Progression Routes into HE for Modern Apprentices

Report for LSC South Yorkshire

September 2003

EXECUTIVE SUMMARY

Introduction

Modern Apprenticeships were introduced as a post 16 vocational training route and subsequently revised in 2001 following Cassels' report Modern Apprenticeships the Way to Work. The report sought to address the lack of skills in the workforce and the Government announced plans in November 2001 to make on-the-job training for young people in England 'match the best in the world'. One of the issues addressed was the importance of 'capturing achievement in widely recognised diplomas issued by NTOs and making 'proposals for ensuring progression routes to Higher Education'. The report set a target of more than a quarter of young people entering Modern Apprenticeships before the age of 22 by 2004.

If this increase is achieved then the issue of what the Modern Apprenticeship means with regard to the potential career development of those undertaking the Frameworks requires greater consideration. The standard of the frameworks, the employees they produce, and the attractiveness of this route are likely to suffer if the frameworks cannot demonstrate credible pathways on to higher management positions and higher income jobs. Easing the pathway to Higher Education can contribute to the attractiveness of the Frameworks, particularly at a time when financing higher education may require students to take employment between leaving school and entering HE.

To achieve this, an understanding of the current position of Modern Apprentices with regard to HE entry needs to be understood.

Research Aims

This research set out to examine the current position regarding the potential for progression into Higher Education for Modern Apprentices within South Yorkshire. Broadly the brief was to:

- Examine the content of AMA frameworks;
- Explore awareness and understanding in HEIs;
- Establish the extent to which the framework may serve as an entry qualification;
- Establish any barriers to AMA take up of HE places; and
- Examine ways in which these barriers can be removed.

The situation within the main MA Frameworks in 5 key sectors has been examined through a series of discussions with staff involved in Higher Education provision, FE Colleges providing all or part of the MA Frameworks and local partners.

Key findings and a series of general and sector specific recommendations are made here. These have been developed in conjunction with local partners in attendance at a workshop held to discuss preliminary findings. These refer to both national and locally specific issues.

Key Findings

Modern Apprenticeship frameworks can be taken at two levels. The Foundation Modern Apprenticeship (FMA) is a Level 2 qualification and as such is not a viable entry route into Higher Education. The Advanced Modern Apprenticeship is a Level 3 qualification (i.e. the same level as A Levels) and is more applicable with regard to Progression to Higher Education. The AMA involves several elements:

- Key Skills, typically at Level 2
- An NVQ at Level 3
- A Technical Certificate

The Technical Certificate is a taught off-the-job qualification and is the closest in terms of format and content to more traditional entry routes such as A Levels, though that is not to say experience in the other aspects do not contribute to the skills and knowledge a Modern Apprentice has. Nonetheless the Cassels' report states that 'Technical Certificates offer the prospect both of significantly upgrading apprenticeships and of forming a basis for able apprentices to progress to higher education in a subject linked to their chosen occupation'.

- The level of understanding of Modern Apprenticeships varies within each sectoral area, this looks to be a function of the extent to which apprenticeships have historically been an accepted path into a career within the sector. Some sectors are knowledgeable of MAs and understand them; others are not and do not.

- The issue of whether progression routes exist and what barriers there are is complex and there is no single answer. The Technical Certificate is the aspect of the framework of most interest to HE admissions staff. In some cases this is sufficient - providing the requisite grades are achieved in a certain number of Level 3 modules. In other cases the Technical Certificate provides insufficient grounding to progress onto a HE level course.

- There is currently no parity of esteem with the A Level route, though the gap between A Levels and Modern Apprenticeships varies by sectoral area. Some sectors such as engineering have a tradition of apprenticeships and their value is widely understood. IT on the other hand is a relatively new area and the apprenticeship is less well understood and possibly less valued. Hence in engineering a good deal of work has been undertaken locally to ensure that curricula have been developed to assist the progression through to HE while

other subject areas are still at a stage of identifying the gaps in knowledge and issues to tackle and agreeing a framework in which to take these issues forward.

- The barriers to progressing to HE vary. An important initial barrier is that many HEIs do not recognise, or fully understand what a Modern Apprenticeship involves and what skills a Modern Apprentice has to offer. Key Skills is another area that may hinder progression to HE. The research found that those involved in provision of MAs were citing Key Skills as the primary reason for young people failing to achieve the full framework. The poor level of integration of this aspect of the framework to the other aspects was the main reason for this. Key Skills are important in terms of HE progression as it can be possible to meet the mandatory HEI entry criteria for in English and Maths with Key Skills Level 2 qualifications.

- Other barriers involve the level of employer support for MAs to undertake part time HE courses. Employers may not want MAs to start HE level courses as they may be solely interested in training them up to do a specific job within the company. There can be a fear amongst employers that they will lose staff once they have been trained to a certain level. Many of those contacted felt Employers may not want MAs to start HE level courses, they may be solely interested in training them up to do a specific job within the company. Others noted employer support can be a critical factor in the performance on HE courses undertaken whilst still in employment. The engagement of employers in the progression agenda is therefore seen as important.

RECOMMENDATIONS

Much of what is discussed refers to 'national' issues and while local findings can be fed up to the national level there is scope for more immediate local and regional actions to address some of the barriers identified above. The Cassels' report identifies the role of the LSC in the promotion and continual improvement of the Modern Apprenticeships system and a number of activities should be initiated and supported by the LSC nationally and locally to achieve this.

National Level

Nationally, it is important that the message regarding the standard of Technical Certificates is put across if HE is to be a realistic aim of Modern Apprentices. It is argued here that a route to HE could improve the 'image' of the Frameworks and take up could be increased. Technical Certificates therefore need to be pitched at a level suitable for entry to HE, and this level has to be considerably less variable than at present. This way a degree of trust in the training given to students can be built.

The LSC nationally needs to pursue this improvement with significant input from the Sector Skills Councils and National Training Organisations responsible for framework development. The HE sector, which ultimately determines whether individuals can gain entry to their institutions, must be involved in the development of Technical Certificates if they are to provide a solid foundation for progression to HE. This involvement will not only ensure HE criteria for admissions are met but also raise awareness amongst the HE sector about Modern Apprenticeships.

Local Level

Publicity & Promotion

As well as the national need to address the content of the frameworks there is a need to improve the perception and take up of the frameworks at a local level. A key way of achieving this is to ensure the frameworks are not seen as a 'dead end'. In this situation the frameworks may lose young people to other routes such as the A Level route not because it best suits their needs but because it is perceived as the best option by young people and their parents.

To do this there needs to be a campaign of publicising the successes of the Modern Apprenticeships route to young people and parents at the point when their post 16 options are being considered. Examples where young people have gone on to achieve success at HE level after opting for the MA route needs to be publicised. However, this needs to be done with a sense of realism. At present there is no common acceptance of the value of the MA frameworks and institutions and departments vary as to what they will accept or are willing to accommodate. It is of no use promoting the idea of MA progression to HE when it cannot be definitively

stated that a route exists. The LSC locally needs to ensure that successful examples of progression on a recognised route are identified and publicised. In the short term those sectors where examples are available should be focussed on. The intention would be to build up this marketing effort to cover other sectors as work to secure progression routes and to encourage progression comes to fruition.

These two issues need to be addressed hand in hand and it is perhaps best that a small number of sectors are adopted to pilot the approach recommended here.

Promoting Knowledge amongst HEIs

There are local issues concerning the level of knowledge HEIs possess about MAs as well as the level to which each sector has developed approaches to ensuring non-traditional entrants have access to HE.

The Building Pathways Bridging Programme was developed with Further Education Colleges in South Yorkshire, North Nottinghamshire and North Derbyshire to establish progression routes for NVQ learners. The aim of the programme is to improve the academic study skills of NVQ Level 3 and other 'non-traditional' learners to support their success in enrolling into, and being successful on, HE programmes, such as Higher National Certificates and Diplomas. There is experience and expertise here in bringing FE and HE together in dealing with issues around access to HE and this should be utilised in the context of Modern Apprenticeships.

As the Technical Certificates go some way to providing the requirements for admission on an HE course it should be examined as to which areas of the various Technical Certificates fall short of HEI requirements and whether modules from bridging programmes can supplement the Technical Certificates. Many of the bridging programme units, for example, focus on aspects of HE study such as independent study and research. This issue was mentioned by HE admissions staff as a potential weakness in the Modern Apprenticeship frameworks. This needs to be done in partnership with deliverers of Technical Certificates and HEIs.

Building Pathways have already undertaken work in engineering and health and social care and through the research presented here the idea of examining the MA Progression issue has received support in other sectors. This work needs to continue and needs to involve the SSCs or NTOs responsible for frameworks at a regional level, in conjunction with the local and regional universities in order to establish how Technical Certificates can be used to gain access to HE courses. From here it may be possible to design new modules or courses or use existing modules and courses that can bolster the existing frameworks in order to provide the underpinning knowledge required to successfully complete a HE course.

Locally, the LSC can support the continued interest in the MA progression issue amongst the Building Pathways partners. This would provide a means of identifying and tackling specific issues within sectors. Already the business and IT sector

groups within Building Pathways have expressed interest in pursuing the issue further. In addition, the LSC should ensure SSCs/NTOs responsible for frameworks provide clear information on the frameworks, specifically focussing on the progression issue. In particular they need to make clear to HEIs what their frameworks provide in terms of content and preparation for HE level study. This will improve the current level of knowledge that HEI admissions tutors have about Modern Apprenticeships.

Establishing Clear Routes and Advocacy

In the short and medium term the LSC should consider using a local organisation or combination of agencies to develop routes into HE and play an advocacy role to assist progression into HE from AMA.

Although entry to HE cannot be guaranteed from all MA frameworks and to all courses in all institutions there is clearly some local work which could be undertaken to chart where progression is possible already, to negotiate new routes into HE from AMAs and to help those completing the AMA frameworks and wishing to enter HE negotiate a successful progression route. These actions would enable HE progression to be discussed with young people more positively and accurately prior to them embarking on an MA route.

For this activity to succeed, local intelligence of courses where MAs will be considered at HE institutions needs to be built to avoid MAs being misled about the prospect of progression. Organisations such as Connexions and their delivery arms as well as schools Careers Advisors need to be kept up to speed with the situation as it evolves to ensure that information supplied to young people is accurate.

It is important that the route from an AMA to HE can be realised prior to the commencement of any advocacy role. Piloting this in sectors where the progression issue is clearer and it is more likely that progression can be achieved would enable a template for activity in other sectors to be designed. In view of the findings within this research the engineering sector, where progression has been shown to be possible and where there is a willingness to proactively get students in from non-traditional routes, would be a good choice.

These activities should provide a basis on which MAs will become more widely pursued. With a demonstrable and demonstrated progression route to Higher Education and higher level careers MAs should be able to attract increased numbers of students whose aspirations are higher than at present.

The LSC should take a lead in gathering concrete and up-to-date information. This information should identify where progression routes are most developed and should bring partners together to run a pilot scheme within the sub-region, covering the dissemination of information on MAs to HEIs, the securing of progression routes by addressing any outstanding barriers, and the marketing of the route and the

fulfilment of an advocacy role. Given the sub-regions current Objective 1 status and the clear fit of work in this area with national policy it should be possible to access the resources.

1. INTRODUCTION

1.1 The Purpose of the Report

The report has been produced to examine the current position with regard to the progression of Modern Apprentices into Higher Education and higher level skills and to make recommendations on how this route can be improved. In doing this it has not been the intention of the research to suggest that Modern Apprentices should be progressing in to higher education. It is, however, a progression route that some young people may consider and it is important in this regard to be clear as to what the barriers may be to being considered for a HE place when applying on the strength of a Modern Apprenticeship. The situation in five sectoral areas which are regarded as important to the South Yorkshire economy are examined:

- Health and Social Care
- Engineering
- Construction
- IT
- Business and Management

The report examines the context of Modern Apprenticeships before the results of the research into each of the five sectoral areas are examined. Recommendations for each sector are made before the findings of the research are summarised and recommendations that form the basis of an action plan are discussed.

2. POLICY CONTEXT

2.1 The need for vocational training and Modern Apprenticeships

By 2006 it is estimated that there will be over 9 million jobs at junior management, technician and craft level, and the CBI estimate that at least 50% of the jobs in the economy already require Level 3 or higher skills. Due to the lack of skills in the workforce the Government announced plans in November 2001 to make on-the-job training for young people in England 'match the best in the world'. In November 2001 Chancellor Gordon Brown stated that:

> *"Increasing skills is vital to raising Britain's productivity performance. Firms with skilled workers can benefit from greater innovation, increased flexibility and adapt better to new technologies – and more highly-skilled individuals can benefit from higher wages and suffer lower rates of unemployment….Modern Apprenticeships have a key role to play in giving young people the skills they need to do the job to the high standards employers require"*[1]

In order to achieve this Modern Apprenticeships need to meet the following characteristics common to those European countries with the most successful apprenticeship programmes:

- High levels of young people entering apprenticeships;
- A structure to the apprenticeship system, with established time periods;
- A key role ascribed to employers;
- A transparent structure for off-the-job training and education, which links to upper secondary education; and
- Wages for apprentices at low levels in comparison to those of their adult counterparts, restricting costs to firms, and enabling them to afford to provide training.

The recent White Paper of skills[2] states that:

> *"Our best Modern Apprenticeship programmes already match the best in the world. But there have been concerns about the quality of some programmes, the completion rates, and the wide variation between sectors in the quality of training and outcomes. We must ensure that all Modern Apprenticeships are of sufficiently high quality to attract many more learners and employers."*

This has implications in terms of this research in that a consistently high standard across all MA Frameworks is likely to assist in ensuring HEIs start to trust the knowledge and experience MAs obtain in completing the frameworks.

