Research to Shape Critical Mass Pilots to Address Under-Representation in Apprenticeships

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Contents

Executive summary

Key report findings

Areas of under-representation among apprenticeship programmes

Data analysis shows that apprenticeship framework starts reflect significant **gender segregation** found within the occupations and sectors of the economy overall. Women are significantly under-represented in the sectors of construction, plumbing, electrotechnical, engineering and vehicle maintenance and repair. Comparing across regions some sectors within some regions have higher degrees of relative gender segregation than others (this does not, however, mean that those with low relative levels of segregation are 'performing well').

Apprenticeship framework starts from **Black minority ethnic backgrounds** are particularly under-represented in hairdressing, construction, vehicle maintenance and repair, and electrotechnical activities. London has the highest proportion of starts from **BAME** groups, followed by the West Midlands. The North East, the South East, the East of England and the South West has the lowest levels of starts by these groups, reflecting their demographic under-representation in these regions.

In terms of framework starts, learners from Asian minority ethnic backgrounds are under-represented in construction, hairdressing and electrotechnical apprenticeships. Chinese and mixed ethnic background apprentices are under-represented in vehicle maintenance and repair, construction, and engineering apprenticeship framework starts.

Around 10 per cent of apprentices report some **learning difficulty or disability**. Just under six per cent reported a disability, while five per cent reported a learning difficulty.

Framework starts of learners with learning difficulties are under-represented among electrotechnical apprenticeships, management, active leisure and learning,

and retail. Under-representation for learners with disabilities is notable in framework starts in the electrotechnical, plumbing, active leisure and learning, vehicle maintenance and repair, and hospitality and catering sectors.

Addressing under representation

From the literature review, a number of illuminating case studies serve well as examples of good practice in promoting diversity in apprenticeships. However, virtually none have involved formal impact assessments and few have focussed on apprenticeships in isolation. What is available is largely qualitative in nature and centres around participant satisfaction. However, it does not account for other confounding factors, such as sectoral influences or geographical bias. This makes it **difficult to extrapolate a typology of broader lessons or interventions that might instrumentally influence the design of the pilots.**

Recommendations

The detailed recommendations in chapter 4 indicate a number of ways, and areas in which these pilots could be most usefully targeted. The evidence on good practice projects and initiatives has yielded some indication of what might work, but very few robust insights into what could work on a larger scale, beyond the project specificities of geographic location, target group or local labour market. For this reason, we have make three key recommendations:

First, from all the research evidence, we recommend that the term 'critical mass' for the proposed pilots be abandoned. We propose the pilots be re-named 'Apprenticeships for All', reflecting both the need to increase the participation of atypical groups (addressing issues around demand and the ability of atypical groups to take-up and complete apprenticeships), and the need to remove barriers to participation (addressing issues around the supply of apprenticeship places and opportunities for atypical groups). We also believe that this better reflects the overall aims of the pilots.

Secondly, we recommend that the pilots target several key barriers in the current system of demand and supply of apprenticeships to attract and retain more atypical groups. Based on the current evidence, these interventions should centre around effective employer engagement with pilot activities to improve the supply of apprenticeship opportunities. Pilot activity should also focus on improving the provision of workplace-based support and mentoring schemes, to improve take-up and completion rates among atypical groups. Lastly, pilot activities should focus on the much greater promotion of apprenticeships, particularly in schools, or through greater equality training for employers, staff, careers advisors and teachers.

Thirdly, we recommend that the proposed pilots are designed with the potential to mainstream key learning and good practice in the longer-term. This would ensure that key lessons are not confined to the specification of the project and location, but can be rolled out more widely.

1 Introduction

1.1 Apprenticeships and under-representation

Apprenticeships constitute a highly successful and respected vocational education and training programme which is receiving significant investment and promotion by the Government (DIUS, 2008). In particular, the Prime Minister has recently committed to a major expansion of the programme and an ambition that 1 in 5 of 16 to18 year olds should undertake an apprenticeship by 2013(www.number10.gov.uk/Page14414).

The National Apprenticeship Service (NAS) now has end-to-end responsibility for apprenticeships and ultimate accountability for the national delivery of services and targets. The main role of the National Apprenticeship Service is to work with employers, helping more of them to take on apprentices; and to work with individuals who advise learners so that more young people and adults are able to benefit from the experience of work based learning.

Despite success in the past ten years of the rebranding and re-launch of apprenticeships, there still remain problems of unequal participation and success rates across different equality strand groupings of young people entering this form of vocational training. Miller et al. (2004) and Fuller and Unwin (2003) document how some of these problems arise from the historically uneven development of apprenticeships, but many factors are responsible for these outcomes, most of which are not intrinsic to the nature of apprenticeship. They can be divided into: individual choices concerning careers; practical or structural barriers connected to each young person's personal characteristics (eg disability); problems associated with the experience of off-the-job apprenticeship education and training provision; and organisational barriers among employers experienced by young people when they undertake work-based elements of apprenticeship. These will be explored later in this report.

Evidence shows widely differing participation rates in apprenticeships among groups from different equality strands. Overall, six per cent of those starting an apprenticeship are from ethnic minority communities. Statistics show that males and females are more evenly balanced on apprenticeships. However, there are huge disparities when looking within sectors. Females are under-represented in more highly paid sectors, and those in which Level 3 ('advanced') apprenticeships are offered, such as engineering, electro technical and the motor industry. Males are under-represented in, for instance, education and care. Disability is also an area of concern. Of 6.8 million disabled people of working age in Britain only 50 per cent are in employment. Around 12 per cent of people registered on apprenticeship programmes are disabled, which is broadly representative – however, only 5 per cent of people registered as advanced apprentices in 2005 were disabled (Business Case for Diversity in Apprenticeships 2007, p5).

1.2 About this research project

In March 2009, the Institute for Employment Studies (IES) was commissioned by the Learning and Skills Council (LSC) to conduct an investigation entitled *Research to Shape Critical Mass Pilots to Address Under-Representation in apprenticeships.*

The aim of the project is to inform the development of critical mass pilots to tackle inequalities in the representation of particular groups in apprenticeship programmes. The pilots will offer additional support to assist in the attraction, retention and completion of apprenticeships. This could include the provision of mentors and other specific support recommended by this project. The groups targeted include potential apprentices with disabilities, those who would be gender atypical within an occupation and those from ethnic minority groups.

This project consists of three elements: a literature review, analysis of secondary data, and a series of interviews with expert informants. Expert informants are defined here as senior level policymakers, researchers and specialists who have considerable experience of working on issues of inequality and under-representation in apprenticeships and other work-based learning initiatives. A significant majority of these interviews were drawn from local and national LSC staff who worked on this area. The remaining interviews were conducted with relevant interviewees from LSIS, SSCs, EHRC, and regional provider networks.

This final report presents the literature review, the key findings from the secondary data analysis and from interviews with 24 expert informants. It concludes with a summary of our key findings and recommendations. Insights from our expert interviews are interspersed throughout our conclusions in Chapter 4.

2 Literature Review

2.1 Introduction

2.1.1 Aims of this literature review

In the search for relevant literature, this report took the previous, 2006 literature review, as the starting point and sought to update it with relevant literature relating to pilots and projects produced since that report. This literature identifies good practice or barriers encountered by these projects, including lessons learned and critical success factors. It is intended to provide evidence for future models of support and identify any evidence gaps, where more research may be needed before the pilots are commissioned.

The literature review involved two main stages: a rapid search of academic databases and a review of the literature relating to relevant pilots and projects, including 'grey' or unpublished sources. We have drawn from a number of sources, which have included several academic databases, online sources and search engines, and project websites and literature. More details of the key sources and search terms used in this literature review are detailed in Appendix 1.

2.1.2 Summary of key findings from the 2006 literature review

This literature review builds on the findings of the 2006 LSC paper, 'Literature and data review on evidence on apprenticeships around race, gender and disability issues'.

The findings of the previous paper can be summarised as follows:

- Between 2003 and 2006 numbers of apprenticeship starts were declining, but completion rates were rising.
- Wider issues outside the apprenticeship programme – such as parental influences on young people; or segregation by race, gender or disability of

labour markets – can make it difficult to address imbalances within the programme.

- Barriers to greater representation of **all** minority groups in apprenticeships include: parental views of suitable occupations and a lack of apprenticeship places, which can disproportionately affect minority groups
- Barriers to greater gender equality in apprenticeships include: traditional attitudes relating to suitable jobs for men and women, social stereotypes, attitudes of employers. These can affect career prospects and the ability of industry to attract and retain employees. There is a need to tackle both real and perceived barriers to entry into the labour market and also encourage more interest in the apprenticeship programme amongst girls. There has been success on a micro scale with projects that have sought to address this issue, but schemes have not been rolled out on a macro scale, making it difficult to judge the likely effects of programmes if they were implemented on a larger scale. The report concludes that addressing the issue of gender segregation by using the apprenticeship programme is an 'unrealistic goal'.
- Ethnic minority groups are under-represented in the apprenticeship programmes and these groups also have lower rates of retention and completion.[1] As with gender, race segregation exists within the whole workforce, not just within the apprenticeship system.
- Barriers to greater representation of ethnic minorities in apprenticeships include: parental views of suitable occupations and a lack of apprenticeship places. The main barrier identified in the 2006 literature review was that of getting young people on to the apprenticeship programme due to perceptions about routes into a 'good job'. Other issues include certain groups not being aware of government initiatives, recruitment practices, direct and indirect discrimination, cultural barriers and having few positive role models.
- People with a disability are less likely than a non-disabled person to undertake an apprenticeship programme and even less likely to pursue the advanced apprenticeship programme. People with a disability are more likely to have no qualifications than people who are not disabled. Some improvements in the participation rates had been seen up to the time of writing of the LSC's latest review (Cirin, 2006) and the apprenticeship programme can be seen as a potential vehicle to drive change. Key barriers for this group have been identified as lack of awareness regarding the provision of support; a lack of

[1] The definition of 'completion' in this report is based on full or partial achievement of learning aim among those who are not continuing that learning aim or awaiting results

tailored and specialist support; and misperceptions around the limited abilities of disabled people to undertake particular job roles.

- Issues of segregation reflect wider recruitment and employment practice; however there are factors which contribute to segregation on apprenticeship programmes. Apprenticeships are more likely to be seen as an option for boys than girls and different ethnic groups place different values on various types of education and training which can also affect participation.
- It has been very difficult for schemes put in place to have an effect on deep-seated beliefs. Schemes have had an impact at micro level but it is harder to see these changes following through to a macro level.

2.1.3 Summary of our key findings

This literature review has found that all the relevant projects aimed at addressing under-representation in apprenticeships, have attempted to tackle the main barriers of stereotyping, lack of information and segregated work cultures.

Numerous case studies provide food for thought about 'what works' in promoting diversity in apprenticeships. It is important to note, though, that almost all of the evaluations which have taken place have not involved a formal impact assessment. As such, there is little to tell us exactly how much difference is being made, or indeed whether the schemes improve diversity at all. The evidence is largely qualitative in nature - often about participant satisfaction with interventions - and cannot necessarily be used to make wider inferences due to other possible influences on outcomes. These include differences between the sectors; geographical differences (eg labour market environment); and different types of diversity within broader categories (such as different ethnicities; different disabilities). In addition to this, several equality schemes designed to improve access to work-based learning or training have been implemented – however, there has been little focus on the effects on apprentices in isolation.

With this caveat in place, this review of available literature finds that what 'works' to overcome under-representation in apprenticeships is:

- **Partnership working** between key agencies including: the LSC, training providers, Connexions, employers and other advisory and support bodies, to deliver a service that consciously tackles the stereotypes and barriers that prevent young people from entering atypical apprenticeships. For example, regional and sectoral 'hubs' bringing together trainers, colleges and employers to create recruiting, training and mentoring networks are found to be helpful (Andrew 2005).

- **Securing employer commitment** in order to make adjustments to organisational cultures which may be unfavourable to atypical apprentices - either physical changes such as female toilets or cultural changes such as work nights out that do not involve drinking to cater for particular faith groups. These changes can encourage apprentices to enter these workplaces and succeed in their apprenticeships. Making recruitment practices fair and open can also improve diversity and having specialist staff to provide support both to the organisation as a whole and to the apprentices can also increase completion rates.
- **Mentoring**. Although mentoring schemes did not constitute the largest volume of evidence that this literature review found, the literature included persuasive evidence to show that mentoring increases participation and success rates of diverse apprentices.
- **Parental engagement.** Showing parents the benefits for their children of undertaking apprenticeships may help tackle negative stereotypes of apprenticeships, and overcome a lack of direct experience in atypical roles. This could be particularly valuable for recruitment of Black, Asian and Minority Ethnic (BAME) apprentices since parental resistance is thought to be a factor limiting BAME applications.
- **Promotion of apprenticeships** in order to give young people a realistic job preview, with appealing role models and advertising in appropriate places and media.
- **Equality training** for employers, staff and also careers advisers and community workers.

2.2 Key barriers for young people to choosing and completing apprenticeships

This section explores the barriers that young people face prior to and during the apprenticeship programme and external barriers that contribute to the segregation that is seen within apprenticeships.

As some young people enter into apprenticeships with employment status they may stop being eligible for Education Maintenance Allowance (EMA) and some parents also stand to lose benefits such as Child Support and Tax Credits, which could act as another barrier.

Support and recognition of the problems that may occur as a result of being an atypical apprentice are particularly important during off-site training and during work-based learning, as these processes affect completion rates. Lack of awareness

of provision to tackle practical barriers to apprenticeship for disabled people may deter young people with disabilities from embarking on apprenticeships (Ecotec, 2009) and there is evidence to suggest that tailored, flexible support and assessment may be particularly important for some under-represented groups. For example, it is important to appreciate that within each equality strand there are often an array of specific needs. For this reason the nature of disadvantage and barriers to participation in, and to completion of, apprenticeships can be particularly complex. Thus, people with different disabilities or from different racial groups may experience quite different deterrents or obstacles to entering and completing apprenticeship training which may require customised support. Furthermore, unlike most other equality strands, disabilities and health conditions may change or fluctuate in severity and impact over time. Thus, while employers are showing more enthusiasm in attempting to recruit and retain disabled employees (Simm et al., 2007), there may be needs both among employers and training providers to tailor learning experiences in a fully flexible way, that can be modified at any point in the duration of apprenticeship.

2.2.1 Young people's own stereotypes/views and family influences

Socio-economic and cultural expectations heavily influence individual choices concerning. To a large extent, career choices reflect broader patterns of occupational segregation, especially in relation to gender (Miller et al., 2005). Additionally, socio-cultural attitudes to the notion of apprenticeship and employment in different sectors may influence the aspirations of potential apprentices from different racial groups in connection with issues such as parity of esteem with academic qualifications (Ecotec, 2009; Perez-del-Angila et al., 2005). For instance, a survey of 16 to 18 year olds on a 'learning and skills' pathway (ie excluding those in employment with no training element, and NEETs) in the North West found that 15.1 per cent of white young people were in work-based learning, with 84.9 per cent in college-based further education. This compares with just 3.8 per cent of BAME young people who go into work-based learning, with 96.2 per cent of this same group choosing college-based FE (NWPN 2009). This perhaps reflects the perceived higher status of college-based, rather than work-based, learning amongst this group. Survey evidence such as this, as well as qualitative research (eg SHM, 2008) suggests that schemes such as apprenticeships are a less attractive option for those from BAME backgrounds. This ties in with findings that learners from all backgrounds felt that they would be more likely to apply for an apprenticeship if it offered a route to university (see Skills Commission, 2009). This may be significant if parents are not aware that not all college-based learning, and not all apprenticeships, are alike. For instance, Programme-led apprenticeships, which involve college study rather than placement with an employer, have been criticised for their lack of engagement

with the labour market (eg Skills Commission, 2009, p27). Emphasis on the labour market returns that other types of apprenticeship can bring might increase the value of work-based apprenticeships in the eyes of parents and boost their reputation.

This low status of apprenticeships appears to limit the number of young people applying for placements. Young people themselves have been found to see apprenticeships as a route which limits their options – unlike other further education options like college, which are seen as keeping options open (NWPN 2009). Such views may be shared by all members of society – but there is evidence that this is a particular barrier to BAME young people, whose cultural background may make the advice of their parents particularly significant (NWPN 2009). Also, it seems that apprenticeships are simply held in lower esteem by certain ethnic minorities. For instance, young Muslims interviewed by SHM (2008, p3) reported that their parents see Work Based Learning (WBL) as low status: '*parents associate WBL with an unprofessional image based on manual labour'*.

The same report also found that young people felt that it would be difficult for them to undertake an apprenticeship, because of difficulties in finding employers. Finding a suitable employer is not just about the right sector and location; some of the young Muslims interviewed they said they would feel more comfortable with an ethnic minority employer because of fears about discrimination, or of being the only ethnic minority employee. The process of finding an employer *'is a challenging one which requires confidence and perseverance'* (SHM, 2008, p6) and young people require a lot of support which they may not receive from home. Community workers also reported that young people may too easily blame racism and discrimination for the challenges and difficulties they in the labour market (including access to apprenticeships) *'due to low self-belief or lack of self motivation'* (SHM, 2008). The community workers felt that they should be encouraged to take more of an active responsibility in exploring their career options. (SHM, 2008)

There has been much research into the gendered segregation of apprenticeships. Young people formulate their opinions of suitability of occupations for certain genders at an early age and these beliefs can become 'deeply entrenched' (Fuller et al. 2005). This may partly explain the under-representation of, for example, women in construction. It has been found that there was a lack of ethnic minority and female interest in the construction sector – only 2.3 per cent of those working in construction are from ethnic minorities, for instance. They find that this is due to popular images of the sector as white and male-dominated (Clarke and Herrmann 2007).

