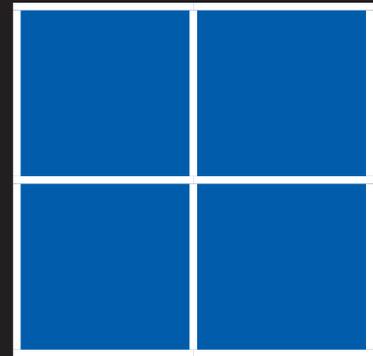


Supporting an Ageing Workforce: Implications for Working Life, Training and Skills Policy in England - a Literature Review

Lorna Unwin, Gayna Davey, Alison Fuller, and Pauline Leonard

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Supporting an Ageing Workforce: Implications for Working Life, Training and Skills Policy in England

A Literature Review

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1. Introduction

Over the past twenty or so years, the traditional linear model of life course transition (education-work-retirement) has become to be seen as increasingly inadequate given the changing nature of people's lives and their relationship to work. In response, new ways to explain and conceptualise transition have emerged, including Bauman's (2000) concept of 'liquid life', Beck's (1992) notion of individuals navigating their way through the 'risk society', and Giddens's (1991) notion of 'reflexive modernisation' (for discussion, see, inter alia, Evans and Helve, 2013; Field et al, 2013; Vickerstaff and Cox, 2005). The growing interest in studying transition across the life course, as opposed to focusing solely on young people's transition from education to work, is partly a reflection of the breakdown of a clearly defined age of exit from the labour market and recognition of increasingly individualised and fractured trajectories (see, inter alia, Bimrose and Brown, 2010; Fuller, 2007).

As the period of transition from schooling through to the labour market has gradually been extended in many countries, the notional age boundaries between 'young person', 'adult' and 'older' have shifted. The OECD (2010) reports that, internationally, the age range of 'young people' in some form of schooling, combined in varying degrees with some form of work, extends from 15 to 29 years. At the same time, governments and international agencies are adamant that the transition to retirement will be increasingly extended, with expectations that people will need to continue in paid work into their late 60s and beyond. These developments raise profound implications for education, workforce development, opportunities for career progression, the way work is organised, and employment relations.¹

In this literature review, we draw on research in relevant fields of inquiry, including: adult learning; life course transition; workplace learning; human resource management; sociology of work; and ageing and the workforce. There is a substantial and multi-disciplinary international literature in each of the first four fields, which are also informed by insights from political economy and policy studies, and a rapidly growing literature in the fifth. The review is structured into three main sections. First, we discuss the ways in which age is defined (often in stereotypical ways) in relation to work and in the light of the international

¹ A new multi-disciplinary research programme, 'Extending Working Lives', was launched in 2014 as part of the UK's Research Councils' 'Lifelong Health and Wellbeing' initiative. For details, see: <http://www.mrc.ac.uk/research/initiatives/lifelong-health-wellbeing/research-activities/> [accessed 15.12.2014]

drive to extend people's working lives. Secondly, we examine how views on age interact with the way organisations afford access to training and individuals' attitudes to learning at and for work. Finally, we discuss implications for skills policy in England. This concluding section explores the dominance of a qualifications-led approach to adult skills as exemplified in two key initiatives: a) Train to Gain; and b) Adult Apprenticeship.²

2. Defining and Extending Working Age

There has long been an assumption embedded within the policy literature that age is a defining feature of labour market participation and that there is a 'prime' working age. This is reinforced through the OECD's classification of the labour force in terms of three age groups: 15-24 year olds who are recent labour market entrants; 25-54 year olds who are in 'the prime of their working lives'; and 55-64 year olds, as 'those who have passed the peak of their career and are approaching retirement' (OECD, 2013: 132). The European Union (EU) uses the same classification (see Eurostat, 2014; Sinclair et al, 2013), though Nordic countries tend to define 'older workers' from the age of 45, which is also the age used by the Australian Bureau of Statistics (see Martin et al, 2014; Smith et al, 2010).

In their study of the common stereotypes used to portray older workers in the US, Ng and Feldman (2012: 824) argued the case for using 40 as an 'acceptable cut-off' stage in a working lifespan from 16-65 to distinguish 'older' from 'younger' workers. They note that, although this could be contested, particularly as 40 might seem an odd age to be deemed as 'old', but that this was 'consistent with both previous research and legal definitions' (ibid). From their analysis of the UK's ONS Opinions Survey for 2010/11, Sweiry and Willitts (2011) also found that the mean age at which survey respondents considered people stopped being young was 40.71 years, whilst the mean age for starting to be old was 59.21 years. These divisions seem increasingly out-dated, however, in the light of the drive in many advanced economies to extend working life in response to the impact on rates of employment due to falling birth rates, people living longer, and the social and economic cost of increasing dependency of ageing populations.

² A version of this literature review forms part of the research report prepared by the authors following their study of adult apprenticeship in England, funded by the Nuffield Foundation. This report presents a detailed statistical map of apprenticeship participation by individuals aged 25 and over and findings from a qualitative study of five organisations (in Social Care, Health Care, Transport, Hospitality and Energy) who employ and train adult apprentices, and from a longitudinal study of the experiences and perspectives of 25 adult apprentices.

The EU declared 2012 as the year of ‘active ageing and solidarity between generations’ (Cedefop, 2012: foreword). The concept of ‘active ageing’ was adopted by the World Health Organisation in 2002 and defined as: ‘the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age’ (WHO 2002: 12). A key aspect of the EU’s ‘2020 strategy’ to achieve a 75% employment rate for the 20-64 age group, is to increase the participation of older workers (EC 2010:8; Sinclair et al 2013). Walker and Maltby (2012: 121) point out that the EU began developing ageing-related policies in the early 1990s, when ‘the main policy discourse was still in the deserving or compassionate mode: older workers needed inclusion and equal opportunities’. They argue that now, ‘the dominant policy paradigm across the globe is the economic one of working longer’ (ibid: 119) and add that, ‘The reality of the labour market experience of large numbers of older workers in most EU countries is exclusion from employment’ (ibid). Walker and Maltby (ibid) contrast the concept of ‘active ageing’ with that of, ‘successful ageing’ as introduced by Rowe and Kahn (1987) during their pioneering multi-disciplinary study of older people in the US. Rowe and Kahn challenged the existing notion of ‘normal ageing’ prevalent in gerontology at the time by showing that there was substantial heterogeneity among older people in terms of the way they lived and behaved and that this increased with age. Their concept of ‘successful ageing’ combines three overlapping dimensions: a) avoiding disease; b) maintaining high cognitive and physical function; and c) engagement with life. Walker and Maltby (2012: 119) call for a ‘new paradigm of active ageing’, one that ‘reflects the gerontological heritage as well as the policy imperatives’, in order to overcome the ‘traditional age-segregated life-course model of education, work and employment into a more age-integrated approach where all three span the whole life course’.

