational qualifications” which brings a wealth of information to this crucial subject. Among its conclusions were the following:

- The estimates reveal substantial wage returns in 2004/5 to Modern Apprenticeships, of around 18% at Level 3 and 16% at Level 2, compared to individuals whose highest qualification is at Level 2, or at Level 1 or 2 respectively. It should be acknowledged, however, that the demand for Modern Apprenticeship places exceeds supply, so that employers may be able to choose the most able from the queue of applicants, meaning that a proportion of these wage returns may be due to ability differences, rather than the impact of the apprenticeship training itself.

- When the analysis differentiates between men and women, significant wage returns are observed for women for the first time in the study of apprenticeships in the UK, specifically of 14% to a Level 3 (Modern) Apprenticeship.
- Considering changes over time between 1996 and 2005, the estimated wage returns to apprenticeships are rising, particularly for Modern Apprenticeships. There is significant variation in the estimated wage returns to apprenticeships, depending on the sector in which the former apprentice works. For example, a Modern Apprenticeship increases the average wage of an individual working in construction by 32%, relative to an individual in construction whose highest qualification is at Level 2, whereas in the retail sector, there is no observed effect of apprenticeships on wages at all.
- The wage returns to apprenticeships, particularly Modern Apprenticeships are considerably higher than for other vocational qualifications, such as NVQs, BTECs and City and Guilds.
- All of the apprenticeships and vocational qualifications considered are shown to be significantly positively related to the probability of the individual being in employment. However with the data available to us, we cannot say how much of this association is due to the employment-enhancing properties of the qualification, and how much is due to the fact that individuals studying for a vocational qualification, particularly apprenticeships, are much more likely to be in employment in the first place.
- The cost benefit analysis by sector reveals wide variation in results, but, for the five sectors considered, there are clear positive benefits.

Similar research by the Centre for the Economics of Education (2007), albeit on a wider scale than apprenticeships, concluded:

“There are high returns to academic qualifications across the board, substantial returns to higher level vocational qualifications and smaller but nonetheless significant returns to some but by no means all intermediate and lower level vocational qualifications. We also confirm the non-existent average returns to NVQ2. We find high wage (and more arguably employment) returns across a range of contexts for a number of level 2 and level 3 vocational qualifications, such as BTEC, City and Guilds and RSA. However, the wage returns to NVQs are not so large, nor so widespread.

Post Leitch the UK is moving to adopt a more demand led system of vocational provision, whereby employers, via their sector representatives, have a greater say in the development and delivery of qualifications. However, it is obvious from our evidence that some of the current vocational offer does not meet the needs of employers. In the case of NVQ2 and NVQ3 qualifications, in many sectors and across a range of occupations, even otherwise low skilled individuals do not gain a large wage return to these qualifications, even where they are held as their highest qualification. This suggests that employers do not value them as much as other qualifications, such as BTEC, which provide good returns across a much wider range of sectors and occupations. Yet NVQs were developed supposedly with substantial employer input into their design. With the shift to a more demand led system, it

remains critical that we have a better understanding as to exactly why BTEC qualifications are in demand by employers whereas NVQ2 qualifications in certain sectors are not. We cannot assume that the processes set up to enable employers to influence vocational qualification development and provision will automatically ensure that the vocational training system responds effectively to the needs of individuals and employers, and produces qualifications that have good economic value."

In April 2008 the new UK Commission for Employment and Skills published number 5 in its 'catalyst' research series, a paper by Dr Hilary Steedman entitled "Time to Look Again at Apprentice Pay? Getting Cost Sharing right". This paper considers the incentives to employers to provide apprenticeships for young people, in particular issues of cost and benefit. It also looks to the strategies currently employed in other countries for ways of increasing employer commitment in the UK.

Another April 2008 report which contributes significantly to this debate was commissioned by DIUS. "Apprenticeship Pay: 2007 Survey of Earnings by Sector" is based on a sample survey of those in the 11 largest apprenticeship sector frameworks. The key findings are as follows:

- The average net pay per week for an apprentice in 2007 was £170. Although this is substantially above the £137 recorded in the 2005 survey, much of the increase is due to the differing respondent profiles between the two surveys. Analysis suggests that, on a comparable basis, pay increased in line with inflation between 2005 and 2007.
- Average net pay per week had increased since 2005 across all industry sectors. However, pay varied greatly across industry sectors, the lowest paying sector being Hairdressing (£109), the highest paying sector being Electrotechnical (£210). This mirrored the 2005 finding.
- Those on a Level 2 Apprenticeship earned an average of £159 compared with an average of £179 earned by those on a Level 3 Advanced Apprenticeship. The difference in pay by apprenticeship level narrowed in 2007 (from a 26 per cent difference to an eleven per cent difference).
- Apprentices aged 21 and over had an average net pay per week of £199 compared with £140 for those aged 18 and under. As with apprenticeship level, the difference in pay by age narrowed in 2007.
- The average pay for a male apprentice was £186 compared with an average of £147 for female apprentices. This was likely to be explained by the close correlation between gender and industry sector rather than any particular pay discrimination based on gender.
- Tips were received by 85 per cent of Hairdressing apprentices and 47 per cent of Hospitality apprentices, much higher than in other sectors. The average amount of tips per week for those who received them was £13.
- Around six in ten apprentices (62 per cent) worked overtime (compared with 57 per cent in 2005). However, this difference is likely to be explained by a different profile of

respondents in 2007. Eighty three per cent of apprentices that did overtime got paid for it (compared with 71 per cent in 2005).