Occupational choices are often influenced informally by family and friends who themselves have not crossed any traditional occupational divides, so young

people can lack mentors who might think more broadly about career options. There is evidence that young people are open to the idea of taking on non-traditional working roles, if they had a chance to try them out before having to commit.

> *'…chances for young people to develop initial vocational knowledge and skills in relatively unthreatening environments (eg college workshops). Supporting the development of such provision would allow for a more gradual and sheltered transition in to jobs normally done by just one sex.'*
>
> (Fuller, Beck and Unwin, 2005, p309)

2.2.2 Lack of information on apprenticeships

When young people were asked for their perspective on barriers to WBL and apprenticeships, one of the barriers they cited was the lack of visibility of apprenticeships and WBL opportunities (SHM, 2008). For people from ethnic minority backgrounds, their parents often had little direct experience of work-based learning and so young people were unable to get relevant information from them. This backs up the evidence cited in the section above which highlights how young people often lack role models of people who have undertaken atypical roles.

Lack of information on apprenticeships was also reported to be a problem for staff working in community organisations. They were unable to pass on relevant information on and even when they did have the relevant information, it was not appealing to the young people they worked with from ethnic minority communities because of the language and imagery used (SHM, 2008). It is important that materials show a diverse workforce (ASW Consulting, 2004), use imagery and words that are relevant to the young people and their parents, highlight different careers options, and counteract the out-dated view of apprenticeships equating to 'low status' roles. The promotional materials should be appropriate to the venues they will be distributed in, for example no pictures of humans should be used if the materials are to be placed in mosques (SHM, 2008).

There is widespread evidence to suggest that there are general weaknesses in the provision of information, advice and guidance for school age children, which need tackling to promote apprenticeships as a worthwhile post-16 VET choice (Rudd et al., 2008). One expert informant for this report stressed that the lack of information in schools and colleges on apprenticeships was so prevalent that '*any pilot should tackle promotion of apprenticeships first and foremost before looking at addressing under-representation among atypical groups*'. Similar issues have been documented in the work of Miller et al. (2005), where concerns were expressed around the passive role that Connexions advisers often took to the work of promoting apprentices.

One Connexions adviser stated that '*society may need more men in childcare but Connexions are there to support individuals not solve society's problems*.' The role of schools and colleges is particularly important because gendered and racial norms and expectations of appropriate careers are formed early in life and where these encompass stereotyping, it is likely to take considerable effort to overcome them.

2.2.3 Employer approaches and requirements

A study of the North West of England found that recruitment, rather than retention, was at the crux of under-representation in apprenticeships in the area (NWPN 2009). The failure to recruit atypical apprentices may be due to a number of factors:

A lot of recruitment in construction is done in an informal way, relying on networks of people, favouring insider rather than outsiders and perpetuate any existing inequalities (Clarke and Herrman, 2007).

GCSE-based entry criteria – particularly in higher-paid sectors like Engineering – can pose particular problems for some applicants (NWPN 2009). Boys of Black Caribbean, Pakistani and Black African origin are considerably less likely than average to gain five or more GCSE grades A* to C: 27.3 per cent of boys from Black Caribbean backgrounds; 38.8 per cent of boys from Pakistani backgrounds and 37.3 per cent of boys from Black African backgrounds achieve this level at school, compared to an overall figure of 46.8 per cent of all boys getting five GCSEs graded A* to C. The pattern for girls is less marked, though still present (DfES 2004, cited in NWPN 2009). While this is in large part a structural issue beyond the control of providers, some employers willing to invest extra resources may be able to make adaptations – for instance using initial assessments to help learners overcome problems (NWPN 2009).

Miller et al. (2005) also found that the fact that apprentices have generally needed to be in employment in order to start an apprenticeship, has also acted as a barrier to increasing the diversity of the apprentice population. A shortage of starter jobs limited the number of apprenticeship places available and this was more likely to have a disproportionately greater impact on minority groups.

2.2.4 Structural issues beyond apprenticeships alone

Prior educational achievement of applicants

As argued above, prior educational achievement can be a barrier for certain groups – and this cannot be fully addressed within the apprenticeships system. While some employers may be able to adapt their training and entrance

requirements to accommodate diversity, this may be difficult – indeed, good practice recommendations for equal opportunities in Young Apprenticeships specify that it should be ensured at application stage that young people reach certain academic standards (Newton et al. 2007, p38). If the same principle is applicable to apprenticeships in general, any such policy is likely to exclude the same young people who under perform in GCSEs.

Occupational segregation

As noted by Cirin (2006), issues of occupational and hierarchical segregation in apprenticeship programmes have to be seen within the context of issues of segregation within the workforce as a whole. Gender segregation in lower-skilled employment is mirrored by segregation in apprenticeships (Walsh 2006) which themselves are often at a low level (as opposed to Advanced apprenticeships). Female apprentices often work in sectors with low pay, so they are disadvantaged in what they earn compared to men (Fuller and Unwin, 2004c). Although this reflects broader patterns in the labour market to some extent, the TUC report *Decent Pay for Apprentices* (2008), suggests that the problem is particularly marked at apprentice level:

> *'…low pay in Apprenticeships is particularly gendered. As identified by the DfES survey, the gender pay gap in Apprenticeships is 26 per cent, making the gender pay gap in Apprenticeships higher than in the broader labour market. For example hairdressing and early years care are the two lowest paying sectors, employing 92 per cent and 97 per cent women respectively.'*
>
> (TUC, 2008)

One issue which may contribute to the under-representation of women in male-dominated industries may be the fact that more girls stay in full-time education than young boys, which makes the pool of young females from which to draw the apprentices smaller (Miller 2004; Fuller and Unwin, 2004c, p12).

The labour market for the creative and cultural sector is very difficult to enter – especially for ethnic minority groups. They make up 4.1 per cent of the workforce in creative industries compared to 7 per cent in the economy as a whole (Guile, 2006). There are a number of reasons for the lack of diversity in the creative and cultural sector. One of these is a 'culture of volunteering', where only those who can afford to support themselves undertaking unpaid work experience get to succeed in the industry (Galloway, 2002 as cited in Guile, 2006). Lower earnings among certain minority ethnic groups have been well-documented, with unemployment and sectoral and hierarchical segregation leading to particularly low earnings for those of African, Pakistani and Bangladeshi ethnicities, including an 'ethnic penalty' of 25 per cent for Black African and Bangladeshi men even

compared to white men in similar jobs (Clark and Drinkwater 2007). Therefore the lack of paid placements is likely to be a particularly difficult barrier for apprentices from these groups. The lack of structured training in the workplace, as well as an expectation that people will learn on the job via unpaid work experience, means that there are limited opportunities for entry with intermediate level qualifications. Guile (2006) states that the focus on training young people through apprenticeships and Diplomas:

> *'…runs the risk of inadvertently increasing rather than diminishing social exclusion as the hopes of young people who lack a degree are dashed when they try to secure employment in the creative and cultural sector.'*
>
> (Guile, 2006, p445)

There is also evidence to show that some employers continue to discriminate against minority groups (Miller et al. 2005). While work has been done, and continues to be done to improve equal opportunities and diversity among some employers, among others, progress is much slower. There was evidence from those interviewed as part of this project that the attitudes of employers continued to be an issue to the recruitment of atypical apprentices. Two interviewees, both working in the construction industry, stated:

> '*There are cultural barriers that prevent minority groups joining the sector, but most of this is down to the "traditional" attitudes of employers.'*
>
> *'The key thing for us is getting employers to change their views and offer to recruit people. It is difficult to get a significant mass of employers to do this. It's even more difficult to do this among SMEs.'*

Geographical variations in the labour market

Further practical barriers may relate to availability of apprenticeship opportunities, which could be documented through labour market analysis. The Edge Foundation (2008) discovered that participation and completion rates are particularly low among people from ethnic minority groups, in part because many of these young people live in London, where there is a shortage of apprenticeships (Peacock, 2008). This lack of availability in areas where BAME young people live has also been highlighted in documentation on the North West of England. NWPN (2009) notes that many young people in deprived areas are unwilling to move out of their communities. Since some deprived areas have particularly high proportions of BAME residents, these local area discrepancies may disproportionately affect BAME participation (NWPN 2009).

2.3 What has been done to address barriers

In this section we give examples of projects that have tried to address the issue of segregation in apprenticeship or other employment schemes. It is noticeable that many of the larger projects aim to reduce gender barriers. There is less evidence of large-scale interventions to promote ethnic diversity or to increase involvement by disabled people; although a variety of individual schemes do of course exist.

2.3.1 Recruitment stage

Print advertising

Clarke and Herrmann (2007) found evidence from one construction company which advertised in the local Asian press, using images of Asian women in the advertisements and in women's centres. Other practices to improve recruitment include: leafleting the local area to attract recruits before work started; advertising in more locations; addressing advertisements to females and relatives of employees; and going out to local colleges to attract apprentices.

BT have been cited in an Equality and Human Rights Commission document (EHRC, 2007) as having many good practices for widening their apprenticeship programme. Measures undertaken in print advertising include a marketing campaign which featured articles in women's magazines that included frequently-asked questions and case study examples.

Similar methods of advertising in non-traditional spheres were undertaken by an employer who advertised at 'Miss London' in an attempt to recruit more female apprentices (Fuller and Unwin, 2004c) and a children's centre in Sheffield, which advertised childcare apprenticeships or jobs in working men's clubs and leisure centres. Although slow to take effect, this has resulted in them employing more men, although the degree of success is not quantified (EHRC, 2007).

Outreach

There are many examples from across the literature of organisations conducting outreach at careers fairs. To take just one example, Bedfordshire and Luton Education Business Partnership is a WBL provider which attends all possible careers fairs and distributes leaflets in the community.

'Daring to be different. The business case for diversity on apprenticeships' gave other examples of good practice, including that of Puffins of Exeter. They took two young men, who had completed apprenticeships in childcare, to careers events and featured their stories in promotional literature. BT have undertaken several measures to try and increase the amount of apprenticeships undertaken by

women and to increase participation from young people from ethnic minority communities. They displayed promotional stands at large Asian lifestyle events in Birmingham and London to promote the idea that BT and its apprenticeship programme welcome applicants from all backgrounds. BT are also cited in other reports of good practice, such as visiting girls' schools to promote their work to potential female recruits (EOC, 2006).

Although these types of interventions are well documented, and there is some evidence of their success, many employers have reported mixed results from their efforts in advertising and conducting outreach in communities, saying that levels of minority recruitment are low in spite of the measures. For instance:

> *'It can't just be about awareness as we've gone to places like mosques and tried to recruit and we've still got no applications.'*
>
> (SHM, 2008, p8)

The same report suggests that high qualification barriers to entry may be part of the problem. However, some outreach interventions did lead to reported success, suggesting that they can be made to work. Specifically, speaking to community leaders and advertising in minority community newspapers are sometimes said to improve application rates (SHM, 2008) although the evidence on whether or not this latter measure works is mixed. For instance it has been argued (NWPN, 2009) that this can be ineffective for certain ethnic minorities (see section 2.4.2 of this report).

Taster sessions/placements

In addition to outreach initiatives, others have attempted to open up the workplace to young people who may have had no experience of these environments. The literature provided examples of initiatives with little formal evaluation available. Schemes illustrated in the literature have included general open days that have been targeted at all young people, and also open days that have been targeted at specific groups of young people (for example inviting young females to taster sessions in the construction industry or young males to taster sessions in the care industry). Wiltshire College ran a series of same-sex taster sessions, which gave young people a chance to try out roles in non-traditional areas (BTEG, 2008). CITB-Construction Skills has also made attempts to move towards an integrated model of learning and social support for atypical apprentices, by aiming to establish learning centres (at or near construction sites) and have several young women and ethnic minorities at that centre. Alongside additional support and mentors, these moves also aim to educate staff working at

these sites to address some of the cultural issues around these environments (Miller et al., 2005).

As well as targeting certain under-represented groups, such as males, females, and ethnic minority groups, projects have also tried to target specific occupational sectors. Various projects were trialled as part of the Last Mile project with regard to creative apprenticeships. One company targeted the 'multi-racial, internet generation' to provide them with themed taster packages within the mobile phone industry. North West Vision and Media have been responsible for an on the job 'apprenticeship' model and positive action recruitment in the North West Foundation Placement with ITV. Although not quantified, the author found that these had:

> *'…changed the ways in which the partner organisations work in recruiting to the previously stubbornly non-diverse TV production industry.'*
>
> (Harrison, 2008, p30)

2.3.2 Workplace and Careers Adviser initiatives

As well as initiatives to try to interest young people in non-traditional roles, projects have also tried to tackle the stereotyped views of professionals who have an impact on the decisions and opportunities for young people, such as teachers, careers advisers, employers and employees.

The EQUAL funded project GERI (Gender Equality Race Inclusion) set up a suite of learning and support products for careers advisers, teachers, trainers and employers. Research conducted with careers and personal advisers found that the majority felt that their clients were adversely affected by stereotyping. The careers advisers surveyed felt that the key to challenging gender stereotypes lay with challenging the attitudes of employers as well as the attitudes of the young person's family and the young people themselves (Harrison, 2006). The outputs of the project included classroom products that were related to key curriculum priorities, a collection of role models, live dramas and drama DVDs, a learning website, and a diversity training guide. The products were 'extensively' tested and evaluated with great interest shown in products, such as the live interactive drama which were seen by young people to be very attractive (Pearson and Naylor, 2006). Products were used with year 9 and Year 11 pupils, pupils with moderate learning difficulties as well as education practitioners. The dramas were successful in engaging with and 'provoking' the audience to think about gender and ethnic stereotyping issues. Changes during the life of the project meant that it did not have any direct beneficiaries and so the evidence of impact lies in the response to the materials they devised, which was overwhelmingly positive (Harrison, 2006).

The 'If We Can…You Can' project provided seminars to individuals who engage with young people when making career decisions, with the aim of overcoming stereotypical perceptions held by practitioners, improving knowledge and skills and providing guidance on material that was already available (Equality North East, 2008). The delegates at the four seminars thought role models played a vital role in supporting and encouraging young people. They felt that more Management Information (MI) was needed in order to see trends, choices and gaps in provision, as well to measure accountability. They also felt that there should be mandatory equality and diversity sessions in PSHE. Some learning providers and Connexions staff believed that they were already addressing the issues, and the careers advisers surveyed as part of the GERI project also focussed outside of their role for their recommendations for changes. However, in the North East region where these sessions took place, Equality North East found that they were 'huge' issues with gender stereotyping:

> *'Organisations that work with young people and help them with careers choices must accept the fact that there is a problem with gender stereotyping rather than becoming complacent and believing that 'they have it right'.'*
>
> (Equality North East, 2008 p15)

As well as trying alternative ways of attracting young people to their apprenticeship programmes, BT also undertook measures to make the workplace more attractive to a diverse groups of young people. They created a more appropriate environment with female toilets and changing facilities and a range of work clothing for women. They revised their recruitment practices to reduce discrimination against minority groups. They held assessment days for potential ethnic minority apprentices who do not have the required number of GCSE passes. Those doing well on the aptitude test, including some manual tasks, were selected for interview and then competed on merit, with their lack of GCSEs not counting against them. BT are also a 'two tick' employer which means that they are committed to interviewing disabled applicants who meet the minimum criteria for vacancies. BT have seen their recruitment of apprentices from ethnic minority groups raise to 12 per cent of all apprentices they take on. They continue to work to raise this figure, as they do with their intake of female apprentices; they set a target of moving from 8 per cent in 2007 to 20 per cent of apprentices in 2008. However, it is not known if they achieved this target (Equality and Human Rights Commission, 2007).

For LLDD (Learners with Learning Difficulties and/or Disabilities) apprentices, projects have tried to address possible barriers to successful completion of apprenticeships by providing extra support in the workplace. Luton Borough Council is a WBL provider who have provided additional support for LLDD

learners with successful results. This is a rare example of a project which appears to have some outcome data. In 2007, 100 per cent of learners achieved full frameworks, although the definitive impact of the extra support cannot be extrapolated. Bedfordshire and Luton Education Business Partnership also offer additional support to learners with learning difficulties, such as one-to-one support, e-learning and extensions for assignments or breaks in learning. Breaks in learning have also been used for learners who have cultural commitments.

Good practice has been noted in the example of Prospects, a company which is sub-contracted to deliver the careers advice service on behalf of Connexions in a number of different areas. In Tottenham, Prospects used a number of methods to work with young people and their families to challenge issues and views around occupational segregation. This has included utilising software packages that promote equal opportunities, group work with young children in schools, and Personal Advisers working in schools (Miller et al., 2005).

2.4 What works

The review of literature found that many schemes and small-scale initiatives have tried to increase diversity in apprenticeships, encourage young people to take on non-traditional roles and tackle stereotyping and discrimination from employers. This section will focus on the evidence from these projects and initiatives which have emerged as successful in breaking down barriers and highlight some transferable principles of good practice.