The UK government defines the ‘older’ worker as someone between age 50 and the State Pension Age (SPA), though the latter is set to rise over the coming years to reach 67 for men by 2026 and 67 for women by 2028. This follows legislation introduced in 2011 to abolish the default retirement age of 65 and a policy drive to encourage more people to stay in work for longer (DWP, 2014). Since then the employment rate for those aged 65 and over has risen from 8.6% in 2011 to 10.1% in 2014. This represents an increase of 229,000 people. The figure for males has risen from 526,000 to 643,000 and for women from 348,000 to 460,000³.

³ See <https://www.gov.uk/government/news/older-peoples-day-1-million-in-work-over-65-3-years-since-end-of-default-retirement-age> [accessed 12.1.2015]

Age discrimination legislation was introduced in the UK in 2006 and was further developed in the 2010 Equality Act, which included protection against discrimination for people of any age if the less favourable treatment is based on their age. This means it applies equally to people of all ages and includes: employees and job applicants; ex-employees; apprentices; people seeking or undertaking vocational training; and contract and agency workers. The economic argument for these policies has been made in a report for the Department for Work and Pensions by researchers at the National Institute of Economic and Social Research who found that, as well as increasing the supply of labour, extending working life raises the potential levels of Gross Domestic Product (GDP) and consumption and boosts tax revenues (Barrell et al, 2011). McNair (2011: 1) argues that the age of 50 has strong resonance in the UK because it marks the point when there is: a) a decline in labour market participation; b) reported age discrimination; and c) growing awareness of approaching retirement.

The abolition or extension of mandatory retirement ages is now being pursued in many countries (see Wood et al, 2010; Field et al, 2013). The US and New Zealand were relatively early adopters in this regard having abolished mandatory retirement in 1986 and between 1993 and 1999 respectively. An OECD report in 2006 gave a further boost to the trend by calling for a comprehensive change in policy and a cultural shift to ensure that people could extend their stay in employment. The OECD (2006) used the device of the ‘age dependency ratio’, which calculates the age structure of the population and the number of individuals that are likely to be dependent on the support of others in relation to the number of individuals capable of providing that support. The ratio of older inactive individuals per worker is set to almost double from around 38 per cent in 2000 to over 70 per cent by 2050, whilst in Europe, the ratio will be one to one. The trend is particularly pronounced in Saudi Arabia, China, Korea, Brazil, Turkey and Indonesia (Johansson et al, 2013: 11). As Vickerstaff (2010: 869) notes, an ageing population is ‘increasingly being reframed as a major social, economic and political problem’, in particular because it is seen to ‘unbalance the established inter-generational contract on which many welfare states are based, namely that current prime age workers pay for the pensions and health care of the retired’.

The global drive to extend working life has put into reverse the early retirement trend of the 1980s and 1990s, which, as Phillipson (2013: 151) argues, ‘accelerated the growth of post-work lifestyles, consolidated by the cohort of ‘first wave’ baby boomers (those born in the 1940s and early 1950s)’. Phillipson (ibid) adds that, ‘Both aspects are now in collision with

the drive to delay retirement and put in place later pension ages'. Drawing on data from five UK-based surveys of the employment experiences of over 22,000 workers taken from 1986 to 2006, Felstead (2010a) observed that, unlike in previous recessions when older workers were encouraged and able to take early retirement, its attractions have diminished as pension funds have shrunk and government has encouraged the extension of working life as one solution to the financial consequences of an ageing population.

3. Workplace Practices, Training and Quality of Work

There is a long-standing and extensive literature on the ways in which workplaces are organised, including who gets access to training and promotion, who gets to be involved in decision-making, and the relationship between these factors and the quality of work itself (see, inter alia, Warhurst et al, 2012; Felstead et al, 2009; Green, 2006; Rainbird et al, 2004). The concept of the workplace as a learning environment and the ways in which individuals can be said to learn in the workplace has also generated a considerable body of research (see for a review, Fuller and Unwin, 2011). Given the mandatory requirement for adult apprentices to achieve Level 2 in Functional Skills, the OECD's findings from the first round of its Programme for the International Assessment of Adult Competencies (PIAAC) are highly relevant for our study. The findings showed that newly acquired skills need to be used and refined through use in the workplace. This aligns with research by Wolf and Evans (2010) on the problems faced by employees who are trying to improve their competence in literacy, numeracy and ICT, yet find they have limited opportunity to practice these skills due to the nature of their jobs. Similarly, we note the findings of Wanrooy et al (2013) that unionised workplaces and those in the public sector are more likely to display higher levels of training.

The overwhelming picture from the literature is one of employer discrimination towards older workers and a reluctance to plan for the demographic changes highlighted earlier in this review (see, inter alia, Martin et al, 2014; Parry and Tyson, 2010; Taylor, 2013). In their meta-analysis of 418 empirical studies, Ng and Feldman (2012) identified six common stereotypes portraying older workers as being:

- less motivated
- generally less willing to participate in training and career development
- more resistant and less willing to change

- less trusting
- less healthy
- more vulnerable to work-family imbalance.