- On average apprentices working overtime worked 4.1 hours paid overtime per week and of those that worked paid overtime the average weekly pay for overtime was £29.
- Over one third (38 per cent) of apprentices that did overtime said they were given time off in lieu or flexi leave in return. Over a quarter (28 per cent) reported being paid for overtime and being given time off in lieu.
- Five per cent of apprentices reported earning less than £80 per week. Thirteen per cent of this five per cent were receiving a training allowance or Education Maintenance Allowance only.
- Four in ten apprentices who had completed the NVQ component of the Apprenticeship framework (40 per cent) said their pay increased as a result of completing their NVQ. On average they received a pay rise of £36 per week. The majority (56 per cent) did not receive a pay rise.
- One in ten apprentices (10 per cent) said they had received a bonus as a result of completing their NVQ (same proportion as 2005). On average the bonus was £123. The majority (87 per cent) did not receive a bonus.
- On average apprentices spent 37 hours per week working for their employer (this includes on-the-job training but excludes off-the-job training). This compared with 33 hours worked per week on average in 2005. This increase is possibly linked with the decrease in the proportion of apprentices reporting they received off-the-job training (from 68 per cent in 2005 to 57 per cent in 2007 – and from an average of five and a half hours per week in 2005 to three hours per week in 2007), but an older respondent profile in 2007 is unlikely to have affected this result. Apprentices may have mistakenly included off-the-job training within their answer for number of hours worked. Recent initiatives such as “blended learning” may also have blurred the distinction between training and working.
- The majority of apprentices (85 per cent) reported receiving on-the-job training, down from 87 per cent in 2005. The average number of hours per week spent receiving on-the-job training fell from twelve hours in 2005 to eight and a half hours in 2007.
- Around six in ten apprentices (59 per cent) intended to stay working for the same employer after they finished their apprenticeship (compared with 62 per cent in 2005). A further 22 per cent said they would stay working in the same sector and seven per cent expected to go on to further education.

2.2.4 Gender and Equal Opportunities Issues

Gender and equality remain key issues for apprenticeships, as it appears that age-old stereotypes are difficult to shake off. Many of the policy papers described in the sections make unequivocally similar points about the need to change perceptions about who is suitable for which line of work.

The Equal Opportunities Commission’s Investigation into workplace segregation and apprenticeships (2005) called on Government to tackle what it saw as a crucial issue. It concluded that

“The Government must tackle occupational segregation as a barrier to progress and roll out a national agenda to build on the real momentum for change that we have discovered in carrying out this Investigation. All those engaged in the delivery and practice of careers advice, education, work experience and training should aim to open up young people’s choices and work opportunities, rather than sit back and allow the illusion of ‘freedom of choice’ to perpetuate inequality. Young people and adults must have the encouragement and support they need – from teachers, advisers, trainers and placement managers, for example – to choose non-traditional options if they want to.

More employers must rid their workplaces of attitudes, practices and cultures that have for so long defined their businesses as ‘male’, so they can start to harness the essential skills that only more women can provide”.

Also in 2005 the LSC produced a guide to how training providers can break down gender segregation in “Action for Change”. This recognised the need to open up non-traditional vocations for both men and women. It made the following recommendations:

- developing training schemes to meet the particular needs of atypical trainees including flexible working hours, single sex training, and support mechanisms/mentoring of atypical trainees;
- improving access to information about training opportunities, by working in partnership with key stakeholders including Sector Skills Councils (SSCs);
- providing taster sessions including the Entry2Employment programmes;
- working with schools to provide opportunities for young people to experience different vocational areas such as taster days;
- devising pilot schemes to test the interventions that employers said may encourage them to take on more minority-gender apprentices and trainees;
- working with employers to ‘re-brand’ training and work opportunities and re-define skills in male-dominated sectors in ways that will appeal to both sexes;
- working with employers to increase their awareness of equal opportunities issues and the business case for diversity;
- dedicating resources to helping atypical trainees find work placements; and
- employing members of the non-traditional sex as trainers and in development roles.

LSCs can further promote equality through the requirements they place on, and the support they provide to training providers, including:

- collecting and making available to young people annual data on Apprenticeship frameworks by sector, gender, race and disability, along with apprenticeship pay rates;
 - setting national and local measures (targets) or Equality and Diversity Impact Measures (EDIMs) to reduce gender segregation in Apprenticeships; and introducing
-

training for employers and training providers to improve recruitment practices and training and workplace culture.

Beck, Fuller and Unwin (2006) explain that, whilst an expansion in terms of females in apprenticeships has certainly been achieved (more girls now start apprenticeships than boys), the distribution across sectors still reflects age-old stereotypes. Females in advanced apprenticeships are concentrated in low-pay female sectors.

Gender segregation is both a vertical phenomenon, restricting an individual to the lower level of an organisation and horizontal in that individuals are also restricted to particular occupations (Blackburn et al. (2002), Millar et al. (2004)). Girls and boys educational choice has an impact on occupational distributions and segregation: the more education and occupation are limited the stronger the effect on gender segregation (see Borghans and Groot, 1999). In terms of the uptake of work placements whilst at school Francis et al's (2005) research for the EOC GFI has shown that the actual uptake of these placements 'reflects and potentially perpetuates gender stereotyping'. Their findings show that even though girls and boys experienced interest in taking non-traditional placements they were not encourage or helped to do so, and only 15% in their sample had received advice of information about such placements.

In terms of apprenticeships, the concentration of females in the level 2 pathway means that girls need to be aware of the consequences of entering sectors such as hairdressing, early years, health and social care and retail.

The article discusses how the UK's apprenticeship programme reflects the segregated nature of the labour market in both the public and private sector should not be surprising given the "voluntary" approach to labour market policies adopted by governments over the years.

The authors argue that young people need much more detailed information about how to compare a work-based pathway with full-time education. At the same time, they also need to understand that apprenticeships (and jobs more generally) in some sectors may result in very limited opportunities for career advancement. Their findings show that much work need to be done to ensure that young men and women regardless of educational attainment and class background, are properly informed of the consequences of embracing a stereotypical vision of their employment prospects.

Beck, Fuller and Unwin (2006) discuss research funded by the Equal Opportunities Commission into employers' and young people's attitudes to apprenticeship in five

occupational sectors, namely construction, early years care and education, engineering manufacture, information technology and electronic services, and plumbing. The research formed part of the EOC General Formal Investigation into gender segregation in the labour market. The UK government supported apprenticeship programme, established in 1994 as the Modern Apprenticeship (MA) is highly gendered, with sectoral distribution heavily reflecting traditional notions of male and female jobs. Given, however, that apprenticeships link classroom/workshop based (off-the-job) education and workplace learning and are therefore, an important route through which gender segregation currently becomes established, they are useful vehicles for exploring segregation. In fact, it was one of the original aims of the MA to encourage a more equal balance of the sexes in heavily male or female dominated sectors (Unwin and Wellington, 2001). The term 'Modern' denoted the desire by government to establish apprenticeship which would breach with tradition and be equally open to males and females.

The authors point out that participants are aware that, in theory, the programme should be equally suited to males and females but in practice associate the programme with 'male jobs'. It might be perceived, therefore, that the apprenticeship route is more of a risk for girls because it is associated with occupations that are characterised as 'male'.