Some headway has been made in terms of increasing diversity in apprenticeships. Data from the LSC in 2006 showed that there was an increase in the number of women entering atypical apprenticeships (EOC, 2006), though these increases were from a very low baseline. It must be acknowledged that there are drawbacks to looking at good practice in isolation, as many schemes that have been tried are specific to a geographical area, employer, sector or particular target group. It is also notable that some schemes (such as mentoring) are likely to benefit almost all apprentices, including all the diverse sub-groups within under-represented groups. However, different approaches may work better with particular groups of people. For instance, those with learning disabilities might benefit particularly from particular types of training, while those with physical disabilities would require physical access schemes. The current evidence is insufficiently detailed to give us information on more nuanced examples of this type.

SHM (2008) came up with a checklist of good practice, many of which have been seen as recommendations in other reports and are mirrored in the findings of this report. The eight factors were:

1. the right media channels

2. the right information tools
3. the right role models
4. the right community presence
5. the right partnerships
6. the right employer engagement
7. the right support for learners
8. the right parental engagement.

2.4.1 Partnerships

A number of different agencies are involved in apprenticeships, and this begs the question of which are best placed to make real changes. The optimal situation is, of course, that various different organisations and stakeholders work together in partnership – the idea behind the JIVE Partnership (see Andrew 2005) and, to an extent, the Women and Work Initiative (see UKCES 2008). The pilots we have considered have been initiated by a number of different organisations:

- National and local Learning and Skills Council
- Sector Skill Councils (SSCs)
- Private employers
- Voluntary/community organisations.

Some consideration of who administers the projects may also be necessary. For instance, the GERI Project is now administered by a private company, with a limited number of free resources offered alongside a more extensive range of products available for purchase.

The evidence available does not permit a systematic comparison between the different approaches, although it does throw up some issues which may affect the functioning of some of the agencies, or partnerships. For instance, there currently appear to be fairly low levels of contact between employers and SSCs. One medium-sized survey covering nine of the SSCs suggests that the proportion of employers who had ever had contact with their SSC is 36 per cent (IFF Research, 2008). This suggests that the Sector Skills Councils could engage more closely with employers to provide wider awareness of diversity issues in apprenticeships. As the National Skills Academies (NSAs) become more established they will also have a greater role in liaising with the National Apprenticeship Service (NAS), employers and providers to promote apprenticeships.

Exactly how to promote meaningful engagement by various partners is a difficult problem. Pointers are provided by Newton et al. (2007) who suggest that partnerships between agencies can be strengthened by asking the parties involved (the authors specify schools, as their focus is on Young Apprenticeships) to sign up to a contract, setting out all parties' expectations from the collaboration, including responsibility for equal opportunities. Although reported results are mixed, the authors feel that such a contractual framework may facilitate stronger action (Newton et al. 2007).

2.4.2 Employer buy-in

Private employers implement schemes which they are forced to do by regulations or which benefit them financially, through enlargement of the talent pool when recruiting; retention of employees; or through enhancement of their reputation and brand.

The evidence suggests that many employers see the benefits of encouraging diversity. In some cases, the barriers to improving representation are partly a matter of identifying precisely how to go about doing this.

This view is backed by a report published by the Greater London Authority in 2006 which stated that rather than apprenticeship programmes being determined by centrally set targets they should address *'specific needs for certain kinds of skills in certain areas or communities'* (London Assembly Committee for Economic Development, Culture, Sport and Tourism, 2006, p3). The report 'Gender segregation in apprenticeships' (Miller et al., 2005) found that in sectors where there were skill shortages there was also gender segregation, suggesting that by failing to tap into a broad talent pool, those sectors were in fact facing recruitment problems.

The 'Good practice in promoting diversity in apprenticeships' report (ASW Consulting, 2004) found common features among organisations that it identified as having good practice including:

- senior management support and a genuine belief in the benefits of a diverse workforce
- 'willingness to examine the company's own image and employment practice' (p21)
- recognising the need to be proactive
- taking a partnership approach
- long term commitment.

Employer organisational culture

Adverse organisational cultures are a common problem to tackle when promoting diversity in the workplace. Organisational cultures are intangible which makes their assessment more complicated. A cultural analysis tool was piloted by the JIVE Partnership. This was assessed very positively in the evaluation as a way of tackling barriers to women in on-site training and work, and its extension is 'strongly recommended' by the academic evaluator (Andrew, 2005).

The attitudes of management in encouraging a diverse culture are also clearly of great importance. These can be addressed either by training management directly, or perhaps by showing the benefits of focusing on disadvantaged groups. Equality and diversity training can make a difference (ASW Consulting, 2004). Feedback from the GERI Project, which engaged in a variety of activities in this area, has also been positive.

Whole-organisation support is also a way in which organisational culture can be thoroughly improved. The construction company cited by ASW Consulting (2004), has had success in recruiting women in atypical roles, not just through apprenticeships. Part of their success derives from contractual requirements they have imposed on subcontractors to comply with their equal opportunities policy and a zero tolerance approach to discriminatory behaviour for all employees and subcontractors. This means that any subcontractors who behave inappropriately will be removed from site (ASW Consulting, 2004).

Recruitment and HR practices

Recruitment, selection and HR processes are another key area where research suggests that employers can have an impact on participation of non-traditional groups in apprenticeships (for instance, Fuller and Unwin 2007).

In the case of ethnic minority apprenticeships, some employers have tried to implement fairer recruitment practices, but for reasons they did not understand, these did not result in being able to recruit BAME apprentices (SHM 2008).

Good recruitment publicity is a precursor for success. Employers have found that diversity campaigns are successful when collaborations were undertaken with schools (SHM 2008). Similarly, Clarke and Herrmann (2007) found that formal and proactive methods of recruitment in the construction industry attracted more people from ethnic minority groups and females. One provider – GEN II, a company established by five major employers in the North West to provide training in engineering and technology – has also found some success with specialised campaigns. Its 'Women in Engineering' campaign placed recruitment posters strongly targeted at women in venues such as bars, hairdressers, beauty

salons, clothes shops and NEET/ E2E providers. This resulted in a 28 per cent increase in female applicants getting to interview stage, compared to the previous year (GEN II, 2009). Such campaigns have the dual benefit for business of forming a reputable image in the wider community (Fuller and Unwin 2007).

Choosing ethnic minority-specific media channels may be useful for recruitment of ethnic minorities, although the evidence on this is equivocal. Some businesses have been successful in identifying suitable apprentices from advertisements placed in newspapers or radio channels targeted at minority groups (SHM 2008). However, other reports have found that this is ineffective – at least for certain ethnic groups. For instance, an apprenticeship provider targeting Black Caribbean youth using this method found that it generated little response – perhaps because, while older generations may read community papers, younger people are more interested in the mainstream media (unreferenced report, cited in NWPN 2009).

Reviewing recruitment advertisements to make sure that they do not reinforce stereotypical views about the job can also be important (ASW Consulting, 2004) as is thinking carefully about the possible impact of interview questions and discussions. Emphasising the minority status of women in male-dominated occupations, for example, may reflect a perceived need to be honest with potential and actual applicants, but may also convey messages about who is most employable within these occupations (Andrew 2009). In other words, it is important that employers assess applicants against the criteria of the job and train interviewers; the same kinds of equal opportunity interviewing processes should be in place as for recruitment of other staff.

General improvements in HR processes can particularly benefit non-traditional apprentice groups. For instance, slow application processes may lead to discouragement (Andrew 2009). Arguably minority groups are particularly vulnerable to this since they may have more at stake and more pressing financial needs, meaning they may take up alternative opportunities without waiting for the results of their apprenticeship application, even if apprenticeship offers better long-term career potential.

Employers are being told that recruiting from an ethnically diverse apprenticeship cohort can translate into an ethnically diverse workforce, particularly important since minorities can be under-represented in more highly-paid positions. In an interim report published by the Task Force for the Apprenticeship Ambassadors Network (2004), one company was reported to have benefited as apprentices progress up the career ladder quicker than other employees, so 10 per cent of their line managers now came from ethnic minority backgrounds.

Specialised staff

Dedicated staff to monitor the progress and welfare of apprentices and to keep in touch with supervisory staff can also ensure that both the employer's and the apprentices' needs are met (Fuller and Unwin, 2007).

In another report for the Apprenticeship Taskforce (ASW Consulting, 2004) a case study was given of a construction firm which focussed on recruiting women to address a shortage in skilled trades. This company recruited a community liaison officer who was responsible for delivering their proactive strategy and they found that this was key to their success. The liaison officer supported both site managers and the female workers. Similar to Fuller and Unwin's findings (2007), this company found that recruiting a more diverse workforce led to a better company image. The case study of the local council housing department (ASW Consulting, 2004) also included good practice of employing a women's support team.

Support for young people who have no or only Level One qualifications is important in order to enable them to gain and complete apprenticeships. In a Barnardo's centre in the North East, young people with physical learning and behavioural difficulties are supported on training programmes that can lead to apprenticeships; this support needs to continue throughout the apprenticeship for these vulnerable groups (Evans et al., 2009). They had dedicated staff that could focus on the wider support needs of young people.

> *'At Palmersville the manager was able to claim that their progression rates to apprenticeships were comparable with other training providers, but 'with a more difficult client group.'*
>
> (Service manager interview. Evans et al., 2009)

The Roles 4 All project, is being run by the Plymouth Skill Centre during 2008/9 and focuses on increasing participation and completion for under-represented groups of males in the Health and Social Care sector, females in construction and engineering and ethnic minority and LLDD learners throughout different sectors.[2] They worked with employer ambassadors who promoted their experiences in the working environment and in their working lives to learners, allowed organised visits to their workplace and offered work experiences/trials to learners. The project also created learner mentors who were given training and then offered support to any learners within the target groups who required a mentor. A complete set of outcomes and progressions have not, to date, been published, however the project engaged with:

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[2] http://www.roles4all.co.uk/

- 39 ethnic minority learners
- 55 males in non-traditional roles
- 18 females in non traditional roles
- 243 LLDD learners.

2.4.3 Mentoring

Mentoring is one factor found, in some cases anecdotally, to improve retention among apprentices, including those from groups not traditionally employed in the sector (see for instance SHM, 2008). As a double benefit, coaching and mentoring is important for all apprentices not just those in atypical roles or from ethnic minority groups.

An article by Colley and Jarvis (2007) focussed on assessment of motor vehicle apprentices and as such highlighted mentoring support provided by assessors in the motor vehicle industry. Advanced apprenticeships in this occupation were strongly gender segregated at the time of the research with girls comprising only 1.9 per cent of entrants in the year 2005/6 (LSC figures, quoted in Colley and Jarvis 2007). They were also ethnically segregated, with fewer entrants from minority ethnic groups into advanced apprenticeship than in the population as a whole (3.8 per cent compared with 7.9 per cent). They defined mentoring as including instrumental career functions and aspects of teaching, advising, sponsorship, etc. and also psychosocial support such as motivation and esteem building.

Their case studies found many examples of mentoring on the part of NVQ assessors. However, mentoring activities were not provided on a universal basis, and where apprentices were not provided with as much mentoring support:

> *'…these apprentices were considering abandoning the NVQ and taking whatever they could without the qualification.'*
>
> (Colley and Jarvis 2007 p305)

One of their conclusions was that mentoring does influence the completion rates of apprenticeships.

> *'Supplementary mentoring plays an important role in motivating candidates to persevere with their training through to achievement of the qualification.'*
>
> (Colley and Jarvis 2007, p305)

Deciding on which candidates received more mentoring often came down to decisions about who deserved this extra support, who was a 'good bloke' and who would 'fit in'. This judgement often conformed to stereotypes: gender, the motor

industry being a male-dominated sector; racial - Asian people having high career ambitions, which do not fit manual occupations; class - prestige dealers preferred articulate apprentices, small garages favouring people who may not be articulate, but not afraid to get their hands dirty. The culture of the workplace decided who was perceived as deserving additional support needed to get them through their qualification and in turn reinforced existing, potentially discriminatory, cultures.

> *'Not only did apprentices' access to supplementary mentoring activities depend on the resources of the learning provider assessing their NVQ, with wide inequalities in achievement as a consequence; but also the covert assessment of apprentices' dispositions determined assessors' allocation of sponsorship-mentoring to some and not others, introducing in-egalitarian practices into the overtly formal procedures of summative NVQ assessment.'*
>
> (Colley and Jarvis 2007, p310)

Colley and Jarvis (2007) concludes that there is a lack of resource for broader assessor support to all apprentices, labour market regulation and capacity building in teaching and assessment staff may help to overcome discrimination.

> *'Capacity building should involve greater awareness of some of the inequalities fostered both formally and informally by the vocational culture of (in this case) motor vehicle engineering and perpetuated by employers' expectations of the 'good bloke' defined by gender, race and class fraction.'*
>
> (Colley and Jarvis 2007, p312)

More evidence for the success of mentoring schemes appeared in SHM (2008), where mentoring and guidance for learners was '*seen to make a real difference to ethnic minority learners, not just in motivating them but also in helping them to overcome obstacles*' (p9).

The national Empowering Asylum Seekers to Integrate (EASI) project as delivered by North of England Refugee Service (NERS) aimed to widen asylum seekers' participation in education and training and to identify barriers to individuals accessing these opportunities through mentoring. Although not focussed on apprenticeships or solely working with young people, the successes they have had with their mentoring project could be extended to working on apprenticeships. They have found success by:

- establishing trained community learning mentors to support and encourage new learners
- working with regional employers to increase opportunities for volunteering and work shadowing opportunities.

They recruited 55 mentors and provided advice and guidance to 126 learners. Nine mentors achieved an NVQ in mentoring with another eight hoping to register, while 74 learners from the group progressed into further education.

2.4.4 Parental engagement

Parental engagement is also critical to providing influential and effective support to apprentices, which may be particularly important for ethnic minority participants, given the lower status which may be attached to apprenticeships for those from certain backgrounds. It has been suggested that parents in BAME communities and working class parents are more likely to adopt an 'authoritarian' parenting style in directing their children's choices, which means that it is essential for families to be engaged through marketing materials (SHM 2008).

The GERI project hoped to target parents with one to one advice and support but was unable to do this due to the end of their funding. They did see this as potentially being a 'significant' piece of work, had they been able to achieve this (Harrison, 2006).

Targeting parents to help improve their understanding of contemporary apprenticeship has been mentioned in much of the literature that has been examined for this review (ASW 2004, Fuller and Unwin 2004c, Harrison 2006, Harrison and Moore 2008, Pearson and Naylor 2006, SHM 2008), however, little evidence has been presented to show if this has been achieved and how effective this has been.

2.4.5 Promotion of apprenticeships

Promotion of apprenticeships through outreach work was a common example of good practice from many of the reports. Outreach could involve employers or training providers going out to schools and colleges, or activity and taster days actually in the employer's premises.

School outreach can be important in tackling the problem of recruitment. One report (London Assembly Committee for Economic Development, Culture, Sport and Tourism, 2006*)* suggests that this is necessary so that apprenticeships are no longer seen as a 'last resort'. Addressing the issue relatively early – not just at 16, when attitudes may already have been formed and preliminary decisions made – may be crucial, as the current 14-19 agenda acknowledges. For this reason, provider engagement may be considered, although implementation of this depends on provider resources, experience and expertise, and co-operation from schools may be minimal. Providers who have been successful using this method have reported that schools tend to be more co-operative when the benefit for the

school is spelt out – in particular, a school may have 14-19 commitments which engagement with the provider can help them attain (NWPN 2009).

It has also been suggested that many teachers view vocational training, including Young Apprenticeships, as a second-rate option, and that partly as a result of this impartial information, advice and guidance is lacking in many schools (Newton et al. 2007). This affects all potential recruits, not just those from diverse backgrounds – but better promotion in school would also reach a diverse audience and encourage people who would not otherwise be encouraged on to apprenticeship programmes. Such attitudes may be tackled or at least mitigated by employer outreach or by partnerships and collaboration to inform teachers' attitudes. Small-scale results suggest that employer outreach can have a large effect on applications from atypical groups. For instance, the BT female apprentice recruitment programme aimed to increase applications from girls and women for engineering apprenticeships. They worked with Education Business Partnerships to go into secondary schools to talk about career options, and targeted a publicity campaign at females. Over 200 applications were received from women and girls following this initiative, compared to 50 female applicants the previous year (Equal Opportunities Commission, 2006).

Information at school age may also come at a time when individuals are still forming career choices. To take gender as an example, knowledge of the pay discrepancies between traditionally male- and female-dominated sectors could be disseminated more widely to enable a fuller understanding of the earnings potential of different career paths. Some 67 per cent of adult women surveyed by the Equal Opportunities Commission were not aware of gender pay differences caused by sectoral pay discrepancies; of these, 67 per cent of women in the 16 to 24 age group said that they would have considered a wider range of career options if they had known about the pay gap (Equal Opportunities Commission 2006, p 5). One example of promoting information on apprentices to young people is the EEF Technology Centre in Birmingham. The Centre worked with the EMTA and Advantage West Midlands to produce a directory called Engineering Connections that details all the engineering apprenticeships in West Midlands. It is circulated to schools, Connexions offices, community centres and libraries to promote apprenticeships in the sector. There is also a website where vacancies are listed. Marketing material for this project included women and ethnic minorities, and the project proactively tracks the equal opportunities monitoring sections of all the applications forms to monitor impact among particularly under-represented groups (Miller et al.,2005).