[1] DfES. Morris, Brown and Hewitt Announce New Plans for Modern Apprenticeships, Nov 2001
[2] DfES. 21st Century Skills – Realising our Potential, July 2003

2.2 The rationale for the new Modern Apprenticeships?

In 2001 the Government commissioned representatives from industry, the voluntary sector, trade unions and learning and training providers to carry out a review of Modern Apprenticeships. The Modern Apprenticeship Advisory Committee was set up by the Secretary of State for Education and Employment, David Blunkett, in March 2001. The committee were asked to report on a three year action plan for the development, promotion and delivery of Modern Apprenticeships. The committee was chaired by Sir John Cassels who submitted the committee's report - 'Modern Apprenticeships: The Way to Work' - to the Secretary of State for Education and Skills and the Chair of the Learning and Skills Council in September 2001.

Modern Apprenticeships were to have two levels, a Foundation level and an Advanced level with the expectancy that the Advanced Modern Apprenticeship (AMA) would act as a route to technical and management roles. Cassels' report indicated a need for a National Framework for Apprenticeships with the responsibility for developing, promoting, and delivering being assigned by the DfES to the Learning and Skills Council (LSC). The framework proposed by the committee included a signed apprenticeship agreement between each employer and apprentice, together with an individual training plan; a period of probation of eight weeks; attainments in Key Skills and in technical learning as well as in the relevant NVQ; minimum permitted durations at foundation (1 year) and advanced (2 years) levels; and provision for an accelerated option within the Advanced Modern Apprenticeship for those who have already attained the relevant Key Skills requirements.

The report indicated that Technical Certificates should be introduced. Technical Certificates were considered as a way of forming links with Higher Education courses within the same discipline, and create further opportunities for competent trainees to enter Higher Education during their apprenticeship. The new Modern Apprenticeships provides the young person with a diploma on completion of their apprenticeship which is issued by either the appropriate National Training Organisation (NTO)[3] or the Sector Skills Council (SSC).

> *"Our task now is to ensure all Modern Apprenticeship provision meets the highest standards and to encourage their take-up among employers and prospective apprentices… The new technical certificates we are introducing will ensure that standards remain consistently high across the broad spectrum of apprenticeships on offer. Some Modern Apprentices already take familiar qualifications such as BTECs and City and Guilds to provide more in-depth knowledge which complement the skills aspect of the apprenticeship…*[4]

The committee also recommended that in England there should be a long-term aim that 35% of young people should progress through the Modern

[3] NTOs are currently being replaced by the new Sector Skills Councils (SSCs)
[4] DfES. Morris, Brown and Hewitt Announce New Plans for Modern Apprenticeships, Nov 2001

Apprenticeships route. A more immediate target was set for 28% of young people between the ages of 16 and 21 to be entering apprenticeships by 2004. This represents a 25% increase in new entrants in three years and a 64% increase in the eight years to 2010.

Of the European countries that presently have a flourishing Modern Apprenticeship system Germany has some two-thirds of the age-group entering apprenticeships, and the great majority complete them successfully. In Denmark, about a third of young people enter apprenticeships and some 90% complete their programmes.

2.3 Recent policy developments

The recent government White Paper on skills has important implications for Modern Apprenticeships and provides opportunities for their future development. In effect the White Paper is an admission that Modern Apprenticeships have yet to live up to what was hoped of them in terms of the level of take-up, the consistency of quality across the frameworks and completion rates. Amendments to the age cap should see the numbers of apprentices rise towards the target for the increase in people on the vocational route in order to meet employer demand for employees educated to Level 3 and there is also a drive to strengthen the MA as a top quality vocational route.

Another concern raised was the place of Key Skills in the frameworks, this element has been a large contributor to many MAs failing to complete the full framework and it is recognised that closer integration of this element with the NVQ and Technical Certificates is required.

3. RESEARCH ISSUES

3.1 Progression beyond Completion of the Framework

The purpose of the Modern Apprenticeship is worth reiterating. Primarily MAs are a response to shortages in workers trained to Level 3. For a large number of MAs there will be no intention of progressing into Higher Education via the MA route, rather it will be viewed as a way to get training while earning a wage and hopefully securing employment.

It has to be remembered that many AMAs do not complete the full framework, often because of a failure to complete the Key Skills element and this may well count against the MA in terms progression to courses where demonstrable competence in maths and English are required.

That said, with an anticipated increase in the numbers on AMAs in the future and an expectation that the 'standard' of apprenticeships will be raised across the board, it is likely that progression to HE will become a more common aspiration for Modern Apprentices. For this reason the issue of how easy it is to take this progression route and how this can be improved needs addressing. Particularly when the attractiveness of the route needs improvement to meet targets for the numbers of young people entering vocational training.

The way Modern Apprenticeships are publicised or 'sold' to young people is important as this will affect their decision as to whether their longer-term goals are best served by the MA route. Of course the age of entry of MAs means their longer-term aspirations may not be fully formed and HE may only become a consideration once the MA has embarked on a framework. Ensuring progression options are not closed by choices made in the early stages of a framework is also therefore an issue.

The LSC information regarding Modern Apprenticeships suggests that progression is an important characteristic of the programme. The literature indicates that on completion of the Modern Apprenticeship the individual may follow one of three routes of progression. Firstly, someone who has completed an AMA could continue their progression by moving on to NVQs at Levels 4 and 5. It is also suggested that on completion of an MA it may be possible to start a Foundation Degree. Finally, it is proposed that the individual could continue their development by undertaking professional qualifications.

Publicity documents from the DfES and DfEE also suggest that young people with an AMA will be able to "*secure a ladder of progression in vocational learning*"[5], having the opportunity to advance into an expanded HE system. The DfEE believed that the MA would become a nationally recognised award which would allow progression into further learning, including Higher Education. Their publicity states that a

[5] Modern Apprenticeships – Consultation Document. DfEE.

Modern Apprentice would be able to attain an award which would be recognised by HE providers, leading to progression onto Foundation Degrees or other types of learning. DfES suggest that this provides a parity of esteem with more traditional routes into HE.

3.2 Progressing from Modern Apprenticeships to Higher Education

A number of MAs may decide that Higher Education best offers the chance to develop their career. Higher Education typically refers to education at Level 4 and above. It covers Undergraduate Degrees, HNC/HND and Foundation Degrees.

Projects set up locally by the 'Building Pathways' partnership have aimed to develop progression routes into Higher Education for learners undertaking NVQs. The areas of Childcare and Social Care, and Construction and Engineering have been integrated into a 'Bridging Programme' to enable the transition of individuals from NVQ to Higher Education. Other research was carried out with Modern Apprentices from the engineering sector by the partnership, which looked into – amongst other issues – their awareness of routes into Higher Education. The research indicated that the majority of employers were sympathetic towards their Modern Apprentices and encouraged their progression into Higher Education. However, it emerged that some of the apprentices were already qualified to partake in Higher Education courses, but had been guided onto craft level courses, suggesting that these individuals were not meeting their full potential.

Research has also been undertaken by The Open University (1999)[6] regarding Modern Apprenticeship progression routes into Higher Education within Yorkshire and Humberside. The Open University spoke to TEC staff, who felt that relatively few Modern Apprentices would want to take the Higher Education route and those that did were more likely to be coming from sectors such as engineering and business administration. The employers of Modern Apprentices believed that around 46% of apprentices would be suitable for continuing their studies into Higher Education, and once again noted that they were more likely to be coming from backgrounds such as engineering or business administration. The findings revealed that if employers were better informed then they would be more likely to encourage their Modern Apprentices into Higher Education programmes. There appeared to be a lack of knowledge amongst the Modern Apprentices themselves about progression into Higher Education, with only 16% initially viewing it as a possible route at the beginning of the interviews, but 27.5% stating it as an option by the completion of the interview.

[6] The Open University (1999). Research on Progression Routes for Modern Apprentices into Higher Level Provision in Yorkshire and Humberside. Commissioned by Government Office for Yorkshire and the Humber.

The Open University also found a number of barriers to the progression of Modern Apprentices into Higher Education:

- Low levels of awareness and preparedness;
- Admissions policies;
- Financial; and
- The need to stay in employment.

Admissions policies appeared to create a barrier for Modern Apprentices wanting to enter Higher Education; this was due to the fact that the qualification is often not recognised by HEIs as meeting the entry requirements. Apprentices, employers and training providers also felt the need to stay in the employment environment after the completion of their apprenticeship; therefore Further Education or training would have to fit in with this aim.

In 1999 the provision for Modern Apprentices in Higher Education was at a low level, with only a small number of Modern Apprenticeship-specific programmes in existence. The research by The Open University cited reports from individuals stating that there was no demand from the Modern Apprentices to progress into Higher Education. This is reflected in the small number of institutions that had former apprentices registered on their courses. Leeds, Huddersfield and Hull were the only institutions with former apprentices, who were registered on Engineering, Business and Chemistry courses respectively.

3.3 Summary of Research Aims

It is possible for anyone to progress to Higher Education on achievement of appropriate entry requirements and the satisfaction of other criteria HE providers have regarding the types of person they wish to admit. This may, however, take a long time where the applicant is embarked on a route that does not provide the necessary evidence of academic achievement, resulting in the applicant having to take additional qualifications. The research presented here is essentially examining the extent to which the criteria of admissions departments can be met through the achievement of an Advanced Modern Apprenticeship and whether the shortcomings in these frameworks can be overcome without recourse to embarking on an entirely new entry route into HE.

Key questions are:

- Are young people adequately informed prior to starting Modern Apprenticeships?
- What issues surround the contents of the different aspects of the framework from a HE perspective?
- Can a value be ascribed to MA Frameworks?
- Are the frameworks understood and valued by HE staff?

- What is the particular situation in different sectoral/subject areas?
    - Is progression possible?
    - What are the barriers?
    - How can they be overcome?

4. METHODOLOGY

Research involved a combination of both desk-based and primary research. Desk research focussed on gaining an understanding of the Modern Apprenticeships system, what the frameworks involve, their policy context, the situation in South Yorkshire regarding the numbers of Apprentices, the availability of HE courses in each sectoral area and their admissions criteria.

- Desk research
    - Policy context
    - The numbers involved
    - Modern Apprenticeships
    - Provision of HE options
    - HE admissions

- Primary Research
    - Face-to-face interview with key organisations
    - Discussions with partners at Building Pathways meetings
    - Workshop to generate options

Desk research, however, can only uncover a 'theoretical' picture of progression. HE providers will have their own criteria not captured in published documents and HE admissions staff will possess varying degrees of understanding of the vast array of qualifications and experience they are presented with by applicants. It was also necessary therefore examine this aspect through consultation with HE providers. A close working relationship was established with key players involved in Modern Apprenticeship and Higher Education provision. This process tested out how current levels of understanding of MA Frameworks and progression routes into HE and higher level skills could be improved.

It has not been possible to examine the precise situation in all cases. There are many MA Frameworks and their make up can vary considerably in terms of the Technical Certificate and NVQ and the suitability of these for the myriad of HE options. The research therefore focuses on some of the main frameworks and HE courses within each sectoral area and draws out issues that are more widely applicable.

This stage involved a series of face-to-face interviews and meetings with key players where the main issues were discussed and nascent recommendations formulated. Researchers attended Building Pathways meetings for each of the 5 sectors, the MA Progression issue on the agenda at each and a discussion of current understanding,

barriers and ways forward were explored. Key players in the consultation included representatives from Further Education and Higher Education, Building Pathways[7], the Open University, Connexions and the South Yorkshire Workforce Confederation (SYWFC). Representatives of the employer organisations (SSCs and former NTOs) were also contacted and their role in the production of the frameworks and views on the progression to HE issue were sought.

It was the original intention of the research to employ case studies of Modern Apprentices that had progressed to identify instances of best practice and demonstrate the barriers they had faced. In practice, finding 'real life' examples of people who had made this progression was difficult. In anticipation of this difficulty it was agreed 'vignettes' would be produced, providing a fictional description of the prospects and barriers faced by young people who have pursued the work-based route. The vignettes were assembled through the face- to-face interviews with the key partners, and sought out the likely response to a typical young person, probably taking the advanced MA route, who is seeking to move in to a higher level skills training. Again the range of possible attributes of applicants and the range of HE options, coupled with the lack of knowledge of MAs held by HEIs made this process difficult. The vignettes do, however, serve to focus attention on some of the issues faced by MAs. The lack of clarity here was in the context of this research which was a finding in itself.

The next stage in the research was concerned with generating options, and drew together the findings from the previous stages to provide the basis for the action plan and the recommendations for the LSC. A workshop was then organised for a number of key stakeholders, including Building Pathways, Barnsley College, Sheffield Hallam University, Sheffield Futures and Connexions, and the LSC. A paper summarising the main conclusions from the work to that point was presented and discussed. The purpose of the workshop was to inform key stakeholders of the range of findings as well as setting out and testing options to enable better progression routes into HE.

7 Building Pathways is a partnership of Further and Higher Education providers working together to open up access to Higher Education for local people. They are funded through HEFCE and the LSC. They have a number of projects developing progression routes to Higher Education.

5. RESEARCH FINDINGS

This section presents the findings of the research. Figures and statistics about Modern Apprenticeships at the national and sub-regional level are covered initially followed by general findings applicable to all frameworks. These relate to the situation in South Yorkshire and how knowledge of the frameworks affects the ease of progression for Modern Apprentices. The section then details the findings in each of the five sectoral areas. This details the content of the main frameworks in each area, focussing on the Technical Certificate as this aspect was felt to be of most relevance for progression to HE courses. The current provision of AMAs and HE possibilities is outlined before the understanding of the frameworks and the barriers MAs face are discussed in reference to the findings of the research. Sector specific recommendations are given here, while broader recommendations follow in the summary chapter.