In September 2004 DfES commissioned IES to evaluate equal opportunities in the second cohort of its Young Apprenticeship programme. The five good practice partnerships visited in 2005 were followed up after recruitment for cohort 3 in 2006. This longitudinal element allowed the sites progression in terms of practices to be tracked.

In terms of key findings in good practice case studies, the main way in which the partnerships worked with schools to ensure delivery was to agree a contact, most frequently verbally, for the inclusion of a representative ethnic mix based on school populations. This appeared to work well and could be extended to meet the requirement to target socially disadvantaged groups. However, it was less effective as a means to encourage greater gender-balance in non-traditional subjects.

Other support for minority or atypical groups included the provision of a suitable buddy at the placement and the opportunity to network with peers across course when at college. It is also important to offer all pupils, but particularly minority ethnic and gender-typical entrants the opportunity to discuss their experiences at their placements and to use specific rather than general questioning.

This second round of research demonstrated the link between good equalities practice and good practice more generally. The case study areas had made some significant progress

towards improving the YA delivery process to ensure that all pupils, including those who are atypical, have the best experience possible.

A paper by the Equal Opportunities Commission (2005) discusses research carried out by the Equal Opportunities Commission. In 2003, the EOC launched a General Formal Investigation in gender segregation in five occupational areas where there are skills shortages: construction, engineering, information and communication technologies (ICT) and plumbing (all male dominated occupations), and childcare (female dominated). The aim of the research was to look at what the National Learning and Skills Council (NLSC) and its local arms (LLSCs) have done within the 'investigation sectors' to address gender segregation in Modern Apprenticeships.

The key findings were as follows:

- Patterns of gender segregation in MAs across Britain mirror those seen in employment
- 60% of LLSCs regarded gender segregation as one of their priority issues
- Some LLSCs were also involved in national projects such as JIVE and GERI or were working with SSCs
- 30 LLSCs were able to provide data on the number of females and males starting and completing MAs in the five investigation sectors
- No LLSC reported that it collected pay data for apprenticeships
- Three quarters of LLSCs with Equality and Diversity Impact Measures (EDIMs) in place had developed one or more of these measures to address gender segregation
- LLSCs had experienced some conflict in prioritising their efforts, and reported that a lack of time, resources and specialist knowledge impeded their effort to address gender segregation.
- The newer emphasis on completions, rather than starts, might make providers more cautious about recruiting apprentices from under-represented groups, since they might be perceived as being less likely to complete
- In addition to the barriers above, respondents in all stages of the research agreed on a number of common major barriers for organisations seeking to challenge gender segregation, generally and specifically in MAs. These were – traditional attitudes regarding the proper jobs for women and men; social stereotypes; the poor image of some sectors; the attitudes of employers, the lack of apprenticeship places; and the fact that training providers typically only become involved with apprentices after they have been recruited by employers.
- The research showed that some employers continue to discriminate against apprentices from under-represented groups in both overt and more subtle ways
- Several young female apprentices had experienced bullying from other apprentices and one had been driven from her apprenticeships as a result.

Research by the Skills for Business Network in 2007 made the following recommendations to remedy some of the issues highlighted above:

SSCs will need strategies in place to demonstrate to employers the risks of not recruiting a diverse workforce when the numbers of school leavers are falling, when they will be in competition with new and emerging industries. They will need accurate Labour Market Intelligence (LMI) and monitoring systems and procedures in place to implement these strategies. Examples of projects and activities in the High Level Plans include:

- Developing a strategy in partnership with the Network of Black Professionals and the Women in Management Network to ensure numbers of ethnic minorities and women in management roles are representative of national levels
- Developing and linking a monitoring system for this to the registration data
- Setting targets around recruitment of apprentices at a regional level, on the basis of the make up of the community and feed this into SSA work /targets
- Employers, industries, training providers and skills academies will be working together in all areas of Equality and Diversity
- A draft diversity plan for the organisation from 2007 to 2011 which outlines staff targets for delivering the SSA with relation to attracting candidates from diverse backgrounds and the promotion of opportunities in the Sector.
- Initiatives to attract females into the industry
- Extending careers materials, including introducing a new website.
- Working with employers on a guide to recruitment and retention of apprentices which focuses on increasing equality and diversity in the workplace
- Research into learning styles and requirements for people for whom English is not the first language to see how apprenticeship frameworks can be made more attractive and useful for them
- Incorporating skills for life into apprenticeship design so that everyone of all abilities has the potential to benefit from them
- Increasing female participation through identifying barriers to take-up and progression and potential solutions in apprenticeship design and implementation processes
- Combating ageism through identifying factors which help/hinder older workers undertake apprenticeships as part of continual professional development; followed by a marketing campaign to promote frameworks to older workers
- Raising awareness amongst employers of the need to improve the perception of the industry to encourage a more diverse workforce in order to counteract falling numbers of school leavers and competition from emerging sectors seen as more attractive.

2.3 The Future

A select number of research reports reflect on the contemporary political context in the UK and are well placed to make recommendations for the future direction of apprenticeships.

A report by the Learning and Skills Network (2006), commissioned by the LSC, identifies a number of challenges for the design and delivery of apprenticeships, in particular the creation of a strong brand:

- a lack of employer demand and commitment to the idea of ownership, including limited take-up by small and medium-sized enterprises
- cultural issues within business sectors relating to established working practices and recruitment preferences within particular sectors which cannot necessarily be resolved through establishing apprenticeship training alone
- problems relating to the participation and successful achievement of apprenticeships by young people, resulting from candidates being poorly equipped educationally and attitudinally to complete programmes, as well as gender and racial barriers to participation; there also appears to be competition within apprenticeship and higher education policy for the most able young people to participate in a range of learning and training routes post-16
- issues relating to the appropriate content of apprenticeships, including concerns about a lack of underpinning technical knowledge.

The report concludes that three crucial issues remain unresolved:

- whether apprenticeships can really be offered as an inclusive training option for both able and less able trainees and continue to be perceived as a high-status, high-quality option on a par with other advanced level training and initial higher education
- whether industrial sectors with little history of offering apprenticeships can be encouraged to develop apprenticeship places on a significant scale
- whether small and medium-sized enterprises with little capacity, or desire, to offer long term training places can be encouraged do so.

