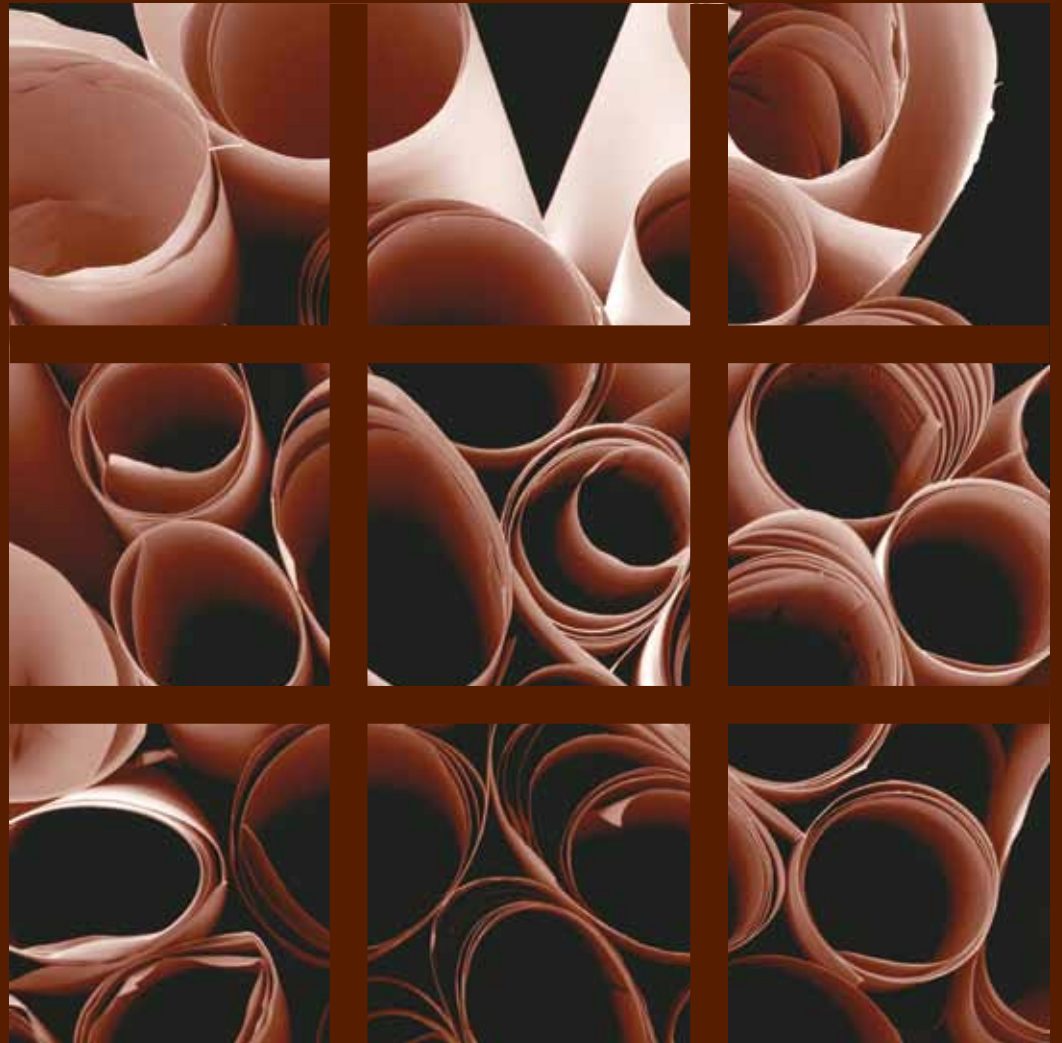




OLDER LEARNERS IN THE WORKPLACE

RESEARCH REPORT

Matilda Gosling, The Research Base, for the
City & Guilds Centre for Skills Development



March 2011



CITY & GUILDS
CENTRE FOR SKILLS
DEVELOPMENT

OLDER LEARNERS IN THE WORKPLACE

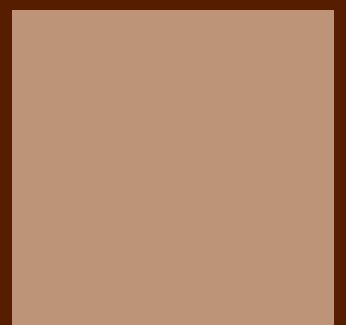
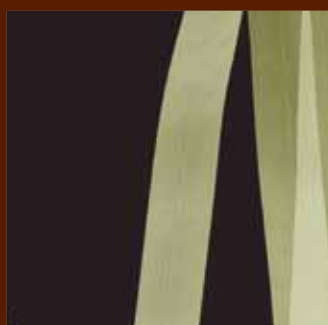
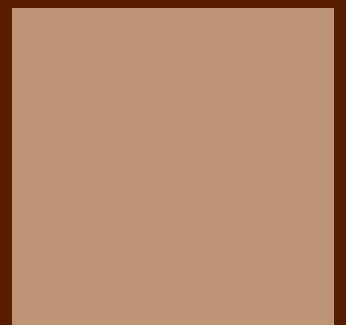
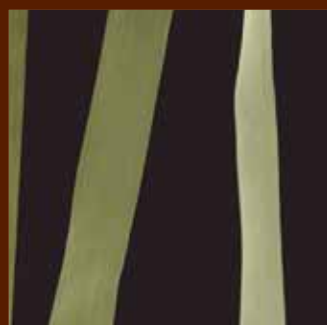
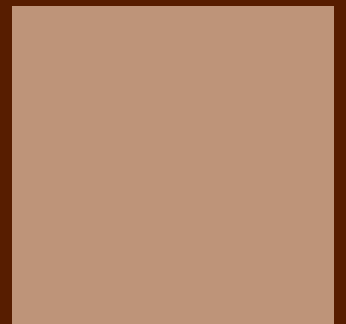
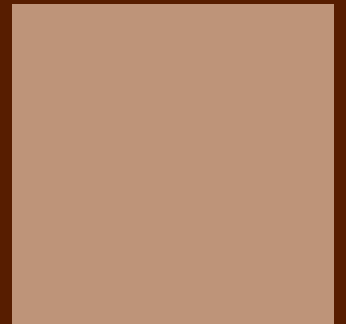
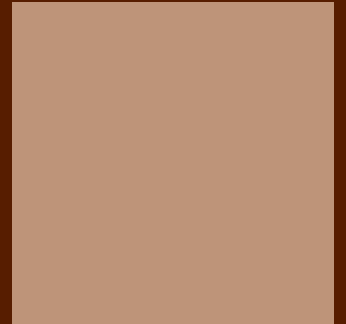
RESEARCH REPORT

**Matilda Gosling, The Research Base, for the
City & Guilds Centre for Skills Development**
March 2011

CONTENTS

SECTION 1: SUMMARY	3	4.4 Barriers to learning	22
1.1 Overview	4	4.4.1 Overview	22
1.2 Recommendations	5	4.4.2 Stereotypes and expectations	22
1.2.1 For employers	5	4.4.3 Motivation and insecurity	22
1.2.2 For practitioners	5	4.4.4 Mismatch with learner needs	22
1.2.3 For policy makers	6	4.4.5 Social capital	23
		4.4.6 Age-related effects on learning	23
SECTION 2: CONTEXT	7	4.5 Programme design	23
2.1 Introduction	8	4.5.1 Overview	23
2.2 Why train older workers?	8	4.5.2 Structure and presentation	24
2.3 Impacts of ageing on learning	9	4.5.3 Considerations for employers	26
2.4 Diversity and context	11		
2.5 Sector and organisational differences	12	SECTION 5: RECOMMENDATIONS	27
		5.1 General	28
SECTION 3: COUNTRY OVERVIEWS	13	5.2 Employer tools	28
3.1 United Kingdom	14	5.2.1 Overview	28
3.1.1 Older people in the workforce	14	5.2.2 Key employer recommendations	30
3.1.2 Policy and legislation	14	5.3 Practitioner tools	30
3.2 Australia	15	5.3.1 Overview	30
3.3 Canada	15	5.3.2 Key practitioner recommendations	31
3.4 Ireland	15	5.4 Policy tools	31
3.5 New Zealand	16	5.4.1 Overview	31
3.6 United States of America	16	5.4.2 Key policy recommendations	32
		5.5 Further research	32
SECTION 4: OLDER LEARNERS IN THE WORKPLACE	17	SECTION 6: BIBLIOGRAPHY	33
4.1 Availability of training	18		
4.2 Employer attitudes and beliefs	18	FURTHER INFORMATION	38
4.2.1 Evidence-based assumptions	18		
4.2.2 Negative beliefs and stereotypes	18		
4.2.3 Positive beliefs and stereotypes	19		
4.2.4 Return on investment	19		
4.2.5 Organisational culture	20		
4.2.6 Changing beliefs	20		
4.3 Preferences and needs of older learners	20		
4.3.1 Motivations	20		
4.3.2 Learning preferences	21		
4.3.3 Promotion of training and exit strategies	21		

SECTION 1: SUMMARY



SECTION 1: SUMMARY

1.1 Overview

Older workers, defined for the purposes of this paper as those aged 50 and above, are less likely to have access to training and development opportunities than younger workers, and are also less likely to engage in learning if the opportunities are available to them. The growing proportion of older people in the workforce, and their increasing propensity to work through and beyond the official age of retirement, suggests that supporting the skills development of older workers will hold long-term benefits for employers and society alike.

Caution needs to be taken in analysis of existing research on older learners, as age is too simple a construct to enable any meaningful understanding of older learners' aspirations or needs. Although older adults have often been wrongly portrayed as a homogenous group in terms of age, gender, race, class, ethnicity and able-bodiedness, there are some characteristics which they often share. These include the tendency for older people to work part-time or to hold lower levels of formal qualifications than their younger counterparts. These characteristics may have an impact on training requirements, but should not be assumed of all older workers or only older workers. Additionally, good practice for older learners is very often good practice for all learners, particularly in ensuring flexibility and responsiveness through the delivery of training.

Age stereotypes are one of the principal barriers to the provision of equal access to training in the workplace for older workers. Older learners in the workplace also face many of the same barriers as those in other age groups; workers on short-term contracts, the lower paid and those with no qualifications, for example, are all less likely to receive training. Other barriers are rooted in previous levels of education, which tend to be lower than those of younger workers, age-related effects on learning, lower self-esteem and lower levels of social capital.

Various recommendations are made in the literature about programme design. As already noted, these should be approached with a degree of caution, as older workers are not a homogenous group and appropriate training design and delivery for older learners is often the same as good training design and delivery for all learners. Studies suggest, however, that older learners prefer to work independently, using more flexible ways of learning. Self-pacing by the learner seems to have the most significant effect on positive learning outcomes. Integrating learning with work is important, as is the use of sufficient feedback, practical learning and the use in learning programmes of existing knowledge and experience.

Training programmes tailored towards older learners need to sit within the wider context of support for older workers. This includes equal access to training, increased availability of part-time work as part of a phased transition to retirement, more flexible working time arrangements, high performance working and the opportunity to stay in employment until or beyond retirement age. It is also important to convince employers of the value of their older workforce, as the cycle of negative stereotypes are further reinforced by the resulting effects of low investment in training and the resultant low productivity.

The low level of training offered to and taken up by older workers is, we believe, the most important finding of this report. The immediate focus of future research should be on developing a better understanding of how to get employers to offer training to older workers, and how to encourage older workers to take up the offer of training, rather than on training design; the fundamental elements of good training design are similar for all workers.

There are, however, some specific recommendations which emerge from the literature for employers, practitioners and policy makers.



1.2 Recommendations

1.2.1 FOR EMPLOYERS

- Ensure that age stereotypes within the organisation are addressed. This could be in the form of programmes to counter stereotypes, and audits to ensure that older workers are being treated similarly to younger workers and have the same access to training opportunities.
- Develop training frameworks for all employees, regardless of age, which outline the skill requirements of each role to ensure that relevant training is undertaken.
- Consider targeting learning programmes at older workers, as they are less likely to participate in training than younger learners when such programmes are available. Work with individuals to ensure that age-related barriers to participation in learning programmes are addressed. This might include peer group support and mentoring programmes to ensure that older learners have the social support they need to participate in training, and the encouragement of those who have undertaken training to share their positive experiences with other members of staff.
- Consider good practice in training for all learners. This should include training in job-specific skills as well as general employability skills, and the promotion of a culture of continuing learning and development throughout the organisation.
- Work closely with practitioners to ensure that the needs of older learners are considered in training design. This could incorporate learning among people of a similar age, peer support, lower intensity training, a focus on practical knowledge and the promotion of clear job-related outcomes, self-paced and independent learning, offering the opportunity to practise skills as they are learned, and ensuring an informal learning environment.
- Consider developing mentoring programmes, through which older workers are able to use their skills and experience to develop others, as well as being supported to continue their own skills development.
- Encourage and support regular feedback from all staff, regardless of age, on training provision within the organisation.