Another case study in ASW Consulting's report (2004) of a local council housing department demonstrates that outreach work and positive publicity can lead to

success in recruiting atypical and diverse apprentices. This report summarised good practice in relation to promotion of apprenticeships. They found that marketing materials should promote a diverse workforce. Under-represented groups could be involved in the design of promotional materials to make them more meaningful to those groups. Where employers are attending events such as careers fairs these should be focussed and should involve current apprentices or other employees from under-represented groups.

An innovative example of outreach was conducted by the Impact Theatre Group in Birmingham and Solihull, who were tasked to improve the image of construction among young people, but among ethnic minorities and females in particular. Evidence to date shows positive changes in the audience's attitudes immediately post-performance. The theatre group were also used to educate learning providers, with excellent feedback being recorded thereafter, with many participants reporting that the session had informed them about the issues surrounding under-representation (Miller et al., 2005).

A BTEG report found some evidence that the Young Apprenticeship programme acted as a conduit to apprenticeships.

> *'Anecdotal evidence suggests that Young Apprenticeships programmes are increasing the diversity of applicants for Apprenticeship places, by feeding through a higher number of atypical applicants.' (p10)*

This is despite an Ofsted report which found that attempts to increase gender or ethnic diversity in Young Apprenticeships were not consistently effective (Ofsted, 2006).

2.4.6 Equality training for providers and employers

Fuller and Unwin (1999) have analysed the nature of apprenticeship, stressing key processes of induction and socialisation into the culture both of an organisation and an occupation. Miller et al. (2004) highlights how teachers and Connexions staff can play a part in this by failing to adequately inform potential apprentices of their options in this area. For young, atypical apprentices, facing implicit or explicit discrimination, whether intended or unintended, as they enter working life, is likely to affect their success. Ecotec (2009) and Rudd et al. (2008) note the importance that drawing on broader lessons from Human Resource Management practices about methods of encouraging and helping employers to build diversity cultures in the workplace may have in helping atypical apprentices to succeed.

The GERI project reached 2,000 schools and 1,000 careers advisers, policymakers and administrators from the national LSC and local LSCs, "as well as large numbers of LEA representatives, trainers, HR managers, and policymakers"

(Harrison, 2006). The project aimed for a national approach whilst also taking into account local labour markets and was part of a transnational partnership which was found to contribute positively to their work. The final evaluation report (Harrison, 2006) found that the quality and relevance of GERI's products were strong and that despite the failure to secure EQUAL Round 2 funding, the legacy of the project should continue, "the products and materials produced remain pretty much unique" (Harrison, 2006, p21). It was stated that the only thing that they did not achieve was one-to-one advice and support for parents and community leaders, which was part of their plan if they had received EQUAL Round 2 funding. EQUAL funding ended in November 2005, so a new not-for-profit consultancy organisation was created to attempt to continue the work. This aimed to focus on the sale of equal opportunities and diversity training, consultancy, learning products and workshops. In the south west it also sought to engage employers; this goal was not achieved, but there is no evidence to explain why employers failed to respond.

Promoting equality messages via work based learning providers could be another way of targeting inequalities in apprenticeships. An ongoing exploratory project involving four Cambridgeshire WBL providers has found that training providers could have a more extensive role to play in promoting equality and diversity (Rose, 2009).

2.5 Key messages concerning critical success factors for projects

It is hard to identify critical success factors reliably given that the lack of pilots with controls to make comparisons and identify precise impact. However, the factors listed below seem to be particularly important to the operation of schemes which promote equality in apprenticeships. It has been noted (Newton et al. 2007) that improvements in practices which promote equality and diversity also appear to have a beneficial effect on the whole cohort. Good practices have repercussions beyond their immediate target.

2.5.1 Employer commitment

As the ultimate recruiter, the employer's commitment is vital to success in improving diversity. This requires some investment of resources and staff, and challenging of existing cultures and assumptions. Indeed, Fuller and Unwin (2007) suggest one of a number of good practice measures, is for employers to accept the higher costs involved in delivering outstanding apprenticeship programmes:

'Investment over and above government funding is crucial for the provision of an apprenticeship programme that builds capacity for the future.' (p456)

In addition to this general need for employer resources, ensuring diversity may require a further investment: it is therefore imperative that employers are fully committed to the process. Some employers have reported the benefits of wage subsidies for recruiting ethnic minority learners (SHM, 2008). This was a proposal in BTEG (2008), and might be a consideration in encouraging full dedication from businesses.

2.5.2 Apprentice confidence and motivation

Once recruited, apprentices need support to complete their training. This can be achieved through a variety of approaches, offered by the employer (mentors, training) or by state and community organisations (eg encouragement of parental support through promotion of apprenticeships).

2.5.3 Partnership working

Success in partnership working is hard to achieve, but lessons from JIVE Partnership suggest that good management practices are key. These include: allocating sufficient time and resources; clarifying expectations to build trust and confidence; identifying dedicated staff; taking diverse needs in different situations into account; and making the promotion of diversity integral (rather than a bolt-on) to programmes (Andrew 2005). The importance of joint planning and a shared vision is also emphasised by Newton et al (2007). Challenges are likely, including: complex management structures; lack of communication between partners; a lack of time, especially to discuss and reflect on differential impact of equality and diversity practices.

What constitutes the partnership – who the partners are – is another key point. The JIVE partnership, consisting of training organisations (including colleges, universities and voluntary sector providers and support services) alongside the Equal Opportunities Commission found some success (Andrew 2005). Partnership may also involve schools, however, to maximise atypical recruitment (Newton et al. 2007).

2.5.4 Reach relevant groups

The Women and Work project suggests that initiatives aimed at people across the full spectrum of the pay scale can attract a disproportionately large number of senior compared to junior staff (IFF Research 2008, see page 27 and pages 32-33). This may be indirectly beneficial for junior apprentices in providing more senior

non-traditional role models. However, it may imply that a targeted programme could also have a greater chance of directly involving apprentices.

Many of the ideas discussed in the IFF report (IFF Research 2008) simply involve opening up and creating a more welcoming atmosphere which is to the benefit of all potential recruits from all types of non-traditional (and indeed traditional) backgrounds. However, some schemes will naturally benefit particular groups more than others, for instance, targeting women for training ignores disabled or ethnic minority men, who may face equal or greater challenges in some sectors and/or geographical areas.

2.5.5 Monitoring who benefits

It is hard to assess what needs to be done, and for which groups, without monitoring who is missing out on apprenticeship entry and completion. Although good information exists in some areas (particularly the gender balance) it seems that a critical success factor for future interventions might be whether their evaluation is based on adequate evidence – this is difficult at the moment, particularly for under-researched groups like apprentices with disabilities or from ethnic minority groups. There is little information on the sub-categories of disability and how apprenticeships can be adapted to different needs; or on how people from various ethnic minorities or religious groups are affected by workplace cultures in different sectors. Many of the issues faced by non-traditional apprentices, for instance unwelcoming organisational cultures which are predicated on workforce homogeneity in certain sectors or organisations, might also be faced by workers who are in any way different from the dominant majority of employees. Gay or bisexual applicants, apprentices and employees may therefore also benefit from efforts among employers and other stakeholders to improve the diversity of apprentices.

Monitoring also enables the setting of targets, which latter are seen by Newton et al. (2007) as a critical success factor in ensuring apprentice diversity.

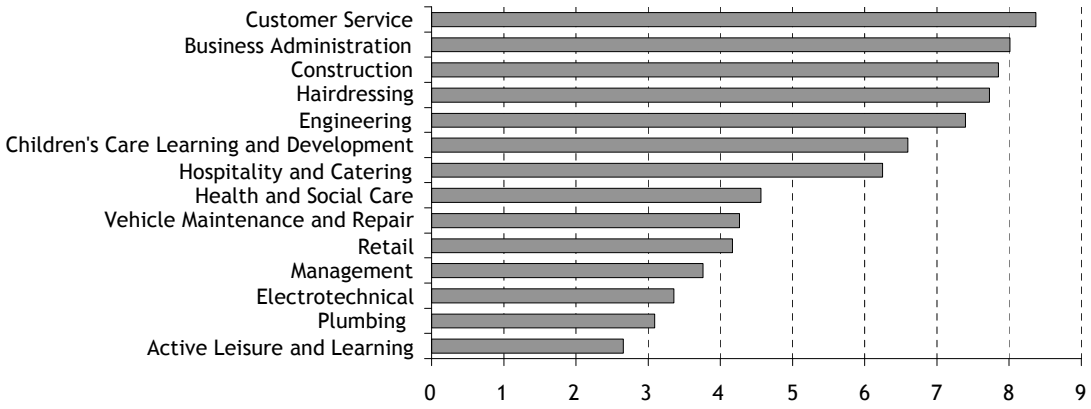
3 Findings from Secondary Data Analyses

3.1 Overview of apprenticeship starts

Between August 2008 and January 2009 there were around 139,000 Apprenticeship and Advanced Apprenticeship starts (herein referred to as apprenticeships) in England.

As we can see from the breakdown of framework aims reported in Figure 3.1, customer service is the most popular apprenticeship in terms of framework starts (8.4 per cent of all starts), followed by business administration (8.0 per cent); construction (7.9 per cent); hairdressing (7.7 per cent); engineering (7.4 per cent) children's care and development (6.6 per cent); and hospitality and catering (6.2 per cent). Health and social care, vehicle maintenance and repair, retail and management each account for around four per cent of framework starts, while electrotechnical, plumbing and active leisure and learning each account for around 3 per cent.

Figure 3.1: Percentage distribution of apprenticeship framework starts by sector (August 2008 – January 2009)



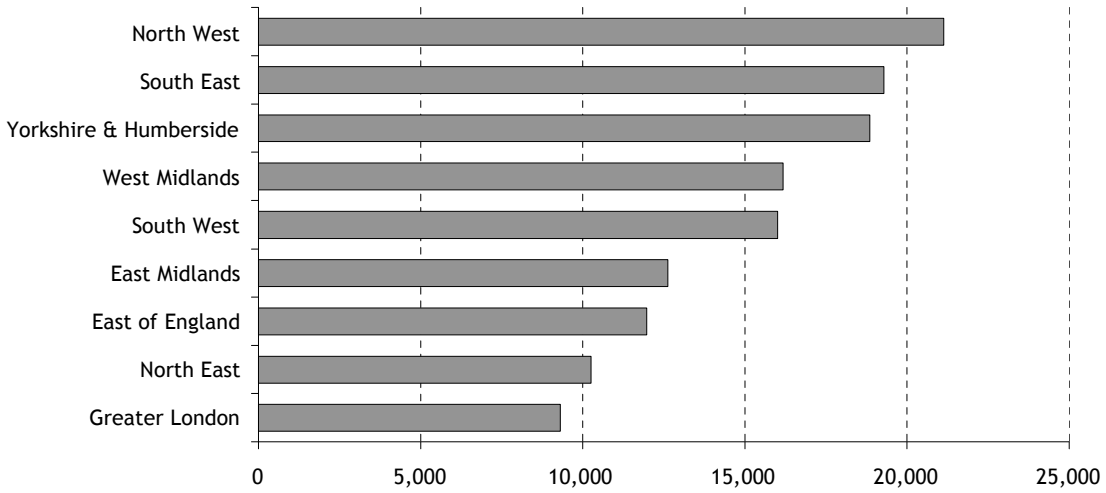
Source: IES analysis of ILR 2008-09

Reflecting demographic and industrial variations, there are significant differences in the distribution of apprenticeship framework starts by LSC regions (Figure 3.2). The North West accounted for over 21,000 starts, followed by the South East (19,300); and Yorkshire and Humber (18,800). West Midlands and the South West accounted for just over 16,000 starts each. In the East Midlands, there were 12,600 starts recorded whilst in the East of England figures dropped just under 12,000. For the North East and Greater London, framework starts were fewer at 10,300 and 9,300, respectively.

Finally, there is considerable variation in the types of framework starts by region (see Appendix 2 Table A2.2). For example, the children's care framework accounted for 6.6 per cent of all framework starts overall. However, in Greater London there were twice as many starts (10.7 per cent) in children's care learning and development compared with the North East (4.6 per cent); this unequal distribution may reflect further geographical differences in demand and pay for workers among childcare providers in the two areas. Engineering, a male-dominated sector, on the other hand, showed similar patterns of variation with three times more framework starts recorded in the South East (10.8 per cent) than in Greater London (3.2 per cent). The next section explores issues of gender segregation in apprenticeship framework starts at greater length.

With regard to overall success rates of apprenticeships, this has seen a significant increase over the period 2006-2009, from 60.9 per cent in 2006/07 to 68.1 per cent in 2008/09.[3]

Figure 3.2: Number of apprenticeship framework aim starts by region (August 2008 – January 2009)



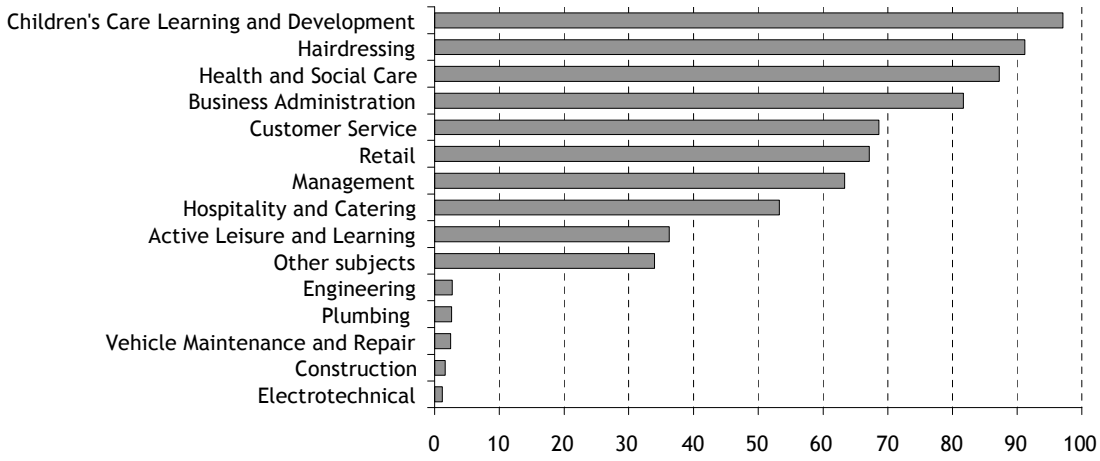
Source: IES analysis of ILR 2008-09

3.1.1 Apprenticeships and gender

Framework starts in apprenticeships reflect significant gender segregation found within occupations and sectors of the economy overall (see Appendix 2 Table A2.3). Looking first at the national picture, we find that around 47.2 per cent of apprenticeship framework starts are from female students. However, as Figure 3.3 demonstrates, women are significantly under-represented in construction (1.6 per cent of starts are from female students); plumbing (2.6 per cent); electrotechnical (1.2 per cent); engineering (2.7 per cent); and vehicle maintenance and repair (2.5 per cent). Female apprentices are particularly over-represented in children's care (97.1 per cent); hairdressing (91.2 per cent); business administration (81.6 per cent); customer services (68.6 per cent); management (63.3 per cent) and hospitality and catering (53.3 per cent).

[3] Overall Success Rate data supplied to IES by the LSC.

Figure 3.3: Percentage of female apprenticeship framework starts by sector (August 2008 - January 2009)



Source: IES analysis of ILR 2008-09

Regarding the overall success rate for men and women, there are no significant differences between them, looking at the data from 2006-2009. The overall success rate for both men and women has increased considerably, from 58.7 per cent for women in 2006/07 to 67.4 per cent in 2008/09, and from 61.8 per cent for men in 2006/07 to 68.9 per cent in 2008/09.[4]

Variations by region

We now turn to the issue of sectoral gender segregation by region. There are three factors worth reviewing in any strategies aimed at targeting gender segregation. The first is the relative size of the sector (measured here in terms of overall apprenticeship framework starts). For example, if we focus on the South East engineering represents 10.8 per cent of apprenticeship frameworks, while plumbing represents 2.9 per cent (see Appendix 2 Table A2.2). A question that would need to be considered is whether the ability to develop a critical mass of apprenticeships is likely to be affected by the size of the sector.

The second question to consider is the absolute level of segregation in each sector. Using the same sectors reported above, we find that 3.6 per cent of engineering framework starts in the South East are made by female apprentices compared with 1.8 per cent of plumbing apprentices (see Appendix 2 Table A2.3). This suggests that relative female under-representation is substantially higher in plumbing than

[4] Overall Success Rate data supplied to IES by the LSC.

engineering (although in absolute terms under-representation is very high in both sectors).

The final question to resolve is whether segregation within a sector is any worse in one region than another. In our example, we find that females account for similar low proportions of framework starts in plumbing (2.6 per cent) and engineering (2.7 per cent) across England overall. However, in the South East framework starts among female students in engineering are 'above average' (3.6 per cent) whereas in plumbing they are 'below average' (1.8 per cent). In other words, despite low levels of female representation in both engineering and plumbing within the South East, the region performs 'above average' with regards to engineering but 'below average' in the case of plumbing. The reverse, however, is true, when the focus shifts to the South West, where framework starts among female students are 'below average' in engineering but 'above average' in plumbing (see Appendix 2 Table A2.3).