5.1 Current Figures and Statistics

5.1.1 The National Picture

The major skill shortages in Britain are not at degree level, but at the apprenticeship level (NVQ Levels 3 and 4). The Advanced Modern Apprenticeship is a Level 3 qualification, and HND and HNC are Level 4 qualifications, or Foundation Degree, which leads on to a degree level qualification. The skill shortages exist within certain craft skills. The shortage appears to be becoming more problematic due to the decrease in numbers of young people taking on Modern Apprenticeships. In 1979 around 374,000 apprentices were trained, whereas recently this figure stood at only 200,000[8].

Around 75% of the two million young people aged between 16 and 18 (1.5 million), are involved in education and training; 55% of these individuals are in full-time education; 8% in government-supported training; and only 5% are in employer-supported training[9]. The Cassels' report 'The Way to Work' described employer-supported training as the ideal form.

Between 1997 and 1998, the number of young people starting work-based learning programmes decreased by 11,000. Between 2001 and 2002 the numbers of people in work-based learning increased by 10,000, to a figure of around 284,000[10]. This is, however, a similar figure to 2000. The rise is partly attributed to the growth in numbers of young people participating in the Foundation Modern Apprenticeships

[8]Hansard. 15th July 2002. Baroness Sharp of Guildford

[9] Hansard. 15th July 2002. Baroness Sharp of Guildford

[10] Work Based Learning –Government Supported Further Education and Work Based Learning for Young People on 1 November 2002 - Volumes (LSC statistical first release)

(FMA), where there has been an increase of around 20,000 people. Numbers on the Advanced Modern Apprenticeships and NVQ Learning have fallen.

In November 2002, 213,000 16 to 19 year-olds were undertaking Modern Apprenticeships. Since that was announced, the Learning and Skills Development Agency has published a study saying that the quality of training has fallen, particularly since April 2001.

In November 2002 the largest area of learning for work-based learning was Engineering, Technology and Manufacturing, with 24% of all learners (67,200 individuals). Retailing, Customer Service and Transportation was next with 13% (37,400 individuals) just ahead of Business Administration, Management and Professional[11].

Around 250,000 of 16 to 18 year olds in England are in work-based education or training, with less than half taking the Advanced Modern Apprenticeships route (119,000 individuals); around 85,000 individuals in this age group are pursuing the Foundation Modern Apprenticeship; and a further 44,000 participate in other forms of work-based training.

In total there around 12.5% of young people aged between 16 and 18 in work-based education and training, with 10.2% of this age group involved with Modern Apprenticeships. Cassels' report targeted 28% of people between 16 and 21 to be on Modern Apprenticeship programmes by 2004.

5.1.2 South Yorkshire

In South Yorkshire the number of young people undertaking a Modern Apprenticeship within the five sectors[12] identified as important to the sub-region has risen slightly between 2002 and 2003 from 5,514 to 5,540[13]. Advanced Modern Apprenticeships (AMAs) in the five core sectors has also risen by around 22% whereas those on a Foundation Modern Apprenticeship (FMA) have decreased by around 18%. However, although this appears to be a relatively high figure, when the number of young people leaving their Modern Apprenticeship before completing the award is considered the result appears very different. During 2002-2003 the number of people leaving their MA course in South Yorkshire was 720 and the number of those actually completing the course was 60 making a retention rate of only 8.3%.

LSC data for South Yorkshire is available, detailing the numbers of Modern Apprentices within the various sectoral areas. This data is summarised below:

[11] Work Based Learning – Government Supported Further Education and Work Based Learning for Young People on 1 November 2002 - Volumes (LSC statistical first release)
[12] The five core sectors are Business administration, Management & Professional, Construction, Engineering, Technology & Manufacturing, Health, Social Care & Public Services, and ICT.
[13] Data from South Yorkshire LSC 2003

Table 1: Number of Modern Apprentices in South Yorkshire in the 5 Core Sectors (2002)

Area of Learning	**Programme Type**		***Total****
	AMA	**FMA**	
Business administration, Management & Professional	740	1,386	*2,126*
Construction	278	606	*884*
Engineering, Technology & Manufacturing	958	342	*1,300*
Health, Social Care & Public Services	260	632	*892*
Information & Communication Technology	70	242	*312*
Total	**2,306**	**3,208**	***5,514***
**In learning at 29th July 2002*			

Source: LSC South Yorkshire

Table 2: Number of Modern Apprentices in South Yorkshire in the 5 Core Sectors (2003)

Area of Learning	**Programme Type**		***Total****
	AMA	**FMA**	
Business administration, Management & Professional	572	1,532	*2,104*
Construction	180	552	*732*
Engineering, Technology & Manufacturing	826	664	*1,490*
Health, Social Care & Public Services	278	756	*1,034*
Information & Communication Technology	44	136	*180*
Total	**1,900**	**3,640**	***5,540***
** In Learning at 13 June 2003*			

Source: LSC South Yorkshire

Ofsted area-wide reports for three of the South Yorkshire districts are also obtainable (Barnsley not available). These detail the number of Modern Apprentices in the various sectoral areas, and also provide information concerning those in other types of training. The content of these reports are summarised below:

Table 3: Numbers of Workers Undertaking Advanced Modern Apprenticeships (thousands)

	1998/99	1999/00	2000/01	2001/02
	AMA	**AMA**	**AMA**	**AMA**
Yorkshire & Humberside	8.8	8.5	9.4	5.1
England [1]	82.3	84.1	84.6	49.6
[1] 2001/2002 excludes figures for the National Learning and Skills Council				

Source: DfES (TEC Management Information (to 25/03/2001) LSC Individualised Learner Record (from 26/03/2001))

Table 4: Trainees: Numbers by Occupational Sector & District

Occupational Area	AMA	FMA	Other Training	*Total*
Construction				
Barnsley	-	-	-	**-**
Doncaster	252	84	11	***347***
Sheffield	34	152	10	***196***
Rotherham	56	13	71	***140***
Engineering				
Barnsley	-	-	-	**-**
Doncaster	158	27	101	***286***
Sheffield	116	66	91	***273***
Rotherham	184	5	82	***271***
Business Administration, Management & Professional				
Barnsley	-	-	-	**-**
Doncaster	172	81	71	***324***
Sheffield	68	382	61	***511***
Rotherham*	279	117	51	***447***
Information & Communication Technology				
Barnsley	-	-	-	**-**
Doncaster	**	**	**	
Sheffield	-	-	-	**-**
Rotherham	**	**	**	
Health, Social Care & Public Services				
Barnsley	-	-	-	**-**
Doncaster	11	6	11	***28***
Sheffield	42	90	86	***218***
Rotherham	29	28	80	***137***
Foundation Programmes				
Barnsley	-	-	-	**-**
Doncaster	0	0	0	***0***
Sheffield	-	-	160	***160***
Rotherham	-	-	26	***26***
Total	**1,401**	**1,051**	**912**	***3,364***
**Only includes* Business Administration *not* Business, Management & Professional ***Data not available*				

Sources: OFSTED Area wide Inspections - Doncaster (Autumn 2000), Rotherham (Spring 2001), Sheffield, (December 2002)

5.2 General Findings

5.2.1 What is involved in a Modern Apprenticeship?

Modern Apprenticeships differ from other forms of education and training. Firstly, they incorporate on-the-job training, which allows young people to gain experience of the work environment. Secondly, they permit apprentices to earn money whilst they are learning, which is an appealing option for those young people who would not return to learning otherwise. Finally, they give businesses the opportunity to train apprentices to their own requirements due their close involvement with the Modern Apprenticeship programme and furthermore they create a chance for the apprentice to engage in a relationship with the employer. The integration of Modern Apprenticeships between the national education system and the labour market created a bridge between the two activities. It was thought that this route would encourage the progression of young people from secondary education to apprenticeship and then perhaps onto Higher Education.

There are two different types of Modern Apprenticeship; Foundation Modern Apprenticeship (FMA) and Advanced Modern Apprenticeship (AMA). Apprentices can either progress from Foundation to Advanced Modern Apprenticeships, or in some circumstances gain entry directly onto an Advanced Modern Apprenticeship. The introduction of the Foundation and Advanced Modern Apprenticeships has meant that individuals can now start at a level that is appropriate for them and their situation.

Foundation Modern Apprenticeships (FMA) take around a year to complete and lead to an NVQ Level 2, a Technical Certificate and relevant Key Skills. This route mainly involves practical work, and the FMA allows them to develop their technical skills alongside gaining work experience. Individuals completing this qualification may either be on a work placement with a training allowance, or employed with a wage.

The Advanced Modern Apprenticeship (AMA) aims to give the individual skills in order to carry out technical, supervisory or junior management roles. Training for this qualification lasts for at least two years, and leads to an NVQ Level 3, a Technical Certificate and relevant Key Skills. Modern Apprentices doing an AMA should be in full-time employment and receiving an appropriate wage. Once the AMA is completed there may be an opportunity to progress into Higher Education and also to NVQs at Levels 4 and 5.

Technical Certificates, such as a BTEC National Certificate or a City and Guilds Progression Award, are gained through off-the-job learning. The Technical Certificate is a qualification which assesses specific occupational knowledge and comprehension. The qualification can be delivered through a taught programme including off-the-job training. This qualification is therefore different to NVQs which are delivered through on-the-job training. Technical Certificates have been developed by Awarding Bodies working in conjunction with NTOs/SSCs. Many

Technical Certificates are not new, but existing qualifications which have been reworked to fit the Technical Certificates' criteria.

Technical Certificates began to emerge in May 2002, with Accounting, Sport and Recreation, IT and Motor Industry being the first pathfinder sectors. All Modern Apprenticeship frameworks will eventually include a Technical Certificate and it is anticipated that this will bolster the 'information' element of the qualification alongside helping to provide a more robust progression route into Higher Education. Apprentices who already have a Technical Certificate for a relevant framework do not need to retake the qualification, as long as it still has a valid application.

Each Modern Apprenticeship framework has a number of different routes, enabling the apprentice to take NVQs and Technical Certificates which are suitable for their chosen career path. Some frameworks have limited numbers of options, such as the framework for 'Health and Social Care' which only has one Technical Certificate in the FMA route and one in the AMA path. Other Modern Apprenticeship frameworks, however, have far more options. For example, the 'Engineering' and 'Engineering Construction' frameworks have 27 Technical Certificates in the FMA qualification and 45 in the AMA route.

The depth of knowledge covered by the Technical Certificate also varies quite markedly. Some are quite narrow and focus on a particular craft skill while others are broader. As a result AMA frameworks even in the same subject area are not necessarily equivalent. As an example, Technical Certificates within Engineering could be a BTEC National, a C&G Progression Award, or an AVCE Double Award covering subjects as broad as 'engineering' and as narrow as 'CNC Manufacturing'.

Key Skills are a variety of important skills which help people to gain success in the world of work and their lifelong learning, and are also part of the criteria for completing the Modern Apprenticeship qualification. Apprentices are trained in whichever Key Skills are relevant to their chosen industry, and new AMA trainees must gain the Key Skills of communication and application of number at Level 2 as a minimum requirement. Overall there are six Key Skills:

- Communication;
- Application of Number;
- Information Technology;
- Working with Others;
- Improving Learning and Performance; and
- Problem Solving.

Key Skills can be met in a number different ways. Firstly, through the use of a proxy qualification, for example GCSE IT at grades A*-C will exempt a young person from the tests in Information Technology. Secondly, through the completion of a Key Skills qualification in Communication, and Application of Number at Level 2, as a minimum requirement. Finally, Key Skills can be met by those who have achieved grades A*-C in GCSE English and/or Maths or higher level qualifications such as

A/AS levels in English, Maths or ICT, who would not be asked to undertake any Key Skills related qualifications at Level 2.

5.2.2 How are Modern Apprenticeships Supplied?

Modern Apprenticeships will be typically provided by a managing agent. This will be a private training provider, FE College or employer. Where a private training provider or employer is the managing agent it is likely that a local FE college will be involved in the delivery of the Technical Certificate and Key Skills elements of the framework.

5.2.3 How Modern Apprenticeships are 'Sold'

An important issue is how young people are made aware of Modern Apprenticeships and how the benefits of them are 'sold' to young people. The government has targets of dramatically increasing the number of young people going through the vocational route and periodically Modern Apprenticeships are promoted by the government. Clearly the role of schools and advisory services such as Connexions (for 13-19 year olds) is to offer a more continual source of advice and guidance to young people about employment and training.

Connexions offer a two tier system of advice, the bulk of this is targeted at those with serious barriers to education and employment while the more universal advice for the more able students is far less intensive. These students are deemed to be able to make choices on the basis of advice from the school and also from the information Connexions make available.

Information is important because young people entering MAs will have a wide range of abilities and career paths in mind, some of which may be best served by the MA route, others may not. Students likely to pursue the MA option are not targeted by Connexions and are therefore reliant on published material and the advice provided at schools (which Connexions have a role in supporting). Additionally, Connexions would have contact with those exploring MAs at times when the government is running a campaign as the contact details of those enquiring in response to the campaign are passed to Connexions who will follow up to offer their services to help the young person.

The knowledge which Connexions possess about MAs is therefore an important aspect of the advice passed on to young people. Recent efforts have been made to improve Connexions advisors' knowledge of the MA frameworks. However, there are gaps in the local knowledge of advisors with regards the suitability of advising MAs for potential MAs with HE in mind. This becomes an issue where advice is given that progression routes to HE exist from the AMA framework (which they do in theory in most instances), yet in practice there are barriers to taking this route. For example:

- Particular HE courses are oversubscribed and there is then a tendency to fall back on the A Level 'gold standard' as the preferred entry requirement;
- Particular departments knowledge of MA Frameworks may be limited and admissions tutors are often unsure over the worth of the aspects of the framework;
- Institutions and departments are not necessarily interested in the widening participation agenda; and
- The MA framework may not provide adequate underpinning knowledge and academic skills to prepare the student for the rigours of the more academic courses within higher education.

It was acknowledged during this research that Connexions staff need to be better informed of such local issues to ensure that young people can be accurately advised.