- Ensure that those employed to design, allocate and deliver training have themselves been trained in diversity and equality issues.
- Build training provision for older learners into a broader framework for the support of older workers, which should include elements such as recruiting according to competence and not age, the provision of flexible work arrangements and promoting and implementing lifelong learning.
- Consider how the skills of older learners could be used until and beyond retirement, perhaps through a phased retirement process or by employing older people on a consultancy basis after their official retirement date.

1.2.2 FOR PRACTITIONERS

- Do not treat older learners as a homogenous group. Greater variability in learning ability between older learners also suggests that individual characteristics play a greater role than they would among younger groups of learners. Good training for older learners is essentially the same as good training for other groups – it focuses on the needs of the individual and does not make assumptions about the group, and is both flexible and responsive.
- Independent and self-paced learning, with a practical rather than theoretical focus, are methods which should receive priority for older workers. Learning activities might include collaborative and practical activities, group work and independent work, and the use of learners' previous experience and case studies. Sufficient feedback should be offered, together with the use of learners' existing knowledge and experience.
- Ensure that learning outcomes are closely integrated with work and necessary job skills, and that this is communicated effectively to older learners to ensure that they feel the learning programme is both useful and relevant to their needs.
- If delivering e-learning programmes, consider using a data projector, providing paper-based instruction booklets which incorporate screen shots and jargon-free instructions, and making computers available outside of regular session times.

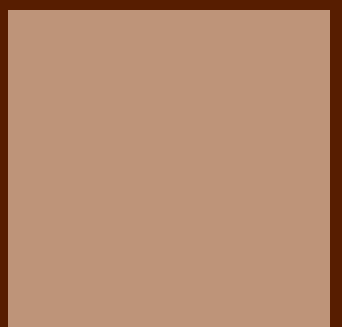
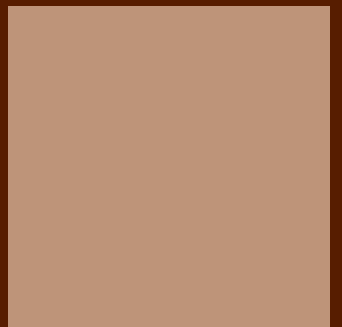
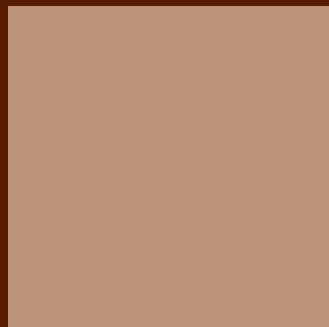
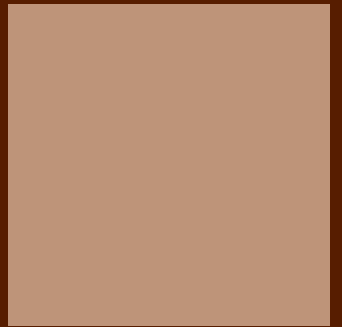
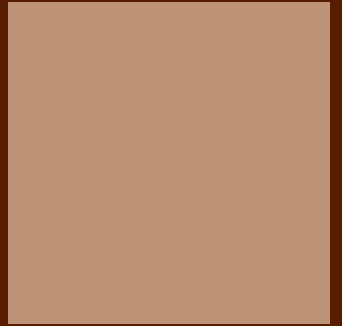
- Consider the use of modelling, through which learners are given the opportunity to watch another successfully perform the task under consideration.
- Give learners advance knowledge about the tasks to be undertaken.
- Minimise the use of formal assessment.
- Ensure that accessibility is incorporated in the development of learning resources, such as larger print size.
- Work with researchers and employers to develop a better understanding of how an ageing workforce can best be managed, looking at flexible working, phased retirement planning and skills transfer to ensure that (a) the older workforce is trained and effective and (b) valuable skills-sets are not lost as employees reach retirement age.

1.2.3 FOR POLICY MAKERS

- Campaigns directed at perception change may be the key role for policy makers to play in improving the provision of training for older learners. Age stereotypes are a major barrier both to the provision and take-up of training by older workers, and large-scale campaigns to challenge perceptions can be an important way of initiating change as the workforce grows older.
- Consider the use of direct funding incentives to encourage employers to train their older workers.
- Ensure that age discrimination laws are fit for purpose, and that employers do not have the option of creating business cases for not training their older workers.



SECTION 2: CONTEXT



SECTION 2: CONTEXT

2.1 Introduction

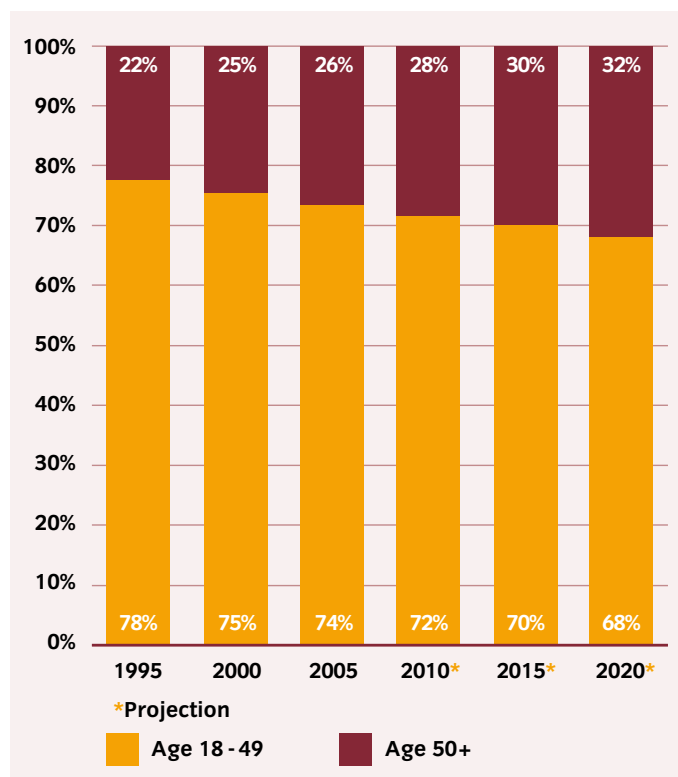
This report presents a summary of the literature on older workers. Older workers, defined for the purposes of this paper as those aged 50 and above, are less likely to have access to training and development opportunities than younger workers, and are also less likely to engage in learning if the opportunities are available to them (e.g. Armstrong-Stassen & Schlosser, 2007). The resulting cycle of underinvestment compounds negative perceptions surrounding older learners in the workplace.

Older workers should not simply be defined by age, but be considered as a variable group. They may differ, for example, in terms of personal and professional abilities, as well as their achievements. Some suffer deteriorating health, death of a partner or, in contrast, enjoy excellent health and strong relationships (Foster, 2008). They also differ according to factors such as gender, ethnicity and sector in which they work. Research to date, however, rarely takes these differences into account.

2.2 Why train older workers?

The proportion of older people in the workplace is growing steadily. As Figure 2.2 demonstrates, the proportion of older workers in the United Kingdom has risen from 22% to 28% in the last 15 years, and is projected to grow to 32% by 2020. This increasing importance of older people to the workforce means that the value of ensuring that older workers have access to and receive value from training is of growing significance to employers.

Figure 2.2: People of 18+ in Employment by Age (UK)¹



Many older workers are at the height of their career, not at the end of it, and will continue to contribute through voluntary and part-time employment beyond their official retirement (Foster, 2008). According to a survey of over 8,000 employees across the G7 countries, over one third of older workers expect to continue working in some capacity during their retirement (Towers Perrin, 2007). This suggests that supporting the skills development of older workers will hold long-term benefits for employers and society alike; demographic changes mean that use of older talent will need to be maximised. People with higher levels of educational attainment have greater labour force participation and tend to stay in the workforce for longer (Ferrier, Burke & Selby Smith, 2008), suggesting that training can keep older workers in the labour market for longer (Fouarge & Schils, 2009)

¹ Calculations were based on National Statistics time series data (labour market status by age group). Projections were calculated by applying the average proportional change over the past 15 years to future years.

Cedefop (2010a) suggests that a skills mismatch could be a core factor impacting on the ability of older workers to continue working both effectively and productively. The effects of a skills mismatch can be detrimental to employers, with negative effects on productivity, wages, labour turnover and job satisfaction (Cedefop, 2010b). Skills mismatches can be addressed either by reskilling or by tailoring jobs towards the existing skills of the workforce.

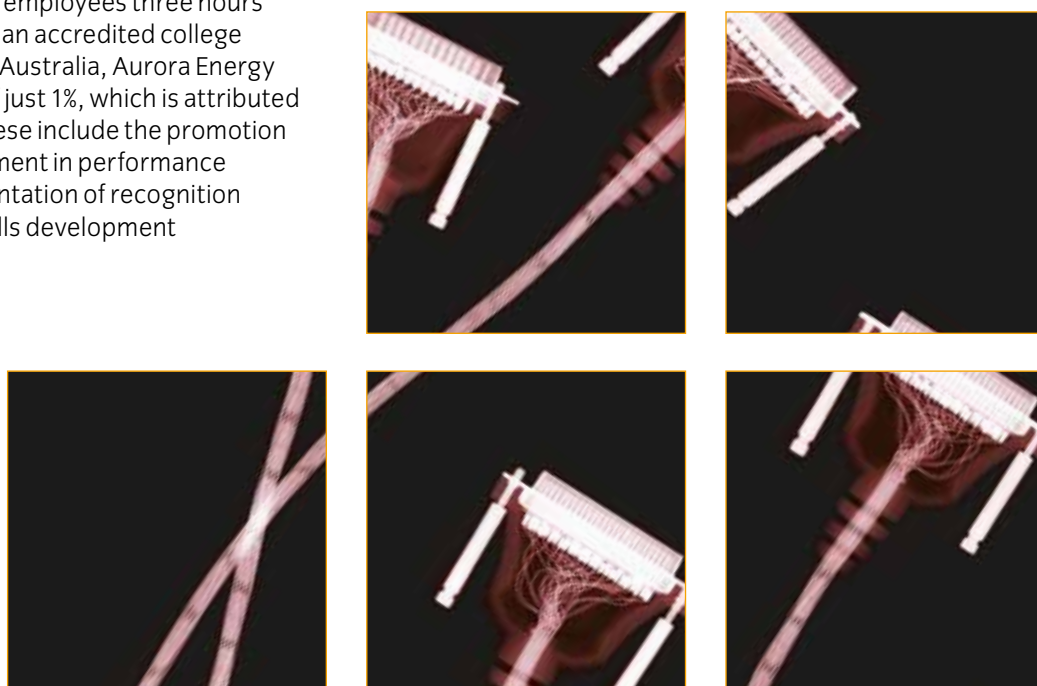
Relative to their productivity levels, older workers are usually more expensive than younger workers, and on-the-job training can increase their productivity relative to their wage (Fouarge & Schils, 2009). Skill obsolescence (the retention of skills which no longer meet the requirements of the job through, for example, technological change) also has relevance to the case for training older workers. They are more likely than other age groups to suffer from skill obsolescence, either due to the length of time since they undertook training in certain areas, or because they are less adaptable to technological changes, which can affect their productivity (Cedefop, 2010a). As older workers are also less likely to receive training than their younger counterparts (see below under Section 4.2), the cycle of underinvestment in older workers' skills is likely to have a negative impact on their productivity, further underlining negative stereotypes about their abilities.