The LSC's final report of its Research into Expanding Apprenticeships was published in May 2008 and covered a range of key topics, such as employer engagement, young people's choices, barriers and so on. Much of the evidence was based on a survey of employers.

Among the report's many conclusions and recommendations are the following:

- Around a third of non-participating employers said that it was very or fairly likely that they would consider participating. Given that these employers represent the largest slice of the market, this is potentially the most significant area into which to expand the programme.
- Colleges and training providers are a key part of making the Apprenticeship market work. Case study discussions with them have highlighted the need for the LSC to communicate its vision for what the expanded programme should look like in order to help colleges and training providers plan for the expansion.
- A number of providers said that they were not sure that it was their job to expand the programme, and that they would need clear guidance on:
 - what type of (and how many) Apprenticeships should be prioritised;
 - what the timeframe should be; and
 - how the expansion is to be funded.
- Most employers approach the programme from the perspective of their own specific training needs, rather than from the perspective of securing placements on particular training programmes. They are usually not specifically interested in recruiting an apprentice, but are looking for a training programme that will address their workforce development needs.

- Advertising will raise general awareness of Apprenticeships, but individual programmes (such as the Apprenticeship programme) can rarely cover all of the training needs identified by an employer. Employers will be more likely to respond to an offer of a comprehensive training package that can address all of their training needs, than they will to a call to increase the take-up of apprentices. Colleges and training providers can help to deliver packages of training, some which might then involve Apprenticeships if individuals are eligible. Essentially, employer demand must be the starting point.

In 2007 the SSDA and Sector Skills Councils published the “Skills for Business network and Other Bodies Contribution towards meeting the Apprenticeship Entitlement and Leitch”. This ‘high level indicative project plan’ gives a very broad indication of starts and achievements between 2007 and 2013, together with an approximate figure for resources required for the next three years to work towards delivery of the Entitlement and to address issues around equality and diversity. The work concludes that:

- The Skills for Business Network (SfBN) believes it will deliver the Leitch target of 400,000 in learning in England each year by 2019/2020. SSDA research shows that approximately 627,154 apprentices between the ages of 16–18, 19–24 and 25+ are likely to be starting apprenticeships in the year 2019/2020
- In all framework areas there is the potential for growth, either with existing employers or with new employers. This is particularly the case with the following industries where between 40% and 100% growth will come from new apprenticeship places with new employers and where SSCs are considering using apprenticeships to address skills gaps and shortages. There is also considerable potential for growth in apprenticeships at a higher level (level 4) in Information and Communications Technology and in Engineering Technology.
- Those industries such as business and administration, construction, electro-technical and retail, where predicted growth with NEW employers is lower than 40% but, because of large volumes, actual new starts will make a considerable contribution towards both the Entitlement and to Leitch
- Essential development activity will need to be undertaken over the next three years to ensure that apprenticeships are fit for purpose and meet the needs of employers, especially SMEs. In addition, providers need to be geared up to deliver the growth required to a high standard and potential apprentices from a range of diverse backgrounds, will need clear, accessible information and guidance to make informed choices
- SSCs will need strategies in place to demonstrate to employers the risks of not recruiting a diverse workforce when the numbers of school leavers are falling, when they will be in competition with new and emerging industries. They will need accurate Labour Market Intelligence (LMI) and monitoring systems and procedures in place to implement these strategies
- Sector-based marketing and communications campaigns, managed and co-ordinated by SSCs is essential to secure the effective engagement of new employers, particularly SMEs, and support their understanding and participation in apprenticeship schemes.

3 EVIDENCE FROM OTHER COUNTRIES

UK and Continental Europe

A report by the Centre for Labour Market Studies (2005) suggested that relatively high drop-out figures for apprenticeship schemes in the UK are misleading because there are wide variations in the interpretation of the meaning of apprenticeships among employers. Some employers view apprentices as simply an extra pair of hands and remove them from apprenticeships before they have completed the prescribed training and qualifications prescribed by government targets. The apprentices still have employment but have not been allowed to gain the qualifications they might need to switch to another employer or sector to progress in the future. The research shows that apprenticeships are much more likely to be successful in organisations which understand how to integrate apprenticeship training with their business strategies.

A concrete example is given in the variable standard and quality of apprenticeship. An engineering apprentice working for Rolls Royce might study for an HND and follow this four year period with a sponsored degree. At the other end of the spectrum, another apprentice might spend a few months working in a corner shop being assessed for an NVQ Level 2 in the workplace. Apprenticeship training should ensure that young people are gaining the qualifications and skills they need to progress in their careers as well as taking on new learning.

The paper also concluded that a major factor holding back British apprenticeship is the lack of regulation of employers' behaviour and the fact that training needs are decided by government and administered by intermediaries.

Research which benchmarked the delivery of apprenticeship training from the LSE (Benchmarking Apprenticeship: UK and Continental Europe Compared Hilary Steedman, 2001 – Centre for Economic Performance, London School of Economics and Political Science) states that the Modern Apprenticeship Scheme has aimed to build a vocational route to high-level skills and qualifications in Britain. This commitment arose from recognition that Britain did not have the coherent and transparent vocational route to intermediate and high level skills which, in other countries, had contributed to raising post-16 educational achievement.

The paper reviews the framework elements of apprenticeship provision and its implementation in those countries where apprenticeship is successfully established including Austria, Germany and Switzerland – and France, Denmark and the Netherlands.

In each of the above countries, offers of apprenticeship places enable individual firms to signal immediate and anticipated skill needs to young people. Apprenticeship structures then enable firms to meet those skills needs by appropriate training in partnership with government. By offering places, employers provide good quality information to young people and their parents on future career possibilities. Young people are thereby encouraged to invest in further education and training in a way which helps to meet skill needs and improve the probability of future employment.

In Britain, government practice of target-setting for apprentices in terms of numbers has led to the side-lining of employers in favour of 'training providers' to whom most government funding is channelled on condition that they enable the government to meet its targets. Training providers then place 'young' people with employers with little regard to local skill needs. The prime advantage of apprenticeship as a means of signalling skill need and satisfying demand for skills has thereby been almost entirely dissipated.

In most other European countries, apprenticeship is a recognisable brand with binding legislation on issues such as duration, standards and assessment. This allows the 'marketing' of apprenticeship to employers and young people. In Britain, apprenticeship has no legally-defined identity leading to wide variations in the administration of government funding for MA. This makes it difficult to define apprenticeship in Britain except as some combination of 'paid work and training.'