They found that the only stereotype that was consistent with the empirical evidence was that older workers are less willing to participate in training and career development. Loretto and White (2006) argue that there is an ‘enactment gap’ between the stated equality policies of organisations and actual practice and behaviour on the other (see also McVittie et al, 2003). Van Dalen and Henkens (2005) remind us, however, that some employees hold even stronger stereotypical views than senior managers. Yet, again, we have to be careful not to fall into the stereotyping trap ourselves and condemn all workplaces as they vary considerably in how they organise themselves as learning (see Felstead et al 2009; Fuller and Unwin 2004a). One study that highlights this is McBride’s (2011) research on female workers’ access to training in the National Health Service. She highlighted the positive influence of ‘enthusiastic local actors’ (corporate staff, workforce development managers and external actors) who were facilitating women’s training and development (ibid: 543).

Age is, of course, a culturally dependent concept, whose significance and consequences within the workplace are filtered through organisational and occupational practice (Loretto and White 2006). Furthermore, each occupational context offers an extra mediating factor. A particularly prevalent stereotype is that older workers are resistant to change and tend to display reduced potential for development than their younger colleagues (Posthuma and Campion, 2009). This stereotype is particularly pervasive in the IT sector. From their research in the IT sector in Canada, Australia, the US and the UK, McMullin and Duerden Commeau (2011:148-9) found that ‘ageist beliefs in regard to learning and technological adaptation’ were ‘shared and normative among workers and managers and younger and older respondents’. In this research, ‘older’ meant anyone aged 40 or over. In contrast, research in Germany by Bertschek and Meyer (2008) found that workers older than 49 were not significantly less productive than prime age workers between 30 and 49, though older workers who used a computer were significantly more productive than older non-computer users.

McCarthy et al’s (2014) study of the views of over 400 managers and supervisors in industries across Ireland suggests, however, that ageist views transcend sector. Their survey found ‘older’ was defined on a scale from 28 to 75 years of age, with a mean age of 52.4

years. Their survey also confirmed the findings from previous research to show that, the older the manager or supervisor, the older they set the age of being an ‘older worker’ and that older workers tend to display ‘more positive stereotypes towards older workers than (chronologically) ‘younger’ employees (ibid: 14).

The gendered nature of work and the ways in which men and women are regarded in the workplace are themes that appear in the literature on apprenticeship as well as in research more generally (see, *inter alia*, Ainsworth, 2002; Moore, 2009; Fuller and Unwin, 2013b). A study by Grant et al (2006) in six local labour markets across England explored why women work in low-paid roles. The study highlighted how the concept of working ‘below their potential’ (defined in relation to levels of qualification and experience including at supervisor/management level) was associated with gender in that, whereas part-time, low-paid work is associated with young and pre-retirement males, it was a feature across the working lives for women in their 30s, 40s and 50s. As such, the propensity of women to spend their apparently ‘prime’ career stage in such employment raises questions about the motivations or requirements for work-related training. In this study, the attitudes of line managers revealed not only a pervasive attitude that ‘working below potential’ was a positive choice, but also ignorance of the workers’ previously acquired skills and experience.

As the literature amply demonstrates, the ways in which individual employees respond to opportunities to enhance their skills or to invitations to participate in training (which may occur despite their actual level of expertise) have to be considered in relation to a wide range of factors. In his review of the UK Skills Surveys, Felstead (2010a: 1309) found that approximately two-thirds of older men and women (50+ age group) said that they ‘did not want any training’, as compared to between one-third and two-fifths of younger workers. He also examined whether the drive to prolong working lives has been at the expense of a poorer quality of working experience for older workers. Whilst observing an improving situation for older workers’ employment experience based on some measures, including the skill content of jobs, he concluded that the opportunity for training and the duration of training remains different by age (2010:1311; see also Canduela et al, 2012; McNair 2011; Smeaton et al, 2009). Furthermore, ‘men and women in their fifties who received training were a little less likely than their younger counterparts to say that it had improved their skills and working practices. More notably, the training they received was far less likely to result in a pay rise or to add to their enjoyment of work’ (ibid: 1308).

From his analysis of Labour Force Survey data on the relationship between training and labour market participation for adults from age 25, together with survey and telephone interview data from individuals and organisations across Austria, Schmid (2012) found that closeness to retirement led to a decrease in training participation. He also found, however, little difference in outcomes of training across the age groups and concluded that chronological age on its own played a minor role. Rather, he argued, we need to understand the ‘complex interplay of educational level, occupational status, company environments (provision of time and cost incentives for the employee as well as sector-specific differences in training needs) and individual cost-benefit considerations’ in terms of how decisions are made to participate in training. These findings problematise any straightforward relationship between training and ageing, and instead direct our attention to the heterogeneity of older workers and the organisations in which they work (see also Froehlich et al, 2014). From their study of employee perspectives about older workers in the Dutch construction industry, Kooij et al (2014) argue that Human Resource (HR) practices need to be reconfigured in order to address this heterogeneity. They propose that HR practices need to be ‘bundled’ together in four categories: accommodative (e.g. part-time work, semi-retirement); maintenance (e.g. measures to enable older workers to continue functioning at their current level of work); utilisation (adapting work in order to make full use of workers’ experience); and development (training opportunities). Their emphasis is on lateral practices (such as job rotation and getting older workers to use their experience by leading or being involved in special projects) rather than on practices based on the assumption that workers are on an upward career trajectory.

As the normative age thresholds mapping out the life course have been questioned, there has been renewed interest in the explanatory potential of the concept of ‘generation’, which was developed by the German sociologist, Karl Mannheim in the 1920s and 30s (see Biesta et al, 2011, for a discussion). Generations are seen to be formed through a ‘common location in historical time and ... a distinct consciousness of that historical position...shaped by the events and experiences of that time’ (Gilleard, 2004: 108). The concept of generation can be used to make sense of the way a group’s shared position, more than age itself, influences attitudes and orientations to work and learning. This has influenced a strand of research, which has hypothesised that there are generational differences in relation to people’s work values including organisational commitment. From their analysis of this research, however,

Parry and Urwin (2011) conclude that, as yet, based on existing empirical evidence, it is not possible to make a robust case to support such a claim and argue that, ‘future academic research should continue to work on disentangling the effects of age, career stage, cohort and period’ and consider the impact on gender and race (ibid: 93). Felstead’s (2010b) analysis of the UK Skills Surveys from 1991 to 2006 shows the danger of assuming that older generations will remain more committed to their workplaces than younger ones. He found that whilst organisational commitment among people aged 50 and over was relatively high during the 1990s, it fell sharply in the 2000s. The fall was particularly strong in the public sector and was stronger for men than women.