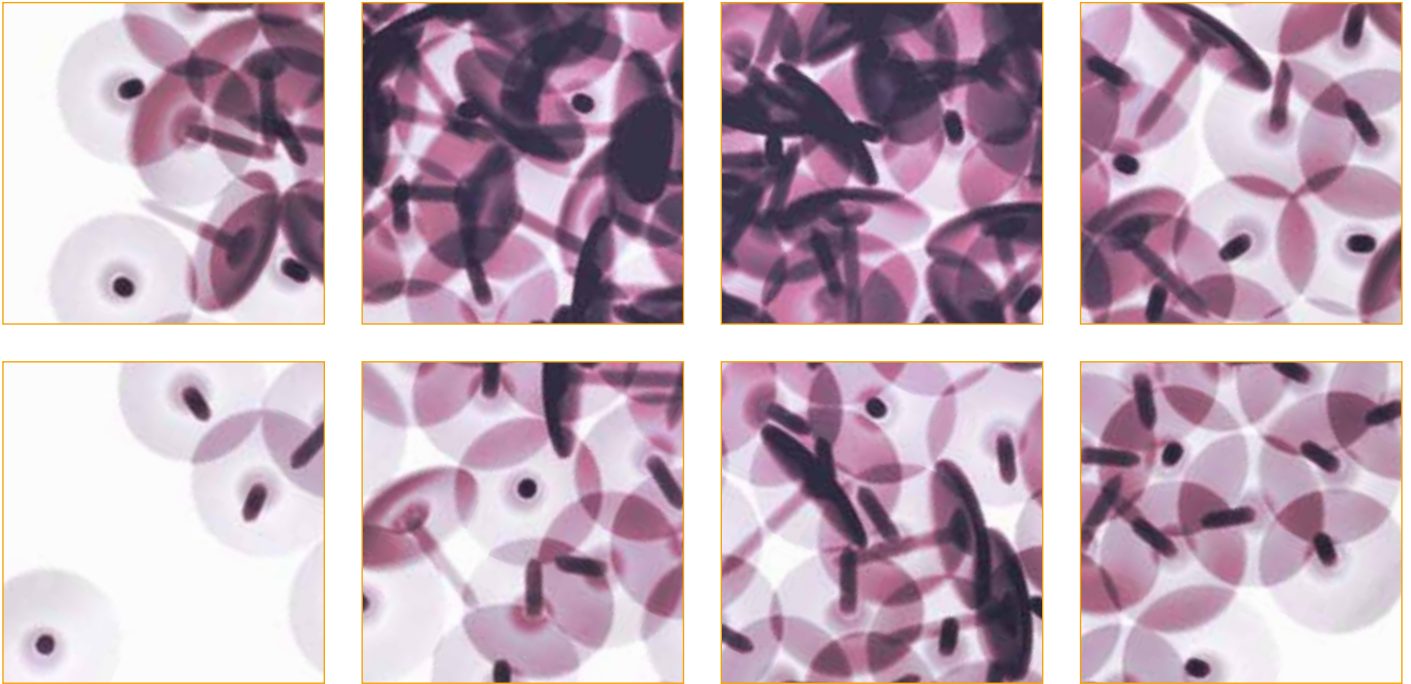
Companies have experienced improved retention rates through tailoring training to older workers. United Technologies Corporation in the USA, for example, has improved its retention rates through a scheme which gives \$10,000 worth of stock to older workers who gain an academic degree, and offers employees three hours off a week if they are enrolled in an accredited college (Moseley & Dessinger, 2008). In Australia, Aurora Energy has achieved an attrition rate of just 1%, which is attributed to its age-friendly practices. These include the promotion of further training and development in performance management, and the implementation of recognition and reward programmes for skills development (Foster, 2008).

The Department for Work and Pensions states that upskilling and retaining an existing workforce makes good business sense, reducing recruitment costs and motivating staff and, in turn, increasing productivity levels (Department for Work and Pensions, 2009). Older workers also tend to remain longer within an employing organisation and seem to hold better attendance rates than their younger counterparts as well as high levels of commitment. The Chartered Institute of Personnel and Development estimates that employee replacement can cost up to £12,000 per person, depending on the level of skill required, in addition to training costs (Age Positive, 2007).

2.3 Impacts of ageing on learning

Although older adults demonstrate deterioration in reaction times and perceptual skills, other performance areas, such as memory, creativity, problem-solving abilities, general intelligence, social skills and the ability to cope with stress, can be maintained or even improved through training (Dworschak, Buck & Schletz, 2006).





Reduced vision and hearing ability, impaired blood circulation, decreased neurotransmitters, depression, stress and chronic illness can all affect the ability of older learners (Crawford, 2004; Merriam, 2001). Age-related cognitive decline includes aspects such as working memory, attentional processes and spatial cognition (Lee, Czaja & Sharit, 2009). Cognitive training studies suggest, however, that cognitive decline in older people may be due to being out of practice and that this decline is often reversible (Foster, 2008).

Primary mental abilities, which include numerical ability, word fluency, verbal meaning, inductive reasoning and spatial orientation, do not decline markedly until people are in their mid 70s (Crawford, 2004). Secondary mental abilities include fluid intelligence, which is the ability to reason quickly and think abstractly², and crystallised intelligence, which refers to knowledge and skills that have accumulated over a lifetime³. Younger people perform better in fluid intelligence learning via rote memory tasks, and older learners perform better in crystallised intelligence through better developed verbal abilities and judgement (Merriam, 2001, cited in Crawford, 2004).

According to Cavanagh and Blanchard-Fields (2002), the differences in performance between older and younger workers are greatest with more complex tasks and where more than one task is presented at a time. Older adults also tend to be more sensitive to the context within which a problem sits when presented with problem-solving tasks. Advance knowledge about the task reduces the impact of distractions for older learners (*ibid.*).

Older workers may be disadvantaged in training if methods used to train younger people are applied without modification; rote learning and fast paced presentation may cause particular difficulties (Duncan, 2001). Older learners can be equally successful, assuming that training is tailored towards their needs (*ibid.*). Maurer (2007) cites a 1996 study⁴ which demonstrated that differences in learning abilities between age groups may be explained by factors such as previous education levels and experience with technology, rather than age itself. This led Maurer to suggest that '*much if not all of the performance differences associated with age after training might be accounted for by existing competence differences before training.*'

²http://psychology.about.com/od/findex/g/def_fluidintell.htm

³http://psychology.about.com/od/cindex/g/def_crystalinte.htm

⁴Kubeck, J., N. Delp, T. Haslett & M. McDaniel (1996). Does Job-Related Training Performance Decline with Age? *Psychology and Aging* 11: 92-107.

Maurer also points to studies showing that variability between older learners as a group is substantially greater than variability between younger learners. In other words, the differences in ability between individual learners become greater with age. He therefore suggests that the characteristics of individuals need to be considered independently from aggregate findings about older learners.

2.4 Diversity and context

According to Foster (2008), age is too simplistic to allow for any meaningful understanding of older learners' aspirations or needs: *'some are at the peak of their personal and professional abilities and achievements, others are among the most vulnerable experiencing multiple areas of disadvantage in the labour market, suffering deteriorating health or changes in their lifestyles'*.

Gender differences play an important role in determining the specific needs of older learners. In Australia, for example, older women workers tend to have lower levels of education and earning capacity, work intermittently due to caring duties or increasing part-time and casual work, and are concentrated in service industries; older male workers tend to experience higher rates of retrenchment as they are concentrated in manufacturing and trades, and many work in lower skilled roles as labourers and related occupations (Foster, 2008). Wolf (2009) outlines a variety of ways in which the needs of older female learners differs from older male learners, such as the tendency of older women to set high goals for themselves and to require affirmative feedback from their instructors.

A review of 93 articles in five adult education journals (Chen, Kim, Moon & Merriam, 2008) identified various assumptions underlying much of the work on older learners. They found that older adults have been portrayed as a homogenous group in terms of age, gender, race, class, ethnicity and able-bodiedness, and that they have been viewed as capable and motivated learners with few cognitive or physical limitations.

Different situational factors, most of which are highlighted elsewhere in this report, also have various impacts on the extent to which older workers are offered and engage with training. Maurer (2007) lists these situational influences as:

- Stereotypes about older workers' learning and development behaviour.
- Possible discriminatory treatment.
- Differences in access to developmental job experiences, training and social support.

These influences interplay differently according to context, and caution must be exercised in assuming that general findings about age and work-related learning apply in the same way across different scenarios. Career intentions, for example, can have a significant impact on the learning behaviour of older workers; older workers in bridge jobs, defined as a job between one's long-term career job and permanently exiting the workforce, are less likely to engage in development opportunities and more likely to perceive their job as offering fewer development opportunities than those in career jobs (Armstrong-Stassen & Schlosser, 2007).

While general recommendations can be drawn out for older learners, employers, practitioners and policy makers must exercise caution and recognise that they are not a uniform group with uniform needs. Likewise, employers do not necessarily treat them in the same way.



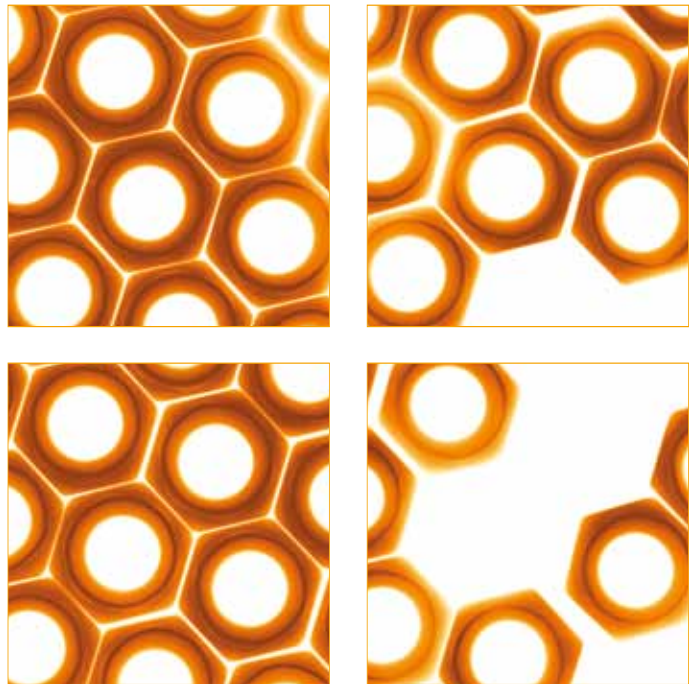
2.5 Sector and organisational differences

Differences exist in the content, quality and amount of training offered to older workers across employment sectors. Retail and hospitality are the sectors in which learning for older workers is perceived as being the most important; Towers Perrin's 2007 survey identified training and skills development as one of the three most important employment practices to retain mature talent in these sectors. Training was not identified as a key programme in the other sectors (new industry⁵, health care, old line⁶ and public sector⁷). Workers of all ages are more likely to have received recent training in public administration, education and health (Newton, Hurstfield, Miller & Bates, 2005).

Training for older workers within the healthcare sector, usually in the ten years leading to retirement, typically covers subject areas relevant to retirement, such as pensions and personal finance management (Beck, 2009). This differs significantly from other sectors, where older learners train to acquire skills of more professional relevance, mostly in managerial positions (Phillipson & Ogg, 2010). In addition to sectors, organisation size has an impact on the number of older learners. Older employees within larger firms are more likely to continue training, particularly those between 50 and 69, than those within smaller companies (McNair, Flynn, Owen, Humphreys & Woodfield 2004).

An analysis of the UK's 2004 Labour Force Survey (Newton et al., 2005) reveals the complexity of older workers' training participation older workers. The analysis suggests that:

- Women are more likely than men to have recently participated in training, and this difference is more pronounced with age.
- More highly qualified workers are more likely to have recently trained.



- There is a decline in training with age within all occupational groups. Older workers in low-skilled occupations are the least likely to receive training.
- Part-time workers receive less training than their full-time counterparts (the authors point out that older workers are more likely to work part-time).

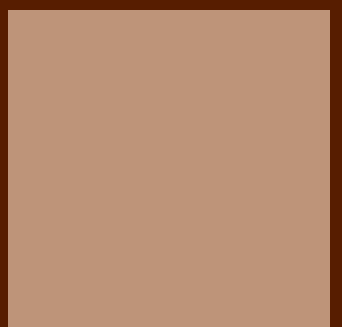
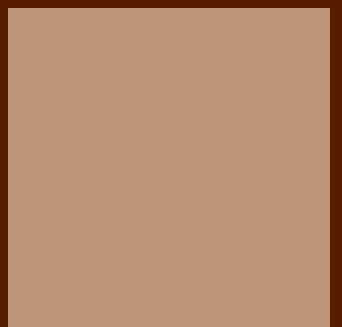
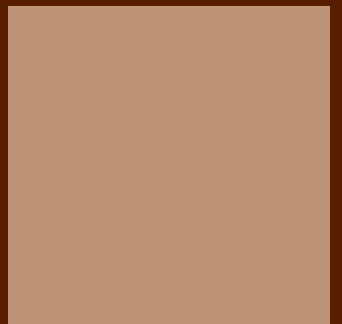
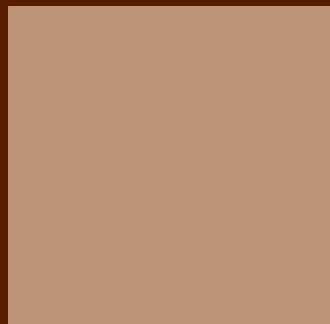
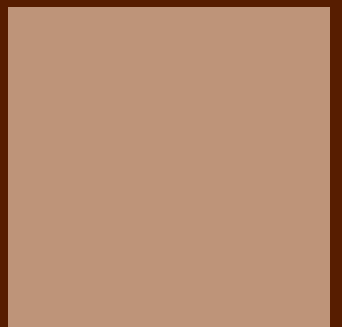
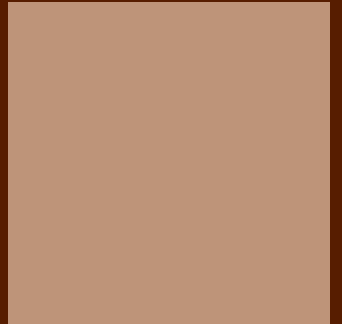
Training such as manual handling and health and safety, which is now mandatory and regulated, is offered throughout industry and to all ages. Given the nature and necessity of this training, discrimination does not appear to be an issue (Beck, 2009).