Relative levels of segregation can be explored by reviewing the sectoral segregation of a group (eg females, black and minority ethnic groups etc.) within each region relative to the representation of that group in the region overall (measured in terms of their share of overall apprenticeships in the region). Taking engineering in the South East as our example the ratio of segregation we would obtain is 0.08 (Appendix 2 Table A2.4). This is derived through calculating the share of females framework starts in engineering within the South East relative to their share of all apprenticeship frameworks in the South East (ie 3.6 per cent divided by 42.7 per cent). The South East followed by the North West are the two regions with the 'best' representation of females in engineering - ie relative to the number of female starts across all apprenticeships in the South East and the North West, a higher proportion of females start frameworks in engineering than in any other region of England (it is still only 3.6 and 3.7 per cent of all engineering starts in these regions though).

The above account highlights a number of issues worth summarising here:

- sectors vary in size and so, all things being equal, segregation in large sectors affect more apprentices than segregation in smaller ones
- segregation needs to be viewed at a sectoral level
- comparing across regions some sectors within some regions have higher degrees of relative segregation than others (this does not, however, mean that those with low relative levels of segregation are 'performing well').

Turning to the overall regional data for gender segregation, we find that:

- Electrotechnical, engineering, plumbing, construction and vehicle maintenance and repair all have very low levels of female framework starts (ie between one and three per cent).
- Engineering and construction are large sectors in terms of overall framework starts. Engineering has particularly low levels of female representation in the North East (1.7 per cent), while construction has low female representation in the East Midlands and the South West (1.1 per cent)
- Sectors/regions that stand out in terms of relative female under-representation include: electrotechnical apprenticeships in the West Midlands; engineering in the East Midlands and the North East, and vehicle maintenance in the West Midlands.

3.1.2 Apprenticeships and ethnicity

We now turn our attention to ethnic segregation within apprenticeship starts. Looking first at the ethnic distribution of apprenticeship starts by region (Table 3.1) we find that London has the highest proportion of starts from black and minority ethnic groups, followed by the West Midlands. The North East, the North West, and the South West have the lowest levels of framework starts by these groups, reflecting their demographic under-representation in these regions. In terms of individual groups, black and Asian apprenticeships have the highest relative levels of representation in London, while Asian apprentices have also a high representation in the West Midlands.

Table 3.1: Ethnicity of apprenticeship framework starts by region (August 2008 - January 2009)

	Asian	Black	Chinese/ mixed	White	other/DK	Total
East Of England	1.9	1.1	1.4	94.6	1.1	100.0
East Midlands	2.7	1.0	1.5	93.2	1.5	100.0
Greater London	10.8	12.4	5.2	67.2	4.4	100.0
North East	1.1	0.2	0.5	97.3	0.8	100.0
North West	2.4	0.6	1.0	94.7	1.3	100.0
South East	2.3	1.6	1.6	93.3	1.3	100.0
South West	1.3	0.9	1.0	94.5	2.2	100.0
West Midlands	6.3	2.3	2.2	87.2	1.9	100.0
Yorkshire & Humberside	3.6	1.1	1.3	92.4	1.6	100.0
Total	3.3	1.9	1.6	91.4	1.7	100.0

Source: IES analysis of ILR 2008-9

A review of the types of apprenticeship framework starts undertaken is provided in Table 3.2 below. It suggests that:

- Apprenticeship framework starts from learners of black ethnic backgrounds are particularly over-represented in active leisure and learning, health and social care, and children's care, learning and development; they are particularly under-represented in hairdressing, construction, vehicle maintenance and repair, and electrotechnical activities.
- Apprenticeship framework starts from learners of Asian ethnic backgrounds are over-represented in children's care, business administration, customer services, health and social care, management, and retail while they are under-represented in construction, hairdressing, and electrotechnical apprenticeships.
- Apprenticeship framework starts from learners of Chinese and mixed ethnic backgrounds are over-represented in activity, leisure and learning, children's care, customer service, and business administration, while they are under-represented in vehicle maintenance and repair, construction, and engineering apprenticeship frameworks.

While there are differences between black and minority ethnic groups, relative to their representation across all apprenticeship sectors, learners from these groups overall are disproportionately over-represented in children's care and business administration, and are under-represented in electrotechnical, construction and plumbing activities.

Table 3.2: Percentage of apprenticeship starts by sector and black or ethnic minority group (August 2008 - January 2009) - ranked by level of segmentation

Black		Asian		Chinese / mixed	
Sector	%	Sector	%	Sector	%
Active Leisure and Learning	4.3	Children's Care Learning and Development	9.2	Active Leisure and Learning	2.8
Health and Social Care	4.0	Business Administration	6.3	Other subjects	2.1
Children's Care Learning and Development	2.6	Customer Service	5.1	Children's Care Learning and Development	2.0
Other subjects	2.5	Health and Social Care	5.0	Customer Service	1.7
Business Administration	2.4	Management	4.3	Business Administration	1.7
Customer Service	2.3	Retail	4.0	All subjects	1.6
Management	2.0	Other subjects	3.4	Hairdressing	1.5
All subjects	1.9	All subjects	3.3	Hospitality and Catering	1.4
Hospitality and Catering	1.6	Vehicle Maintenance and Repair	2.5	Retail	1.4
Engineering	1.4	Active Leisure and Learning	2.0	Electrotechnical	1.3

Black		Asian		Chinese / mixed	
Retail	1.3	Hospitality and Catering	1.5	Management	1.2
Plumbing	1.0	Engineering	1.2	Health and Social Care	1.2
Electrotechnical	0.8	Plumbing	1.0	Plumbing	1.2
Vehicle Maintenance and Repair	0.7	Electrotechnical	0.8	Engineering	1.1
Construction	0.7	Hairdressing	0.7	Construction	1.1
Hairdressing	0.5	Construction	0.6	Vehicle Maintenance and Repair	1.0

Source: IES analysis of ILR 2008-09

Variations by region

Finally we consider both sectoral and regional segmentations. The evidence from Appendix 2 Tables A2.5 to A2.12 suggests that:

- The levels of sectoral/regional representation among Asian apprenticeships are lowest within the electrotechnical and plumbing sectors in the South West, where there were no reported cases. Greater London has a relatively large population of Asian apprentices but the group is still under- represented in plumbing (they have a segregation ratio of 0.09) and construction (0.23). Similarly, Asian apprentices in the West Midlands are under-represented in the construction sector (0.11).
- Six sectors in the North East do not have any starts from black students, while the electrotechnical and plumbing sectors each have fewer than ten apprenticeship framework starts from black students in more than half of the English regions. In Greater London around 4.2 per cent of electrotechnical apprenticeship starts are from black apprentices, compared with 12.4 per cent of black apprentices enrolled across all sectors in that region. Although the absolute percentage (4.2 per cent) is high relative to other regions this is only because the black population is higher in Greater London. The ratio of segregation (which controls for the size of the black apprenticeship population within each region) suggests that group is under-represented in Greater London within electrotechnical (0.34), hairdressing (0.35), construction (0.43), vehicle maintenance and repair (0.46) and plumbing (0.51).
- In absolute terms, representation of Chinese and mixed ethnic groups is lowest among children's care apprenticeships in the North East, where there were no recorded incidences. On the other hand, the largest proportions of these ethnic framework starts were found in Greater London and particularly in the health and social care (11.6 per cent) and in the active leisure and learning (7.8 per cent) sectors.

Regarding the overall success rates for minority ethnic groups, these have increased for almost all minority ethnic groups in the period from 2006/07 to 2008/09. However, overall success rates for minority ethnic groups still lag some way behind that of 'White – British'. The success rate among 'White – British' in 2008/09 was 68.6 per cent, compared to 59 per cent for Bangladeshis, 63.7 per cent for 'Mixed – White and Black Caribbean', 63.9 per cent for 'Mixed – White and Black African' and 64.2 per cent for Pakistanis.[5]

3.1.3 Apprenticeships and learning difficulties and disabilities

Around ten per cent of apprenticeship framework starts were by learners with a reported learning difficulty and/or disability. Just under six per cent reported a learning difficulty, while five per cent reported a disability (it is possible to report a disability and a learning difficulty and around one per cent did so). The most frequently cited learning difficulties were dyslexia (47.6 per cent of those reporting a learning difficulty) and moderate learning difficulties (39.1 per cent). Commonly cited disabilities were medical conditions such as epilepsy, diabetes and asthma (41.8 per cent of those reporting a disability); visual impairment (21.3 per cent); hearing impairment (4.8 per cent) and multiple disabilities (7.8 per cent).

The representation of apprenticeship framework starts with learning difficulties and disabilities across sectors is highlighted in Table 3.3. Learning difficulties are disproportionately over-represented in hairdressing (14.7 per cent); children's care (10.9 per cent); and construction (9.2 per cent). They are under-represented among electrotechnical apprenticeship framework starts (2.0 per cent); management (2.2 per cent); active leisure and learning (3.3 per cent); and retail (3.4 per cent). Disabilities are over-represented within customer service (15.2 per cent); business administration (13.2 per cent); children's care (10.5 per cent); and hairdressing (9.5 per cent). Under-representation is notable in electrotechnical apprenticeship frameworks (1.2 per cent); plumbing (1.2 per cent); active leisure and learning (1.5 per cent); vehicle maintenance and repair (3.4 per cent) and hospitality and catering (3.8 per cent).

[5] Overall Success Rate data supplied to IES by the LSC.

Table 3.3 Percentage of apprenticeship framework starts by sector and learning difficulty or disability (August 2008 - January 2009)

	Learning difficulty	Disability
Business Administration	4.2	13.2
Children's Care	10.9	10.5
Electrotechnical	2.0	1.2
Engineering	4.8	4.0
Retail	3.4	6.4
Construction	9.2	3.9
Plumbing	2.7	1.2
Hairdressing	14.7	9.5
Hospitality and Catering	6.1	3.8
Active Leisure and Learning	3.3	1.5
Health and Social Care	5.8	4.2
Management	2.2	7.5
Customer Service	5.6	15.2
Vehicle Maintenance and Repair	6.7	3.4
Other subjects	18.6	14.5
Total	5.8	5.3

Source: IES analysis of ILR 2008-9

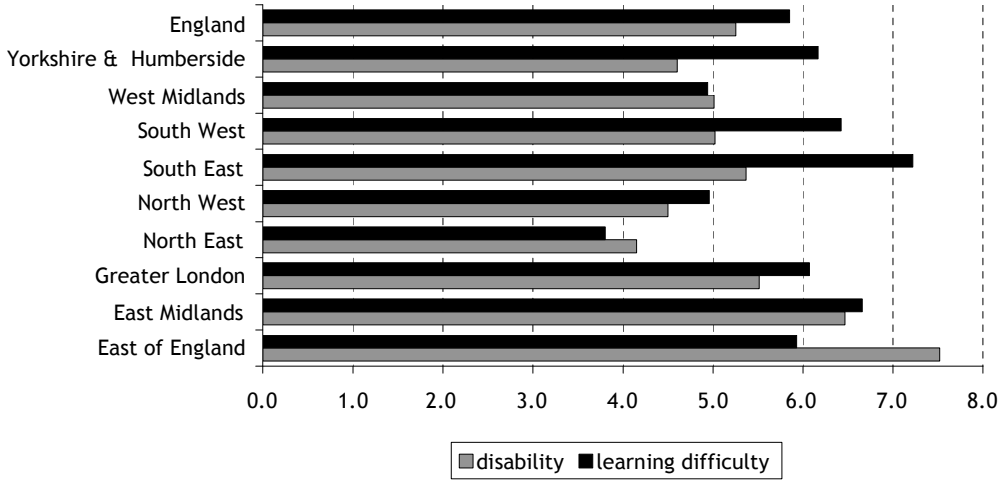
Regarding the overall success rate for those reporting a learning difficulty, this has increased from 54 per cent in 2006/07 to 64 per cent in 2008/09. However, these success rates remain stubbornly low when compared to the success rates of those reporting no learning difficulties (68.7 per cent in 2008/09).[6]

Variations by region

The spread of reported learning difficulties and disabilities among apprenticeship framework starts and region is reported in Figure 3.4. As we can see, there are some regional variations but the distribution of those with learning difficulties and disabilities undertaking apprenticeships appears relatively evenly spread across the LSC regions.

[6] Overall Success Rate data supplied to IES by the LSC.

Figure 3.4: Learning difficulties and disabilities reported within framework starts by region (August 2008 – January 2009)



Source: IES analysis of ILR 2008-9

Variations in the regional and sectoral profile of apprenticeship framework starts who reported learning difficulties and/or disabilities are summarised in Appendix 2 Tables A2.13 to A2.18. There is little that suggests a rationale for targeting one region over another as those reporting learning difficulties or disabilities are spread relatively evenly throughout England and the main factor determining segmentation is the sector of the apprenticeship rather than its location.

4 Summary of Findings and Recommendations

This chapter presents a synthesis of our findings from the literature review, the data analysis and expert interviews.

4.1 Report findings

From the research conducted, our findings can be summarised under four headings:

4.1.1 Barriers to participation and completion of apprenticeships among under-represented groups

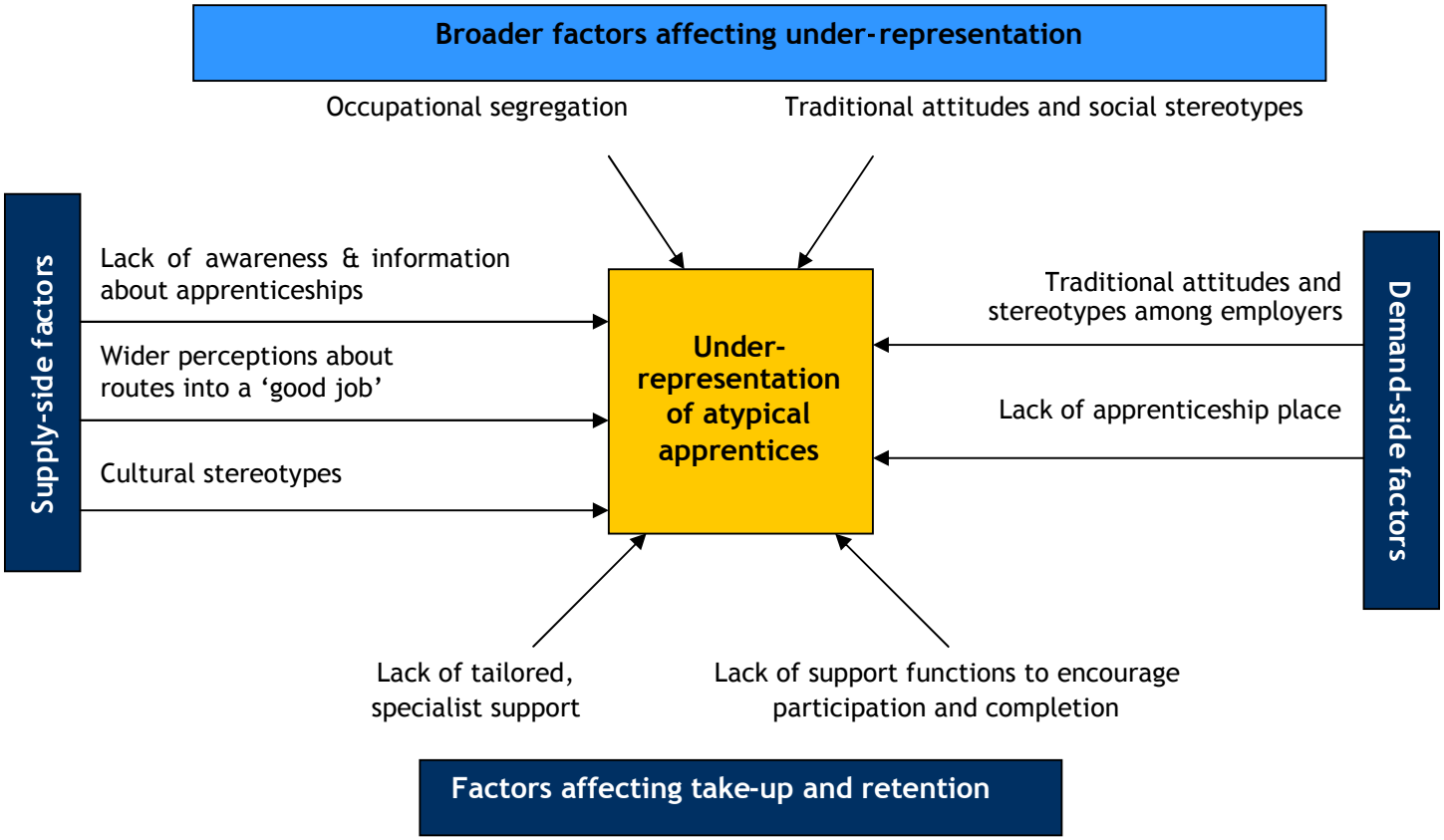
- The literature review affirms the findings of earlier work which has identified the following barriers as being significant for ethnic minority groups:
  - lack of apprenticeship places.
  - cultural and wider perceptions about routes into a 'good job'
  - lack of awareness about apprenticeships
- The literature review identifies the following barriers as being significant for gender atypical groups:
  - traditional attitudes, social stereotypes and discrimination
  - wider gender segregation in the workforce.
- The literature review identifies the following barriers as being significant for disabled groups:

- lack of awareness of provision available to assist with overcoming practical barriers
- a lack of tailored and specialist provision
- misperceptions around the limited abilities of disabled people and employers' concerns around the costs of additional support.