Nevertheless, the feeling of belonging to or associating one’s self with a particular generation is a powerful and enduring sensibility, one that can have both positive and negative connotations. McMullin et al (2007) used ‘generational affinity’ with computing technology to explain the ways in which age norms are ascribed to generational groups within the working environment. Groups identify with particular technologies or cultural phenomena as ‘natural’ parts of that generation’s coming of age. The seemingly natural, taken-for-granted distinctions made through technological affinities draw our attention to the way in which ‘otherness’ is constructed in the workplace. The influence of stereotypes and how they create workplace cultures is important for our understanding of how organisations treat different groups of workers. The focus on age, particularly in public policy, fails to recognise that it is unable to explain very different experiences across the workforce (see Radl, 2012). Individual characteristics such as gender, race, class and health, add layer upon layer of complexity to and intersect with age. Duncan and Loretto (2004) have argued that the concept of ‘ageism’ is now increasingly being used to refer to discrimination in general rather than being confined to the experiences of ‘older’ workers. This is confirmed by Parry and Harris’s (2011: 12) finding from a review of workplace practices in the UK that, ‘Despite anti-age discrimination legislation, stereotypical attitudes about both older and younger workers appear to be both widespread and well embedded’ (see also Tikkanen and Nyhan, 2006; Brooke and Taylor, 2005; Fuller and Unwin, 2004b). This poses a challenge to Billett et al’s (2011: 1259) argument that older workers will also have to take responsibility “individually and collectively, and become agentic learners and workplace participants”.

4. Implications for Skills Policy in England

There is a considerable and largely critical literature on the way successive governments in England have developed and implemented policies aimed at improving the skills of the workforce, regardless of age. This effort has been particularly intense over the past twenty or so years, during which, as Ewart Keep (2014: 4) has argued:

... we have run a great deal harder in producing skills than we used to, particularly in terms of amassing stockpiles of qualifications, but other countries have run harder still, and appear better able to put the enhanced skills of their workforce to productive use. This outcome is not entirely surprising because traditional English skills policies have only ever really addressed the supply side, and have ignored problems bound up with deficiencies in the underlying levels of demand for skill within the economy, and also the issue of how effectively skills are deployed within the workplace.

The drive to stockpile qualifications was behind two initiatives that have dominated England's approach to the challenge of an ageing workforce since the early 2000s. In 2003, the then Labour Government published a White Paper focused on addressing the UK's seemingly perennial skills problem and the barriers it presented to the country's economic competitiveness and productivity (DfES, 2003). One of the proposals was lifting the age limit on apprenticeships so that 'more older learners can participate and bringing in a wider range of employers' (ibid: 22). Sector Skills Councils (SSCs) would be asked to work with employers to design apprenticeship programmes for adults aged 25 and over. In 2005, the then Modern Apprenticeship Taskforce informed government that the Learning and Skills Council (LSC) was not going to meet its Public Sector Agreement (PSA) target for apprenticeship numbers. At the same time, the LSC was aware that some large employers wanted to offer apprenticeships to their older employees as well as recruit younger apprentices. In addition, the LSC was being lobbied by employers in three specific sectors about the need to provide retraining and upskilling for adults: a) the care sector, which was having to respond to the requirement of the 2000 Care Standards Act that 50 per cent of employees in care homes should be qualified to NVQ Level 2; b) the engineering sector; and c) the IT sector.

In response to these demands, the LSC launched an initiative to fund the training and assessment required for adult employees to gain a first Level 2 NVQ. The LSC also produced an internal paper for the then Minister for Skills, Ivan Lewis, proposing the development of adult apprenticeships. Four pilot programmes were run, but there are no

publicly available records of any evaluation. There was some concern in the LSC at the time about the potential for deadweight (employers taking public funds for training they would otherwise have funded themselves). There was also a concern that adult apprenticeship should not be used as a vehicle for accrediting (through NVQs) existing employees for skills they already possessed. In 2006, the government-commissioned *Leitch Review of Skills* set out a detailed, target-driven agenda for improving adult skills (including literacy and numeracy), stating that, ‘More adult apprenticeships will be available for those individuals and employers who wish to fill skill gaps’ (Leitch 2006: 24). It also called for apprenticeship numbers as a whole to be boosted to 400,000 per year (in England). The following key phrase in Leitch shows how the then Labour government was trying to balance competitiveness and social inclusion goals: “...skills is the most important lever within our control to create wealth and to reduce social deprivation” (ibid: 2). A key target for Leitch was to increase the numbers of adults with nationally recognised qualifications at Level 2 and above so that the UK could rise up the international league tables for education and training (see Payne, 2009).

In August 2006 and as a response to Leitch, the *Train to Gain* initiative was launched. Lanning and Lawton (2012: 19) have called this, ‘the flagship programme for Labour’s qualifications agenda in adult skills policy’. This initiative had ambitious aims in relation to boosting the qualification levels of adults (particularly in relation to NVQs at Levels 2 and 3), including making training providers (including FE colleges) more responsive to employer demands for flexible, workplace-based training, and providing a skills brokerage service for employers (NAO 2009). By 2008/09, *Train to Gain* accounted for one third of England’s total adult skills budget. Subsequent evaluations of the effectiveness of the initiative have been very critical pointing to considerable deadweight, fraudulent practices by some training providers, and doubts about the extent to which the employment and career prospects of adult employees were sufficiently enhanced (ibid, see also (see e.g. Ofsted 2008). It is important to note that at the heart of *Train to Gain* was the use of competence-based qualifications (NVQs) to accredit the existing skills of adult employees. This key feature is also at the heart of the apprenticeship programme in England and is of particular importance to apprenticeships for adults aged 25 and over.

In England, the government-supported apprenticeship programme is currently available at Level 2 (broadly equivalent to five GCSEs at grades A* to C), known as Intermediate

Apprenticeship, and Level 3 (broadly equivalent to two A-level passes), known as Advanced Apprenticeship. There is also a Higher Apprenticeship programme (Level 4 and above), but numbers participating at this level are currently small (9,800 total starts in 2012/13). Since the government-supported apprenticeship programme was introduced in 1994 (then known as Modern Apprenticeship and only available at Level 3)⁴, successive governments have invested in expanding the programme, although significant investment only began in the early 2000s.