⁵Banking, business/professional services, computer, finance, insurance, media and telecoms.

⁶Consumer products, pharmaceutical, utilities, heavy manufacturing, automotive, apparel, transportation.

⁷Government, not-for-profit and education.

SECTION 3: COUNTRY OVERVIEWS



SECTION 3: COUNTRY OVERVIEWS

3.1 United Kingdom

3.1.1 OLDER PEOPLE IN THE WORKFORCE

Older workers play a key role in the UK's workforce, with 72% of people aged 50-65 in employment⁸. This is only marginally lower than the 25-49 age group, at 81%, and substantially higher than the 16-24 age group, at 52%. Despite high levels of economic activity, however, 18% of these older workers hold no qualifications, compared to just 10% of those under 50 (Department for Work and Pensions, 2009).

Data from the Office for National Statistics Labour Force Survey shows a concentration of older workers in the north of Scotland, north of Yorkshire, parts of East Anglia and central Southern England, and South East London. Wales and southern Scotland have a far lower proportion of older workers in employment. In terms of sectors, those with higher concentrations of older workers include hospitality, banking and finance, and public administration, education and health. During the economic recession period of 2008 to 2009, employment figures among older workers changed less than those of younger workers, suggesting that older workers' skills may be more valued by employers and less vulnerable to recession.

3.1.2 POLICY AND LEGISLATION

The Employment Equality (Age) Regulations 2006 seek to ensure that workers of all ages receive equal vocational training rights. This excludes those under 16 years old, school pupils and members of the regular armed forces, full-time and part-time reservists as well as unpaid workers. Another exception to regulations is apprenticeships. Although older workers may access these, they are not eligible to receive government funding.

It is unlawful for an employer to refuse to provide training on the grounds of age (ACAS, 2006). It is permissible to discriminate on age, however, if *'there is an objective justification for treating people differently – for example, it might be necessary to fix a maximum age for the recruitment or promotion of employees (this maximum age might reflect the training requirements of the post or the need for reasonable period of employment before retirement)'* (*ibid.*). ACAS also recommends that employers *'provide training to help those making judgements to be objective and avoid stereotyping people because of their age'* (*ibid.*). This includes interviewers who may need to be aware of all legislation surrounding age and other potential discrimination areas.

The EU Employment Directive allows for vocational training age requirements if they can be justified. An example of justification may be on the grounds of vocational integration⁹, whereby older or younger workers or those with caring responsibilities require additional training to prevent being disadvantaged in the workplace (*ibid.*).

UK Government policy is geared towards upskilling the existing workforce to address economic and social exclusion (Beck, 2009). This is likely to have a positive impact on older workers in terms of training and development, as it includes workers of all ages, rather than being exclusive to those entering the workforce directly from education.

Platman and Taylor (2006) believe that the age discrimination in employment law *'heralds a more punitive, regulatory approach to unfair, age-based employment decisions, including those relating to vocational training'*. The regulations specify that it is unlawful for any employer, training provider, qualifications body, employment agency or institution of further or higher education to discriminate solely on the grounds of age against someone seeking or undergoing training, which is defined as *'all types and all levels of training which would help fit a person for any employment'* (*ibid.*).

⁸Source: Labour Force Survey, 2009

⁹Integration into employment, occupational rehabilitation or reintegration into working life.

3.2 Australia

Australia faces cultural and language challenges in the design and delivery of training to older workers to a greater extent than many of the other countries under consideration, due to high levels of immigration. More than a third of 50-59 year olds in Australia were born overseas (Ferrier et al., 2008). Demographic change responses in Australia include encouraging older workers to train so that they can work longer, encouraging older people to combine work with partial retirement and promoting the virtues of the older worker to employers (Foster, 2008).

Recent policy initiatives are supportive of older workers, with the new Experience+ Training Grant of AU \$4,950¹⁰ starting in September 2010. This initiative, focused on employers and small business owners, provides a grant for training at Certificate III or above for 'mature age' workers (defined in this instance as 55 years and older). The training grant is paid in instalments – one at start up and the other on completion of study¹¹.

Platman and Taylor (2006) cite the case of Qantas, which was taken to tribunal for recruiting its pilots under a certain age because it wanted to recoup its heavy training costs prior to retirement. Costs were awarded against the airline, with the tribunal arguing that equal opportunity considerations overrode economic justifications.

3.3 Canada

In 2008, the Canadian Government commissioned a panel to identify challenges and opportunities for increasing the participation rates of older people in the workforce. The panel observed that there is a need for provincial/territorial government to unite and produce policies aimed at improving the training prospects for older workers. Their recommendations also included the promotion of lifelong learning and the encouragement of employers to review workplace practices in favour of older workers' needs (Expert Panel on Older Workers, 2008).

The Targeted Initiative for Older Workers, the predecessor of the Expert Panel, commenced in 2006 with CA\$60 million¹² dedicated for training older workers and increasing employability. According to the Federal Government, more than 6,000 workers have already taken part in this programme¹³. Following recommendations from the Expert Panel, the 2008 Federal Budget allocated another CA\$90 million¹⁴ to extend this programme for a further three years¹⁵.

3.4 Ireland

Ireland was one of the few European countries in 2009 to have reached the Stockholm 2010 target of 50% of older people in employment¹⁶, although it is as yet unclear how the impacts of recession may have changed this. The proportion of older workers receiving training was also increasing before the recession; in 2008, it was reported that 44% of workers aged 55+ have participated in employer sponsored training in the past two years, as opposed to 2003, when the rate was only 38% (O'Connell, Russell, Watson & Byrne, 2009).

This increase is due to the emergence of a number of policy initiatives specifically aimed at training and retaining older workers. These include the promotion of apprenticeships and modularisation; the *Towards 2016* social partnership agreement, designed to create a 'cultural mindset change'; and the phased abolition of the Pre-Retirement Allowance, which allowed over-55s to leave the workforce without needing to sign on (Department of the Taoiseach, 2006). Another initiative is the *Assisting the Recruitment and Retention of Older Workers* (ARROW) programme, which provides training for managers, human resources departments, and older workers themselves (Stratton, 2006).

¹⁰ £3,087 (December 2010).

¹¹ http://www.deewr.gov.au/Employment/Programs/ExpPlus/Pages/news_ApplicationsforTrainingGrants.aspx

¹² £37.6 million (December 2010).

¹³ <http://www.cbc.ca/canada/story/2009/12/15/finlay-older-employees-assistance.html#ixzz16gR84i00>

¹⁴ £56.5 million (December 2010).

¹⁵ http://www.hrsdc.gc.ca/eng/corporate/newsroom/speeches_solbergm/2008/080723.shtml

¹⁶ Central Statistics Office.



3.5 New Zealand

Policy makers attribute a high labour force participation rate of older people to the fact that there is no compulsory retirement age in New Zealand, and the fact that policy initiatives designed to make working life more comfortable for older people have been established (Department of Labour, 2007).

The Department of Labour has outlined the challenges facing New Zealand's ageing workforce, including the impact of the current economic climate. A further action group has been established to consult with stakeholders on the best way of supporting older workers to remain in the workplace; specifically, how employment, career and training services are adapting to suit older workers and their needs (Department of Labour, 2009).

3.6 United States of America

Workers of 65+ are becoming the fastest growing segment of the US workforce, and numbers in this group are likely to continue to grow until 2030 (Moseley & Dessinger, 2007). Few organisations in America, however, are developing strategic plans to retain, hire or rehire, or train or retrain older workers (Moseley & Dessinger, 2008). The Committee for Economic Development (1999) suggests that employers' reluctance to train workers nearing retirement may be a self-perpetuating problem: *'without adequate training, workers reach a plateau in their careers when little more than retirement is expected of them'*.

The provision of training for older workers is highly variable, according to the priority afforded the issue by each state government, and the funding and policy interplay between state and federal government. The recent *Ageing Worker Initiative*, introduced in July 2009, aims to increase employability and training access for older workers. Worth US\$10 million¹⁷, the funding was split across ten separate state organisations, and focuses on providing training and advancement opportunities for workers aged 55 and above (United States Department of Labor, 2009).

Job retention is highest among 55-64 year olds, even when the older worker is a recent addition to the company (OECD Employment Outlook).

¹⁷ £6.3 million (December 2010).

SECTION 4: OLDER LEARNERS IN THE WORKPLACE



SECTION 4:

OLDER LEARNERS IN THE WORKPLACE

4.1 Availability of training

Figure 4.1 Participation of EU-25 Labour Force in Education & Training by Age Group¹⁸

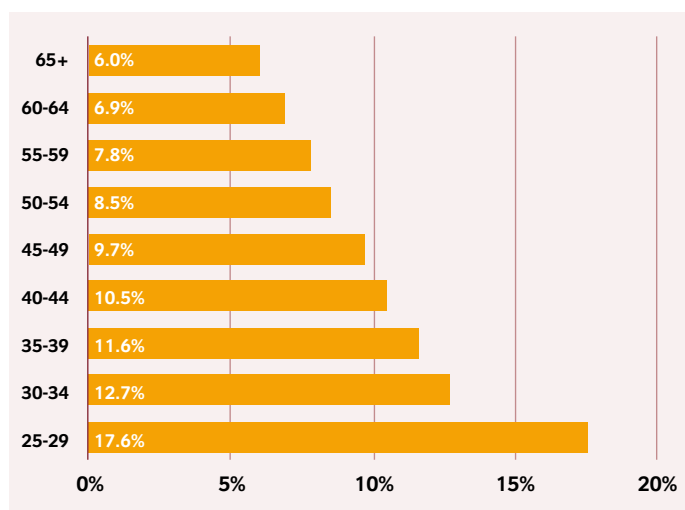


Figure 4.1 above demonstrates the rapidly diminishing participation in education and training that goes with age. Lower levels of training for older workers are also reflected in reported levels of mentoring. Younger workers report receiving more career-related mentoring than older workers, and mentors report spending less time with the older people whom they mentor (Finkelstein, Allen & Rhoton, 2003).

4.2 Employer attitudes and beliefs

4.2.1 EVIDENCE-BASED ASSUMPTIONS

Some of the attitudes and beliefs of employers towards older learners are rooted in evidence. As participation in learning encourages further learning, for example, training investments at an early age can be more efficient than training at a later age (e.g. Fouarge & Schils, 2009, citing Becker, 1962 and Heckman, 2000¹⁹). Roles which entail significant job-specific training impose fixed costs on employers, encouraging them to hire younger workers and to hire infrequently, as long as it results in longer job tenure (Cedefop, 2010a). While this latter example does not have a direct impact on the training of older workers, it does suggest that employers are more likely to hire, and therefore train, younger workers for certain jobs.

4.2.2 NEGATIVE BELIEFS AND STEREOTYPES

Stereotypes among employers are also prevalent. Gray and McGregor (2003) identify four popular age stereotypes: older workers do not want to learn; older workers cannot learn; older workers have great difficulty learning new technology; and an investment in training older workers provides a poor return. Motivation is also a significant perceived barrier; perceptions around older workers' inclination to learn are more negative than perceptions around their ability to learn (Maurer, 2007). According to a Netherlands study of over 1,000 employers, 73% of employers associate an increase in the average age of their staff with an increase in labour costs. Only 7% find increased productivity likely. 57% view resistance to change as being highly likely, and 56% forecast an increase in absenteeism (Remery, Henkens, Schippers & Ekamper, 2003).

Interviews with 36 human resource executives across the G7 suggested that employers generally value older workers, but they have concerns about cost, health issues and the ability of older workers to change and adapt, particularly to new technology (Towers Perrin, 2007). There appears to be a misconception that older workers do not require development and training (ACAS, 2006). Recruiters generally believe that younger employees require support and training, whilst older recruits add value directly to the business from previous experience. Some believe that skills, knowledge and ability all decrease with age and that training is necessary to make up this shortfall. Others consider that workers' skills and knowledge reflect the environment at the time of entry to employment. This latter view suggests that the fall in productivity of an ageing workforce is not due to age, but to outdated skills and that a failure to train is a form of age discrimination (Beck, 2009).