- From the expert interviews, traditional attitudes and social stereotypes were felt to be a particular barrier for gender atypical and minority ethnic groups, as was a lack of awareness about apprenticeships among these groups and employer attitudes that discriminate against minority groups.

Our findings identify several barriers to apprenticeships for atypical groups. They constitute demand and supply-side issues as well as those which affect the ability of particular groups to take-up and complete apprenticeships. These barriers are conceptualised on figure 4.1.

Figure 4.1: Barriers to apprenticeships for atypical groups



Source: IES

4.1.2 Areas of under-representation among apprenticeship programmes

- Data analysis shows that apprenticeship framework starts reflect the existing significant **gender segregation** found within the occupations and sectors of the economy overall. Women are significantly under-represented in the sectors of construction, plumbing, electrotechnical, engineering and vehicle maintenance and repair. Comparing across regions it is apparent that the extent of gender segregation within sectors varies between regions; however this does not mean that those with relatively low levels of segregation are performing particularly well.
- Apprenticeship framework starts from **Black minority ethnic backgrounds** are particularly under-represented in hairdressing, construction, vehicle maintenance and repair, and electrotechnical activities. London has the highest proportion of starts from **BAME** groups, followed by the West Midlands. The North East, the South East, the East of England and the South West have the lowest levels of starts by these groups, reflecting their demographic under-representation in these regions.
- In terms of framework starts, learners from Asian minority ethnic backgrounds are under-represented in construction, hairdressing and electrotechnical apprenticeships. Chinese and mixed ethnic background apprentices are under-represented in vehicle maintenance and repair, construction, and engineering apprenticeship framework starts.
- The levels of sectoral/regional representation among Asian apprenticeships are lowest within the electrotechnical and plumbing sectors in the South West, where there were no reported cases. Greater London has a relatively large population of Asian apprentices but the group is still under-represented in the plumbing and the construction sectors. Similarly, Asian apprentices in the West Midlands are under-represented in the construction sector.
- Six sectors in the North East do not have any apprenticeship framework starts from Black students, while the electrotechnical and plumbing sectors each have fewer than ten apprenticeship framework starts from Black students in more than half of the English regions. In Greater London, although the absolute percentage is high relative to other regions, this is only because the Black population is higher in Greater London. The ratio of segregation (which controls for the size of the Black apprenticeship population within each region) suggests that this group is under-represented in Greater London within the electrotechnical, the hairdressing, the construction, the vehicle maintenance and repair, and the plumbing sectors.

- In absolute terms, representation of Chinese and mixed ethnic groups is lowest in the children's care and learning sector apprenticeship framework starts in the North East, where there were no recorded registrations.
- Around 10 per cent of apprentices report some **learning difficulty or disability**. Just under six per cent reported a disability, while five per cent reported a learning difficulty.
- Framework starts of learners with learning difficulties are under-represented among electrotechnical apprenticeships, management, active leisure and learning, and retail. Under-representation for learners with disabilities is notable in framework starts in the electrotechnical, plumbing, active leisure and learning, vehicle maintenance and repair, and hospitality and catering sectors.

4.1.3 Addressing under representation

- Projects aimed at addressing under-representation in apprenticeships to date have tackled the main barriers of stereotypical ideas of who might work in particular occupations, the lack of available information on apprenticeships and segregated work cultures.
- From the literature review, a number of illuminating case studies serve well as examples of good practice in promoting diversity in apprenticeships. However, virtually none have involved formal impact assessments and few have focussed on apprenticeships in isolation. What is available is largely qualitative in nature and centres around participant satisfaction. However, it does not account for other confounding factors, such as sectoral influences or geographical bias. This makes it **difficult to extrapolate a typology of broader lessons or interventions that might instrumentally influence the design of the pilots.**
- From the literature review and expert interviews, it is possible to identify a number of interventions, or project design features, which have yielded positive responses from participants and project staff, or which were cited by our expert informants as potentially useful to include in future pilots targeted at under-representation in apprenticeships. These elements were:
  - **Partnership working** between key agencies, LSC, training providers, Connexions, employers and other advisory and support bodies.
  - **Securing employer buy-in** in order to make adjustments to the organisational culture - either physical changes such as female toilets or cultural changes such as work nights out that do not involve drinking. These changes can encourage apprentices to enter these workplaces and succeed in their apprenticeships. Making recruitment practices fair and open can also

improve diversity and having specialist staff to provide support both to the organisation as a whole and to the apprentices can also increase completion rates. Employer buy-in is also a critical vehicle for changing employer attitudes.

- **Mentoring**. There is a relatively strong evidence base to suggest that mentoring appears to work in increasing participation and success rates of diverse apprentices.
- **Parental engagement** in order to tackle stereotypes and overcome a lack of direct experience in atypical roles. Many interviewees noted that this was a particular issue for certain minority ethnic groups, who did not value apprenticeships as highly as other forms of further and higher education.
- **Promotion of apprenticeships** in order to give young people and their parents a full picture as early as possible, with appealing role models and advertising in appropriate places and media.
- **Equality training** for employers, staff and also careers advisers and community workers.
- **Employer and provider commitment** and involvement was seen by many expert interviewees as being crucial to ensuring that sufficient opportunities were open and accessible for under-represented groups. The literature review also highlights the importance of employer commitment. This commitment could take various forms, including the investment of resources and staff, active efforts to engage minority groups, proving in-work support for apprentices, or getting involved in the broader promotion of apprentices to atypical groups (for example, visiting schools to increase awareness about apprentices, the sector, what the job involves, and what support is available). Employers' commitment of this kind reflects a genuine belief in the benefits of having a diverse workforce and the need to change any discriminatory attitudes within the employer organisation.

From the above list, expert interviewees stressed that **workplace support** (and mentoring in particular), the **promotion of apprenticeships in schools, and the effective promotion of apprenticeships through parents, teachers and careers advisers,** had all proven to be a particularly successful interventions in their experience of WBL projects and initiatives. schools, colleges and the Connexions service were all key sites at which it was thought this kind of work could be best targeted.

4.2 Recommendations

Below we present our recommendations from the report analysis. We detail these recommendations along the lines of overall pilot design; the target groups; and the target sectors and regions.

4.2.1 Overall pilot design

- From all the research evidence, we recommend that the term 'critical mass for the proposed pilots be abandoned. While there are a few projects that have utilised this design function to date, it is not entirely clear how this would take shape in these pilots. Moreover, the majority of interviewees expressed confusion at the term and similar concerns over how a 'critical mass' function would work in practical terms. If a pilot were to have a 'critical mass' of atypical learners, it is conceivable that this could make sectors more accessible in the longer term and could eventually start to change expectations about the types of people that might be suitable to work in each sector, thus increasing the appeal of related occupations. However, in order to achieve this, any critical mass pilot would have to have significant profile and visibility in order to ensure sufficient outreach to wider pools of potential atypical recruits. They would also have to run for a minimum period of at least three to four years to ensure the pilots have a chance to embed, achieve visibility and profile, and ensure sufficient longer-term impacts on potential groups of atypical learners.

  We propose the pilots be re-named 'Apprenticeships for All', reflecting both the need to increase the participation of atypical groups (addressing issues around demand and the ability of atypical groups to take-up and complete apprenticeships), and the need to remove barriers to participation (addressing issues around the supply of apprenticeship places and opportunities for atypical groups). We also believe that this better reflects the overall aims of the pilots.

  Given that our research has found that the current evidence base is relatively patchy with regards to how far they lend themselves to broader applicability and wider insights, we also propose that pilot design retain a focus on the potential to mainstream good practice beyond the life of the pilots. The pilots would thus need to trial activity within current working and organisational arrangements, either at the local or regional level, with consideration given as to how this activity, and any lessons learned, could be sustained after the pilots finish.

  In light of the fact that our research findings also pointed to a lack of formal evaluations among the majority of the initiatives and projects that we reviewed,

we also recommend that these pilots be formally evaluated to assess their impact, but also help strengthen the existing evidence base regarding good practice.

- **Which interventions for whom?** In order make critical mass pilots successful in building the volume of apprentices from under-represented groups, this review has identified a number of key themes from the literature which should be embedded in the development of the pilots. These are generalised support mechanisms and may require customising for the particular groups targeted but the available literature and evidence base of current projects is generally not sufficiently detailed to make recommendations for sub-groups from the equality strands.

  The evidence shows that the key barriers for disabled, ethnic minority and gender atypical groups centre are around stereotypical perceptions and assumptions about apprenticeships; lack of awareness and information about apprenticeship schemes or the additional/tailored provision that might be made available; and discriminatory attitudes among employers, careers advisors, parents and teachers.

- **How long?** The view of a significant number of expert informants highlighted that the Pilots should run for a minimum of two years, to allow for the full impact to be assessed from the start to the completion of the Pilot apprenticeship schemes. However, given that the recession is currently raising the demand for apprenticeships and also lowering the supply of them too, we would recommend that the pilots would need a minimum of three to four years to get up and running, and to have a notable impact.

- **What might the key components be?** From the available evidence the key components of the pilots should either involve or trial several interventions targeted at different points in the model detailed in figure 4.1, or should focus on the model as a whole. Given that the evidence points to deficiencies in both the supply and demand for atypical apprenticeships, we would lean towards recommending the former approach. Based on the current evidence, this should involve and trial methods of:

  - effective employer engagement and buy-in to initiatives that target atypical groups to improve the supply of apprenticeship opportunities to these groups.

  - greater provision of workplace-based support and mentoring schemes. Where it is not possible to produce same sex mentors, provision of mentors from other programmes should be made available.

- widespread promotion of, and information around apprenticeships, particularly in schools and targeted at children, parents, teachers and careers advisors. Interventions which seek to integrate pilot activity into the 14-19 commitments of schools should be encouraged where possible.
- equality training for staff, employers, careers advisors and community workers to facilitate the promotion of apprenticeships and ensure that atypical groups are made aware of apprenticeship opportunities and what they might involve.

The spread of these interventions across the pilots will depend on the atypical group(s) being targeted.

- **Publicity**. Available evidence would suggest that for gender and ethnic minority atypical groups, early interventions that centred around promoting apprenticeships in a way that challenged perceptions about routes to a 'good job' or traditional attitudes to particular sectors of work would be valuable in raising awareness and aiding applications prior to wider roll out of pilot provision itself. Pilots that tested interventions around these barriers could focus on the use of particular information tools, the use of role models or particular media channels.
- **Piloting access for young people with disabilities**. For disabled groups, the evidence seems to indicate that negative perceptions around the abilities of disabled people to take on particular jobs, along with a lack of access to tailored provision for disabled people, particularly those with specific impairments, remain key barriers. Expert informants reported that although employers were sometimes keen to take on disabled apprentices, and were often even aware that additional support and funding could be made available, they were often discouraged by the impact that additional support might have on their overall performance or by the bureaucratic process of applying for additional support. Pilots that tested interventions around these barriers could, therefore, test out the use of appropriate support for people with disabilities.
- Support for employers. Some employers are uncertain of what support might be available if they take on an apprentice with a disability, or what support they should offer an atypical learner. However, the current evidence is insufficiently detailed to provide any nuanced information on what may work for specific ethnic minority groups, or for those with specific disabilities and impairments. Further research would be desirable to identify the most appropriate interventions for groups with different disabilities.

In designing the detail of the pilots, further consultation with researchers and experts on the barriers and needs of the specific groups prioritised should be conducted in order to determine the most appropriate support needed. This might include, for example, consultation with specific charities and healthcare organisations who can provide detailed information on the likely needs of learners with specific disabilities or health conditions, or with community groups representing people from a particular ethnic minority background. If this is not available or possible, then we recommend that bids to run the pilots should either incorporate this evidence-gathering and consultation phase as part of the early stages of implementation and delivery, or must clearly indicate the evidence upon which they have based their proposed core elements of delivery.

- **Who should be involved?** The evidence indicates that pilots aimed at addressing under-representation in apprenticeships could potentially involve a mix of all the key players in delivery and implementation to address demand and supply side issues: the LSC, the NAS, training and education providers, Connexions, SSCs, employers and other advisory and support bodies. Where they can usefully add value, specialist knowledge or expertise, the role of third sector organisations should also be considered, particularly with regard to providing support or mentoring in the workplace. There was an overwhelming consensus among interviewees that pilots should, where possible, draw out lessons for the greater involvement of, and engagement with SMEs in addressing under-representation of atypical groups in apprenticeships. The findings from the literature review and interviews suggest that employers, schools, teachers, parents, careers advisors and mentors/ apprenticeship 'champions' should also play a key role in any pilot design.

4.2.2 Target groups

- Secondary analysis of ILR data indicates that under-representation of atypical ethnic minority, gender and disabled groups within apprenticeships still persists and so should be the focus of any future pilots in this area.
- There is a paucity of evidence in relation to lesbian, gay and bisexual (LGB) under-representation in apprenticeships and the representation of different faith groups. The current ILR data does not collect evidence along these equality strands either. Any pilot designed to target these groups would need a robust evidence base upon which to proceed. To this end, the LSC could usefully liaise with the Equality and Human Rights Commission on how this could be done and if it could be incorporated into the pilots in any meaningful way.

4.2.3 Target sectors and regions

- In broad terms, the sectors which have the lowest representation of gender atypical apprentices and ethnic minority groups are those covered by the Sector Skills Councils of SEMTA, SummitSkills and Construction Skills (ie engineering, construction and professions allied to building services engineering - eg plumbing, electrotechnical etc). If the pilots are to target women, then our analysis of the data shows that region only plays a part in so far as some sectors might be regionally clustered (eg: engineering in the South East). For the most part, then, targeting the pilots according to specific sectors of under-representation, rather than regionally, would be more productive.
- For ethnic minority groups, analysis of the data indicates that regional targeting would be necessary to address the under-representation of ethnic minority apprentices clustered in London and the West Midlands. However, with regard to sectoral distribution, apprentices tend to be under-represented in sectors that are evenly spread geographically, so there is less need to focus on sectors in particular regions.
- Analysis of the data reveals that the sectors with an under-representation of individuals with learning difficulties or disabilities themselves are, in the main, very geographically dispersed. There is little rationale, therefore, to target one region over another for disabled learners, as those reporting learning difficulties or disabilities are spread relatively evenly throughout England and the main factor determining segmentation is the sector of the apprenticeship rather than its location.

4.3 Conclusion

The findings detailed above indicate a number of ways, and areas in which these pilots could be most usefully targeted. The evidence on good practice projects and initiatives has yielded some indication of what might work, but very few robust insights into what could work on a larger scale, beyond the project specificities of geographic location, target group or local labour market. For this reason, we have made three overarching recommendations.

The first is that the pilots target several key barriers in the current system of demand and supply of apprenticeships to attract and retain more atypical groups. Based on the current evidence, these interventions should centre around effective employer engagement with pilot activities to improve the supply of apprenticeship opportunities. Given some of the evidence around the importance of employers' attitudes and recruitment practices in the construction sector, for example, such work could usefully focus on achieving attitudinal change among

employers in this sector. Pilot activity should also focus on improving the provision of workplace-based support and mentoring schemes, to improve take-up and completion rates among atypical groups. Lastly, pilot activities should focus on the much greater promotion of apprenticeships, particularly in schools, or through greater equality training for employers, staff, careers advisors and teachers.

The second is that the proposed pilots strengthen the existing evidence on good practice by involving formal evaluation of pilot activity. This would assess overall impact, but also highlight more robust conclusions about what works and why.

The third is that the proposed pilots are designed with the potential to mainstream key learning and good practice in the longer-term. This could be achieved by utilising existing organisational and partnership arrangements in pilot delivery to better ensure that such infrastructure continues even after the pilots have finished. This would ensure that key lessons are not confined to the specification of the project and location, but can be rolled out more widely.

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Appendix 1: Key Sources and Search Terms Used in the Literature Review

Sources of the literature review

For the rapid search of academic databases, we searched the following databases:

- International Bibliography of the Social Sciences
- ASSIA
- Emerald
- Ingenta
- Proquest
- Web of Science
- Business Source Premier
- Expanded Academic ASAP
- JSTOR
- Science Direct
- Wiley Interscience.

Other sources searched and consulted as part of the literature review included:

- Google scholar
- various literature relating to relevant projects and under-representation in work-based learning and apprenticeships (which were available in the public domain)

- project websites (where they existed)
- general web searches.

Parameters of the Database search

Primary search term for database search

Our primary search term within the academic databases were '**apprenticeship**' **or** '**apprentice**'. From this, we then searched within the relevant literature for the following secondary search terms (see below).

A decision was made against using the following primary search terms, in addition to the two listed above: 'work-based learning', 'vocational learning' and 'NVQ'. This decision was taken because of the likelihood that these additional search terms would yield a much greater, and less relevant volume of literature that could not be processed in the timescale of the project.

Secondary search terms for database search

The secondary search terms used were: 'completion', 'take up', 'gender', 'equality', 'ethnic minority', 'race', 'disability', 'age', 'mentor', 'mentoring', 'coaching', 'lessons', 'good practice', 'barriers', 'success', 'under-representation' and 'ethnicity.'

After these searches were completed, we also used the following search terms to cover literature relating to other equality strands: 'sexuality', 'gay', sexual orientation', 'religion', 'faith' and 'belief'.