In other European countries, young people in apprenticeship continue to be educated like their counterparts within publicly provided upper secondary education. This ensures that vocational practice is underpinned by sound technical knowledge and general education and greatly facilitates further progression to higher-level vocational courses from apprenticeship.

In contrast, NVQs can be awarded on the basis of assessment on the employers' premises alone in Britain. Employer pressure has ensured that apprentices in Britain have no entitlement to education during apprenticeship.

In Britain, around one fifth of young apprenticeship schemes are of good quality and produce well-qualified young people. However, the MA initiative has failed to spread good practice to newer sectors such as health and social care, customer service, business administration, hotels and catering, hairdressing and retailing. These sectors account for one half of all apprentice starts in Britain and for almost all female apprentices. This failure serves to underline the weaknesses of a non-statutory framework for apprenticeship. This is compounded by the overriding aim to meet government targets with little regard to quality or local skill requirements.

In Britain, the government has failed to provide sufficient compensatory counter-balance to the voice of employers in the design and governance of apprenticeship programmes. Apprenticeship in Britain lags behind the progress made elsewhere in Europe on every important measure of good practice.

An associated article by the same author 'Are we being serious about apprenticeship?' (CentrePiece Spring, 2002) looks at on-the-job education in six continental countries to find a benchmark against which to judge British policy for vocational training and finds it deficient.

The key points of difference are as follows:

- In Britain, apprenticeship is not regulated by legislation
- In other European countries apprentices continue to be educated like their contemporaries
- On the Continent, the Internet now provides additional high quality information on careers

In the UK a fixed training duration is no longer a condition of public funding of youth training. When MA was introduced in 1995, duration was left at the discretion of the employer. In 1998 only 10% of British employers surveyed by the (then) DfEE expected apprenticeship in their companies to last less than 18 months. In three sectors, child care, health and social care and hotels and catering, between 20 and 25% of all apprenticeships were expected to last for 18 months or less. However, analysis shows that the gap between expectation and actual length of stay in apprenticeship is huge. In four of the ten largest apprenticeship sectors, accounting for roughly one third of all apprenticeship starts, Health and Social Care, Retailing, Hotels and Catering and Customer Service, the actual length of stay in apprenticeship was less than one year. In all sectors, average length of stay was considerably less than 'expected' and none was longer than two years. The CBI is opposed to fixed training periods.

The business benefits which accrue from apprenticeship schemes to employers are reviewed in a paper by Kenyon (2005). The focus of the paper is on whether MAs provide employers in the UK with a positive return on investment in key performance areas. The paper provides evidence that apprenticeships deliver strong business benefits such as increased productivity and staff retention, reduced costs and a more diverse workforce. Other benefits include increased profits (BT estimated they gained a higher annual profit of over £1,300 per apprentice) when compared with non-apprentices; higher quality of work – at BAE Systems apprentices fulfilled tasks correctly at a rate of 85 per cent after completing their training and career progression – over 90 per cent of line managers in British Gas's engineering operations trained as apprentices.

In a paper on apprenticeships as a route to higher education and perceived barriers to progression in the UK, Bowers-Brown and Berry (2005) show that employer support, time, finance and apprentices' perceptions of their own ability are the key factors that determine whether apprentices will progress to higher-level courses. The research highlights the need for a holistic multi-agency approach to information, advice and guidance, ensuring that consistent and comprehensive information and advice are delivered to enable successful transition from an apprenticeship to higher-level qualifications. The Tomlinson report on 14-19 curriculum reform (2004) identified the need for vocational options to be presented at an earlier stage to ensure that all the pathways for progression to higher education are given equal discussion at the time pupils make their study choices. The government's response to Tomlinson, the White Paper 14-19 Education and Skills (DfES, 2005) aims to make vocational options more relevant (through the emphasis on maths and English) and more widely available at an earlier stage to help raise the profile of the apprenticeship scheme as a route into higher education.

In a paper entitled 'Apprenticeship in the British 'training market,' Paul Ryan and Lorna Unwin (National Institute Economic Review, 2001) British apprenticeship is compared with German apprenticeship and its national predecessor, Youth Training.

British apprenticeship performs poorly, in terms of qualification and completion, as well as in the breadth and depth of training, relative to its German counterpart. MA resembles YT more than German apprenticeship reflects continuing institutional differences between the two countries, notably the limitations of the training quasi-market in which both YT and MA have operated. The prospects for MA to develop an educational role are poor in the absence of institutional development along different lines.

MA has increased the contribution of youth programmes to national skill supplies. However, rates of qualification and completion remain low, as does employer involvement. Apprenticeship activity appears not to have increased, despite an unprecedented rate of subsidy. Opportunities to secure high quality vocational preparation remain hard for young people to find. These failings are linked to the commercialised training quasi-market within which MA operates.

The VfM associated with public funding for MA is questioned. MA has extended systematic youth training into sectors and occupations which it had not previously reached and, to have reduced gender and age imbalances in access to apprenticeship. However, MA training activity in industrial occupations, with their higher training costs and skill shortages, is still delivering at the low levels of the mid 1990's.

Current reforms (dated at 2001) propose to build apprenticeships into a ladder of ascending work-based qualifications, linked to the wider ladder of vocational qualifications. Institutional support for this development remains inadequate as NVQs are educationally impoverished and requirements for Key Skills and Technical Certificates are circumvented by both employers and apprentices. Many training providers, including further education colleges, lack qualified staff. The educational content of the Foundation MA remains weak.

The training quasi-market constitutes an obstacle rather than an asset. Apprenticeship's contribution to intermediate skills will continue to falter until better ways of ensuring quality and commitment are developed.

The City and Guilds Centre for Skills Development reported on attitudes and perceptions to skills development (March, 2008) based upon an international research project. Despite the diversity of the countries surveyed, there were four common themes:

- Quality of provision: are people being given the best possible preparation for work?
- Supply and demand: how can supply and demand be balanced in skills?
- Employer engagement: are employers sufficiently engaged in vocation education and training?
- Esteem: how can we improve the perception of vocational education and training?