According to Australia's Business, Work, and Ageing Centre for Research, 'common perceptions about older workers are that they are costly and suffer from declining productivity, cognitive or intellectual capacities. Older workers are said to lack flexibility and adaptability, particularly in relation to new technologies and training. They are often viewed as having diminishing health, resulting in higher levels of absenteeism and accidents. Further stereotypes that surround older workers are they do not fit the culture of fast paced and dynamic business environments and that they will not stay as long as younger workers and as such are not a good recruitment or training investment' (cited by Foster, 2008).

¹⁸Source: Eurostat, EU Labour Force Survey, 2006.

¹⁹Becker, G. (1962). Investments in Human Capital: A Theoretical Analysis. *Journal of Political Economy* 7(5): 9-49 and Heckman, J. (2000). Policies to Foster Human Capital. *Research in Economics* 54: 3-56.

Foster adds that workplaces are competitive environments for resources and support, and that younger workers are privileged over mature age workers. Age discrimination is a key issue, with managers rating the potential for promotion of older workers as lower than for younger workers. There is also a misconception that older workers resist change and avoid learning. This attitude prohibits access to training for older workers, with managers not recognising their potential value (Chappell, Hawke, Rhodes & Solomon, 2004).

The impacts of negative stereotypes about older workers can be two-fold. Individuals may be denied access to training and development experiences, or they may not receive support and encouragement in the pursuit of training and development from an organisational or psychological perspective (Maurer & Rafuse, 2001²⁰, cited by Maurer, 2007).

It is worth noting that older workers are not the only group to suffer from negative perceptions. According to Newton et al. (2005), younger workers *'face negative assumptions about their maturity and reliability, their emphasis on their social life and a reduced likelihood to stay with a company, because they are at an early point in their careers'*.

4.2.3 POSITIVE BELIEFS AND STEREOTYPES

Older workers sometimes benefit from positive stereotypes, such as levels of loyalty, reliability, experience and job commitment (McGregor & Gray, 2002). According to the US National Household Survey (2005), employers show stronger support for older workers, with higher levels of financial support, programmes being offered in the workplace, and salaries being paid during training (Ewell, Kelly & Klein-Collins, 2008). As older workers in the US are classified as those aged between 35-64, this finding may not be specifically representative of those aged between 55-64. Evidence from other countries, however, supports this view; while employers in the Netherlands view older workers as being expensive and non-productive, for example, they recognise and value their knowledge: 55% of employers see greater organisational knowledge and experience among their older workers (Remery et al., 2003).

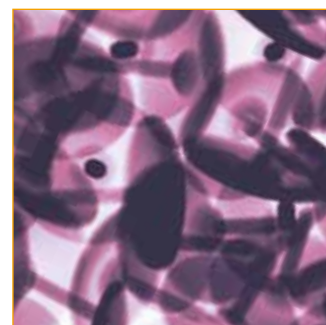
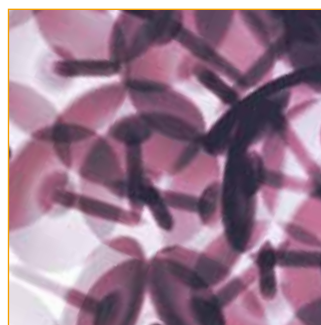
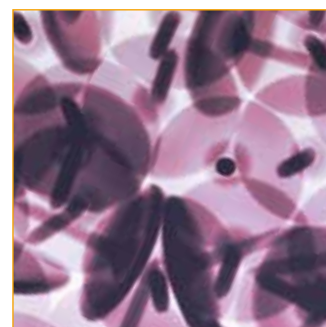
In the EU, employers are now seeing the consequences of 'early exit' from older workers, and are recognising their value. Organisations with a diverse age base are more likely to respond well to challenges (Walker, 1998).

In a 2005 study, the majority of executive-level employers noted that older workers bring 'experience, knowledge and mentoring ability' to the workplace (Lakin, Mullane & Porter Robinson 2007).

4.2.4 RETURN ON INVESTMENT

Investment in training is seen by some as more effective for younger learners in terms of return on investment because of the length of time they will be able to contribute to the labour market (Heckman, 2000). Employers do not believe that investment in the training of their older workers will give them adequate returns. Older workers are significantly less likely to receive promotion or a pay increase than their younger counterparts (Chappell et al., 2004). Contrary to many EU employers' beliefs, however, the net employment cost of older workers is the same to employers as that of younger workers (Walker, 1998).

Employers do not have access to information or data on the productivity and return on investment of older workers, and so lean towards the traditional model of valuing younger workers (Remery et al., 2003). In Ireland, 30% of older workers are given 'general training', which gives transferable skills, while only 14% are given specialist training specific to their employer (O'Connell et al., 2009). This could indicate that while the general trend is towards increasing employability in older workers, employers are not willing to train older workers specifically for their own business needs.



²⁰Citing Maurer, T. & N. Rafuse (2001). Learning, Not Litigating: Managing Employee Development and Avoiding Age Discrimination. *Academy of Management Executive* 15: 110-121.

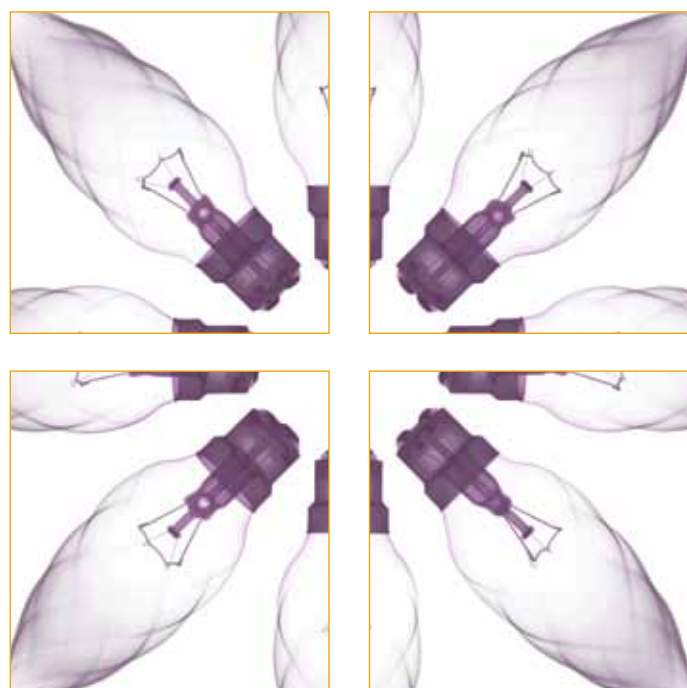
4.2.5 ORGANISATIONAL CULTURE

Changes in human resources practice and in organisational culture can help to dispel the misconceptions of older workers' abilities and worth. This can include the promotion of a culture of continuing learning and development, which has been shown to increase the retention of older workers with training (Chappell et al., 2004).

In New Zealand, organisational characteristics have been shown to have an impact on attitudes towards older workers, with smaller organisations valuing knowledge and experience (McGregor & Gray, 2002). In Ireland, the nature of the organisation is also significant, with 60% of public sector organisations offering workplace training as opposed to only 46% of private companies (O'Connell et al., 2009).

4.2.6 CHANGING BELIEFS

It appears that employer beliefs may be changing. Weiss and Maurer (2004) attempted to replicate a 1976 study on age discrimination, finding that employer beliefs about older workers' suitability for training, promotion and hiring had improved to the extent that they were similarly rated on these traits as younger workers were. The authors suggest that this may be due to changes in age discrimination legislation in the United States, together with the increasing prevalence of older people in the workplace, due to their growing numbers relative to the rest of the population.



4.3 Preferences and needs of older learners

4.3.1 MOTIVATIONS

The extent to which older workers engage with workplace opportunities to learn varies considerably. Older workers who view work as an important aspect of their life, who work full-time and who work out of financial necessity are more likely to engage with training than other groups (Armstrong-Stassen & Schlosser, 2007). According to Ferrier et al. (2008), older learners '*seek acknowledgement of the skills and knowledge they already possess and their ability to use these as a resource for their further learning – and for the learning of others*'.

Differences in learning activity begin to appear at the age of 45 and as individuals progress through various age brackets their motivations to learn appear to change (Beck, 2009). Some older learners can be unwilling to broaden their skills base. Those demonstrating this behaviour feel that specialising gives them a sense of identity and security (Tikkanen, Lahn, Withnall, Ward & Lyng, 2002). Motivations for learning in the workplace among older learners are mostly personal and for self-fulfilment, and include a desire to learn, to try new things and to stay mentally and physically active (Pincas, 2007; Towers Perrin, 2007). Older workers tend to be less motivated by enhancing or changing their careers (Pincas, 2007) or by financial incentives (Towers Perrin, 2007). This suggests that incorporating work-related training within a broader programme of lifelong learning may encourage older workers to participate. Attitudes towards learning and skills generally, with the exception of memory and speed, do not otherwise appear to change with age (Tikkanen, 2007).

American studies suggest that older people are also more frequently recommended to undertake training by their employers than their younger counterparts, possibly to keep up with technological shifts (Ewell et al., 2008). The compulsion to undertake training may be to combat the possibility that while older workers are happy to be trained, they might not necessarily see the need for it. This may contribute to the fact that older workers participate less in workplace training than younger workers (Chappell et al., 2004).

4.3.2 LEARNING PREFERENCES

According to Ferrier et al. (2008), older learners need evidence that the programme content is relevant to outcomes, suggesting that learning and work should be closely integrated and that opportunities should be given to apply newly acquired knowledge and skills.

Adults prefer to participate voluntarily in the learning experience and learn best if they have a degree of control over their learning environment. Older workers are adaptable to a range of learning methods, with the popular methods including training in small groups (90%), mentoring or on-the-job training (83%), larger classroom training (81%) and online training (71%) (Towers Perrin, 2008). Delahaye and Ehrich (2006) synthesised three Australian studies of older learners to draw out their preferences. These can be summarised as²¹:

- Learning among people of a similar age.
- Group and collegial learning strategies/peer support and mentoring.
- Need for slower paced and lower intensity training.
- Learner readiness.
- A main focus on practical knowledge.
- Independent learning with active, discovery based learning methods.
- Opportunities given to practise skills as they are learned.
- An informal learning environment.

Older adults tend to prefer informal approaches to education and training, including unaccredited training (Foster, 2008). A study of unemployed older adults (Lee et al., 2009) identified a preference for classroom-based training, but it is not clear whether this would also apply to older learners in the workplace.

Employers need to deliver training at a frequency that appeals to older workers. A 2007 survey indicates that nearly half of learners would ideally have between one and four training sessions per year (Towers Perrin, 2008). Where workplace learning and other forms of vocational education are concerned, they generally want to be able to apply the skills that they are learning to their jobs immediately so they can see a quick and practical 'return on investment' (DEST, 2003).

The right mix of skills training needs to be presented to older workers. The majority of older workers are interested in learning hard skills as well as soft skills: importantly, the same sets of skills that employers have indicated as being of interest to them. The skills rated as being of highest interest are computer and technical skills (79%), professional skills training (72%), management skills training (58%) and communication skills (53%) (Towers Perrin, 2008).

Employers note that older workers are enthusiastic learning participants, suggesting that as a group they would value working in organisations that offer them opportunities to learn (Towers Perrin, 2008).

4.3.3 PROMOTION OF TRAINING AND EXIT STRATEGIES

Although training in the workplace may be available to older learners, some encouragement and guidance may be necessary to promote it. Human resource development departments and trainers should work together to provide this encouragement (Tikkanen, 2006). Employers should also be aware that some older workers in need of support may avoid drawing attention to their shortfall by failing to request it (Billett & van Woerkom, 2006).

As older workers begin to consider retirement, much of the literature argues that personal interests should be included in their training and skills development. While significant resources are devoted to the transition of young learners into the workplace, remarkably little is available for older workers preparing for retirement (McNair, 2009). Training which addresses personal goals, which often overlap with work-related skills and encompass areas such as change management, self-reliance and flexibility (Gavondato & Kim, 2007), would assist in the transition from work to retirement (Tikkanen et al., 2002). Foster (2008) defines this as a 'managed exit strategy' as well as a means of retaining staff and suggests that some people preparing for retirement may engage in part-time work with their existing employers.

²¹ We have included preferences identified by at least two of the three synthesised studies.