Initially, government funding was provided for two age groups: 16-18 and 19-24. In 2008, at the same time as the *Train to Gain* initiative had become firmly established, the Labour government produced its plans for developing its apprenticeship programme (DIUS/DCSF 2008). This included the following rationale for additional funding for adult apprenticeships:

For certain groups of adults – those facing a career change, those entering the labour market for the first time or those coming back to work after an extended break due to caring responsibilities – an Apprenticeship can be a highly effective way of making such a transition. (ibid: 15-16)

When the Coalition Government was elected in May 2010, one of its first policy announcements was that the *Train to Gain* initiative would be abolished and its funding allocation switched to apprenticeships. The Conservative Party (2008) had proposed this in a policy paper prior to the 2010 General Election. The paper bemoaned the ‘tick-box culture’ of assessing employees’ existing skills and the overall poor quality of apprenticeships (ibid: 19) and announced that a future Conservative government would invest in ‘real apprenticeships of all ages’ (ibid: 21).

In continental Europe, apprenticeship still tends to be conceived as part of the initial vocational education and training system for school leavers and public perception in many countries would equate apprenticeship with young people (Fuller and Unwin, 2013a). In the United States (US) and Canada, however, individuals typically enter government-recognised ‘registered apprenticeships’ in their late 20s (see Lerman, 2013; Meredith, 2013). As Lerman (2013: 110) notes, the relatively high age of entry in the US, coupled with the very limited connections between apprenticeship and schools and colleges, “are reasons why they are largely invisible to education providers and policy-makers”. Despite the US experience and

⁴ In 2004, the then Labour government changed the name from Modern Apprenticeship to Apprenticeships and included the existing Level 2 National Traineeships (see Fuller and Unwin, 2003 and Unwin and Wellington, 2001, for critiques of Modern Apprenticeship).

the fact that apprentices in Europe can also be in their 20s, the concept of ‘adult apprenticeship’ is a policy construct currently found only in Australia (where the age restriction on government-funded apprenticeship was relaxed in 1992) and the UK. Three studies provide valuable overviews: a 2006 report by the National Centre for Vocational Education Research (NCVER) in Australia (Karmel, 2006); and two reports from the UK’s National Audit Office (NAO, 2009 & 2012) and the House of Commons Committee of Public Accounts (2012). There has also been some research on adult apprentices in Australia’s construction industry (Sparks et al, 2009).

The latest available full-year official administrative statistics for England (2012-13) show that the majority of apprentices are aged 19 or over when they start their apprenticeship and 45% are aged 25 and over (and, approximately 3,200 adults aged 60 or over started an apprenticeship):

- age 25+ - 230,300 (45% of all starts)
- age 19-24 - 165,400 (32% of all starts)
- age under-19 - 114,500 (22% of all starts)

Source: <https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships> [accessed 20.2.2015]

There are no publicly available official administrative statistics tracking the number and type of employers participating in the programme or the number of apprentice ‘conversions’. Although the starting age of apprentices in Europe has been getting older due to the delayed nature of transitions from education to the labour market, England stands out because it has such a large proportion of older adults who join an apprenticeship whilst they are with their existing employer – a practice known as ‘conversion’. When Fuller and Unwin acted as specialist advisers to the Innovation, Universities, Science and Skills Select Committee’s Scrutiny of the Draft Apprenticeships Bill in 2007/08, the Committee pursued this matter with witnesses from the then Learning and Skills Council and noted that:

We established during the course of the inquiry that the majority of apprentices were not new recruits to a business but existing employees who are in work and who “convert” from their current jobs to apprenticeships with the same employer. (House of Commons 2009)

The Select Committee recommended that official statistics should differentiate between apprentices recruited to a new position with an employer and those who had been

‘converted’. In its response, the then government agreed this should be done, though stated that the earliest date for the change would be from August 1st 2010. Four years later, this change has still not been made. This makes it impossible to develop a clear picture of which employers (in both the public and private sector) are using apprenticeship as a vehicle for training older employees rather than recruiting 16-18 year olds. It must also be remembered that some 16-18 year old apprentices are also ‘conversions’. The reason that this matter is serious for both adults and young people is that there is still a possibility that apprentices are being accredited for what they already know. Furthermore, it suggests that government and its agencies responsible for the funding, promotion and management of apprenticeship are still focusing primarily on quantity rather than quality. Providing funding for the ‘conversion’ of existing employees has been a major catalyst for the rapid increase in the number of apprentices in recent years.

In his review of apprenticeship, commissioned by government in 2012, Doug Richard acknowledged the ‘conversion’ problem and began his list of recommendations with this statement:

Apprenticeships should be redefined. They should be clearly targeted at those who are new to a job or role that requires sustained and substantial training. Training and accreditation of existing workers that are already fully competent in their jobs should be delivered separately. (Richard 2012:17)

In its response, government stated that:

Apprenticeships will be available to new and existing employees, but should only be offered to the latter where substantial training is required to achieve competency in their occupation. (BIS 2013: 10)

There is considerable slippage here from Richard’s recommendation that apprenticeship be ‘redefined’ so that it is clearly aimed at individuals who are newly recruited to a job or to a new role. Current government policy is clearly to continue with the practice of conversions, albeit with the caveat that ‘substantial training’ should be involved. It is not clear how government will police this caveat given that it does not collect data on ‘conversions’. There are strong social justice and motivational arguments for enabling adults to gain accreditation for the skills they have acquired through their work experience. Qualifications continue to play an important role in the UK and other countries in relation to gaining access to and progression within the labour market and further and higher education. When qualifications

are gained purely through workplace assessment, the critical question is to what extent they are regarded as having the same exchange value as those gained through participation in formal education (see, *inter alia*, Smith and Smith, 2011; Fuller, 2001; Fuller and Unwin 1999). Furthermore, if adult apprentices are not engaged in the ‘substantial training’ referred to in the above quotation from BIS (2013:10), we have to ask whether the appropriation of the term ‘apprenticeship’ as a label for standard in-house workforce development training is misleading and potentially detrimental to the reputation of apprenticeship more generally (Fuller and Unwin, 2014 and 2012).