Appendix 2: ILR Data Tables on apprenticeship starts 2008-9

Table A2.1: Number of Apprenticeship and Advanced Apprenticeship frameworks started by region of domicile and subject type (August 2008-January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	831	918	961	1213	2066	914	960	1595	1452	10910
Children's Care	655	1042	1000	473	1385	1080	763	1438	1172	9008
Electrotechnical	363	489	260	282	792	795	484	467	643	4575
Engineering	726	903	295	991	1452	2076	1372	1166	1095	10076
Retail	749	521	329	313	843	933	797	581	603	5669
Construction	928	1049	530	1104	2213	1414	1202	976	1336	10752
Plumbing	513	482	303	269	646	567	459	348	622	4209
Hairdressing	1092	981	860	754	1744	1617	1260	1093	1101	10502
Hospitality and Catering	682	1021	408	559	1224	1410	1305	903	946	8458
Active Leisure and Learning	378	270	411	147	620	596	442	441	297	3602
Health and Social Care	521	468	69	614	967	850	785	814	1109	6197

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Management	551	576	408	540	809	681	374	631	484	5054
Customer Service	1123	1125	971	891	1679	1514	1017	1516	1506	11342
Vehicle Maintenance and Repair	566	499	336	361	864	907	809	634	725	5701
Other subjects	2294	2275	2164	1749	3831	3931	3985	3580	5758	29567
Total	11972	12619	9305	10260	21135	19285	16014	16183	18849	135622

Source: IES analysis of ILR August 2008- January 2009

Table A2.2: Percentage distribution of Apprenticeship and Advanced Apprenticeship frameworks started by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	6.9	7.3	10.3	11.8	9.8	4.7	6.0	9.9	7.7	8.0
Children's Care Learning and Development	5.5	8.3	10.7	4.6	6.6	5.6	4.8	8.9	6.2	6.6
Electrotechnical	3.0	3.9	2.8	2.7	3.7	4.1	3.0	2.9	3.4	3.4
Engineering	6.1	7.2	3.2	9.7	6.9	10.8	8.6	7.2	5.8	7.4
Retail	6.3	4.1	3.5	3.1	4.0	4.8	5.0	3.6	3.2	4.2
Construction	7.8	8.3	5.7	10.8	10.5	7.3	7.5	6.0	7.1	7.9
Plumbing	4.3	3.8	3.3	2.6	3.1	2.9	2.9	2.2	3.3	3.1
Hairdressing	9.1	7.8	9.2	7.3	8.3	8.4	7.9	6.8	5.8	7.7
Hospitality and Catering	5.7	8.1	4.4	5.4	5.8	7.3	8.1	5.6	5.0	6.2
Active Leisure and Learning	3.2	2.1	4.4	1.4	2.9	3.1	2.8	2.7	1.6	2.7
Health and Social Care	4.4	3.7	0.7	6.0	4.6	4.4	4.9	5.0	5.9	4.6
Management	4.6	4.6	4.4	5.3	3.8	3.5	2.3	3.9	2.6	3.7
Customer Service	9.4	8.9	10.4	8.7	7.9	7.9	6.4	9.4	8.0	8.4
Vehicle Maintenance and Repair	4.7	4.0	3.6	3.5	4.1	4.7	5.1	3.9	3.8	4.2
Other subjects	19.2	18.0	23.3	17.0	18.1	20.4	24.9	22.1	30.5	21.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: IES analysis of ILR August 2008- January 2009

Table A2.3: Percentage of female Apprenticeship and Advanced Apprenticeship framework starts by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	82.2	81.9	76.7	82.7	79.4	83.6	84.1	80.5	85.1	81.6
Children's Care Learning and Development	96.8	97.1	96.4	96.8	97.3	97.6	97.9	96.6	97.1	97.1
Electrotechnical	1.1	2.0	1.2	1.1	0.9	1.0	1.7	0.6	1.2	1.2
Engineering	2.6	1.6	2.0	1.7	3.7	3.6	1.8	3.2	2.6	2.7
Retail	65.4	65.5	59.9	66.1	69.4	68.5	65.4	67.3	72.3	67.2
Construction	1.8	1.1	3.2	1.3	1.4	1.8	1.1	2.5	1.6	1.6
Plumbing	1.6	3.3	2.6	2.2	3.6	1.8	3.1	3.7	2.1	2.6
Hairdressing	88.8	92.7	89.3	93.0	92.8	89.6	91.7	90.9	91.9	91.2
Hospitality and Catering	54.8	57.9	53.7	56.2	53.3	46.2	51.6	50.9	60.5	53.3
Active Leisure and Learning	38.4	43.3	33.1	42.2	29.7	40.8	35.3	34.5	37.0	36.2
Health and Social Care	87.3	86.3	76.8	88.9	87.8	83.1	91.0	87.3	87.3	87.2
Management	58.4	62.2	68.4	68.3	65.6	57.9	58.8	67.5	62.2	63.3
Customer Service	69.2	71.9	60.8	73.5	70.8	66.1	69.0	67.9	68.7	68.6
Vehicle Maintenance and Repair	2.7	3.0	2.7	1.9	2.5	2.6	3.2	0.9	2.2	2.5
Other subjects	38.0	44.0	37.0	30.7	43.1	30.5	29.9	42.3	22.3	34.0
Total	48.3	50.4	51.4	47.7	49.1	42.7	43.5	52.1	43.4	47.2

Source: IES analysis of ILR August 2008- January 2009

Table A2.4: Ratio of the proportion of female Apprenticeship and Advanced Apprenticeship starts within sector and region against their representation within the region (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	1.70	1.63	1.49	1.73	1.62	1.96	1.93	1.54	1.96	1.73
Children's Care Learning and Development	2.00	1.93	1.87	2.03	1.98	2.28	2.25	1.85	2.24	2.06
Electrotechnical	0.02	0.04	0.02	0.02	0.02	0.02	0.04	0.01	0.03	0.02
Engineering	0.05	0.03	0.04	0.04	0.07	0.08	0.04	0.06	0.06	0.06
Retail	1.35	1.30	1.16	1.39	1.41	1.60	1.50	1.29	1.67	1.42
Construction	0.04	0.02	0.06	0.03	0.03	0.04	0.02	0.05	0.04	0.03
Plumbing	0.03	0.07	0.05	0.05	0.07	0.04	0.07	0.07	0.05	0.06
Hairdressing	1.84	1.84	1.74	1.95	1.89	2.10	2.11	1.74	2.12	1.93
Hospitality and Catering	1.14	1.15	1.04	1.18	1.08	1.08	1.19	0.98	1.39	1.13
Active Leisure and Learning	0.79	0.86	0.64	0.88	0.60	0.95	0.81	0.66	0.85	0.77
Health and Social Care	1.81	1.71	1.49	1.86	1.79	1.94	2.09	1.68	2.01	1.85
Management	1.21	1.23	1.33	1.43	1.34	1.35	1.35	1.30	1.43	1.34
Customer Service	1.43	1.43	1.18	1.54	1.44	1.55	1.59	1.30	1.58	1.45
Vehicle Maintenance and Repair	0.05	0.06	0.05	0.04	0.05	0.06	0.07	0.02	0.05	0.05
Other subjects	0.79	0.87	0.72	0.64	0.88	0.71	0.69	0.81	0.51	0.72
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IES analysis of ILR August 2008- January 2009

Table A2.5: Percentage of black Apprenticeship and Advanced Apprenticeship framework starts by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	1.8	1.6	16.0	0.1	0.4	1.0	0.2	2.9	0.6	2.4
Children's Care Learning and Development	1.5	1.6	13.9	0.4	0.4	0.6	0.3	2.7	0.4	2.5
Electrotechnical	0.6	1.0	4.2	0.0	0.1	0.8	0.4	1.9	0.5	0.9
Engineering	0.3	0.3	7.5	0.1	0.1	2.9	2.3	1.1	0.5	1.4
Retail	0.7	1.0	14.3	0.0	0.4	0.4	0.0	1.0	0.5	1.3
Construction	0.9	0.3	5.3	0.5	0.1	0.4	0.3	0.7	0.5	0.7
Plumbing	0.2	1.5	6.3	0.0	0.6	0.4	0.2	1.7	0.3	1.0
Hairdressing	0.1	0.2	4.3	0.1	0.3	0.1	0.1	0.5	0.2	0.5
Hospitality and Catering	1.6	0.4	13.5	0.4	1.0	2.3	0.5	1.6	0.4	1.7
Active Leisure and Learning	1.3	1.1	21.7	0.0	3.1	0.5	2.0	5.2	0.7	4.2
Health and Social Care	6.1	5.8	31.9	0.8	2.6	3.6	1.5	6.1	3.4	3.9
Management	1.1	0.9	12.5	0.6	0.4	0.9	0.5	3.2	0.6	2.0
Customer Service	0.9	1.3	12.7	0.0	0.9	1.3	0.3	3.8	1.1	2.3
Vehicle Maintenance and Repair	0.4	0.0	5.7	0.0	0.1	0.6	0.6	0.8	0.4	0.7
Other subjects	0.8	0.7	15.6	0.2	0.5	2.9	1.7	2.1	1.8	2.5
Total	1.1	1.0	12.4	0.2	0.6	1.6	0.9	2.3	1.1	1.9

Source: IES analysis of ILR August 2008- January 2009

Table A2.6: Ratio of the proportion of black Apprenticeship and Advanced Apprenticeship starts within sector and region against their representation within the region (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	1.68	1.64	1.29	0.37	0.73	0.62	0.23	1.27	0.57	1.25
Children's Care Learning and Development	1.42	1.63	1.12	1.89	0.61	0.41	0.28	1.17	0.39	1.31
Electrotechnical	0.51	1.02	0.34	0.00	0.21	0.47	0.45	0.83	0.43	0.45
Engineering	0.26	0.33	0.60	0.45	0.23	1.84	2.52	0.48	0.50	0.74
Retail	0.62	0.96	1.15	0.00	0.60	0.27	0.00	0.44	0.46	0.67
Construction	0.80	0.29	0.43	2.02	0.23	0.27	0.36	0.31	0.48	0.35
Plumbing	0.18	1.45	0.51	0.00	1.04	0.22	0.24	0.74	0.30	0.52
Hairdressing	0.08	0.20	0.35	0.59	0.58	0.04	0.09	0.24	0.17	0.28
Hospitality and Catering	1.50	0.39	1.09	1.60	1.64	1.42	0.58	0.67	0.39	0.87
Active Leisure and Learning	1.23	1.11	1.75	0.00	5.14	0.32	2.20	2.24	0.62	2.22
Health and Social Care	5.70	5.78	2.57	3.63	4.34	2.28	1.65	2.64	3.15	2.04
Management	1.01	0.87	1.01	2.48	0.62	0.55	0.58	1.36	0.57	1.02
Customer Service	0.83	1.34	1.02	0.00	1.50	0.83	0.32	1.62	0.98	1.19
Vehicle Maintenance and Repair	0.33	0.00	0.46	0.00	0.19	0.35	0.67	0.34	0.38	0.37
Other subjects	0.77	0.66	1.26	0.77	0.79	1.83	1.79	0.89	1.63	1.33
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IES analysis of ILR August 2008- January 2009

Table A2.7: Percentage of Asian Apprenticeship and Advanced Apprenticeship framework starts by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	3.0	3.4	19.6	1.6	5.1	4.7	1.3	11.1	6.0	6.3
Children's Care Learning and Development	8.4	6.5	15.2	4.0	6.8	4.7	4.1	12.3	15.0	9.1
Electrotechnical	1.1	0.4	2.3	0.0	0.8	0.5	0.0	0.9	1.6	0.8
Engineering	0.4	1.4	5.4	0.4	0.6	1.4	0.9	2.4	0.4	1.2
Retail	2.4	4.4	13.4	3.5	3.3	2.9	1.4	6.2	4.6	4.0
Construction	1.1	0.9	2.5	0.3	0.5	0.3	0.1	0.7	0.6	0.6
Plumbing	0.0	1.0	1.0	0.7	2.0	0.4	0.0	0.9	2.1	1.0
Hairdressing	0.2	0.6	2.2	0.3	0.6	0.2	0.2	1.3	1.1	0.7
Hospitality and Catering	0.4	0.9	7.6	0.2	0.4	3.9	0.7	1.0	0.4	1.5
Active Leisure and Learning	0.3	1.1	3.9	0.0	1.1	1.3	1.4	5.9	2.0	2.0
Health and Social Care	1.9	9.6	13.0	0.8	4.7	2.8	4.8	8.2	6.0	5.0
Management	2.0	4.7	11.5	0.6	2.8	3.2	2.4	10.5	1.9	4.3
Customer Service	2.7	3.7	13.6	2.1	4.2	2.8	2.3	9.4	5.1	5.1
Vehicle Maintenance and Repair	1.1	2.0	10.7	0.0	1.4	1.5	0.6	5.5	3.4	2.5
Other subjects	1.9	2.4	13.4	1.4	1.6	2.8	1.3	6.4	2.6	3.4
Total	1.9	2.7	10.8	1.1	2.4	2.3	1.3	6.3	3.6	3.3

Source: IES analysis of ILR August 2008- January 2009

Table A2.8: Ratio of the proportion of Asian Apprenticeship and Advanced Apprenticeship starts within sector and region against their representation within the region (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	1.62	1.23	1.82	1.43	2.16	2.06	0.94	1.76	1.68	1.89
Children's Care	4.53	2.37	1.41	3.68	2.85	2.07	3.07	1.95	4.20	2.73
Electrotechnical	0.59	0.15	0.21	0.00	0.32	0.22	0.00	0.14	0.43	0.24
Engineering	0.22	0.52	0.50	0.37	0.23	0.63	0.72	0.38	0.10	0.35
Retail	1.30	1.61	1.24	3.22	1.40	1.27	1.04	0.98	1.30	1.19
Construction	0.58	0.31	0.23	0.25	0.23	0.12	0.06	0.11	0.17	0.19
Plumbing	0.00	0.38	0.09	0.68	0.85	0.15	0.00	0.14	0.58	0.29
Hairdressing	0.10	0.22	0.21	0.24	0.24	0.08	0.12	0.20	0.30	0.20
Hospitality and Catering	0.24	0.32	0.71	0.16	0.17	1.71	0.52	0.16	0.12	0.45
Active Leisure and Learning	0.14	0.40	0.36	0.00	0.47	0.59	1.03	0.94	0.56	0.61
Health and Social Care	1.04	3.50	1.21	0.75	1.96	1.23	3.66	1.31	1.69	1.50
Management	1.08	1.70	1.07	0.51	1.19	1.41	1.82	1.66	0.52	1.28
Customer Service	1.44	1.36	1.26	1.95	1.78	1.24	1.71	1.49	1.43	1.53
Vehicle Maintenance and Repair	0.57	0.73	0.99	0.00	0.58	0.67	0.47	0.88	0.96	0.75
Other subjects	1.04	0.86	1.24	1.26	0.69	1.23	0.99	1.01	0.72	1.03

Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IES analysis of ILR August 2008- January 2009

Table A2.9: Percentage of Chinese or mixed ethnic group Apprenticeship and Advanced Apprenticeship framework starts by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	0.6	2.3	5.2	0.5	1.0	1.6	1.4	2.7	0.8	1.7
Children's Care	0.9	2.6	5.0	0.0	1.2	1.8	1.0	1.7	2.0	1.9
Electrotechnical	0.6	1.2	1.9	0.4	0.8	1.5	1.4	1.9	1.9	1.3
Engineering	1.0	1.0	4.1	0.6	0.8	1.6	0.9	1.1	0.9	1.1
Retail	1.2	1.3	6.1	0.0	1.5	1.1	0.6	1.7	0.8	1.4
Construction	1.6	1.0	3.4	0.4	0.5	1.1	1.2	1.2	1.1	1.1
Plumbing	1.2	1.5	4.6	0.7	0.6	1.2	0.4	1.4	0.8	1.2
Hairdressing	1.9	1.4	4.8	0.7	1.3	1.1	0.9	1.5	1.2	1.5
Hospitality and Catering	1.8	1.0	3.7	0.4	0.8	1.9	1.0	2.1	1.1	1.4
Active Leisure and Learning	1.1	2.6	7.8	0.7	2.3	1.7	1.4	3.6	3.4	2.8
Health and Social Care	1.0	1.1	11.6	0.2	1.3	1.1	0.3	2.1	1.4	1.2
Management	1.3	1.6	3.7	0.4	1.0	1.3	0.5	1.3	0.4	1.2
Customer Service	1.1	1.5	4.5	1.1	0.8	1.5	0.9	3.3	1.4	1.8
Vehicle Maintenance and Repair	1.2	0.6	5.1	0.6	0.2	0.7	0.6	1.3	0.8	1.0

Other subjects	2.2	1.6	6.7	0.7	1.1	2.3	1.4	3.1	1.6	2.2
Total	1.4	1.5	5.2	0.5	1.0	1.6	1.0	2.2	1.3	1.6