4.4 Barriers to learning

4.4.1 OVERVIEW

Older learners in the workplace face many of the same barriers as those in other age groups. Workers on short-term contracts, the lower paid and those with no qualifications, for example, are all less likely to receive training (e.g. Foster, 2008). Newton et al. (2005) state that '*older workers' barriers to training can be broadly categorised as either fear or over-confidence*'. The fear is of their own perceived ability to learn and their over-confidence stems from their professional experience.

A major barrier lies in the level of training received by older workers (see Section 4.1), although reasons for lower training levels are bound up in other barriers such as employer stereotypes and employee motivations. Desire to participate in training tends to be lower among older age groups, leading Platman and Taylor (2006) to suggest that targeted initiatives will have a limited impact on harder-to-reach groups unless employers find ways to motivate these staff. Fuller and Unwin (2005) highlight the need to differentiate between the extent to which organisations provide and encourage development opportunities, and the extent to which individuals elect to engage in those opportunities.

4.4.2 STEREOTYPES AND EXPECTATIONS

One of the most significant barriers to older workers' participation in learning lies in stereotypes about their capability (see above under Section 4.2). A 2002 New Zealand study found that older workers rate themselves higher than their employers do in terms of ability and willingness to be trained (McGregor & Gray, 2002). In Canada, employers have negative perceptions about the capability of older workers to cope with technological and organisational change; interestingly, older workers themselves share similar concerns about their own capability (Zeytinoglu, Cooke & Harry, 2007).

The way in which trainers and instructors view older learners is also an important barrier. According to Crawford (2004), while many trainers enjoy the challenge of teaching older learners, '*others might feel threatened because of the expertise that such a student could use to challenge the instructor*'.

4.4.3 MOTIVATION AND INSECURITY

Another barrier lies in learner self-belief, and specifically in low self-esteem. In Australia, for example, younger workers tend to have higher qualifications and better study skills, as a result of the increase in secondary school retention rates in the 1980s and 1990s. Older workers, with lower levels of school and post-secondary qualifications, can have insecurities about going back to learning at a later age. They may also have legitimate concerns about being able to 'compete' in the workplace learning environment, with lower literacy, numeracy and related skills (Chappell et al., 2004).

The principal hurdle to further education for Australians aged over 45 and disadvantaged in the workforce is feelings of anxiety. Many of these adults do not think of themselves as good learners and generally lack confidence in their own abilities. Some fear or dislike learning as a result of negative experiences at school, while others avoid learning in the belief that it would be of no benefit to them (DEST, 2003).

Prior experiences may also be detrimental to learning, through past habits, old ways of thinking about an important issue (Crawford, 2004) or previous negative experiences with learning (Ewell et al., 2008). Crawford (*ibid.*) adds that older adults can be '*more sceptical about accepting new information, especially if it appears to contradict what they already believe*'.

4.4.4 MISMATCH WITH LEARNER NEEDS

It appears that current learning programmes are not meeting the needs of older workers. Across the G7 countries (France, Germany, Japan, Italy, the US, the UK and Canada), 44% of older workers are offered the opportunity for training and skill development, and yet only 19% of them find these helpful (Towers Perrin, 2007). Of the ten workplace practices which survey respondents were asked to analyse, the proportional difference among people being offered training and skill development versus those who find it helpful represents the most significant dichotomy. Older workers also demonstrate lower outcomes from workplace learning than their younger colleagues, with fewer reporting that they have learned new skills, experienced any increase in employability or achieved improved ability to advance in their careers (Ewell et al., 2008). As Section 4.3.1 demonstrates, this may represent a more fundamental mismatch between the outcomes of training sought by older individuals and those sought by their employers.

4.4.5 SOCIAL CAPITAL

Social networks are thought to decay with time, leading Maurer (2007) to suggest that older workers have fewer opportunities to receive support from co-workers, supervisors and others. He suggests that this decreased support may combine with the negative stereotyping and internal changes to lead to a decreased tendency to engage with learning.

4.4.6 AGE-RELATED EFFECTS ON LEARNING

Section 2.3 outlines various age-related barriers to learning, which can include a reduced ability to engage with rote learning, fast paced presentation and multiple tasks. Older workers also tend to have lower previous levels of education, which can present a barrier to successful learning engagement.

Taylor and Rose (2005) identify barriers to ICT learning for older workers. These include print size, together with the accessibility of print resources (which they identify as a preferred learning strategy), the small size of text in web address bars, the challenges around changing focus from the screen to their workbook to the keyboard, and pace, as manifested in time limits on training courses and sessions that move too quickly.

4.5 Programme design

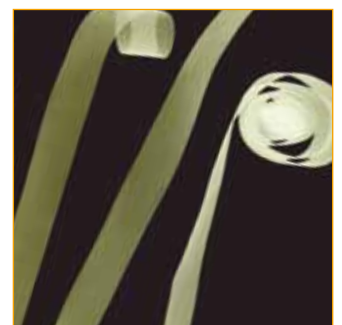
4.5.1 OVERVIEW

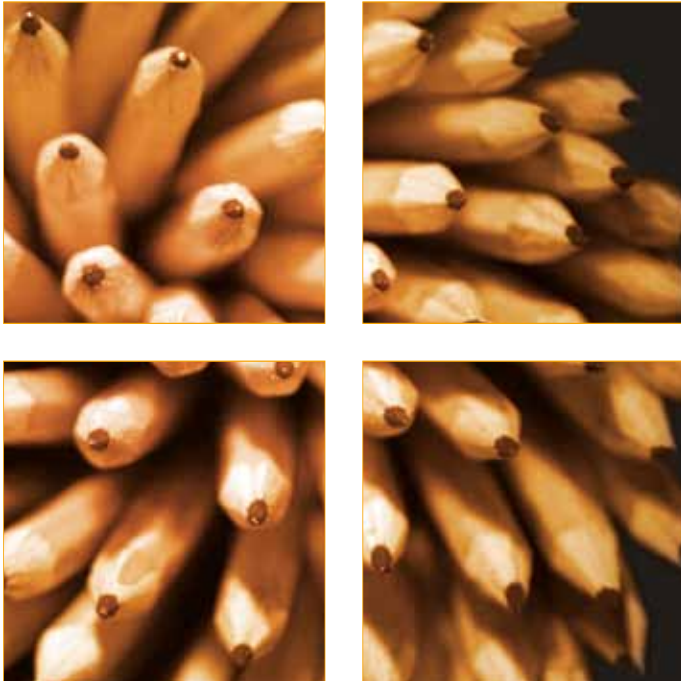
The industrial gerontology model proposes five factors for consideration when designing training programmes for older learners: motivation, structure, familiarity, organisation and time. These factors refer to issues such as whether the learner perceives content and materials as relevant, whether sufficient time is given to complete the training successfully, whether simpler information is provided at the start with more complex information being provided later on, whether training builds on the learners' current knowledge base and whether memory building instruction precedes content instruction (Callahan, Kiker & Cross, 2003). Callahan et al. point out that these factors are relevant to all learners, but they are of particular importance to older learners because they acknowledge important physical and cognitive aging effects related to learning.

Important programme elements for older learners include training that is presented at a slower pace, with opportunities for extended discussion and repetition as well as hands-on approaches to learning, experiential techniques, self-paced materials, co-operative approaches to learning and less reading (Foster, 2008). Foster adds that the following should be considered in programme design:

- Older learners' existing skills.
- The need to integrate learning and work, to ensure training relevance is understood.
- The lack of confidence or discomfort many older workers suffer within a learning environment.
- Any motivations to learn which an older worker might have.

Much of the information presented in the following sections necessarily makes generalisations about older learners. Diversity should always be considered, however. As Ferrier et al. (2008) point out, *'Diversity, whether it is age or other characteristics of adults, is... not necessarily problematic for skills development. Provided the design and delivery of programmes and activities are based on good practices in adult teaching and learning and they are flexible and responsive to the needs of participants and inclusive of differences between them, this diversity can be easily accommodated with only small adjustments. In addition, diversity can make a positive contribution to learning.'*





4.5.2 STRUCTURE AND PRESENTATION

Older learners prefer to work independently, using more flexible ways of learning. These include collaborative and practical activities, group work and independent work, as well as mixed classes with their younger counterparts (Pincas, 2007)²². Older workers also tend to engage with informal learning to a greater extent than formal learning (Berg & Chyung, 2008).

Links with learners' previous experiences, such as using their own case studies, can provide the older learner with confidence, as does taking account of their personal interests (Dworschak et al., 2006). Older learners tend to prefer practice-based learning and training, which is a highly social activity and encourages colleagues to share knowledge (Tikkanen et al., 2002). Older workers who are unused to learning may also require an avoidance of competitive situations, which can be intimidating and demotivating (Dworschak et al., 2006).

Callahan et al. (2003) examined empirically the effects of various instructional methods and instructional factors on older learner training performance. They find a positive effect on training outcomes from the following elements:

- Active participation by the learner in discovering how to perform the task under consideration.
- Use of the lecture method, although this finding conflicts with previous research (the authors argue, however, that previous research was based on an unverified assumption that older learners could not keep up with the presentation of new content, and that no other study had expressly examined the effects of the lecture method on older learner training performance).
- The use of modelling, through which learners are given the opportunity to watch another successfully perform the task under consideration.
- Self-pacing by the learner (interestingly, no positive effects were found from other instructional factors – materials and feedback, leading the authors to suggest that efforts may be better directed in integrating multiple methods rather than using multiple instructional factors). Self-pacing was found to have the biggest effect on training outcomes for older learners.

As indicated above, self-pacing, more than any other learning technique, has been shown to reduce the effects of any age-related declines for older learners (Maurer, 2007). Lahn (2003) states that any new material presented to older learners should be done so at a slower rate to allow for the reduced ability to process information. Research suggests that time for reflection should also be built into programmes for older learners. Older adults compensate for their lesser ability to learn quickly through a wealth of experiences that tends to support superior reasoning and judgement abilities, if they are given time to think and reflect upon the learning activity (Crawford, 2004).

²² Note that mixed-age classes as recommended by Pincas conflicts with the recommendation of Delahaye and Ehrich (2006) to place older learners with people of a similar age (see Section 4.3.2).

E-LEARNING

The American Society for Training and Development has found that e-learning is used for 27% to 38% of all formal learning programmes in organisations, meaning that older workers – with everyone else – are being exposed to e-learning at work (Githens, 2007). Githens adds that *'decision makers cannot assume that older individuals are not interested in participating in e-learning opportunities merely because of their age'*, but there are particular barriers which need to be addressed, from negative stereotypes to usability and interface design.

According to DePryck and Kraemer (2008), supplementing work-based learning with formal e-training programmes for older workers can help to build a constructive relationship between employer and employee beyond the formal retirement age, thus ensuring that important skills are not lost.

Where it is not possible to bring learners together, the use of paper-based 'How to get started' instruction booklets with screen shots and instructions in simple jargon free language will help learners get up to speed with the technology and web interfaces. This is particularly true for older learners as their comfort level and familiarity with paper documentation is high and readily fits their mental model of instructional texts (Tyler-Smith, 2006).

According to Charness, Czaja and Sharit (2007), consistency between stimuli and required responses is essential. They provide the example of learning a software application: *'if the appearance of an icon requires one type of response during some of the learning trials and a different response in other trials, the icon is not consistently being linked to a response.'* Frequent pauses will allow learners to take notes and hold discussions, further aiding the older learner. Furthermore sufficient feedback, relevant tasks and use of existing knowledge and experience should be included in any training programme (Lahn, 2003). Foster (2008, citing Schaie and Willis, 1996²³) also highlights the importance of using examples in instructional material and using large print reading materials.

Older learners tend to dislike formal assessments (Ferrier et al., 2008). The fear that older learners often have of critical assessment can be addressed by using less formal self-assessment methods (Foster, 2008).

Taylor and Rose (2005) identify strategies for computer-based learning targeted at older learners, which include using a data projector (visual demonstration supports the learning style of many older learners), providing a well equipped and managed computer room, making computers available outside of regular session times, demonstrating self help strategies early in the course (e.g. switching the computer off and resetting it), and using every day metaphors to demystify computer concepts (e.g. 'you don't need to know how to drop in a carburettor in order to drive a car').

The US-based National Institute on Aging and the National Library of Medicine have developed guidelines aimed at older users of technology (Githens, 2007). These are based on an assumption of vision problems rather than cognitive decline, and include using only sans serif fonts, using 12 or 14 point font size, using double spaced text and left justification, avoiding the use of yellow, blue or green in close proximity, avoiding patterned backgrounds, inserting text alternatives for all graphics and using consistent layout. Githens adds that usability alone, however, is insufficient; older learners also need interesting and engaging material, together with good aesthetics.