5. Conclusion

This review has examined the growing literature on the relationship between ageing, skill formation, retraining and upskilling, and workplace behaviours related to older workers. It is clear that long-held assumptions about work, training and age are being challenged in many countries (as well as by the EU and OECD), particularly in the light of extended life spans and working lives. There are signs of a shift away from Tikkanen’s (2011: 1217) depiction of how ageing has previously been perceived:

Historically, the socio-economic discussion on growing older beyond midlife has been coloured by a stereotypical (‘mythical’), medicalised view of ageing, i.e. one characterized by sickness, decline and loss. In this view, the management challenge in the workplace has been to find a solution to the problem of ageing workers, i.e. their loss in ability and decline in performance.

In a recent report focusing on the challenge of an ageing workforce across the EU, Sinclair et al (2013) highlighted negative attitudes to ageing and the uneven availability of opportunities for adult learning and retraining across member states. They called for a life course approach to supporting the reality of more people working for longer. However, as well as policies targeted at supply-side issues, they argued that this should include a stronger focus on how Europe’s economy can improve its capacity to create, “the right sort of jobs to meet the needs and wishes of the supply of older workers.” (ibid, p.4)

In the UK, people aged over 50 form 27% of the workforce and this is set to rise to one third by 2020 (DWP, 2013). In 2010, a report of a survey of over 1,000 members of the Chartered Institute of Personnel and Development and the Chartered Management Institute showed that there were signs of a shift away from negative stereotyping of older workers (Macleod et al,

2010). The report also noted, however, that only 14% of managers and HR professionals considered their organisation to be well-prepared for an ageing workforce and only 7% offered training to managers in supporting older workers. In addition, it was reported that 59% of respondents to the survey said young managers found it hard to manage older workers. The organisation of work and workplaces will have to adapt to a different demographic dynamic over the coming years.

Whilst it is clear from this review that the amount of relevant research into these issues is on the increase, government policies and workplace practices in the UK will need to embrace the challenge of an ageing workforce. This will require a more holistic and qualitative approach to workforce development in contrast to the reliance on increasing the number of qualifications in the population and on counting the number of days that employees spend participating in training.

6. References

- Ainsworth, S. (2002) 'The feminine advantage: a discursive analysis of the invisibility of older women workers', *Gender, Work and Organisation* 9, 5, 579-601
- Barrell, R., Kirby, S. and Orazgani, A. (2011) 'The macroeconomic impact from extending working lives', *DWP Working Paper 95*, London: Department for Work and Pensions
- Bauman, Z. (2000) *Liquid Modernity*. Cambridge: Polity Press
- Beck, U. (1992) *Risk Society*. London: SAGE
- Bertschek, J. and Meyer, J. (2008) 'Do older workers lower IT-enabled productivity?: Firm-level evidence from Germany', Discussion Paper No. 08-129. Mannheim: ZEW, Centre for European Economic Research
- Biesta, G., Field, J., Hodkinson, P., Macleod, F. and Goodson, I. (2011) *Improving Learning through the Lifecourse*. London: Routledge
- Billett, S., Dymock, D., Johnson, G. and Martin, G. (2011) 'Overcoming the paradox of employers' views about older workers', *International Journal of Human Resource Management*, 22, 6, 1248-1261
- Bimrose, J. and Brown, A. (2010) 'Older workers' transitions in work-related learning, careers and identities' in K. Ecclestone, G. Biesta and M. Hughes (eds) *Transitions and Learning through the Lifecourse*. London: Routledge
- BIS (2013) *The Future of Apprenticeships in England: Implementation Plan*. London: Department for Business, Innovation and Skills

Brooke, L. and Taylor, P. (2005) 'Older workers and employment: managing aged relations', *Ageing and Society*, 25, 3, 415-429

Canduela, J., Dutton, M., Johnson, S., Lindsay, C., McQuaid, R.W. and Raeside, R. (2012) 'Ageing, skills and participation in work-related training in Britain: assessing the position of older workers', *Work, Employment and Society*, 26, 1, 42-60

Cedefop (2012) *Working and Ageing. The Benefits of Investing in and Ageing Workforce*. Luxembourg: Publications Office of the European Union

Conservative Party (2008) *Building Skills, Transforming Lives: A Training and Apprenticeships Revolution*, Policy Green Paper 7. London: Conservative Party

DfES (2003) *21st Century Skills: Realising our potential*, Cm 5810. London: HMSO

DIUS/DCSF (2008) *World-Class Apprenticeships: Unlocking Talent, Building Skills for All*. London: HMSO

Duncan and Loretto (2004) 'Never the right Age?' Gender and age-based discrimination in employment', *Gender, Work and Organisation*, 11, 1, 95-115

DWP (2014) *Fuller Working Lives – a Framework for Action*. London: Department for Work and Pensions

DWP (2013) *Employing Older Workers*. London: Department for Work and Pensions

EC (2010) 'A strategy for smart, sustainable and inclusive growth', *Communication from the Commission, Europe 2020*, Brussels: European Commission

EUROSTAT (2014) Labour Market Statistics, available at: http://epp.eurostat.ec.europa.eu/portal/page/portal/labour_market/introduction [accessed 15.12.2014]

Evans, K. and Helve, H. (eds) (2013) *Youth and Work Transitions in Changing Social Landscapes*. London: Tufnell Press

Felstead, A., Fuller, A., Jewson, N. and Unwin, L. (2009) *Improving Working as Learning*. London: Routledge

Felstead, A. (2010a) 'The importance of "teaching old dogs new tricks": training and learning opportunities for older workers', in Parry, E. and Tyson, S. (eds) *Managing an Age Diverse Workforce*. London: Palgrave

Felstead, A. (2010b) 'Closing the age gap? Age, skills and the experience of work in Great Britain', *Ageing and Society*, 30, 8, 1293-1314

Field, J., Burke, R.J. and Cooper, C.L. (eds) (2013) *The SAGE Handbook of Ageing, Work and Society*. London: SAGE

Froehlich, D.E., Beusaert, S.A.J. and Segers, M.S.R. (2014) 'Age, employability and the role of learning activities and their motivational antecedents: a conceptual model', *International Journal of Human Resource Management*, published online at: <http://dx.doi.org/10.1080/09585192.2014.971846> [accessed 15.12.2014]

Fuller, A. (2007) 'Mid-life "transitions" to higher education: developing a multi-level explanation of increasing participation', *Studies in the Education of Adults*, 39, 2, 217-235

Fuller, A. (2001) 'Credentialism, adults and part-time higher education in the UK: an account of rising take up and some implications for policy', *Journal of Education Policy*, 16, 3, 233-248.