The study highlighted three positives:

- Vocational education and training gets employees ready for the workplace
- Employers believe that they get a return on their training investment
- Esteem is improving

And, less positively:

- Most agencies believe there to be a skills crisis
- There are serious issues with leavers not finding employment after completing their training

Ireland / Eire

In reviewing the Irish experience of apprenticeship, 'Meeting the skills needs of a buoyant economy: apprenticeship – the Irish experience' O' Connor (Cork Institute of Technology - Journal of Vocational Education and Training – March 2006) suggests that the Irish Standards-Based Apprenticeship (SBA) system, introduced in 1993 on a phased basis, has been the cornerstone of intermediate skills development with the capacity to produce high-quality craft workers and in sufficient numbers to meet demand.

The SBA is rooted in the craft tradition of learning and the modular approach is integrated with a broad focus. It has been capable of responding to the needs of industry by producing

highly trained craft persons in sufficient numbers to meet employer demand. It prepares apprentices to develop skills which they will apply to engage in lifelong learning and to cope with evolving technology.

Institutional development in Ireland has moved toward a continental approach in three respects:

- The linkage of apprenticeship to the education system
- The development of social partnership for the design and administration of apprenticeship, and the adoption of a statutory framework to underpin the whole
- The development has been consensual, taking the time needed to win support and commitment from the social partners, helped along by generous public funding.

There are some areas of concern regarding the Irish model of apprenticeship including the need to measure the quality of the on-the-job element of the SBA to ensure a consistently high level of skill, knowledge and competence and afford them the opportunity to apply the expertise they have acquired during the on-the-job phases on a variety of appropriate tasks.

The development of routes of progression to higher courses for those apprentices with the ability and motivation to aspire to higher qualifications within the sector of industry in which they work also presents a challenge to those in the educational sector to map the apprenticeship model of the SBA on to higher courses on the National Framework of Qualifications.

Substantial public investment has been made by the state to develop the SBA. This poses the question of the sustainability of the system. Any model of intermediate skills development must be able to respond to changes in technology and labour market requirements by phasing out obsolete skills and introducing new curricula to reflect change. The challenge for policy-makers in Ireland is to construct a dynamism and capability to identify areas of change developing in the economy and to be able to respond quickly and efficiently to meet those needs.

The success of the SBA can be attributed to FAS (as the body with statutory responsibility for administering the SBA), the social partners (employer and trade union representatives) and the institutes of technology for responding to the national need to develop additional apprenticeship facilities.

Scotland

From the Scottish context, ESRC funded research undertaken by Stirling University cast doubt on the value of the Scots' apprenticeship scheme (ESRC press release, May 2003).

The ESRC funded research study suggested that the MA scheme in Scotland is flawed with up to 60% of young people dropping out in some sectors before completing their training. The Scottish Enterprise boards have been successful in broadening the scope of apprenticeships away from traditional sectors into service industries. There has also been a corresponding rise in the number of women apprentices and increasing numbers of recruits above the age of 18 years.

However, the research found there to be no common standard for apprenticeships in terms of their duration or the acquisition of intermediate level skills.

The researchers (Dr Roy Canning, Stirling University) called for a fundamental policy change in how apprenticeship is regulated and supported at national level. They recommend that the Scottish Parliament should introduce new legislation to reform the present structure and administration of modern apprenticeships. They argue that there is a need for a recognised national diploma in apprenticeship, statutory entitlement to day release at college and monitoring of the employment conditions of apprenticeships.

The Scottish Executive issued a press release to respond to the study which refuted its main findings and argued that it was based upon a limited number of MAs and employer case studies.

Wales

In Wales, ELWa commissioned an evaluation of modern apprenticeships and national traineeships in Wales (2003). The evaluation highlighted the fact that MAs are driven by targets identified by training providers which are commercially oriented rather than by employers. It follows that apprenticeship placements are not directly responsive to economic signals from employers. The report noted the need to engage employers as a component of future success in terms of selling the programme to employers. The report recommended the need:

- to offer greater honesty and transparency in the MA prospectus to, and contract with, young people. It needs to separate, conceptually and practically, the different strands which make up the programme. It needs to arrange funding so that more expensive, high-quality training – ‘serious’ career-related apprenticeships – receive more generous funding than short bite-sized ‘taster’ or pre-employment training
 - to offer consistent standards appropriate to whichever part of the programme young people are involved, certified by qualifications which have established names and meaning
 - to work with sectors, non-traditional apprenticeships ones particularly, to better establish the consistent skill sets which the different programme levels develop and certificate.
-

- to develop stability such that processes associated with its delivery become routine rather than subject to continual change
- to promote, market and brand the programme consistently to parents, prospective trainees, their advisors and employers

Australia

A paper by Josie Misko 'Vocational education and training in Australia, the United Kingdom and Germany' (published by the National Centre for Vocational Education Research, 2006; Adelaide, Australia) compares vocational education and training (VET) Australia, the United Kingdom and Germany. The following key messages emerged:

- In Australia, the UK and Germany, training policies are increasingly based on similar general principles. However, implementation of these principles remains specific to each country
- Arrangements in Australia stand out in terms of ease of movement and flexibility between the vocational and higher education sectors. Australia provides a good example of a lifelong learning system in action. However, international practices in relation to harmonisation and credit transfer frameworks have important lessons for improving portability of qualifications across Australian state and territory jurisdictions
- Apprenticeship pathways associated with formal contracts of training and industry involvement in the development, delivery and assessment of competence continue to be key features for training, especially in the traditional trades in all three countries, and for other recognised occupations in Germany. In Australia and the UK they are increasingly being applied to occupations with no formal history of apprenticeship
- Moves to establish consistency between countries and even states to facilitate student mobility and credit transfer may not require wholesale re-alignment of country and state-specific approaches to the provision of education and training. The challenge is to develop relationships between education and training systems so that they have clear and open communication. In this way, qualifications and credits can be more easily transported across education and training sectors and within and between education and training systems

'Factors in vocational education policy development: Modern Apprenticeships, a case study' by Stephen Billet at Griffith University (1997) suggested that there are significant differences between the UK and Australia in terms of policy implementation. These differences are of greater magnitude than is apparent from the adoption of common initiatives such as competency standards and industry leadership in the respective countries.

A paper by Erica Smith (Charles Sturt University, 2004) examines young workers' beginning engagement in learning through work, placing it in the context of Australian policy on entry-level training. The study demonstrates that the presence of a contract of training (an apprenticeship) is a strong predictor of a young worker's propensity to regard the workplace as a learning environment. However, unsatisfactory interactions with employment or training providers can create low morale. Moreover the study suggests that learning through work is strongly affected by individuals' abilities to learn how to learn. The paper concludes by

arguing that that, for those young people starting work who are not in a training contract with a recognised training provider, additional assistance may be required for them to continue the habit of lifelong learning in the new environment of work.