Foster suggests that older people are more likely to remember the overall message of a text rather than its detail, meaning that assessments should incorporate:

- Multiple choice questions, requiring recognition memory.
- Essay questions, requiring the learner to discuss key points or the overall subject area more broadly.
- Sufficient time, allowing older learners to recall the required information and detail.
- The provision of examples, adding meaning to subject areas.
- Large print reading materials.

Research by Lundberg and Marshallsay (2007) suggested that four out of five older workers favour 'train the trainer' courses to equip them to train or mentor younger workers.

²³Schaie, K. & S. Willis (1996). *Adult Development and Aging*. New York: Harper Collins.

4.5.3 CONSIDERATIONS FOR EMPLOYERS

Employers should provide training frameworks, outlining the skill requirements of each role regardless of age in order to ensure that relevant training is undertaken. In some cases training is linked to staff appraisals, with development plans to address any additional training needs, both for positions held and career aspirations (Newton et al., 2005). The OECD recommends the use of Recognition of Prior Learning to ensure no time is wasted on relearning (OECD, 2003).

Conflicting advice exists around compulsion, with Dworschak et al. (2006) arguing that an element of compulsion may sometimes be needed, with employers also needing to communicate clearly the benefits and outcomes of training to the older learner, and Towers Perrin (2008) stating that voluntary arrangements work best. Further encouragement may come from 'inter-generational communication and cooperation', as older learners exchange skills and knowledge with their younger colleagues and feel empowered by taking on a 'teacher' role (Tikkanen et al., 2002).

ACAS suggests that older people can be good mentors, offering their own experience to younger colleagues as well as to specialised projects. This could reduce training costs, allowing the transfer of skills internally. Human resource managers particularly require training to cater for this, specifically on age diversity issues (ACAS, 2006).

The Department for Work and Pensions encourages employers to ensure that all training practices are compliant with age-related legislation, including course content. Any employees not attending or refusing to attend training should be questioned in order that any possible discrimination issues are promptly resolved (Department for Work and Pensions, 2009). It also offers a checklist for employers to ensure that training and development are age positive (*ibid.*):

- Ensure that training and development is available to all employee age groups.
- Ensure that training is available to all employees at all levels, ranging from new recruits to longer term staff. This keeps everyone up to date in terms of their abilities and knowledge.
- Tailor training to both the organisation's needs as well as those of the individual.

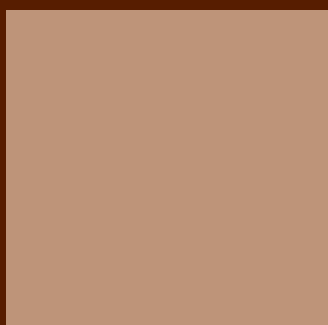
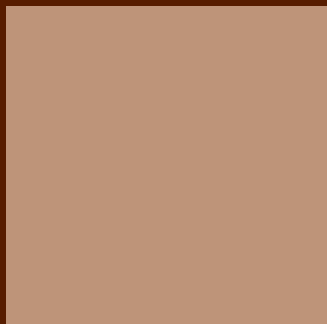
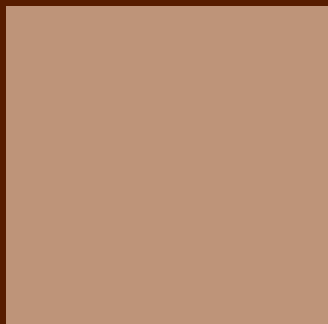
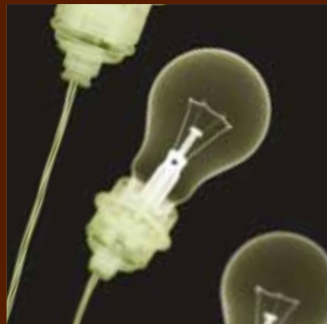
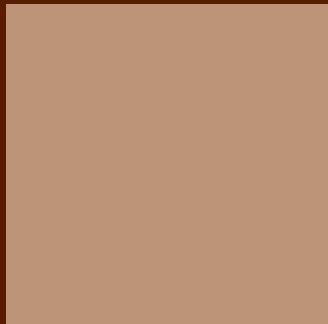
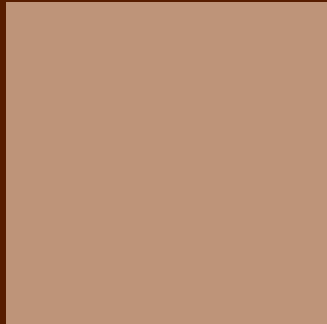
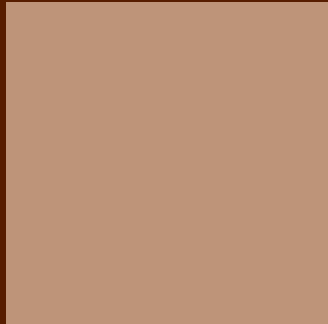


- Engage with the staff regularly to discuss development needs and opportunities, ensuring that their views are heard. This should be recorded so that any feedback can be actioned, as appropriate.
- Consider employee self-assessments in terms of skills and training needs.
- In addition to formal communication, allow informal discussions to take place regularly between staff and managers.
- Encourage and support older workers less willing to participate in training, highlighting the benefits and relevance of training. It might be beneficial to use other older workers who have undergone training as examples and mentors.

Furthermore, the Department for Work and Pensions (*ibid.*) has recommendations regarding how employers should approach training:

- Implement a mentoring scheme, allowing older workers to help develop younger staff.
- Ensure all training is flexible in terms of methodology, location and timing. Feedback should be taken on board.
- Employees who have already undergone training could be used to encourage course attendance, sharing their own experiences.
- Ensure that all training has no ageist content and that those carrying out the training are themselves trained in diversity and equality issues.
- If no internal trainers are appropriate, consider employing external companies.

SECTION 5: RECOMMENDATIONS



SECTION 5: RECOMMENDATIONS

5.1 General

The literature reviewed in this document suggests that much of the challenge with developing an appropriate learning offer for older workers lies in negative stereotypes, both on the part of employers and of older workers themselves. Finding a way to change perceptions seems to be the only real way to address this significant challenge. The Business, Work and Ageing Centre for Research (cited in Foster, 2008) suggests highlighting the following to change perceptions²⁴:

- Older workers can use experience and skills to offset any decline in performance due to ageing.
- The idea of general intellectual deterioration that impairs performances with age is incorrect.
- When learning programmes are tailored to the age, knowledge and experience of older workers, learning is just as effective and no more expensive than for younger workers.
- The goal of older workers is not necessarily to retire.
- Older workers are interested in undertaking training and furthering their careers.

The literature also makes clear that training programmes tailored towards older learners need to sit within the wider context of support for older workers. Eurofound (2008), alongside its recommendation that older workers should have the same opportunities for training as younger workers, recommends the increased availability of part-time work as part of a more phased transition to retirement, more flexible working time arrangements, greater participation of workplaces in high performance working activities, monitoring of the level of exposure to physical risks of workers approaching retirement, improved working conditions and the potential to stay in employment until or beyond retirement age.

Foster (2008) points out that *'good practice for mature age learners and workers is good practice for all learners. There may be some preferences for learning that are age appropriate, but there is no suggestion that they require a discrete approach to merely cater for their age.'*

5.2 Employer tools

5.2.1 OVERVIEW

Employers need to ensure that training support is provided throughout workers' careers and that age-appropriate training is developed. It is also imperative to combat ageism in the workplace, primarily through senior management support and a supportive human resources environment. It is also important to obtain commitment from the older workers themselves (Walker, 1998).

Practices and culture in the workplace should be aimed at the enabling of an appealing, rewarding training environment for older workers. Changes can include (Chappell et al., 2004):

- Shifts in culture and policies towards supporting older workers.
- Targeted policies about providing training and development opportunities for older workers.
- The provision of supportive supervision and the fostering of developmental relationships.
- Training managers in equality issues.

Learners themselves need to be made aware of the possible benefits of training and the returns they may receive from their participation (*ibid.*). A case study analysis by Newton et al. (2005) suggests that successful organisations have a training policy which links training to job competencies and role matrices, ensuring that training is driven by job requirements rather than age.

Cedefop (2010a) suggests that as the working population ages, employers should review the incidence of skills mismatch among their employees, perhaps by conducting surveys of their employees to ascertain their views on how well their skills are used.

The following table is taken from the Business, Work and Ageing Centre for Research (*op cit.*), and demonstrates how training policies can be built into a broader framework for supporting older workers:

²⁴The recommendations pertinent to older learners have been listed here; the recommendations pertinent to older workers more generally have been excluded.

RESPONSE TYPE	ACTIONS
Human resources practice	<ul style="list-style-type: none"> ● Use of information systems that inform human resource managers about the age profile of the workforce. These should provide data to measure recruitment, training, retention and exit practice by age and gender.
Organisational culture	<ul style="list-style-type: none"> ● Review how managers and staff respond to older workers. ● Programmes to counter stereotypes of older workers and about age discrimination legislation. ● Culture of diversity in the organisation. ● Health and wellbeing programmes to counteract health issues regarding ageing.
Recruitment	<ul style="list-style-type: none"> ● No age limitations in advertisements and selection of media to solicit a range of responses. ● Focus on competence, not age. ● Become an employer of choice through employment programmes that focus on diversity. ● Recruit and retrain older people to address skills shortages.
Retention	<ul style="list-style-type: none"> ● Retain and reward workers with the best skills. ● Career planning and intervention to support retention. ● Re-engineer jobs for diversity of skills and capabilities; ensure training and occupational health and safety measures. ● Offer flexible work arrangements (permanent part-time reduced hours, fixed term contracts, home working, temporary, etc).
Training	<ul style="list-style-type: none"> ● Promote and implement lifelong learning. ● Encourage continuous skill acquisition. ● Encourage employees to build their CVs/résumé – documenting skills developed on the job. ● Formal identification of employee skills when selecting for new projects. ● Use older workers as mentors. ● Sponsor sabbaticals to encourage training.
Exit strategies	<ul style="list-style-type: none"> ● Focus away from age and towards business objectives. ● Flexible, phased work to retirement transition schemes ‘that equitably service the needs of both employees and employers’.

5.2.2 KEY EMPLOYER RECOMMENDATIONS

- Ensure that age stereotypes within the organisation are addressed. This could be in the form of programmes to counter stereotypes, and audits to ensure that older workers are being treated similarly to younger workers and have the same access to training opportunities.
- Develop training frameworks for all employees, regardless of age, which outline the skill requirements of each role to ensure that relevant training is undertaken.
- Consider targeting learning programmes at older workers, as they are less likely to participate in training than younger learners when such programmes are available. Work with individuals to ensure that age-related barriers to participation in learning programmes are addressed. This might include peer group support and mentoring programmes to ensure that older learners have the social support they need to participate in training, and the encouragement of those who have undertaken training to share their positive experiences with other members of staff.
- Consider good practice in training for all learners. This should include training in job-specific skills as well as general employability skills, and the promotion of a culture of continuing learning and development throughout the organisation.
- Work closely with practitioners to ensure that the needs of older learners are considered in training design. This could incorporate learning among people of a similar age, peer support, lower intensity training, a focus on practical knowledge and the promotion of clear job-related outcomes, self-paced and independent learning, offering the opportunity to practise skills as they are learned, and ensuring an informal learning environment.
- Consider developing mentoring programmes, through which older workers are able to use their skills and experience to develop others, as well as being supported to continue their own skills development.
- Encourage and support regular feedback from all staff, regardless of age, on training provision within the organisation.
- Ensure that those employed to design, allocate and deliver training have themselves been trained in diversity and equality issues.

- Build training provision for older learners into a broader framework for the support of older workers, which should include elements such as recruiting according to competence and not age, the provision of flexible work arrangements and promoting and implementing lifelong learning.
- Consider how the skills of older learners could be used until and beyond retirement, perhaps through a phased retirement process or by employing older people on a consultancy basis after their official retirement date.

5.3 Practitioner tools

5.3.1 OVERVIEW

It is important not to treat older workers as a homogenous group. The differences between older workers mean that measures should be targeted towards the needs and circumstances of specific sub-groups, and learning preferences, motivations and expectations should receive particular consideration when designing and delivering training (Ferrier et al., 2008).

By making the learning process an ‘informal and social experience’, rather than one based on formal assessment, older workers may be able to overcome their anxiety. It may also help to provide a safe, non-threatening environment where the teacher and the learner negotiate the learning process and outcomes (DEST, 2003).

Good practice in training older workers, according to Chappell et al. (2004), focuses on engaging learners in the training process and designing training that is appropriate to their needs and experience. The key aspects of successful engagement of older workers in workplace training are the appropriate organisation of training materials, the timing and place of delivery, learner involvement in training design, demonstrated relevance to work and support from employers. Specifically Chappell et al. add that it is important to provide:

- A safe, non-threatening environment.
- Flexibility in training delivery and times.
- Small class sizes.
- The chance for older workers to assist in training design.
- Clear linkages to value and reward from employers.
- Clear support from management.
- An environment free from competitive context.