5.2.4 Key Skills

The Key Skills element has been repeatedly singled out for criticism during the research and is regarded by many in the FE sector to be poorly integrated into the other aspects of the framework. As a result, Key Skills was cited as the main reason that many students did not achieve the full framework. This has been recognised in the recent White Paper which suggests better integration of Key Skills may improve the Modern apprenticeship Frameworks. Locally, however, it is also recognised that there is scope to improve Key Skills delivery within the context of the MA Frameworks and other research commissioned by LSC South Yorkshire is currently addressing this issue.

5.2.5 Technical Certificates

The Cassels' report states that *'Technical certificates offer the prospect both of significantly upgrading apprenticeships and of forming a basis for able apprentices to progress to higher education in a subject linked to their chosen occupation'*. In practice HE admissions staff are most interested in the Technical Certificate as this most closely approximates to a traditional entry qualification in that it is a taught course at a defined level. There are many Technical Certificates available and in practice these vary in their level, depth and focus. Technical Certificates are primarily chosen on the basis of the employer's requirement of the young person and the role they perform within employment. An engineering MA employed in a Welding and Fabrication position will undertake a Technical Certificate in Welding and Fabrication. In terms of HE options this choice may be critical.

Qualification size can vary. As part of the Technical Certificate project work, NTOs have considered what qualifications are suitable for the sector and what can be taught off-the-job within the duration of the apprenticeship. One measure of 'size' is the number of guided learning hours included in the specification. The regulatory authorities criteria define 'Guided Learning Hours' as:

> *'A notional measure of the substance of a qualification. It includes an estimate of the time that might be allocated to direct teaching or instruction together with other structured learning time such as directed assignments, assessments on the job or supported individual study and practice. It excludes learner – initiated private study'*
> Source: QCA

The number of Guided Learning hours associated with Technical Certificates for AMAs in the sectors examined here varies from 90 to over 1000. This suggests a vast difference in the level of learning being undertaken in the format that most closely resembles HE level study.

5.2.6 Is it clear what Modern Apprenticeship qualifications are worth?

The research is primarily interested in the barrier that HE admissions may place on MAs wishing to progress. An important aspect of this is whether it is actually possible to objectively state whether typical MA qualifications have a value that can be readily understood. The UCAS Entry system offers guidance on the equivalence of different grades in different types of qualification, enabling prospective students to gauge their academic abilities against likely entry criteria at HEIs.

Key Skills are said to be worth 10 UCAS points each, so the framework will typically involve achieving 30 points via Key Skills. In practice Key Skills are pre-requisites of any HE course and demonstrable ability in maths and communication at GCSE A* to C or equivalent are required. Key Skills are therefore unlikely to count towards a university points requirement.

The value of the Technical Certificates varies in terms of their UCAS Points equivalence and many cannot be ascribed a value in this way. From 2005 onwards the BTEC National is a common Technical Certificate for the AMA frameworks. A BTEC National has a value once accredited by the Qualifications & Curriculum Authority (QCA) against the National Qualifications Framework (NQF). A BTEC National can be an award, certificate, diploma (carrying 1, 2 or 3 grades). Typically an AMA will do the certificate which carries 2 grades. Depending on these grades the BTEC National Certificate can be worth between 80 and 240 UCAS Points, with a distinction and merit being worth 200, a common entry requirement for degree level study. It is broadly equivalent to 2 A Levels (a diploma broadly equivalent to 3 A Levels).

When an NVQ at Level 3 is added the MA could have equivalent to 3 A Levels. The UCAS site states:

> *Applicants to HE with NVQs as main entry qualifications are likely to offer NVQ at Level 3 (NVQ 3). These applicants should be judged on their merits alongside those with qualifications such as GCE A level and AS, AVCE and ASVCE. (Source: UCAS website).*

In theory then, a Modern Apprentice could have equivalence to a traditional 3 A Level entrant. Whether HEI admissions tutors view this to be the case or not is an important issue with respect to this research.

However, this style of accreditation is relatively new and many of the well established qualifications have undergone important changes. For example, the BTEC qualifications post September 2002 have undergone change. It is perhaps to be expected that HEI admissions staff are not always fully aware of the content of many Technical Certificates and their value.

5.3 HEALTH AND SOCIAL CARE

The Health and Social Care sector including the NHS, the independent sector, local authorities and the voluntary sector employs over 2.7 million people. Progression for successful apprentices offers a wide range of job opportunities. These include working as a senior carer or team leader in a residential care home; nursing; a support/assistant social worker role; and particular roles in domiciliary care.

The Training Organisation for the Personal Social Services (TOPSS) manage the Modern Apprenticeship frameworks for the sector along with Skills for Health. TOPSS handle the social side, whilst Skills for Health concentrate on the health element.

Problems have been noted concerning people under 18 who would like to participate in Modern Apprenticeships for the Health and Social Care sector. In order to carry out the work-based element of the qualification the young person needs to be over the age of 18, this has negatively affected the numbers of people on Health and Social Care Modern Apprenticeships.

5.3.1 The MA Framework

There are a small number of Modern Apprenticeship frameworks within the health sector, this research however concentrated solely on the frameworks for Health and Social Care.

TOPSS and Skills for Health undertook a review of the Modern Apprenticeship frameworks with a wide range of stakeholders in order to construct revised frameworks for the sector. These frameworks came into existence in September 2002. The framework consists of an NVQ at either Level 2 or 3; a Technical Certificate in the shape of a City and Guilds Progression Award; Key Skills; and Induction Standards and Foundation Standards in Care. The induction programme is included within the Health and Social Care sector due to the National Minimum Standards established by the Care Act (2000).

Different occupational areas may have specific training requirements; therefore each employer may add extra elements to the framework in order to meet the needs for their company.

Key Skills are an important aspect of the Modern Apprenticeship qualification and are thought to be vital in respect to the employability of the young person. The Chief Executive from TOPSS emphasises this point:

> *"These revisions to the Modern Apprenticeships make them even more useful to social care employers. As well as providing the employer with funding for training their younger staff in a structured and work-based way, they now also*

give more technical knowledge, and an assurance that those staff do in fact have the Key Skills of communication, application of number, information technology, working with others, improving their own learning and problem solving."[14]

The Key Skills requirements for the Health and Social Care framework are Level 2 in Communication, Application of Number (AON), Information Technology, Working with Others, Problem Solving and Improving Learning and Performance.

Health and Social Care AMA	
NVQ Level 3	Care Promoting Independence
Key Skills Level 2	Application of Number* Communication* Information Technology* Improving own Learning and Performance Working with Others Problem Solving
Technical Certificate	City and Guilds Progression Award in Care Level 3
* Tested	

5.3.2 Technical Certificate

In late 2001 Technical Certificates were also added to the framework due to the findings of the Cassels' Report[15], with the criteria being specified by the Qualifications and Curriculum Authority (QCA) and the development of Technical Certificates being taken on by TOPSS England. Existing qualifications were analysed in order to identify whether they would meet the requirements of the new Technical Certificate. A City and Guilds Progression Award was approved as the Technical Certificate.

The Progression Award differs slightly within the context of Modern Apprenticeships. The Technical Certificates relate to those units in the Progression Awards that provide underpinning knowledge for the mandatory units of the NVQ only.

The units of the Progression Award in Care Level 3 that match the NVQ in Care Level 3 are:

- Unit 1 - Promoting diversity

[14] Andrea Rowe from TOPSS England CEO, on the Modern Apprenticeships http://www.topss.org.uk/uk_eng/framesets/engindex.htm.
[15] Modern Apprenticeships: The Way to Work. Report of the Modern Apprenticeship Advisory Committee, DfES, September 2001.

- Unit 2 - Effective communication
- Unit 3 - Reflective practice
- Unit 10 - Health and safety within the care environment.

The Health and Social Care frameworks have one Technical Certificate for the FMA – Certificate in Supporting Care Practice Level 2 - and one for the AMA - Certificate in Supporting Care Practice Level 3. The Level 3 Certificate in Supporting Care and Practice does not have any UCAS points attached to it, meaning that it could not be used in conjunction with other qualifications to attain a higher score in a UCAS application to an HEI. The fact that it is only the elements directly related to the NVQ that are covered may weaken its value when approaching an HEI admissions department. There are 180 Guided Learning Hours associated with the Technical Certificate.

5.3.3 Education and Training Provision in South Yorkshire

Modern Apprenticeship provision in South Yorkshire is covered by training providers operating as the managing agents for the Modern Apprentices as well as FE Colleges. There were 278 AMAs in Health and Social Care in June 2003, though this classification also included public service.

5.3.4 Progression to HE

There are progression possibilities into HE within the sector in South Yorkshire. The two universities in Sheffield provide the majority of HE level courses in the Health Sector. Further Education institutions also provide a number of Higher Education courses in Health and Social Care. Sheffield College for example offer full and part-time HNC/HND courses in the Health and Social Care related courses and the courses are designed to allow progression to degree level study direct to the second year. This process is detailed in the course information the college publish.

Courses exist in Nursing at both degree and diploma level. The TOPSS Framework also indicates that social policy may be a progression area and progression possibilities exist here. Additionally, there are plans to introduce a Foundation Degree by the Health and Social Care department at Sheffield Hallam University (SHU) and this may provide a further HE destination for Modern Apprentices.

The Modern Apprenticeship framework for the Health and Social Care sector has been devised – in part – by TOPSS. The Head of Policy at TOPSS asserted that their framework had been designed with progression into Higher Education in mind, but felt that whether that actually occurred in reality was a different matter. Routes into Higher Education within this sector had been set up for people undertaking the NVQ pathway, but not specifically to those participating in Modern Apprenticeships.

Although there is information concerning Higher Education opportunities and progression on the TOPSS web-site, it is not specific to Modern Apprentices, and is essentially related to progression through the qualification system in general. Therefore, even though in theory routes to Higher Education exist, there appears to be a general lack of information to enlighten potential learners of routes to Higher Education.

A representative from TOPSS questioned the merit Foundation Degrees in the Health and Social Care sector, believing that many of them were of little value and that universities were developing Foundation Degrees to make up the numbers. Furthermore, the fact that many Foundation Degrees were requiring the same qualifications as an Honours Degree seemed peculiar.

TOPSS were also concerned by the level of Key Skills required. A suggested reduction from Level 2 to Level 1 was felt to offer Modern Apprentices little chance of progressing their careers. TOPSS feel MAs were about gaining skills to help progression throughout their careers, as an organisation TOPSS want people who are capable of progressing and this is possible at Level 2 but not at Level 1. At present the requirement is Level 2.

Research has found that progression to HE is possible via the AMA. The University of Bradford make clear that the Advanced Modern Apprenticeship in Health and Social Care is one of the acceptable entry routes into their new Foundation Degree (run both full and part-time). This can then lead to fast tracking for an honours degree though the route does not include the hours required for the professional qualification to enable the student to practice as a health care professional. In South Yorkshire a similar course is planned at SHU though details are still unknown.

Admissions Criteria

Health and Social Care Resource managers discussed the issue of Modern Apprentices at their last meeting in June 2003. At the meeting were representatives from both universities as well as the Open University and FE Colleges.

The minimum educational qualifications for entry to nursing and midwifery programmes are set by the Nursing & Midwifery Council (NMC). These are statutory requirements and must be met by all entrants to the Diploma and Degree programmes. Vocational equivalents are also accepted. Importantly an NVQ at Level 3 is accepted.

There seemed to be general confusion as to what the MA Framework in Health and Social Care constituted and there was a feeling amongst Health Sector HE representatives that HEIs should have been involved in the development of Modern Apprenticeships in Health if the intention was to have a progression route to HE.

It was noted that as nursing is oversubscribed it was felt unlikely that MAs would be considered as there was no need to try to do the extra work involved in

understanding the MA framework when there were enough people offering qualifications they understood to fill the available places. As a result there was also a feeling that MAs would be better off in other aspects of health care rather than nursing.

The School of Nursing and Midwifery at the University of Sheffield said that they had had a number of students who had progressed onto Higher Education courses from the Modern Apprenticeship route. These students had undertaken courses in Nursing Studies (Advanced Diploma) and BMedSci (Hons) in Midwifery Studies which both lead to a registered nursing qualification. The admissions staff were, however, unaware of the content of the Modern Apprenticeship framework until it was explained, and appeared to be unaware of the fact that they incorporated work-based training.

The entry requirements for Access onto Higher Education nursing and midwifery courses at the University of Sheffield were:

- Five GCSE/GCE O Levels at grades, A, B or C;
- Five CSEs at Grade 1;
- GNVQ Advanced Level;
- NVQ Level 3;
- A 'kite marked' access to Higher Education course; or
- BTEC National or Higher National Diploma (HND).

Unlike the BTEC National in Care, the Technical Certificate, a Progression Award in Care is not a recognised route onto degree level study. A representative from the admissions department recommended that it would be more beneficial if the person had undertaken an Access course as this would show that they could cope on an academic level. Someone from a Modern Apprenticeship background would – in theory – be able to access these courses if they had completed all elements of the Modern Apprenticeship qualification. An NVQ Level 3 would be acceptable, but the Technical Certificate or Key Skills would not be acceptable without the NVQ award.

The School of Nursing and Midwifery were also willing to take on additional criteria for candidates from a Modern Apprenticeship background, such as their suitability for becoming a nurse; their understanding of the course; and their relevant work experience. Understanding of the work environment is particularly relevant to Modern Apprentices and this route may even have advantage over someone from a more academic pathway.

The school stated that everyone is assessed on an individual basis, meaning that everybody faces the same barriers to progression. It was suggested that people coming from the Modern Apprenticeship route would need English, maths and IT skills, at GCSE grades A*-C or equivalent.