The same author has written more recently (2007) on improving the quality of apprenticeships in a paper which found significant differences among companies in the skills and experience that they bring to the processes of recruiting and developing apprentices and trainees. Poor skills are shown to lead to poor outcomes in terms of the quality of apprentices and trainees while investment of skills and time leads to high quality outcomes that may significantly add value to the company. The paper suggests that companies employing apprentices and trainees need to be very clear about why they are employing them and the individual development strategies that will be out in place. The inclusion of off-the-job training at a training provider adds a safety net that is particularly important for inexperienced companies.

Canada

In the Canadian context, a paper by Taylor and Watt-Malcolm (2007) examines a high school apprenticeship programme with a focus on the opportunities for 'expansive' learning within three different contexts: schools, the training centre and the workplace. The authors assume that while young people differ in the degree to which they engage in learning within different sites, the institutional arrangements and features of different learning environments significantly influence their experiences and the quality of their apprenticeships. The authors note that restrictions on learning occurred in schools partly because of the academic/vocational divide in the curriculum. Further, students were often confronted with the need to make trade-offs in the workplace that restricted their learning. The authors comment that the overall quality of apprenticeships would increase if employers accepted greater responsibility for high school apprentices and provided them with more ongoing support (e.g. mentorship) through their training.

Austria

From the Austrian context a paper 'Labour market effects of apprenticeship training in Austria' by Helmut Hofer (Institute for Advanced Studies, Vienna, Austria; 200) argues that in Austria, low-skilled jobs are much less common than they are in countries such as the US and UK. Moreover, youth unemployment is low when compared to international standards and income differences are less pronounced. The Austrian apprenticeship system plays a decisive role in this context by providing a training option for those who failed at school. The paper analysed social security data to examine earnings and the stability of the occupational career of young workers with an apprenticeship diploma. One of the main findings is that workers with an apprenticeship diploma are much better off than those without further education. The paper finds the following ranking with respect to education: high-school graduates, ex-apprentices and unskilled workers, with more pronounced differences between ex-apprentices and unskilled workers.

One of the main findings of the paper is that workers who have served an apprenticeship are much better off than workers who have completed only their compulsory education. Further evidence suggests that women benefit more from secondary school education, while having served an apprenticeship seems to help them to enter a more stable occupational career but not to earn a higher income compared to those with no further training.

The research results seem to indicate the positive effects on the occupational career of serving an apprenticeship demonstrating that the apprenticeship system is not an antiquated model and that all efforts to maintain the system are justified.

In general, further attempts to create new apprenticeship occupations in the expanding high-skill service sectors are recommended as they could provide appropriate vocational training opportunities for young people.

Netherlands

'Apprenticeship in The Netherlands: connecting school-and work-based learning' by

Jeroen Onstenk and Frank Blokhuis, (Education and Training, 2007) suggests that the system of apprenticeship in the Netherlands is one element in a wider system of vocational education, combining school and workplace learning. The paper suggests that governments as well as schools and companies are attempting to uphold the quality of learning in apprenticeships. More intensive interaction between workplaces and vocational schools is being developed.

Workplace learning in Dutch vocational and educational training is an important factor in the development of broad occupational competency. Working together to apply and develop knowledge and skills contributes to the capacity to adapt learning to different situations which is a key benchmark of rich learning in vocational education.

However, the quality of workplace learning is not guaranteed and often learning in schools and workplaces are not integrated.

The paper recommends that VET innovation should focus on quality improvement and connectivity of work-based learning by establishing quality criteria for work-based learning places, by enriching learning in the workplace and by designing curricula, which integrate learning places as well as learning experiences. Vocational schools in the Netherlands should pay more attention to structuring, supporting and assessing communication processes between school, company and students and apprentices about what could be learned in a specific learning workplace.

The paper also advocates a more connective relationship between workplace learning and learning in school, where practice helps to explain the meaning and value of concepts. Learners should acquire the capability to interpret new situations in the workplace in the light of concepts they have developed in school or earlier practice encounters.

Smits (2006) examined the relationship between a firm's training motives and the quality of apprenticeship training. It was concluded that firms that train apprentices because of a future need for qualified workers provide better quality of training than firms that do not have future benefits from training.

Germany

From the German context a paper by Grollmann and Rauner (2007) 'Exploring innovative apprenticeship: quality and costs' shows that the quality of learning in German apprenticeships can be increased without raising costs in the context of a dual vocational and education training system.

The paper outlines areas of importance to ensure quality within the apprenticeship system:

- Learning in productive work processes is a core characteristic of on-the-job learning in apprenticeships
- Productive work needs to follow a well thought sequential logic which increasingly challenges the competence of apprentices
- Learning and work is based on a high degree of autonomy and self-responsibility
- Learning is embedded into the business process. The satisfaction of the client at the beginning and the end of company process provides an important quality benchmark not only to the work of the company but also to the apprenticeships and the learners.
- Commitment to the occupation and the company can provide a source of responsibility and sense of quality
- Professional competence is the ultimate goal of learning in dual apprenticeships

In policy terms, the paper shows that the willingness of companies to engage in apprenticeship can be enhanced by supporting in turning apprenticeships into a high quality work and business process oriented learning experience. On the other hand, apprenticeships could be made more attractive to companies by reviewing procedures to assess training quality and training regulations.

Deissinger and Hellwig have also written on the German system of apprenticeship (2005) on an approach to modernising the dual system for apprenticeships. The paper finds that Germany, with its long-standing tradition of dual apprenticeships and the reputation of maintaining its practices rather than changing them, has joined the vocational education and training reform agenda. It also suggests that reforms seem inevitable in the face of a partial failure of the traditional mechanisms operating within the existing apprenticeship system.

The paper comments that there is a challenge to redefine the borders between initial training and further training (or lifelong learning) as well as the relationship between full-time and part-time dual vocational and educational training. The German system is moving to adopt a more 'open training market' system.

A paper by Smits and Zwick (2004) analyses why in Germany and the Netherlands the share of apprentices in the business service sector is lower than in other economic sectors. The level of skill which apprentices attain is the key explanation for the relatively low supply of apprenticeships in German business service enterprises. In the Netherlands, the option to hire skilled employees from full-time schools instead of training apprentices seems to be

crucial. The paper proposes offering obligatory extra formal training in areas such as IT skills and foreign languages for apprentices in business service firms in Germany to increase the attractiveness of the dual apprenticeship system for prospective apprentices as well as business service firms.