Source: IES analysis of ILR August 2008- January 2009

Table A2.10: Ratio of the proportion of Chinese or mixed ethnic group Apprenticeship and Advanced Apprenticeship starts within sector and region against their representation within the region (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	0.43	1.53	1.00	0.92	0.97	1.04	1.30	1.21	0.62	1.05
Children's Care	0.65	1.73	0.96	0.00	1.24	1.12	1.01	0.78	1.47	1.20
Electrotechnical	0.39	0.82	0.37	0.66	0.76	0.96	1.39	0.86	1.40	0.81
Engineering	0.69	0.67	0.78	1.13	0.83	1.01	0.91	0.50	0.68	0.71
Retail	0.86	0.90	1.17	0.00	1.55	0.68	0.60	0.77	0.62	0.86
Construction	1.15	0.70	0.65	0.68	0.55	0.72	1.12	0.55	0.84	0.67
Plumbing	0.83	0.97	0.89	1.39	0.62	0.78	0.42	0.64	0.60	0.76
Hairdressing	1.37	0.95	0.91	1.24	1.33	0.71	0.84	0.66	0.88	0.95
Hospitality and Catering	1.25	0.65	0.71	0.67	0.82	1.21	0.96	0.94	0.79	0.86
Active Leisure and Learning	0.75	1.73	1.49	1.27	2.27	1.06	1.30	1.63	2.52	1.72
Health and Social Care	0.68	0.71	2.22	0.30	1.35	0.67	0.24	0.94	1.01	0.75
Management	0.91	1.04	0.71	0.69	1.00	0.84	0.51	0.57	0.31	0.76
Customer Service	0.76	1.01	0.87	2.09	0.84	0.92	0.85	1.48	1.04	1.09
Vehicle Maintenance	0.88	0.40	0.97	1.03	0.23	0.42	0.59	0.57	0.62	0.61

and Repair										
Other subjects	1.56	1.06	1.28	1.39	1.10	1.47	1.37	1.38	1.21	1.33
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IES analysis of ILR August 2008- January 2009

Table A2.11: Percentage of white Apprenticeship and Advanced Apprenticeship framework starts by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	93.3	91.1	56.0	97.5	92.6	92.0	94.5	82.3	90.4	88.1
Children's Care	87.6	88.3	63.3	93.2	91.1	91.8	92.5	81.6	79.9	84.8
Electrotechnical	96.7	97.1	90.0	99.3	97.7	96.2	97.5	94.6	95.8	96.4
Engineering	97.8	96.8	78.6	98.5	98.3	93.4	95.0	94.3	98.2	95.6
Retail	95.1	91.2	58.4	95.2	93.4	94.6	94.5	89.3	92.4	91.3
Construction	95.2	97.5	87.0	97.7	96.6	97.0	96.8	96.1	96.8	96.2
Plumbing	97.7	95.9	85.8	97.0	96.6	96.6	97.6	95.1	96.6	95.9
Hairdressing	96.9	95.7	84.3	98.4	97.2	97.7	97.3	93.9	95.5	95.6
Hospitality and Catering	95.2	95.1	67.6	98.4	96.1	90.1	92.8	92.5	95.9	92.8
Active Leisure and Learning	96.8	95.2	60.3	99.3	92.4	95.0	94.8	84.6	91.6	89.4
Health and Social Care	90.6	79.3	40.6	97.6	87.8	90.7	92.1	81.6	86.7	87.8
Management	94.4	89.6	66.9	98.1	92.5	94.0	95.5	81.6	94.8	90.2

Customer Service	93.7	90.9	63.4	95.6	92.6	93.1	91.6	81.4	90.2	88.4
Vehicle Maintenance and Repair	97.0	97.0	75.0	98.3	97.6	95.3	96.4	90.7	94.6	94.5
Other subjects	93.8	94.1	59.4	97.0	95.5	90.2	93.7	86.0	92.7	90.1
Total	94.6	93.2	67.2	97.3	94.7	93.3	94.5	87.2	92.4	91.4

Source: IES analysis of ILR August 2008- January 2009

Table A2.12: Ratio of the proportion of white Apprenticeship and Advanced Apprenticeship starts within sector and region against their representation within the region (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	0.99	0.98	0.83	1.00	0.98	0.99	1.00	0.94	0.98	0.96
Children's Care	0.93	0.95	0.94	0.96	0.96	0.98	0.98	0.94	0.86	0.93
Electrotechnical	1.02	1.04	1.34	1.02	1.03	1.03	1.03	1.09	1.04	1.05
Engineering	1.03	1.04	1.17	1.01	1.04	1.00	1.01	1.08	1.06	1.05
Retail	1.01	0.98	0.87	0.98	0.99	1.01	1.00	1.02	1.00	1.00
Construction	1.01	1.05	1.29	1.00	1.02	1.04	1.02	1.10	1.05	1.05
Plumbing	1.03	1.03	1.28	1.00	1.02	1.04	1.03	1.09	1.05	1.05
Hairdressing	1.02	1.03	1.25	1.01	1.03	1.05	1.03	1.08	1.03	1.05
Hospitality and Catering	1.01	1.02	1.01	1.01	1.01	0.97	0.98	1.06	1.04	1.01
Active Leisure and Learning	1.02	1.02	0.90	1.02	0.98	1.02	1.00	0.97	0.99	0.98
Health and Social Care	0.96	0.85	0.60	1.00	0.93	0.97	0.97	0.94	0.94	0.96

Management	1.00	0.96	1.00	1.01	0.98	1.01	1.01	0.94	1.03	0.99
Customer Service	0.99	0.98	0.94	0.98	0.98	1.00	0.97	0.93	0.98	0.97
Vehicle Maintenance and Repair	1.03	1.04	1.12	1.01	1.03	1.02	1.02	1.04	1.02	1.03
Other subjects	0.99	1.01	0.88	1.00	1.01	0.97	0.99	0.99	1.00	0.98
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IES analysis of ILR August 2008- January 2009

Table A2.13: Percentage of Apprenticeship and Advanced Apprenticeship framework starts reporting learning difficulties and/or disabilities by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	16.0	13.4	13.7	7.6	8.1	13.1	12.2	9.8	11.4	11.1
Children's Care	15.3	17.0	16.7	10.1	15.5	16.6	12.7	17.0	20.2	16.2
Electrotechnical	5.0	3.5	7.3	2.8	2.7	7.5	5.2	3.9	4.8	4.7
Engineering	6.6	6.3	4.7	5.5	5.0	5.3	11.3	3.8	5.3	6.1
Retail	14.3	11.9	9.4	8.6	8.5	13.9	10.2	10.3	10.0	11.1
Construction	9.9	15.4	10.0	8.9	6.5	10.3	9.4	6.0	7.3	9.0
Plumbing	7.2	10.0	7.3	2.6	7.1	8.1	7.6	4.9	6.3	7.1
Hairdressing	15.7	19.0	13.6	13.0	17.8	18.6	13.8	12.8	13.3	15.6
Hospitality and Catering	7.5	6.3	6.4	6.6	8.3	9.4	10.9	8.6	7.3	8.3
Active Leisure and Learning	14.3	8.9	13.1	6.8	7.3	12.4	7.7	8.4	10.4	10.1

Health and Social Care	10.2	13.2	11.6	9.6	12.6	10.9	12.1	11.2	10.2	11.2
Management	19.8	19.8	18.6	5.2	5.8	16.2	10.2	11.1	11.4	12.8
Customer Service	18.6	14.6	15.3	8.2	6.4	18.0	12.9	9.6	9.5	12.3
Vehicle Maintenance and Repair	13.1	11.4	8.0	8.0	11.5	12.9	16.7	10.6	12.7	12.2
Other subjects	9.5	9.3	5.4	5.3	6.1	8.3	7.7	7.0	9.0	7.7
Total	12.3	12.1	10.9	7.4	8.5	11.5	10.5	9.1	9.8	10.2

Source: IES analysis of ILR August 2008- January 2009

Table A2.14: Ratio of the proportion of Apprenticeship and Advanced Apprenticeship starts reporting learning difficulties and/or disabilities within sector and region against their representation within the region (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	1.30	1.11	1.26	1.02	0.95	1.14	1.16	1.07	1.16	1.09
Children's Care	1.24	1.40	1.54	1.37	1.81	1.44	1.21	1.86	2.05	1.60
Electrotechnical	0.40	0.29	0.67	0.38	0.31	0.66	0.49	0.42	0.49	0.47
Engineering	0.54	0.52	0.44	0.75	0.58	0.46	1.08	0.41	0.54	0.60
Retail	1.16	0.98	0.87	1.16	1.00	1.21	0.97	1.13	1.01	1.09
Construction	0.81	1.27	0.92	1.20	0.76	0.90	0.90	0.66	0.75	0.88
Plumbing	0.59	0.82	0.67	0.35	0.84	0.71	0.73	0.53	0.64	0.69
Hairdressing	1.27	1.56	1.25	1.75	2.09	1.61	1.32	1.40	1.35	1.54
Hospitality and Catering	0.61	0.52	0.59	0.89	0.97	0.81	1.04	0.95	0.74	0.81
Active Leisure and	1.16	0.73	1.21	0.92	0.85	1.08	0.73	0.92	1.06	0.99

Learning										
Health and Social Care	0.83	1.09	1.07	1.29	1.48	0.95	1.15	1.22	1.04	1.10
Management	1.61	1.63	1.71	0.70	0.68	1.41	0.97	1.21	1.15	1.26
Customer Service	1.51	1.20	1.41	1.10	0.76	1.57	1.23	1.05	0.96	1.21
Vehicle Maintenance and Repair	1.06	0.94	0.74	1.08	1.35	1.12	1.59	1.16	1.29	1.20
Other subjects	0.77	0.77	0.50	0.72	0.71	0.72	0.73	0.77	0.91	0.76
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IES analysis of ILR August 2008- January 2009

Table A2.15: Percentage of Apprenticeship and Advanced Apprenticeship framework starts reporting learning difficulties by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	3.1	2.1	6.5	1.9	2.7	4.2	3.1	2.6	2.7	3.1
Children's Care	8.2	8.4	10.0	4.9	8.2	12.2	8.4	9.9	13.5	9.7
Electrotechnical	3.9	2.0	5.8	1.1	1.4	5.9	3.7	3.2	3.4	3.4
Engineering	1.8	3.8	3.7	2.0	2.3	4.1	8.7	2.4	3.5	3.8
Retail	6.0	3.3	4.3	1.9	4.5	6.1	4.6	3.6	4.8	4.7
Construction	8.7	13.4	8.7	7.2	4.2	7.9	7.0	3.4	5.4	6.9
Plumbing	6.0	7.5	5.6	1.5	4.5	6.3	5.0	4.0	4.2	5.1
Hairdressing	8.5	14.9	10.6	8.9	12.1	13.9	9.1	9.7	10.5	11.1
Hospitality and	4.7	4.3	3.2	3.9	6.0	7.5	6.9	6.1	4.7	5.7

Catering										
Active Leisure and Learning	12.4	6.7	7.1	5.4	4.2	9.7	7.0	4.1	8.8	7.2
Health and Social Care	7.3	6.2	8.7	8.3	9.3	7.8	8.3	6.6	5.3	7.4
Management	3.1	6.6	7.4	0.9	2.6	5.0	1.9	2.2	1.0	3.4
Customer Service	4.1	5.2	5.5	2.4	2.7	6.3	3.5	3.0	3.0	3.9
Vehicle Maintenance and Repair	9.9	7.8	7.4	4.2	10.2	9.2	12.0	7.9	10.5	9.3
Other subjects	5.1	5.4	2.4	2.5	3.1	5.6	5.3	4.6	7.1	4.9
Total	5.9	6.7	6.1	3.8	5.0	7.2	6.4	4.9	6.2	5.9

Source: IES analysis of ILR August 2008- January 2009

Table A2.16: Ratio of the proportion of Apprenticeship and Advanced Apprenticeship starts reporting learning difficulties within sector and region against their representation within the region (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	0.53	0.31	1.06	0.50	0.54	0.58	0.49	0.52	0.44	0.52
Children's Care	1.39	1.27	1.65	1.28	1.66	1.69	1.31	2.00	2.18	1.66
Electrotechnical	0.65	0.31	0.95	0.28	0.28	0.82	0.58	0.65	0.55	0.58
Engineering	0.30	0.57	0.61	0.53	0.47	0.57	1.36	0.49	0.56	0.65
Retail	1.01	0.49	0.70	0.50	0.91	0.85	0.72	0.73	0.78	0.80
Construction	1.47	2.02	1.43	1.88	0.85	1.09	1.09	0.68	0.87	1.18
Plumbing	1.02	1.12	0.92	0.39	0.91	0.88	0.78	0.81	0.68	0.88
Hairdressing	1.44	2.24	1.74	2.34	2.44	1.92	1.42	1.96	1.71	1.90

Hospitality and Catering	0.79	0.65	0.52	1.04	1.20	1.04	1.07	1.23	0.75	0.97
Active Leisure and Learning	2.10	1.00	1.16	1.43	0.85	1.35	1.09	0.83	1.42	1.24
Health and Social Care	1.23	0.93	1.43	2.19	1.88	1.08	1.29	1.34	0.86	1.26
Management	0.52	0.99	1.21	0.24	0.52	0.69	0.29	0.45	0.17	0.58
Customer Service	0.69	0.77	0.90	0.62	0.54	0.87	0.55	0.61	0.48	0.67
Vehicle Maintenance and Repair	1.67	1.17	1.23	1.09	2.05	1.27	1.87	1.60	1.70	1.59
Other subjects	0.86	0.81	0.40	0.65	0.63	0.77	0.83	0.92	1.15	0.84
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IES analysis of ILR August 2008- January 2009

Table A2.17: Percentage of Apprenticeship and Advanced Apprenticeship framework starts reporting disabilities by region of domicile and subject type (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	14.1	11.9	8.9	5.9	5.9	10.1	9.9	7.2	9.0	8.6
Children's Care	8.5	10.1	8.3	6.1	8.6	5.6	5.9	9.9	10.5	8.5
Electrotechnical	2.8	1.8	1.9	2.5	1.4	2.6	2.1	0.9	2.0	2.0
Engineering	5.0	3.4	1.7	4.3	3.0	1.5	3.6	1.8	2.3	2.8
Retail	11.1	10.0	6.7	7.0	5.6	9.9	6.6	8.3	6.1	8.0
Construction	1.5	3.0	5.5	2.4	3.1	2.1	3.1	1.4	2.0	2.6
Plumbing	1.0	2.9	1.7	1.1	2.8	2.8	2.6	0.3	2.3	2.1
Hairdressing	8.4	6.3	3.7	4.9	9.0	7.2	5.9	5.2	4.6	6.5

Hospitality and Catering	3.5	2.4	1.2	3.6	3.4	2.6	4.9	3.1	3.4	3.3
Active Leisure and Learning	3.4	3.3	2.9	2.7	2.9	3.2	2.3	2.3	4.7	3.0
Health and Social Care	3.6	8.5	2.9	1.8	4.3	3.6	5.4	5.5	5.9	4.8
Management	18.1	13.5	13.0	4.6	4.0	12.8	9.1	9.7	10.7	10.3
Customer Service	16.4	10.9	9.4	6.1	4.3	14.1	9.2	7.7	8.0	9.4
Vehicle Maintenance and Repair	4.1	4.0	2.1	4.7	2.9	4.5	6.8	4.1	3.7	4.2
Other subjects	5.4	4.8	3.5	3.2	3.5	3.7	3.3	3.4	2.4	3.5
Total	7.5	6.5	5.5	4.2	4.5	5.4	5.0	5.0	4.6	5.3

Source: IES analysis of ILR August 2008- January 2009

Table A2.18: Ratio of the proportion of Apprenticeship and Advanced Apprenticeship starts reporting disabilities within sector and region against their representation within the region (August 2008- January 2009)

	East Of England	East Midlands	Greater London	North East	North West	South East	South West	West Midlands	Yorkshire & Humberside	Total
Business Administration	1.87	1.84	1.62	1.41	1.31	1.88	1.97	1.44	1.96	1.64
Children's Care	1.14	1.56	1.51	1.48	1.91	1.05	1.17	1.98	2.28	1.61
Electrotechnical	0.37	0.28	0.35	0.60	0.31	0.49	0.41	0.17	0.44	0.37
Engineering	0.66	0.53	0.31	1.05	0.66	0.29	0.71	0.36	0.50	0.54
Retail	1.47	1.54	1.21	1.69	1.24	1.84	1.32	1.65	1.33	1.53
Construction	0.20	0.46	0.99	0.59	0.68	0.40	0.61	0.29	0.44	0.49
Plumbing	0.13	0.45	0.30	0.27	0.62	0.53	0.52	0.06	0.49	0.40
Hairdressing	1.12	0.98	0.67	1.18	2.00	1.35	1.17	1.04	1.01	1.23

Hospitality and Catering	0.47	0.36	0.22	0.86	0.76	0.48	0.98	0.62	0.73	0.62
Active Leisure and Learning	0.46	0.52	0.53	0.66	0.65	0.59	0.45	0.45	1.02	0.58
Health and Social Care	0.49	1.32	0.53	0.43	0.97	0.68	1.07	1.10	1.27	0.91
Management	2.41	2.09	2.36	1.12	0.88	2.38	1.81	1.93	2.33	1.97
Customer Service	2.18	1.69	1.70	1.46	0.97	2.62	1.84	1.53	1.74	1.79
Vehicle Maintenance and Repair	0.54	0.62	0.38	1.13	0.64	0.84	1.35	0.82	0.81	0.80
Other subjects	0.72	0.74	0.64	0.77	0.78	0.70	0.65	0.68	0.51	0.67
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IES analysis of ILR August 2008- January 2009