Similarly, SHU are keen to get people on to the degree course and will look at motivation, interpersonal skills and work experience before projected grades come

into it. In general the degree course is more difficult to get on to than Sheffield Universities Diploma. One member of staff responsible for admissions noted a difficulty that arises with the over-subscription to nursing courses meaning that the admissions department would have to be proactive in recruiting from a range of backgrounds. She found that placing emphasis on the personal characteristics of applicants helps here as it is only once it is determined that the applicant is the right sort of person do their academic credentials come into play. This way Modern Apprentices will not be disadvantaged, though by the same token neither are they guaranteed to be accepted. However, the attitude towards ensuring people from all backgrounds had the option of HE open to them was positive.

The Foundation degree

There is also the issue of development of new Foundation Degrees to consider. This is a qualification SHU are planning to introduce within Health and Social Care. What the Foundation Degree will look like is currently being debated – it may be targeted at young people or maybe at people in work (though the new NHS University may pick those up).

Discussions at the Workshop suggested that Foundation Degrees were aimed at people under the age of 30 who were finding it difficult to progress in their career[16], it was also proposed that more would be known about the qualification after they were launched in the autumn. It would not allow someone to practice as a nurse but would allow a role in a care setting and would ideally be designed to count towards the nursing degree and diploma to allow progression to the latter stages of those programmes.

5.3.5 Vignettes/Case Studies

A member of staff with admissions responsibility at Sheffield Hallam noted that a Modern Apprentice would fit well with the profile that SHU expects for people going into nursing. An important aspect is the experience built up working in care settings (even traditional applicants would be recommended to volunteer in the care sector). With an AMA in Care the Modern Apprentice would have two to three years experience in a care setting and have an NVQ Level 3 together with underpinning knowledge and this is viewed positively by the department. The academic side was viewed as less important than aspects such as interpersonal skills and a knowledge of what the course and career would involve, though there was a strong requirement for maths and English ability, particularly as when dealing with medicines and drugs, competence in maths is critical.

[16] Bob Evans South Yorkshire LSC

5.3.6 Summary

Progression

Progression is possible within Health and Social Care though not all admissions staff are familiar with the frameworks. However, the nature of the sector means that personal characteristics such as strong inter-personal skills are taken into account, sometimes before academic qualifications are considered. There are mandatory requirements for people moving into some areas of this sector, such as nursing, though the NVQ aspect of an AMA satisfies this.

Barriers

An issue in Health is the eventual career path and the over-subscription for certain HE courses. In such an instance there is little likelihood of admissions policies to be made more flexible to widen participation when there is already an oversupply of applications.

An important consideration was whether there could be work on preparing MAs for HE. It was felt that MAs would need to be well informed as to what was required in terms of study skills, time management and so on as well as the number of hours study involved.

Recommendations

Building Pathways have suggested that the Access to HE Health and Nursing Social Care could be a viable option in terms of easing the progression route. The programme is accredited by OCN and modules from the Access course could be used to bolster the qualifications gained on the Modern Apprenticeship. This should be explored in conjunction with HE providers to establish which modules would bring the Modern Apprenticeship Technical Certificate up to a standard where it could act as an entry route to the higher level HE courses without the need to embark on the HNC route.

Health and Social Care encompasses a broad range of occupations, some of which are oversubscribed for. There needs to be some discussion of what areas of the sector MAs may ultimately end up in to ensure that work is undertaken in areas where progression is most likely.

5.4 CONSTRUCTION

The Construction Industry Training Board (CITB) is the NTO for the Construction Sector, and their task is to promote and facilitate the training of people in the construction industry. CITB work alongside the industry and government in issues concerning recruitment, training and the skills of the workforce, in order to improve the competitiveness of the sector.

Image and recruitment are part of the remit of the CITB. The construction industry needs around 76,000 new applicants per year, and the CITB helps to promote construction as an interesting pathway to potential entrants. The organisation also acquires government funding to support the training of apprentices within the construction industry, and also has a training division called the National Construction College which trains over 35,000 people per year.

Skills shortages are particularly problematic in the construction industry. The Employers Skill Survey reported[17] that skill shortages for craft, sales and operatives were likely to have a serious effect on the performance of the construction industry. The industry also noted that they were anticipating further problems with recruitment in the future, with around 50% of organisations suggesting that this would occur.

5.4.1 The MA Framework

There are a number of frameworks in construction and its related sectors. Attention in this research focuses on the Construction Modern Apprenticeship. The Modern Apprenticeship framework for the construction industry covers a number of career options such as painting, bricklaying and carpentry to technical support areas such as quantity surveying and site engineering. The framework enables apprentices to achieve NVQ Level 2 or NVQ Level 3 in their chosen occupation, and have been designed by a steering group supported by the CITB.

The Advanced Modern Apprenticeship takes around three years to complete and the apprentice is expected to obtain the relevant NVQ at Level 3, a Technical Certificate and relevant Key Skills. Some pathways may require Key Skills to be certified at higher levels; and any other requirements which are specific to the employer. There is one framework within construction which covers around 25 NVQs at Level 2 and 3.

Differences exist, however, between AMAs leading to a craft level qualification in construction and AMAs leading to a technician level qualification in construction. Many craft-type Modern Apprenticeships are very specific in their nature, leading to specialised qualifications, whereas technical Modern Apprenticeships tend to be

[17] Hansard. 15th July 2002. Baroness Sharp of Guildford

broader. Technical Modern Apprenticeships also have higher levels of Technical Certificates within the AMA framework than the craft MAs. Technical MAs have BTEC National Certificates as a Technical Certificate whereas craft MAs have Advanced Construction Awards (ACA). BTEC National Certificates are thought of as being more applicable to Higher Education than the ACA, and are also worth more UCAS points. The difference is apparent in the level of work required to undertake the Technical Certificate with some Technical Certificates lasting for just 7 hours while can involve 700 hours study[18]. Clearly there is likely to be a big difference in the theoretical grounding these certificates provide and as a result they provide different levels of preparation for progression to HE level study.

Construction AMAs	
NVQ	There are a number of NVQs relating to Construction MAs on the 'craft' and 'technical' routes relating to many of the different trades within the sector.
Key Skills Level 2	AON Communication
Technical Certificate	Advanced Construction Award (265 GLH) BTEC National Certificate City and Guilds Progression Award

The CITB state that the construction industry has 25 NVQs at Levels 2 and 3 which relate to the Modern Apprenticeship route. The nature of the NVQ is dependent upon the particular pathway in which the Modern Apprentice takes, if a young person was undertaking the Roof Slater and Tiler Modern Apprenticeship Programme, for example, they would have to complete an NVQ Level 2 in Roof Slating and Tiling.

5.4.2 Technical Certificate

The construction sector has six Modern Apprenticeship Technical Certificates, two were qualifications that were already available; two have been developed in the knowledge that the Technical Certificates were coming into existence; and two are recent additions.

The framework and Technical Certificates came into existence in August 2002 and cover a range of issues concerning the construction industry, such as:

- ACA Trowel Occupations Bricklaying route;
- ACA Roof Slating and Tiling route;
- BTEC National Certificate in Construction; and

[18] John Harvey from Action on Access at Progression for Modern Apprentices into HE Workshop. July 2003.

- Progression Award in Automotive Vehicle Servicing and Repair (Maintaining Construction Plant) Level 3.

The Advanced Construction Award (ACA) is a Level 3 qualification, but is not valued as highly as other types of Level 3 qualification such as a BTEC National Certification or an AVCE. The ACA is associated with 265 guided learning hours as opposed to 720 for the BTEC National. The ACA appears to provide a weaker basis for progression into Higher Education than these other Level 3 awards. In some instances the Technical Certificate is a reasonable step for progression onto a degree course, whereas in other cases the certificate is only suitable for those wishing to progress onto a HNC.

5.4.3 Education and Training Provision in South Yorkshire

Modern Apprenticeships in construction are offered by a number of colleges, and training providers in South Yorkshire.

Both the FMA and the AMA programmes related to Construction in South Yorkshire have seen a decline in Modern Apprentices between 2002 and 2003. The FMA programme showed a decrease of around 9% and the AMA programme a decrease of approximately 35%, making an overall reduction of around 17%[19].

Within the South Yorkshire area there are a number of colleges providing Further Education courses, although not all of them provide NVQs or Technical Certificates which are related to the Modern Apprenticeship pathway.

5.4.4 Progression to HE

Further Education institutions provide a number of Higher Education courses concerning Construction as well as the universities themselves. Doncaster College for example runs a HNC/D in Building studies as do Sheffield College who also run Civil engineering HNC.

The only institution running degree courses in construction in South Yorkshire is Sheffield Hallam University who have a number of courses within their School for Environment and Development including, BSc (Hons) in Construction Commercial Management, BSc (Hons) in Architectural Technology and BSc (Hons) in Quantity Surveying. Related courses within engineering may also be suitable for construction MAs and both universities offer such courses.

Opportunities within construction exist for progression to Further and Higher Education. The Modern Apprenticeship route is meant to provide pathways for individuals to progress in their chosen field of work or to transfer into technical,

[19] Data from South Yorkshire LSC 2003

supervisory, management and professional careers within the industry. Progression into Higher Education is mentioned on the CITB website where they state that a technician who has been to college could use their qualifications in the future to gain access to a university course. They do not, however, state the type of qualification that this individual would need in order to participate in Higher Education.

Progression into Higher Education within the field of construction is, however, affected by the nature of the AMA. The AMA is practically focussed and the underpinning knowledge aspect can be weaker than in other sectors. As a result progression to Higher Education would not normally occur without undertaking an Access course.

A representative from the CITB felt that the framework for construction had partly been designed with progression in mind, stating that two of the Technical Certificates were National Certificates, which is useful for advancement into Higher Education. Those Modern Apprentices undertaking NVQs related to craft were felt to be less likely to progress onto Higher Education, and a bridging qualification was believed to be needed. The CITB stated that there is work presently being carried out by the National LSC which will attempt to bridge the gap between Modern Apprenticeships and Higher Education.

The CITB state that:

> *"Entry requirements for degrees are varied and include academic and vocational qualifications. Some colleges and universities will consider mature entry with work experience. You should check with the institution in which you are interested"*

Indicating that, realistically, the qualifications an individual needs to access a Higher Education course is down to the Higher Educational Institution, rather than there being an accepted common route.

There is an 'Access to Construction' course run by Sheffield College is designed as a route into Higher level study and runs part-time (over 1 year if two evenings per week). However, the burden in terms of time may make this route unattractive to MAs in full-time employment.

Admissions Criteria

Within the FE Colleges Doncaster College has a HNC/D in Building Studies. The entry requirements for this course are a BTEC First Certificate or Diploma in a relevant subject; or an Intermediate GNVQ in a related subject; or at least 4 GCSEs at grade C or above including science, maths and English, and/or appropriate knowledge and/or experience which has been gained at work or from other related qualifications. Sheffield College also runs a Building Studies HNC/HND. This can be accessed with a National certificate. They also have a HNC in Civil Engineering which can be accessed with a National Certificate, those without a National Certificate or other qualification can access the course via interview with a lecturer.

Sheffield Hallam University run a number of degree level and Higher National level courses in construction (e.g. BSc (Hons) Architectural Technology and BSc (Hons) Building Studies). The School for Environment and Development stated[20] that their Construction Management course includes opportunities for people who had completed an Advanced GNVQ (Level 3 qualification) who had achieved a merit overall and had a minimum of two additional subjects; they were unsure, however, how this would relate to someone who had achieved a Modern Apprenticeship. People who have a Higher National Diploma (HND) or Certificate (HNC) may gain direct access to the second year of the degree course. Modern Apprentices would therefore have to complete an HNC/HND course before progressing onto this degree. They are generally looking for a BTEC National overall pass with 4 merits in the final year for entry at degree level and less for access to the Higher National (1 merit for the Building Studies HNC).

The School of Environment and Development believed that once they were on the course the students tended to perform well, understanding any skills that were required, although stating that maths and numeracy were consistent problems.

5.4.5 Vignette

The School for Environment and Development have attracted a number of students through the vocational route, particularly GNVQs, though the BTEC National is also accepted and these candidates are expected to undertake a Higher National qualification first. The position of an AMA with a Technical Certificate other than the BTEC was less clear cut and a definitive answer as to how they would be treated was not available. A candidate with the BTEC would still have to undertake the placement year as the vocational aspect at HE level is considered to be at a different level to that which a Modern Apprentice will have experienced.

The HNC/HND allows entry to the degree level and the time taken to complete the two courses would be five years.

5.4.6 Summary

Progression

Progression routes depend largely on the component parts of the individuals MA framework, those frameworks that have the BTEC National as the technical certificate face an easier route into HE level courses. For example; HNC level courses provided at some of the FE Colleges can be accessed with the National certificate counting as an entry requirement. At the universities, particularly for degree level study, the picture is more complex. Progression to degree level may require undertaking a HNC/D in the first instance and then gaining entry onto the

[20] Chris Hill from School of Environment and Development at Sheffield Hallam University.

second year of a degree. Despite having work experience, a former AMA would still have to undertake a year's placement. An ACA, on the other hand, is academically far less demanding and would not prepare the MA for HE level study.

Barriers

The main barrier in construction is that many of the frameworks appear to offer low level Technical Certificates. The frameworks are also very much based on practical skills that do not feature as a part of most HE courses in this area which is indicative of the fact that the MA Frameworks in Construction are designed primarily to address an immediate need for practically trained employees.

Recommendations

The varied character of the sector causes the problems with the progression of Modern Apprentices due to the number of different routes that a trainee could take up. The main confusion seems to lie with the split between those Modern Apprenticeships involving craft and those associated with the more technical side of things. Progression routes concerned with these two pathways can vary greatly due to the differences in the Technical Certificate. Craft programmes tend to use the ACA and technical ones the BTEC National Certificate. The National Certificate was more widely understood and provides greater technical grounding important for HE level study. By contrast the AMA Craft route was deemed by the CITB as an entry route into the technical side at Level 3. The issue to be addressed here is a need for the clarification of which MA Frameworks would progress an individual into HE and which are not intended to provide such a route. From there on work can address the content of those Frameworks where demand for progression is more likely and the pathway more readily achieved.