4 POTENTIAL AREAS FOR FURTHER RESEARCH

This rapid review has identified a considerable body of research undertaken in relation to apprenticeships that will help to inform the future direction of the programme as it is taken forward by the National Apprenticeship Service. From the existing research, it is possible to identify a number of areas where further investigation would be of benefit in supplementing the evidence base. Any new research needs to be undertaken within the context of the changing policy environment, in particular taking into account the Leitch Review; the focus on demand-led education and training; the proposed expansion of the apprenticeship programme; and the increases in the staying-on age for education and training.

Potential areas for further research include:

- **Stakeholders** – providers, employers, apprentices
- **Overarching issues** – the ‘apprenticeship route’, cultural attitudes, quality and equality
- **Specific issues** – implications for delivery to over 25s

Further details about each of these are presented below:

Stakeholders

i. Providers

The role of the provider in the delivery of apprenticeships has been examined to only a limited extent within the research identified by this review. The provider can be critical in helping to determine the quality of the package on offer and also in their intermediary role between apprentice and employer. There is a whole range of issues relating to the provider and their potential influence on the ‘success’ of the apprentice, including their infrastructure and delivery mechanisms, the content of the courses that they offer, their relationships with both apprentice and employer (including their flexibility in responding to employer needs) and their status, be it public or private sector. An improved understanding about what constitutes best practice from the provider perspective – what works, in what circumstances and for whom – would make a valuable contribution to the existing evidence base around the apprenticeship option.

ii. Employers

Much of the research identified in this review focuses on employers, their engagement with apprenticeships and the benefits that are perceived to accrue from participation. However,

one of the key challenges in taking the apprenticeship programme forward is in increasing the demand from employers for apprentices in order to facilitate the desired expansion of the programme. If this is to be achieved, more work will need to be done to encourage non-engaged employers, including SMEs, to participate and offer this option. Developing a better understanding of how to create demand from employers will, therefore, be an important factor in the future success of the programme. Research to underpin this, which identifies the motivation and satisfaction of those currently engaged with the programme, will help to provide the evidence needed in order to promote the benefits of participation to non-engaged employers more effectively. This will need to take into account differences in sector, size and organisational characteristics.

In the move towards a demand-led education and training system, the extent to which providers understand the needs of employers in relation to apprenticeships is one key aspect in ensuring successful delivery. There is potential to develop a research project based on 'provider capacity building', which could inform the way in which providers market, design and deliver apprenticeships, building on an improved understanding of what employers need and expect from the programme.

iii. Apprentices

Much of the existing research appears to focus on apprenticeships from the employer perspective, whilst the views of the apprentices themselves appear to be less well documented. If the apprenticeship option is to be promoted to young people, it is important to develop a good understanding of levels of satisfaction with the programme from those who are engaged with it, and to identify the impact that participation in apprenticeships has on skills development, improving employability, progression within the apprenticeship framework and, ultimately, labour market progression. Whilst there is considerable quantitative evidence relating to the financial returns to apprenticeships, further qualitative research in this area could help to explain these findings further. The different experiences of apprentices within the different sectors is also a key area for this research.

Overarching issues

i. The ‘apprenticeship route’ – entry, completion, progression

Above we outline some of the areas in which there is potential for further research in order to better understand the apprenticeship experience for each of the individual stakeholder groups. In drawing all of this together, it would be beneficial to explore the linkages between all of these and examine, in a more holistic approach, the ‘apprenticeship route’ from entry through to completion (or non-completion) and beyond, building upon the end-to-end review undertaken by DfES in 2003. This would result in an improved understanding of who participates in the programme, why and how they became involved (including an exploration of issues around attainment levels of young people prior to entry and the subsequent impact of these; and the important role of Information, Advice and Guidance); what the experiences of each of the stakeholders are; and how this links to the potential for completion and successful progress within the education, training and labour markets, including the potential for access to Higher Education. This should also explore in more detail the reasons for relatively high levels of non-completion. This process would help in identifying the key ‘enabling’ factors that make the difference between positive and negative medium and long-term outcomes.

ii. Cultural attitudes

Whilst much has been done to promote vocational qualifications as being of equal value to the academic route, there remain perceptions (amongst both employers and young people) that apprenticeships are a ‘second choice’ option for education and training and that the experience and accreditation achieved through this route is of less value in the labour market than that of GCSEs and A levels. A range of factors appear to reinforce this perception including the ways in which the apprenticeship option is promoted to young people, entry requirements to the programme and the relatively high proportion of non-completions. Further work is required to understand more fully how these perceptions can be challenged. In so doing, the research would benefit from identifying the key strengths and successes of the programme, including building upon existing findings relating to the returns to apprenticeships, for both employers and the apprentices themselves.

iii. Quality

Linking closely to the issue of cultural attitudes, the quality of the apprenticeship option needs to be better established if unfavourable comparisons with academic options are to be challenged. Whilst existing research acknowledges the variability both in content and delivery frameworks associated with apprenticeships, there is potential to improve the

evidence base around what constitutes a high quality, valuable package, including the identification of best practice.

iv. Equality

There has been a significant amount of research relating to issues of equality in relation to apprenticeships, largely concluding that gender stereo-types appear to be reinforced within the programme, with occupational segregation identified as a key issue to be addressed. Whilst existing research provides considerable evidence about the failure, in particular, of young female apprentices to enter non-traditional occupations, further research into how to address this issue could be beneficial, focusing in particular on two areas. First, the way in which apprenticeships are promoted/ marketed to young people; and second, an examination of participating employers' Human Resource practices and the ways in which they deliver equal opportunities more generally within the workplace. A number of Sector Skills Councils are currently involved in initiatives to promote the role of women in non-traditional occupations, and whilst these largely focus on issues relating to career progression to supervisory and management roles, there may be potential to apply lessons learnt from this process to activities that are of relevance to apprenticeships.

Specific issues

i. Over 25s

Along with the expansion of apprenticeships for young people, the Government is also seeking to increase opportunities within this option for the over 25s. This area has been the subject of more limited research than that for young people. Work to identify the implications for delivery of apprenticeships to over 25s, and how these would differ from those for young people, would help to inform the development of this area.

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