Fuller, A. and Unwin, L. (1999) 'Credentialism, national targets and the learning society: perspectives on educational attainment in the UK steel industry', *Journal of Education Policy*, 14, 6, 605-617

Fuller, A. and Unwin, L. (2003) 'Creating a "Modern Apprenticeship": a critique of the UK's multi-sector, social inclusion approach', *Journal of Education and Work*, 16, 1, 5-25

Fuller, A. and Unwin, L. (2004a) 'Expansive Learning Environments: Integrating Organisational and Personal Development', in H. Rainbird, A. Fuller and A. Munro (eds) *Workplace Learning in Context*. London: Routledge, 126-144

Fuller, A. and Unwin, L. (2004b) 'Young people as teachers and learners in the workplace: challenging the novice-expert dichotomy', *International Journal of Training and Development*, 8, 1, 31-41

Fuller, A. and Unwin, L. (2011) 'Workplace Learning and the Organisation' in Malloch, M., Cairns, L., Evans, K. and O'Connor, B.N. (eds) *The SAGE Handbook of Workplace Learning*. London, SAGE

Fuller, A. and Unwin, L. (2012) 'What's the point of Adult Apprenticeship?', *Adults Learning*, Spring 2012, 8-13

Fuller, A. and Unwin, L. (eds) (2013a) *Contemporary Apprenticeship: International Perspectives on an Evolving Model of Learning*. London: Routledge.

Fuller, A. and Unwin, L. (2013b) *Gender Segregation, Apprenticeship, and the Raising of the Participation Age in England: are Young Women at a Disadvantage?* published by the Centre for Learning and Life Chances in Knowledge Economies and Societies at: <http://www.llakes.ac.uk/sites/llakes.ac.uk/files/44.%20Fuller%20and%20Unwin.pdf> [accessed 15.12.2014]

Fuller, A. and Unwin, L. (2014) *Apprenticeship and the Concept of Occupation*. London: The Gatsby Charitable Foundation. Published at <http://www.gatsby.org.uk/~media/Files/Education/Apprenticeship%20and%20the%20Concept%20of%20Occupation.ashx> [accessed 15.12.2014]

- Giddens, A. (1991) *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Cambridge: Polity
- Gilleard, C. (2004) 'Cohorts and generations in the study of social change', *Social Theory and Health*, 2, 1, 106-119.
- Grant, L., Yeandle, S. and Buckner, L. (2006) *Working Below Potential: Women and Part-Time Work*. Sheffield: Centre for Social Inclusion, Sheffield Hallam University.
- Green, F. (2006) *Demanding Work*. Princeton: Princeton University Press.
- House of Commons (2009) *Pre-legislative Scrutiny of the Draft Apprenticeships Bill, Session 7, Volume 11*. London: The Stationery Office (Evi.77).
- Johansson, Å., Guillemette, Y., Murtin, M., Turner, D., Nicoletti, G., de la Maisonneuve, C., Bagnoli, P., Bousquet, G. and Spinelli, F. (2013) 'Long-Term Growth Scenarios', *OECD Economics Department Working Papers, No. 1000*. Paris: OECD Publishing
- Karmel, T. (2006) *Older workers in apprenticeships and traineeships*. Adelaide, Australia: NCVET
- Keep, E. (2014) *What does skills policy look like now the money has run out?* London: Association of Colleges
- Kooij, D.T.A.M, Jansen, P.G.W., Dijkers, J.S.E. and de Lange, A.H. (2014) 'Managing aging workers: a mixed methods study on bundles of HR practices for aging workers', *International Journal of Human Resource Management*, 25, 18, 2192-2212
- Lanning, T. and Lawton, K. (2012) *No Train, No Gain*. London: IPPR
- Leitch, S. (2006) *Leitch Review of Skills*. London: The Stationery Office
- Lerman, R.I. (2013) 'Expanding apprenticeship in the United States: barriers and opportunities.' in Fuller, A. and Unwin, L. (eds) *Contemporary Apprenticeship: International Perspectives on an Evolving Model of Learning*. London: Routledge
- Loretto, W. and White, P. (2006) 'Employers' attitudes, practices and policies towards older workers', *Human Resources Management Journal*, 16, 3, 313-30.
- Macleod, A., Worman, D., Witten, P., Woodman, P. and Hutchings, P. (2010) *Managing an ageing workforce: how employers are adapting to an older labour market*. London: CMI/CIPD
- McBride, A. (2011) 'Lifting the Barriers? Workplace Education and Training, Women and Job Progression', *Gender, Work and Organisation*, 18, 5, 528-547
- McCarthy, J., Heraty, N., Cross, C. and Cleveland, J.N. (2014) 'Who is considered an "older worker"? Extending our conceptualization of "older" from an organizational decision maker perspective', *Human Resource Management Journal*, published online May 27th 2014. DOI: 10.1111/1748-8583.12041

McMullin, J.A., Duerden Comeau T., and Jovic, E. (2007) 'Generational Affinities and Discourses of Difference: A Case Study of Highly Skilled Information Technology Workers', *British Journal of Sociology*, 58, 2, 297-316

McMullin, J.A. and Duerden Comeau, T. (2011) 'Ageing and Age Discrimination in IT firms, in McMullin J.A. (ed) *Age, Gender and Work: Small Information Technology Firms in the New Economy*. Kelowna: UBC Press

McNair, S. (2011) *Older People and Skills in a Changing Economy*. London: UK Commission for Employment and Skills.