Disentangling the frameworks and identifying realistic progression opportunities requires input from a range of partners including FE, HE and the CITB. These partners currently come together under the Building Pathways banner. However, it is currently unclear that there is any great demand for progression within this sector.

5.5 THE ENGINEERING SECTOR

The engineering industry is composed of eight core sectors located on 71,000 sites in Great Britain, employing 1.63 million people. The majority of engineering establishments are small, with 92% employing fewer than 50 people. Overall, 28% of sites employ apprentices or recognised trainees (EMTA – Engineering Modern Apprenticeships Framework).

The core sectors relating to the EMTA designed framework are:

- Aerospace;
- Automotive;
- Basic metals;
- Electrical equipment;
- Electronics;
- Other transport equipment;
- Mechanical equipment; and
- Ship building.

Currently the AMA in Engineering has approximately eighteen thousand young people in training in England and Wales, and remains the primary mechanism for recruiting and training skilled labour in the engineering industry.

There is an accepted shortage of trained individuals in the sector. The engineering sector have vast recruitment needs and require around 33,000 Modern Apprentices to be involved in training at any one time. The number in training in 1994 was about 8,000; this has increased to around 22,000, of which 18,000 are in England. Although the numbers of Modern Apprenticeships in engineering have been increasing, it has not been at an adequate rate to match the needs of the economy.

SEMTA is the Sector Skills Council for engineering. They have developed a framework for Modern Apprenticeships. SEMTA is one of two SSCs currently operating with a five year license.

5.5.1 The MA Framework

Craft and Technician level frameworks are offered, with technician level candidates requiring higher GCSE passes to enter the framework. The Technical Certificates undertaken depends on the framework. It is likely that the Technician Frameworks will provide better grounding for progression to HE:

> *"The Advanced Modern Apprenticeship in Engineering scheme provides the best possible preparation to achieving skilled and / or technician status within the industry. It may also, where appropriate, provide positive progression to Higher Education or higher-level work"*
>
> Source: MA Framework

Engineering AMAs	
NVQ	There are 10 NVQs associated with AMAs in Engineering.
Key Skills	Predominantly at Level 2 though the Technical Services and Engineering Design frameworks demand Level 3
Technical Certificate	• ABC 165 – Level 3 (Please note that Levels 1 and 2 must be achieved prior to Level 3) • C & G Progression Award Level 2 (Level 3 must be achieved for the AMA) City & Guilds strongly recommends that Level 3 Progression Awards are accessed via Level 2 • C & G Progression Awards Level 3 • Edexcel Advanced VCE in Engineering • OCR Advanced VCE Double award in Engineering • Edexcel National Certificate • Edexcel National Diploma

5.5.2 Technical Certificate

Engineering has a number of certificates that are approved as Technical Certificates for the various frameworks. Technical Certificates are at Level 3 on the whole though a significant number are at Level 2. They include City and Guilds Progression Awards, BTEC National Diploma and National Certificate qualifications. There are also many progression awards in different crafts (finishing, fitting and so on).

The way these certificates are viewed by HE admission staff will vary as their content varies significantly.

5.5.3 Education and Training Provision in South Yorkshire

Modern Apprenticeships in engineering are offered by a number of colleges, and training providers in South Yorkshire. Within the South Yorkshire sub-region there are more young people participating on Modern Apprenticeship programmes associated with engineering than any other subject area[21]. The Modern Apprenticeship programmes in South Yorkshire relating to Engineering, Technology and Manufacturing have seen an overall rise of 13% between 2002 and 2003. The

[21] A Modern Apprenticeship Steering Group stated that 50% of MAs in South Yorkshire were related to engineering.

AMA courses, however, have seen a decrease of around 14% whereas the FMA courses have observed an increase of around 48%[22].

Pilot research carried out in Barnsley, Rotherham and Chesterfield concerning the awareness and take-up of Higher Education opportunities in engineering for Modern Apprentices. The project looked at Modern Apprentices linked to RCAT, Barnsley and Chesterfield Colleges. The interviews with the 40 Modern Apprentices in Barnsley and Rotherham revealed that 37.5% were unaware of progression into Higher Education programmes; this figure includes 64% of craft students and 57% of NVQ 2 Foundation Modern Apprentices. All of the interviewed companies[23] who were employing MAs were aware of Higher Educational opportunities for Modern Apprentices, and only one had not received any information on HE from a college. Furthermore, all but one of the companies stated that they would be willing to pay course fees for any MAs wanting to undertake higher level courses.

Engineering is a popular MA Framework within South Yorkshire. FE involvement in MAs varies from running MA frameworks to providing the teaching for the Technical Certificates.

Research found that the FE colleges view Key Skills as an issue in the engineering MAs. They also feel the frameworks are getting too big (extra modules added) which are difficult to fit into the 42 month maximum. This has particular consequences for the ability to deliver the Key Skills and Technical Certificate in the one day a week that the MA is in college. There are moves to make Key Skills 'invisible' (i.e. students contribute to them while doing other aspects of the NVQ and Technical Certificate), making Key Skills properly integrated. This is a result of poor completion rates and a reluctance of many MAs to do this part of the framework. Such a move is inline with the recent government White Paper that notes the poor level of integration of Key Skills within the frameworks.

5.5.4 Progression to Higher Education

Both of the main Universities in the sub-region offer a wide range of engineering courses at higher levels and some of the FE Colleges also offer higher level courses at HND, HNC and BEng levels. The range of these is great and different entry requirements apply – the suitability of a Modern Apprenticeship framework will also vary in relation to what HE course is considered.

Foundation Degrees (Fd) in engineering are another potential HE destination for AMAs and are currently being designed. Within South Yorkshire Sheffield Hallam University are working on a Foundation Degree in Engineering. They are, however, anticipating it will be targeted at older learners employed in the industry. The

[22] Data from South Yorkshire LSC 2003

[23] The companies visited included those that may be classified as General engineering, Mechanical engineering, Electrical engineering, Fabrication, Manufacture and Production.

reasoning being that it is expected employers will view the Fd as a means to improving the underpinning knowledge of middle managers in order to meet more immediate skills needs.

Despite the reported demand for a Foundation Degree it is felt that employers may well not be interested in supporting employees to do an Fd straight after a MA because they will want the employee to focus on work, and not wish them to become overqualified and leave**.**

The AMA is seen as a potential route into HE by the SSC (SEMTA) and their document on AMA frameworks in engineering highlights the various routes to HE and other destinations via FMA/AMA, ONC, HNC and direct from A Levels. The route map is not straightforward, although it does clearly identify progression to HE as a possibility from a Modern Apprenticeship. The amount of time each route will take in practice varies and in some cases may be prohibitive to MAs.

A representative from SEMTA stated that the engineering sector had the highest levels of progression from AMA to HE than any other sector, and that this was partly due to the fact that apprenticeships are not new to their industry. The SEMTA representative went on to state that in the past the frameworks had been designed with progression to HE in mind as someone would complete a qualification such as a City and Guilds or Edexcel, followed by an HNC or HND, and then on to a degree course. SEMTA said that nowadays the LSC do not recognise this route, and they have told the engineering sector that apprentices need to have the Technical Certificate at a Level 3 and not at Level 4 which SEMTA feel does not allow progression.

The research also found a number of barriers for MAs wanting to progress into HE. Firstly, there appeared to be difficulties for young people wanting to progress from the craft certificate programme onto an HE programme, and there was a suggestion of colleges devising some kind of bridging qualification for these individuals.

There were also problems with the levels of support amongst employers for those Modern Apprentices who wanted to progress beyond a craft or National Certificate level (this is at odds with what is said above).

Admissions Criteria

A good deal of work has taken place within engineering education providers in South Yorkshire on the creation of pathways, facilitated by the Building Pathways partnership of FE and HE providers. Primarily it has focused on the creation of courses that can allow progression into Higher Education – i.e. Access courses and bridging programmes. Engineering at SHU has been particularly active in terms of making sure that people with non-traditional entry routes are considered. As a result the view from SHU is that the barriers to progression are no longer curriculum-based and that Modern Apprentices can, on achievement of sufficient

grades on the Technical Certificate, be eligible for a place at SHU. The main issue with their qualifications is the strength of the candidate's mathematics.

SHU adopt a flexible approach to their admissions and will consider applications on an individual basis. The characteristics of the student and the level of employer support for part-time students will be considered, as will the candidates desire to undertake this level of study. They have accepted Modern Apprentices onto their courses through a variety of routes including direct from a Modern Apprenticeship, via HND, as well as on completion of a preparatory year. Some have gone on to do part-time degrees and the flexibility exists to speed this process up by doing 2 days a week rather than one.

Additionally the FE Colleges' HE provision (HNC/HND) needs consideration. The progression from ONC to HNC is smooth at colleges, though between colleges and SHU the path is less smooth as the SHU HND curricula differs. That is not to say that the progression cannot be made. There were ways identified by an admissions tutor at SHU involving either extra time or harder work to get up the HND level. The SHU HND is the first two years of a degree and progression to the final year of the degree is possible.

Admissions criteria onto HE level courses vary. In theory Sheffield Hallam University's entry criteria for engineering courses for the degree programmes differ depending on the type of degree. The BSc (Hons) Computer Aided Design course requires 140 points from at least 2 A levels, or a BTEC National Diploma or Certificate, or a Foundation course such as the Extended Degree in Engineering. This qualification does accept evidence of breadth of study as demonstrated by AS levels and other new qualifications for 16-19 year olds, although it does not state whether this includes the Modern Apprenticeship route. The BEng (Hons) Combined Degree Award asks for similar entrance criteria but needs 160 points. The BEng (Hons) Electrical and Electronic Engineering course requires 240 UCAS points and does not accept any of the new qualifications for 16-19 year olds, making it unlikely that this would be a course that a Modern Apprentice could progress onto. It would also appear unlikely that a Modern Apprentice would move onto the BEng (Hons) Mechanical Engineering course as they do not accept people under the age of 20 and need an HNC with a minimum of 5 merit passes at the higher level in mathematics, mechanical or manufacturing engineering or engineering principles, although equivalent qualifications are accepted it is unlikely that an apprentice would have qualifications at this level.

Sheffield University also have a number of higher level courses in engineering. Courses in the Department of Electronic and Electrical Engineering such as BEng Electrical Engineering and BEng Electronic Engineering have a typical offer of ABB A Level results which is the equivalent of 320 UCAS points. The A Levels need to be in mathematics and physics or engineering science or technology and one other. The department also accepts an ONC/D HNC/D if the candidate has a distinction in at least one unit of mathematics at Level 3 or above to have a reasonable chance of gaining access. The entrance criteria for Automatic Control and Systems courses,

which include BEng Computer Systems Engineering and BEng Systems and Control Engineering, are between 280 and 300 A Level UCAS points (BBC-BBB), a BTEC National Diploma/Certificate with a distinction in mathematics or an Advanced GNVQ plus an extra A Level in mathematics.

A representative from admissions in the Department of Civil and Structural Engineering at Sheffield University felt that the maths issue was too great to consider candidates with an AMA. They believe that people with a Modern Apprenticeship are not sufficiently qualified to do the degree courses and it would be advisable for these individuals to do an Access course to improve their mathematical ability.

The Further Education Colleges also provide higher level programmes in engineering. Doncaster College supply numerous courses covering qualifications such as BSc (Hons) Integrated Technology, HNDs in Building Services Engineering and Foundation Degrees in Mechanical and Production Engineering. The HND courses require a BTEC HNC, and in some cases an A Level in mathematics or physics, completion of the HND allows entry to a BSc (Hons) degree. The BSc (Hons) degree requires an HND with an overall Merit, although other qualifications and experience will be considered. Sheffield College also have a number of courses associated with the engineering sector. They have two HNC courses, which require the individual to have a National Certificate and an A Level in either mathematics or science. Applicants who do not have the normal entry requirements but have relevant experience in engineering may also be considered.

Rother Valley College only have one higher level course related to engineering, a foundation engineering course which requires the individual to be 18 and over and to have completed an A Level programme of study, but having not achieved the necessary grades for direct entry into University. This course is said to provide a route into Higher Education for those without normal entry qualifications.

5.5.5 Case Study

One former Modern Apprentice has progressed onto an engineering degree at Sheffield Hallam. He did GCSEs but did not get the grades to progress to A Level and lacked English and maths so went on to college to do GNVQ in engineering

One year into the GNVQ he saw an advertisement for Modern Apprenticeships, and started a CNC Operator Modern Apprenticeship Framework with a local employer. He felt the MA was a stepping stone to a good job and university was not considered to be an option at this point.

A number of administrative problems meant that the MA process was not as smooth as he or his employer would have liked and in the end he quit the MA at an early stage while putting together portfolio for the NVQ3. He had not commenced the Key Skills element but had joined colleagues on an additional maths qualification and had passed it.

The decision to quit was based on the feeling that the MA was not offering the desired career paths. He applied to SHU and was accepted on the strength of the Advanced GNVQ which had to equate to 18 A Level points (220 UCAS points).

He started a C Eng degree but found that to be too high a level so transferred to I Eng (Computer Aided Engineering and Design). He is studying full-time and just completed the 2nd Year and is getting on with degree level study well.

5.5.6 Summary

Progression

Progression in engineering is easier at SHU and the FE Higher Education providers than at Sheffield University, though this offers Modern Apprentices plenty of HE options. A good deal of work has taken place to ensure non traditional entrants are able to access HE courses and as a result a number of MAs have entered HE.

Barriers

The barriers to moving into HE are no longer felt to be curriculum-based and bridging course and Access courses are in place. This coupled with Engineering Dept at SHU's approach to admission makes it possible to progress to HE.

A significant issue with regard to MAs taking up places on HE courses is the maths content of the MA framework. Mathematics is a core aspect of engineering and a degree of competence is necessary for the completion of a higher level course.

Employer 'buy in' was also seen as a significant factor in the success of MAs with the view expressed that employers will want to 'get something back' from their MAs and also a fear that if they are trained too highly they will leave. Effectively the MA is not important, it is the free training of the young person that employers are after. There was evidence of this being the case, with students progressing beyond the

AMA being ones that had pushed their employers on the issue. Some employers, for example, will cease supporting employees beyond HNC

Finance was seen as another barrier and it was felt more MAs may progress if some financial support were available.

Key Skills was seen as a serious issue. Of those that fail to achieve the full framework, 90% had failed to attain the Key Skills. A reason for this is the poor level of integration of the Key Skills syllabus to the rest of the framework. Ways are being explored as to how the portfolio can be built up in an integrated way.

Recommendations

The situation in engineering is further advanced than other sectors and attention may now turn to ensuring that as well as a progression route being open, that those embarking on this route are not 'set up to fail'. This was a concern of one HEI staff members in this sector. Ensuring the success of those embarking on the MA to HE route and publicising their success may contribute to raising the perceptions of what MAs can do and demonstrate that the MA route offers the chance to fulfil one's potential. Employers have been identified as critical to the success of MAs in HE, particularly where a part-time HE option is taken. Working with employers to establish the likely level of support for MAs wishing to progress into HE and ensuring that HE provision and employer needs can both be met could potentially provide a basis for a model in which other sectors develop their progression routes.

Additionally, clarification of what HEI admissions require by way of maths content and whether there is scope to bolster the MA Framework either with supplementary courses or amending the Technical Certificate would be of value. Maths is a critical discipline within the sector and MAs are more likely to succeed with a sound mathematics grounding.

5.6 BUSINESS AND MANAGEMENT

There is more than one organisation responsible for the development of MA Frameworks in the Business and Management sector. Two frameworks are considered here, those of Business Administration and Accounting.

The 'Council for Administration' (CfA) are responsible for 'defining and promoting excellence in business administration across all industries'. They carry out research with employers and employees to find out where existing and potential skills gaps exist, and also work alongside the Government and its agencies concerning national standards, qualifications and training frameworks.

The Accounting and Occupational Standards Group (AOSG) is responsible for the development of the accounting and payroll MA Frameworks. The Association of Accounting Technician (AAT) is a professional body that is accredited to award NVQs in payroll and accounting.

The AAT is an accepted route to chartered accountant status and the AAT will provide certain exemptions. AAT status comes after completing an NVQ Level 4 and can lead to direct entry onto year two of an accounting degree.

5.6.1 The MA Frameworks

Business Administration Modern Apprenticeship (BAMA) Frameworks

The BAMA Frameworks are based upon a combination of qualification outcomes, which together provide the breadth and depth of skills and knowledge needed to equip a young person for employment in administration, while fulfilling the national criteria for Modern Apprenticeships. The Advanced Modern Apprenticeships is based on a Level 3 NVQ qualification.

The framework was approved by the Modern Apprenticeship Steering Group (MANTRA) and was launched in June 1999. Since then the Administration National Occupational Standards and Key Skills profile have been revised and Technical Certificates have been introduced.

Business Administration AMA	
NVQ	Business Administration Level 3
Key Skills	Communications Level 3 AON Level 2
Technical Certificate	Certificate in Administration Level 2/3

Technical Certificate

The Advanced Business Administration framework has two Technical Certificates which are a Certificate in Administration (Business Operations) at Level 2 (120

guided Learning Hours) or Certificate in Administration (Business Operations and People) at Level 3 (90 Guided Learning Hours).

The BA AMA Framework offers a number of enhancement options. Whilst employers and candidates are free to select whatever units, qualifications or training are relevant and necessary in each individual context; one option must be chosen from the list of IT related skills.

Accounting Modern Apprenticeship Framework

Accounting AMA	
NVQ	Accounting Level 3
Key Skills	Communication level 2 AON Level 2
Technical Certificate	AAT proxy assessment

Technical Certificate

AAT candidates undertaking Accountancy or Payroll Administration Modern Apprenticeships do not have to complete any additional qualification to meet the Technical Certificate requirements. The external examinations which AAT provides at Levels 2 and 3 are recognised by QCA as "proxy" assessments which meet the requirements of Technical Certificates.

The Technical Certificate is the LCCIEB Level 2 Certificate in Book-keeping and Accounts, together with LCCIEB Level 3 Certificate in Accounting.

5.6.2 Education and Training Provision in South Yorkshire

Modern Apprenticeships in this sectoral area are offered by a number of colleges, and training providers in South Yorkshire. There are more organisations running these types of programmes than any of the other five core sectors in the sub-region. However, RCAT recently stopped running the accountancy MA Framework as they felt it too onerous and students were being turned off by it.

The Modern Apprenticeship programmes in South Yorkshire relating to Business Administration, Management and Professional have seen an overall decrease of 1% between 2002 and 2003. The AMA courses have seen a decrease of around 23% whereas the FMA courses have observed an increase of around 10%[24].

Sheffield College run Modern Apprenticeships in Business Administration, and have around 20 people on the FMA/AMA programmes. Barnsley College have just taken on the Modern Apprenticeship programme in Business Administration and have six people lined up to start the course for the new academic year. Three of these apprentices will be on the FMA and three on the AMA. Doncaster College have

[24] Data from South Yorkshire LSC 2003

around 35 Modern Apprentices on the Business Administration programmes, and around 48 on the Accounting programmes. Half of these are on the AMA.

5.6.3 Progression to HE

Further Education institutions provide a number of Higher Education courses concerning Business as well as the universities themselves. In total there is a very wide range of potential HE level courses available within the sub-region where Modern Apprentices can progress in order to fulfil their career aspirations.

Both the CfA and AOSG feel progression to HE level is possible. A common progression route template for administrators has been developed. This has been achieved by combining the details on job roles and skills with information on qualifications and pathways.

The research showed that it was felt that students should be made aware at the very start that HE could be a possibility and that they should be encouraged to aspire to as a high a level as they could reach. There was a mixed level of understanding by the FE and HE representatives of what Modern Apprenticeships entailed, though it was noted that the reintroduction of the BTEC National may help here if it becomes a Technical Certificate as the gatekeepers to HE places readily understand it. At present it is not the case that HE is presented as an option. The main barrier was deemed to be the poor underpinning knowledge provided by the Technical Certificate.

Progression routes vary. It was felt that very few will progress at present from MAs to HE. However, the Accounting NVQ Level 3 to NVQ Level 4 and then HE route is common. It can also be the case that students would go for college HE provision and then perhaps to the second or third year of a degree course.

Foundation Degrees are being developed by SHU, in partnership with colleges, and the AAT. This route could be topped up to a degree, though once again the details of the course are still in development and it cannot be stated with any certainty that the course would be suitable for progression from an AMA. However, the involvement of FE in the design at this stage as well as an awareness of the progression issue does provide scope for ensuring the needs of Modern Apprentices can be accounted for in the design process.

It was noted in discussions with FE and HE representatives in the sector, however, that there is a need for students to adapt to a different culture within a HEI in which there is far less one-to-one support available and a greater degree of independent study.

Admissions Criteria

Admissions into HE in certain aspects of the Business Management field are possible undertaking the NVQ route, though it is Level 4 that is required. It was noted during the research, however, that progression from NVQ 3 to NVQ 4 in accounting was common.

Admissions staff at the Management School at the University of Sheffield stated that they had never taken a Modern Apprentice onto one of their courses. The A Level requirements vary greatly between the 17 business-related courses on offer at the university, although in general they expect the individual to have ABB (320 UCAS points) or equivalent grades, and all degrees require a B in mathematics and a C in English language at GCSE level. Furthermore, there are no subject specific Access or Foundation courses which would be suitable for entry to these courses. In general, the admissions staff suggested that from their experience, students who had come from a more vocational background had tended to perform less well at degree level; they thought that this was possibly because were less well equipped to cope with the demands of the courses which have a strong academic element. Those students with an Advanced GNVQ are asked to provide an A Level to supplement their vocational qualification, although a bridging or Access qualification would be better. However, the Management School did state that they also look at factors such as work experience and communication skills when assessing UCAS applications.

A number of important issues were discussed with admissions staff at HEIs. Firstly, they were unaware of the contents of the MA Frameworks. This is an important issue in itself and highlights a problem MAs may experience in receiving credit for what they have achieved. Once the Frameworks were explained, however, they were willing to explore what skills a MA could bring to HE and suggested that first year tutors would perhaps need to be made aware of what the MA was bringing so that they could account for it. This discussion threw up a number of issues that need resolution. Particularly at issue was whether Key Skills AON Level 2 would provide sufficient maths grounding. It was accepted that the Technical Certificate for these MA frameworks was more of a bolt-on qualification that did not provide sufficient underpinning knowledge for progression to HE. This is particularly the case where the AAT proxy exemptions apply; making the justification that candidates had strong enough underpinning academic knowledge more difficult.

Not all frameworks are experiencing the same issues around progression. Accounting differs markedly from Business Administration. Accounting has a clearer career focus and many people enter the MAs solely with the intention of taking some accountancy-related position. The role of employers was noted as being important. Many employers see MAs as a cost-effective means of training staff who will be able to perform a specific role in the company and are not necessarily interested (in the short-term at least) in their further development beyond that. It was also acknowledged that even for students through more traditional route the transition to HE and the study methods can be difficult as there is far less support available in the HE setting than at an FE College. It was felt for MAs that this may prove problematic.

5.6.4 Vignette

The development of Case Studies or vignettes within this sector has been difficult because of the lack of understanding of what AMAs involved and a lack of certainty over whether certain qualifications can be accepted as being at the same level as others. For example, maths is a critical subject for those going into accounting or business, though whether Key Skills Level 2 AON would be accepted was not known.

The Technical Certificate exemptions cloud the issue further, though with the AAT qualifications being well respected and providing possible exemption from first year of a degree course (once NVQ Level 4 achieved); this route could be appealing to students wishing to pursue a career in accounting and prepared to work towards the NVQ Level 4.

In accounting the best route was considered to be to progress onto an NVQ Level 4 and to gain AAT membership.

5.6.5 Summary

Progression

In principle there is support for publicising the possibilities of progression to HE to AMAs though at present there is no evidence of a demand for progression within these frameworks to higher education. There is however an NVQ route to HE via the AAT certification which allows membership of the AAT after achieving NVQ Level 4. AAT certification can provide generous exemption on degree programmes, going straight into year 2 for example, and so provides an attractive entry route.

The situation changes however if the proposed increase in students taking the vocational route occurs and if the perceived value of the framework is increased. This may see a different type of student coming through the AMA programme in this area. It was acknowledged currently that where Modern Apprentices are perceived at all, they are perceived to be academically poor. If an increase in numbers occur then a more systematic process for dealing with MA applicants will be needed, and as a result a greater understanding of them will also be required.

Barriers

At present there appear to be two main barriers. Firstly, the Technical Certificates are weak and as such are insufficient to demonstrate academic ability. Secondly, there is a lack of understanding of AMAs and what skills an AMA are likely to offer and admissions staff are therefore unable to gauge the academic ability of applicants.

Recommendations

The main issue to be addressed in this sectoral area concerns the awareness of HEIs of the content of the various elements of the Technical Certificate and the skills that Modern Apprentices may be able to bring to Higher Education. There has been a recent commitment from some of the partners of Building Pathways to address progression routes more widely. The initial focus is likely to be on ensuring it is clear what qualifications are worth. This should be an important first step in identifying what barriers there may be for Modern Apprentices looking to move into HE and the situation can be addressed when it has become clear where any shortcomings of the MA framework are. At present HEIs are not in a position to rule out or rule in the acceptance of Modern Apprentices on the basis of the content of the AMA Framework.

While there is currently no evidence of demand for progression, the Foundation Degree currently under development in the sub-region may provide a more attractive destination than full degrees, especially where the AMAs motivation is to secure employment within a specific role with a company. It is important, therefore, to ensure Foundation Degree development takes place with the progression of Modern Apprentices in mind.

5.7 INFORMATION TECHNOLOGY

It has been an important growth sector over the past decade and when the number of IT professionals in other businesses (where IT is not the core of the business) is considered, IT has become a key employment area.

IT employers will vary widely as most organisations use IT and larger ones will have IT departments within their core business. These will use IT for different things and will therefore have different IT needs. The Frameworks have been developed by e-skills and as such should represent the skills employers in the industry require. There are three types of job identified by e-skills (IT Services, Using IT and Developing IT) and to mirror this categorization are three strands to Modern Apprenticeships in IT developed by e-skills**.**

5.7.1 MA Framework

There are a number of Modern Apprenticeship frameworks within the IT and Electronic Services sector, which are all at the advanced level. The SSC for IT (e-skills) were involved in the development of the frameworks, which became available in April 2002.

Information Technology AMA	
NVQ	• Using IT; • Managing IT for Teleworking; • Operating IT Systems; • Installing & Supporting IT Systems; • IT Services – Repair Centre; • IT Services – Customer Response Centre; • IT Services – Customer Systems Support; and • Developing IT Systems.
Key Skills	Communication Level 2 AON Level 2
Technical Certificate	• Advanced Diploma for IT Users: (Software Development) • Advanced Diploma for IT Practitioners: (ICT Systems Support) • BTEC Nat. Dip. for IT Practitioners: Software Development • BTEC National Award for IT Practitioners: ICT Systems • BTEC National Diploma for IT Practitioners: ICT Systems • Certificate for IT Users (CLAIT Advanced)

The AMA framework consists of an NVQ at Level 3; Key Skills in Communication, and Application of Number (AON); one of the Technical Certificates and an induction covering workplace employment rights and responsibilities.