McVittie, C., McKinlay, A. and Widdicombe, S. (2003) 'Committed to (un)equal opportunities? "New ageism" and the older worker', *British Journal of Social Psychology*, 42, 4, 595-612

Martin, G., Dymock, D., Billett, S. and Johnson, G. (2014) 'In the name of meritocracy: managers' perceptions of policies and practices for training older workers', *Ageing and Society*, 34, 6: 992-1018.

Meredith, J. (2013) 'Apprenticeship in Canada: where's the crisis?' in Fuller, A. and Unwin, L. (eds) *Contemporary Apprenticeship: International Perspectives on an Evolving Model of Learning*. London: Routledge

Moore, S. (2009) 'No matter what I did I would still end up in the same position': age as a factor defining older women's experience of labour market participation', *Work, Employment and Society*, 23, 4, 655-71

NAO (2009) *Train to Gain: Developing the skills of the workforce*. London: HMSO

NAO (2012) *Adult Apprenticeships*. London: HMSO

Ng, T.W.H. and Feldman, D.C. (2012) 'Evaluating six common stereotypes about older workers with meta-analytical data', *Personnel Psychology*, 65, 4, 821-858

OECD (2006) *Live Longer, Work Longer*. Paris: OECD

OECD (2010) *Off to a Good Start? Jobs for Youth*. Paris: OECD

OECD (2013) *Skilled for Life? Key findings from the Survey of Adult Skills*. Paris: OECD

Ofsted (2008) *The impact of Train to Gain on skills in employment*. London: Ofsted

Parry, E. and Harris, L. (2011) *The Employment Relations Challenges of an Ageing Workforce*. Acas Future of Workplace Relations Discussion Paper Series. London: Acas

Parry, E. and Urwin, P (2011) 'Generational differences in work values: a review of theory and evidence', *International Journal of Management Reviews*, 13, 79-96

Parry, E. and Tyson, S. (eds) (2010) *Managing an Age Diverse Workforce*. London: Palgrave

- Payne, J. (2009) 'Divergent Skills Policy Trajectories in England and Scotland after Leitch', *Policy Studies*, 30, 5, 473-494
- Phillipson, C. (2013) 'Commentary: the future of work and retirement', *Human Relations*, 66, 1, 143-153
- Posthuma, R.A. and Campion, M.A. (2009) 'Age Stereotypes in the Workplace: Common Stereotypes, Moderators, and Future Directions', *Journal of Management*, 35, 1, 158-188
- Radl, J. (2012) 'Too old to work, or too young to retire? The pervasiveness of age norms in Western Europe', *Work, Employment & Society*, October 2012, 26, 5, 755-771.
- Rainbird, H., Fuller, A. and Munro, A. (eds) (2004) *Workplace Learning in Context*. London: Routledge
- Richard, D. (2012) *Richard Review of Apprenticeships*. London: School for Startups
- Rowe, J. and Kahn, R. (1987) 'Human ageing: Usual and successful', *Science*, 237: 143-149
- Schmid, K. (2012) 'Barriers to and benefits of further vocational training for older employees', in Cedefop (ed) *Working and Ageing*. Luxembourg: Publications of the European Union
- Sinclair, D., Watson, J. and Beach, B. (2013) *Working Longer an EU Perspective*. London: ILC-UK
- Smeaton, D., Vegeris, S. and Melahat, S. (2009) *Older Workers: Employment Preferences, Barriers and Solutions*. Manchester: Equality and Human Rights Commission Research Report No. 43
- Smith, E. and Smith, A. (2011) 'Does the availability of vocational qualifications through work assist social inclusion?', *Education + Training*, 53, 7: 587-602
- Smith, E, Smith, A. and Smith, C.S. (2010) 'Old dogs, new tricks: training mature-aged manufacturing workers', *Journal of Workplace Learning*, 20, 5, 277-291
- Sparks, A., Ingram, H. and Sunny, P. (2009) 'Advanced entry adult apprenticeship training scheme: a case study', *Education + Training*, 51, 3, 190-202
- Sweiry, D. and Willitts, M. (2011) *Attitudes to age in Britain 2010/11: in-house research No.7*. London: Department for Work and Pensions
- Taylor, P. (2013) *Older Workers in an Ageing Society*. London: Edward Elgar
- Tikkanen, T. (2011) 'From managing a problem to capitalising on talent and experience of older workers, Editorial: Special Issue', *International Journal of Human Resource Management*, 22, 6, 1217-1220

- Tikkanen, T. and Nyhan, B. (2006) (eds) *Promoting lifelong learning for older workers*. Luxembourg: Office for the Official Publications of the European Communities
- Unwin, L. and Wellington, J. (2001) *Young People's Perspectives on Education, Training and Employment*. London: Kogan Page
- Van Dalen, H. and Henkens, K. (2005) *The Double Standard in Retirement and Work – the Case of the Netherlands*. The Hague: Netherlands Interdisciplinary Demographic Institute
- Vickerstaff, S. (2010) 'Older Workers: The 'Unavoidable Obligation' of Extending Our Working Lives?', *Sociology Compass*, 4, 10, 869-879
- Vickerstaff, S. and Cox, J. (2005) 'Retirement and Risk: The Individualisation of Retirement Experiences?', *Sociological Review*, 53, 1, 77-95
- Walker, A. and Maltby, T. (2012) 'Active ageing: A strategic policy solution to demographic ageing in the European Union', *International Journal of Social Welfare*, 21(1): 117-130
- Wanrooy, van B., Bewley, H., Bryson, A., Forth, J., Freeth, S., Stokes, L. and Wood, S. (2013) *Employment Relations in the Shadow of Recession. Findings from the 2011 Workplace Employment Relations Study*. London: Palgrave Macmillan
- Warhurst, C., Carre, F., Findlay, P. and Tilly, C. (eds) (2012) *Are Bad Jobs Inevitable?* London: Palgrave Macmillan
- Wolf, A. and Evans, K. (2010) *Improving Literacy at Work*. Abingdon, Routledge
- Wood, A., Robertson, M. and Wintersgill, D. (2010) *A Comparative Review of International Approaches to Mandatory Retirement, RR674*. London: Department for Work and Pensions
- WHO (2002) *Active Ageing: A Policy Framework*. Geneva: World Health Organisation

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