5.7.2 Technical Certificate

Technical Certificates for the AMA Frameworks in IT include:

- Advanced Diploma for IT Users: (Software Development)
- Advanced Diploma for IT Practitioners: (ICT Systems Support)
- BTEC Nat. Dip. for IT Practitioners: Software Development
- BTEC National Award for IT Practitioners: ICT Systems
- BTEC National Diploma for IT Practitioners: ICT Systems
- Certificate for IT Users (CLAIT Advanced)

There is a large difference in the content of the Technical Certificates noted above and the number of guided learning hours associated with each. Several of these are well established branded qualifications at Level 3 while others are shorter niche-based qualifications and may offer poorer preparation for HE.

5.7.3 Education and Training Provision in South Yorkshire

Research revealed there were few IT MAs in the sub-region. As of June 2003 there were just 44 Advanced Modern Apprentices in Information and Communication Technology compared to 70 the previous year[25]. The lack of MAs in the sector is in part a reflection of the history of the sector which has no tradition of apprenticeships. As the needs of the sectors become established this may change.

Provision of IT modern apprenticeships in the sub-region is primarily via private trainers. Sheffield College felt that the IT sector was fast moving, which has subsequently led to rapidly changing qualifications and needs. Sheffield College felt that this meant it was difficult to keep abreast of the situation in IT as organisations need specific skills for computers which make it hard for the college to offer the necessary flexibility in order to provide this range of IT skills.

5.7.4 Progression to HE

Further Education institutions provide a number of Higher Education courses concerning IT as well as the universities themselves. HE courses are available at degree level as well as HNC/D and cover a broad range of disciplines within the sector. Most career paths within IT can be pursued through South Yorkshire's HE provision.

[25] Data from South Yorkshire LSC 2003

The MA Framework states the progression to Further/Higher Education such as HNC/D or a degree is possible on completion of an MA as well as moving onto higher level NVQs at Levels 4 and 5.

The research found a large gap in the knowledge of FE and HE tutors regarding the content of the MA and in particular the Technical Certificate. For most the idea of a progression route to HE via a Modern Apprenticeship had not even been considered (and the relevance of this route was questioned).

IT was regarded a strange area compared to the other sectors. It is possible for people to come forward who have taught themselves a number of skills on computers, but do not have an understanding of its application in the commercial sector or how those skills fit with the types of employment on offer in IT.

IT is also a relatively new sector, without the history of apprenticeships that exist in other sectors and without the same career structure. The mapping out of a progression route within the sector is thus difficult and it is hard to map out a course structure that will serve the industry. The framework was likened to a *'blank piece of paper'* by one FE College, suggesting that it was difficult to design a framework from scratch and gain credibility among employers, MAs, FE and HE because there was no pre-existing understanding of what the framework involved.

Foundation Degrees

Foundation Degrees, on the face of it, would appear to be a good progression route for MAs as it emphasizes the vocational element.

Sheffield Hallam University will be running a Foundation Degree full-time. The Foundation Degree would therefore require the student to leave employment for two years. It is intended to replace the HND which ran as a three year sandwich course. From the Foundation Degree it will be possible to progress to the final year of a full degree.

There are issues that were raised. One is 'why bother' with the MA framework when the Technical Certificate (in many instances) is enough to get onto the Foundation Degrees or HNC/HND. In other words, it might be preferential for the student to do an ONC full-time and then move on from that. In part, this stems from the lack of serious consideration given to the NVQ at Level 3 which in theory is A Level standard, though in practice is not viewed as suitable preparation for higher level academic study.

Concerns were also raised about whether it would be fair to promote Higher Education to MAs as they may be unable to cope with the level and the methods of learning at a HEI.

Admissions Criteria

The lack of understanding of Modern Apprenticeships by those contacted through this research makes it difficult to be clear about how the MA is viewed by HE admissions staff. However, the HE prospectuses provide a good indication of what will be considered as an entry requirement.

Foundation Degrees will be available in South Yorkshire. From the SHU foundation degree you it will be possible to gain an honours degree through one year of further study on year three of BSc (Honours) Applied Computing. It is also possible to top up from a HND to full degree in this way.

Normally GCSE mathematics and English Language to at least grade C are required plus one of a number of qualifications including the BTEC National Diploma. A BTEC National Diploma - pass with at least two merits in final year- is sufficient for entry to this course and could be met if the appropriate Technical Certificate is taken whilst on the AMA. Sheffield College also plan top run the Foundation Degree though this will not be until 2004.

Full degrees are, in theory, accessible with a BTEC National, though Sheffield University require A Level maths in addition. At SHU a realistic route might include undertaking the HND or Foundation Degree first and then entering the final year of the degree course.

5.7.5 Summary

Progression

Progression is easier in IT where the Technical Certificate is a recognised qualification. The BTEC National Diploma can serve as entry to HND/Foundation Degree level courses at SHU and these can be topped up to full degrees. This is frequently dependent of the achievement of a combination of merits and passes. However, there is a lack of knowledge about Modern Apprenticeships within HEIs in the sector and other Technical Certificates, particularly the weaker ones, may not be understood and consequently not considered.

Full degrees in Computing and related courses at SHU can also be entered via the BTEC National Diploma though the grades achieved need to be distinctions and merits. Similarly at Sheffield University, a BTEC National is quoted as an entry route, though A Level maths is a core requirement in addition to this. For Sheffield University an additional maths qualification may be required.

Barriers

The main barrier at present is the lack of knowledge of the frameworks together with a large variation in the content of the Technical Certificates. It was noted that with the current level of knowledge that it was difficult to advise students on possible

future moves. The limited numbers of AMAs in IT will also mean that HEI staff are unlikely to have to consider an applicant from an MA background.

Recommendations

While there is currently low numbers embarked on this route there is still potential for action. The sector is growing and numbers may well increase, particularly important is the role the sector is forecast to play in the sub-regional economy in future years and the likely demand for skills this will create. If it is deemed worthwhile investing in increasing the number of AMAs to meet local demand then it follows that the progression route will require clarification.

Maths is an important competence in this sector. Sheffield University require an A Level maths in addition to other entry requirements. Many AMAs will not meet this criteria. If HE choices are to be widened it needs to be examined whether anything is available locally that can be regarded as an equivalent to A Level maths.

6. SUMMARY

The following section summarises the main points to emerge from this research.

6.1 Introduction

This research examines the potential for progression into Higher Education for Modern Apprentices within South Yorkshire. Modern Apprenticeships are fundamentally an employer-led vocational qualification comprising: a mixture of work-based learning (via employment in a specific occupation); classroom learning for a Technical Certificate related to the specific occupation; and, learning to achieve Key Skills at the required level. Although the underlying aims of MAs are to give young people the skills they need to succeed in the workplace, and to provide employers with appropriately skilled employees, this vocational route is also intended to offer the opportunity for the young person to achieve a standard of qualification which will enable them to enter Higher Education.

Due to the lack of skills in the workforce the Government announced plans in November 2001 to make on-the-job training for young people in England match the best in the world. In order for this to happen they needed more than a quarter of young people to enter Modern Apprenticeships before the age of 22 by 2004.

If this increase is to be achieved then the issue of what the Modern Apprenticeship means with regard to the potential career development of those undertaking the Frameworks requires greater consideration. The standard of the frameworks, the employees they produce and the attractiveness of this route are likely to suffer if the frameworks cannot demonstrate credible pathways on to higher management positions and higher income jobs, in short if they become perceived as a 'dead end'. Easing the pathway to Higher Education can contribute to the attractiveness of the MA Frameworks, particularly at a time when financing Higher Education may require students to take employment between leaving school and entering HE. This involves ensuring that the frameworks provide adequate preparation for tackling HE level education and also ensuring that HEIs recognise and give appropriate credit to the skills and abilities of young people that have successfully completed the full MA framework.

Technical Certificates are considered as a way of forming links with Higher Education courses within the same discipline, and create further opportunities for competent trainees to enter Higher Education during their apprenticeship. For this reason the level and content of the Technical Certificates is critical to the overall aim of ensuring Modern Apprenticeships are a credible and attractive proposition for young people with aspirations to progress on their chosen career path.

6.2 Aims & Objectives

The research objectives were to:

- Examine the content of AMA frameworks;
- Explore awareness and understanding of progression from Modern Apprenticeships into Higher Education (HE) amongst Higher Education Institutions (HEIs);
- Establish the extent to which the MA frameworks may serve as an entry qualification;
- Establish any barriers to AMA take up of HE places; and,
- Examine ways in which these barriers can be removed.

To achieve these objectives the following key questions addressed through the research include:

- Are young people adequately informed about HE routes prior to starting Modern Apprenticeships?
- How appropriate are the MA frameworks to helping secure a route into HE for those achieving the full framework?
- Can a value be ascribed to MA Frameworks?
- Are the frameworks understood and valued by HE staff?
- What is the particular situation in different sectoral/subject areas?
    - Is progression possible?
    - What are the barriers?
    - How can they be overcome?

There are many MA frameworks on offer in South Yorkshire. Reviewing issues of progression into HE across the whole spectrum would not be prudent use of resources. The research considers the question of HE progression from the perspective of MA frameworks in five key occupational sectors. These sectors account for the majority of Modern Apprentices in South Yorkshire. The heart of the research activity involved a series of discussions with:

- Staff involved in Higher Education provision;
- FE Colleges providing all or part of the MA Frameworks;
- Sector Skills Councils and other sector bodies who help shape the MA frameworks; and
- Local partners with an interest in promoting both parity of esteem across post-16 qualifications and routes into Higher Education. These included Building Pathways, Connexions, local colleges and the two Sheffield Universities.

6.3 Key Findings

Appropriateness of the Content of AMA frameworks

There is evidence that some occupational AMA frameworks provide component qualifications that are more appropriate or suited to accessing HE.

AMA frameworks involve Key Skills typically at Level 2, an NVQ Level 3 and a Technical Certificate. However, variations exist between occupational AMA frameworks regarding the level of depth and breadth of study involved with the Technical Certificates and NVQs.

Some frameworks are focused very much on performing a specific role or craft within a company while others are more preparation for a technical or management role. It is these technical or management frameworks rather than the craft based ones that are more likely to offer progression routes into HE, however even here the depth of study varies considerably. Some Technical Certificates are well known qualifications that are starting to be ascribed a points value by Universities & Colleges Admissions Service (UCAS), the organisation that co-ordinates HE applications. Others have not and are unlikely to ascribed a value in this way. It is therefore difficult to state clearly whether some Technical Certificates provide sufficient underpinning knowledge to gain entry to HE courses. Clearly a national issue which requires some detailed attention to deliver consistent responses from HEIs.

The primary barrier to progression at present appears to be a combination of the variability of the standard of Technical Certificates as well as the lack of understanding HEI admissions staff have concerning the MA Frameworks.

The Key Skills component was also a recurrent issue across all sectors. It is felt that Key Skills are the main reason for the failure of MAs to achieve the full framework and that the integration of this component with the other aspects needs to be improved. The failure to achieve Key Skills to Level 2 will have a bearing on the eligibility of candidates for HE places who do not have supporting GCSE qualifications in English and maths. At present, it seems the pool of apprentices is drawn from those unlikely to have the GCSEs required for entry to HE.

Are the opportunities for progression there?

There is no shortage of HE level courses within the five sectoral areas studied. Courses are available at HNC/HND level, Foundation Degree and full Degree. There is a mix of full and part-time courses and some departments are willing to be flexible in delivery to tie in with employer demands where the course is part-time. The barriers to progression are therefore concentrated around the issues of how well an

AMA prepares an individual for higher level study and how the AMA is perceived by those responsible for university admissions.

The perception HEIs have of MAs is also a problem. There is a feeling amongst HEIs that a lack of experience in independent study may cause MAs difficulties in coping with a HE level course. The idea that MAs cannot cope with HE may be unfounded and represent the regard in which the vocational route is presently held. This in turn will be manifest in the way applicants to HE courses are viewed having undertaken an MA. There is an implicit belief amongst HEIs that they are academically inferior to A Level candidates.

Is there knowledge of frameworks among HEIs?

Some sectors have no tradition of apprenticeships. In these sectors there is little understanding of Modern Apprenticeship frameworks among HEIs and thus the likelihood of an AMA being accepted at HE Institutions is correspondingly low too. Other sectors, engineering in particular, have a tradition of apprenticeships and have been proactive in ensuring there are routes into HE for apprentices, though each case is treated individually and there is no formal recognition of the MA as an entry route.

The issue of progression is further complicated in sectors where inter-personal skills are an important consideration. Students going into nursing, for example, while having to be academically able also have to demonstrate the desire and ability to work in a care setting. As a consequence, there is no definitive answer as to whether progression routes exist. Students are often treated on an individual case by case basis.

At present the number of young people completing their full AMA framework is low. The number of these 'successful' AMA trainees likely to be considering HE is likely to be such that most HEI departments have not yet had to consider Modern Apprenticeships as a formal route into HE. The level of understanding they possess is therefore unsurprising. This raises two questions:

- How can HEIs be encouraged to formalise the progression route from AMAs to HE courses? and
- What information can or should be provided to young people choosing their post-16 learning option regarding the link between AMA framework completion and access to HE courses?

These questions are intertwined and, at present, are most likely perpetuating a position of low entry into HE from AMA and patch acceptance of AMA as a route into HE provision. In short, without a guarantee of progression how can young people choosing a post-16 learning option be told that a route to HE exists unless it is clear that it does for certain. The result of this conundrum is most likely that young people wishing to rule-in HE progression (on completion of their post-16 learning) will choose an option with a clear and formal route. Although not explored through

the study, the young people entering MAs are therefore unlikely to be considering HE on completion and those who may have considered undertaking an MA may choose an alternative route that guarantees a route to HE.

How can the barriers be overcome?

A number of recommendations are contained within this report, both within the individual sector reports and the recommendations chapter.