The methods of delivering training are also important, with Chappell et al. recommending that providers give clearly written instructions; present material in small, digestible units; focus on verbal learning methods rather than literacy-based; and accommodate the time needs of individual learners. It is also important for employers and managers to show learners the work relevancy of their training, provide feedback, and give opportunities for learners to practise their skills as they are developed.

The use of innovative tools such as e-learning is also recommended, which gives older learners flexibility in terms of time commitment and assessment, and also allows learners to pace themselves according to their needs.

5.3.2 KEY PRACTITIONER RECOMMENDATIONS

- Do not treat older learners as a homogenous group. Greater variability in learning ability between older learners also suggests that individual characteristics play a greater role than they would among younger groups of learners. Good training for older learners is essentially the same as good training for other groups – it focuses on the needs of the individual and does not make assumptions about the group, and is both flexible and responsive.
- Independent and self-paced learning, with a practical rather than theoretical focus, are methods which should receive priority for older workers. Learning activities might include collaborative and practical activities, group work and independent work, and the use of learners' previous experience and case studies. Sufficient feedback should be offered, together with the use of learners' existing knowledge and experience.
- Ensure that learning outcomes are closely integrated with work and necessary job skills, and that this is communicated effectively to older learners to ensure that they feel the learning programme is both useful and relevant to their needs.
- If delivering e-learning programmes, consider using a data projector, providing paper-based instruction booklets which incorporate screen shots and jargon-free instructions, and making computers available outside of regular session times.
- Consider the use of modelling, through which learners are given the opportunity to watch another successfully perform the task under consideration.
- Give learners advance knowledge about the tasks to be undertaken.

- Minimise the use of formal assessment.
- Ensure that accessibility is incorporated in the development of learning resources, such as larger print size.

5.4 Policy tools

5.4.1 OVERVIEW

The issue of training and skills development for older workers is part of a complex 'policy web' and cannot be addressed successfully in isolation (Chappell et al., 2004). Policy makers also need to consider the impacts of creating and retaining an older workforce, on the individual workers themselves and also in wider social and economic contexts.

Some countries, such as Australia, are resorting to providing direct funding incentives for employers. A new initiative from September 2010 sees employers and small business owners applying for an Experience+ Training Grant (see Section 3.2 for details), which rewards them for encouraging their workers aged 50 and over to undertake further training.

Ireland is one of the few EU countries to have reached the Stockholm 2010 targets for achieving 50% of older workers in employment (Stratton, 2006). This has been achieved through initiatives such as Towards 2016, a programme whose objectives include changing the perceptions of older workers' abilities. Programmes such as ARROW (Assisting the Recruitment and Retention of Older Workers) in 2003 have also contributed by subsidising the training of managers and older workers. It also specifically addresses change in the human resources sector and provides training on the recruitment and support of older workers.

Towers Perrin (2007) recommends the provision of both positive and negative incentives for employers to hire and retain 'mature talent'. These incentives might include age discrimination laws, legislation to discourage early retirement, subsidies for hiring older workers, state-financed training and retraining programmes, and information campaigns to build awareness on mature workforce issues.

5.4.2 KEY POLICY RECOMMENDATIONS

- Campaigns directed at perception change may be the key role for policy makers to play in improving the provision of training for older learners. Age stereotypes are a major barrier both to the provision and take-up of training by older workers, and large-scale campaigns to challenge perceptions can be an important way of initiating change as the workforce grows older.
- Consider the use of direct funding incentives to encourage employers to train their older workers.
- Ensure that age discrimination laws are fit for purpose, and that employers do not have the option of creating business cases for not training their older workers.
- Work with researchers and employers to develop a better understanding of how an ageing workforce can best be managed, looking at flexible working, phased retirement planning and skills transfer to ensure that (a) the older workforce is trained and effective and (b) valuable skills-sets are not lost as employees reach retirement age.

5.5 Further research

There is a conflict between ensuring that research on older learners generalises sufficiently to enable useful, wide-scale recommendations on how to improve provision, and ensuring that older learners are not treated as a homogenous group with exactly the same needs. Research to date seems to have erred more on the side of the former. There is a need, we believe, for more targeted research which is able to make general recommendations but which recognises to a greater extent the differences between individual learners and the organisations in which they work.

It is generally accepted that smaller organisations tend to offer less training to all workers, and particularly older ones who tend to have more part-time roles (e.g. Newton et al., 2005). A New Zealand research paper (McGregor & Gray, 2002) also suggested that smaller organisations value the skills and experience of older workers to a greater extent. If this is the case, it represents a fundamental disconnect; organisations that do not value older workers may not see them as worth significant training investment, and organisations that do value them may assume that their knowledge and experience belies a need for further skills development. Further research is needed to verify whether this is, in fact, a more general pattern, and if it is, how organisations can be persuaded (a) to value older learners and (b) of the case for training people who already have extensive skills and experience.

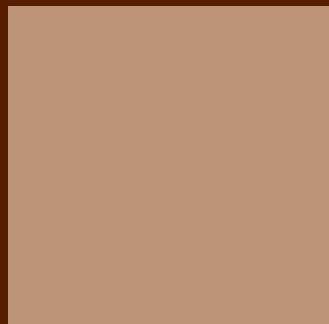
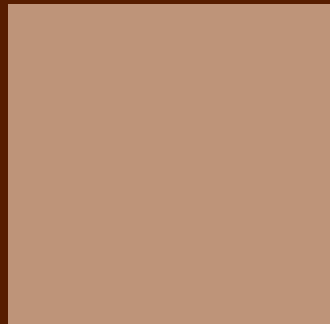
As Foster (see Section 5.1) makes clear, good training for older learners is often the same as good training for all learners – training which recognises individual differences and which incorporates flexibility and responsiveness at its core. Delivery of research, and dissemination of resulting messages, looking at the needs of older learners within the context of all possible differences – gender, ethnicity, reasons for working, sector, previous learning, et cetera – is almost certainly unmanageable. Targeted research should therefore be carried out which looks at the needs of older learners within different contexts and which does not approach them as a group with the same needs.

There is an argument to be made that if good practice in training for older learners is often the same as good practice in training for all learners, there is no need for further research which focuses upon older learners as a distinct group. It is the case, however, that older learners have less access to training and are less likely to participate when it is offered to them. Impending demographic changes suggest that continuing the status quo is likely to have severe impacts on economic and social outcomes.

The immediate focus of future research should therefore be on developing a better understanding of how to get employers to offer training to older workers, and how to encourage older workers to take up the offer of training, rather than on training design.



SECTION 6: BIBLIOGRAPHY



SECTION 6: BIBLIOGRAPHY

ACAS (2006). *Advice Leaflet: Employing Older Workers*. London: ACAS.

Age Positive (2007). *Training: Age Positive Guide*. London: Department for Work and Pensions.

Armstrong-Stassen, M. & F. Schlosser (2008). Benefits of a Supportive Development Climate for Older Workers. *Journal of Managerial Psychology* 23(4): 419-437.

ASTD (2009). *Bridging the Skills Gap: New Factors Compounding the Skills Shortage*. Alexandria, VA: The American Society for Training and Development.

Beck, V. (2009). *Older Workers – Older Learners: The Perspectives of Employers in the East Midlands*. Leicester: Centre for Labour Market Studies/ Learning & Skills Council.

Berg, S. & S. Chyung (2008). Factors that Influence Informal Learning in the Workplace. *Journal of Workplace Learning* 20(4): 229-244.

Billett S. & M. van Woerkom (2006). Older Workers and Learning Through Work: The Need for Agency and Critical Reflection in T. Tikkanen & B. Nyhan (Eds) *Promoting Lifelong Learning For Older Workers: An International Overview*. Luxembourg: Office for Official Publications of the European Communities/Cedefop.

Callahan, J., D. Kiker & T. Cross (2003). Does Method Matter? A Meta-Analysis of the Effect of Training Method on Older Learner Training Performance. *Journal of Management* 29(5): 663-680.

Casebow, P. & O. Ferguson (2010). *How Managers Learn (In Their Own Words) – A Survey of Managers' Learning Activities and their Effectiveness*. Edinburgh: Good Practice.

Cavanagh, J. & F. Blanchard-Fields (2002). *Adult Development and Aging*. Belmont: Wadsworth Group.

Cedefop (2010a). *The Right Skills for Silver Workers: An Empirical Analysis*. Luxembourg: European Union.

Cedefop (2010b). *The Skill Matching Challenge: Analysing Skill Mismatch and Policy Implications*. Luxembourg: European Union.

Chappell, C., G. Hawke, C. Rhodes & N. Solomon (2004). *Major Research Program for Older Workers: Stage 1 – The Conceptual Framework*. Sydney: The Australian Centre for Organisational, Vocational and Adult Learning.

Charness, N., S. Czaja & J. Sharit (2007). Age and Technology for Work. In I. Glover & M. Branine (Eds) *Ageism in Work and Employment*. Aldershot: Ashgate Publishing.

Chen, L.-K., Y. Kim, P. Moon & S. Merriam (2008). A Review and Critique of the Portrayal of Older Adult Learners in Adult Education Journals, 1980-2006. *Adult Education Quarterly* 59(1): 3-21.

Committee for Economic Development (1999). *New Opportunities for Older Workers*. Washington: Committee for Economic Development.

Crawford, D. (2004). The Role of Ageing in Adult Learning: Implications for Instructors in Higher Education. *New Horizons for Learning Online Journal* 11(1).

Delahaye, B. & L. Ehrich (2006). Human Resource Development and the Older Learner. In *Proceedings 20th ANZAM Conference*, Yepoon.

DePryck, K. & J. Kraemer (2008). Turning Silver E-Learners into Silver Workers. In C. Bonk et al. (Eds) *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2008*. Chesapeake, VA: AACE.

Department for Work and Pensions (2009). *Older Workers Statistical Information Booklet, Quarter Two*. London: Department for Work and Pensions.

Department of Labour (2007). *Older Workers Labour Market Outcomes*. Wellington: Department of Labour.

Department of Labour (2009). *Understanding the Job Mobility and Employability of Older Workers*. Wellington: Department of Labour.

Department of the Taoiseach (2006). *Towards 2016: Ten Year Framework Social Partnership Agreement 2006-2015*. Dublin: Government of Ireland.

- DEST (2003). *Adult Learning in Australia: A Consultation Paper*. Canberra: The Department for Education and Training.
- Duncan, C. (2001). *Ageism, Early Exit, and the Rationality of Age-Based Discrimination*. In I. Glover & M. Branine (Eds) *Ageism in Work and Employment*. Aldershot: Ashgate Publishing.
- Dworschak B., H. Buck & A. Schletz (2006). Building Workplaces in Line With the Ageing Process. In T. Tikkanen & B. Nyhan (Eds) *Promoting Lifelong Learning For Older Workers: An International Overview*. Luxembourg: Office for Official Publications of the European Communities/Cedefop.
- Eisen, M.-J. (1998). Current Practice & Innovative Programs in Older Adult Learning. *New Directions for Adult and Continuing Education* 77: 41-53.
- Ewell, P., P. Kelly and R. Klein-Collins (2008). *Adult Learning in Focus: National and State-by-State Data*. Chicago: Centre for Adult and Experiential Learning.
- Eurofound (2008). *Working Conditions of an Ageing Workforce*. Luxembourg: European Union.
- The Expert Panel on Older Workers (2008). *Supporting and Engaging Older Workers in the New Economy*. Ottawa: Human Resources & Skills Development Canada.
- Farrell, J., (2005). *A Current Debate on Employers' Responses to an Ageing Workforce*. Melbourne: Monash University.
- Feinsod, R. & T. Davenport (2006). *The Ageing Workforce: Challenge or Opportunity?* Scottsdale: Worldatwork.
- Ferrier, F., G. Burke & C. Selby Smith (2008). *Skills Development for a Diverse Older Workforce*. Adelaide: NCVET.
- Fenwick, T. (2008). Workplace Learning: Emerging Trends and New Perspectives. *New Directions for Adult and Continuing Education* 119: 17-26.
- Finkelstein, L., T. Allen & L. Rhoton (2003). An Examination of the Effects of Age Diversity in Mentoring Relationships. *Group and Organisation Management* 28: 249-262.
- Foster, S. (2008). *Mature Age Learners and Workers: A Review of the Literature*. Melbourne: Work-Based Education Research Centre, Victoria University.
- Fouarge, D. & T. Schils (2009). The Effect of Early Retirement Incentives on the Training Participation of Older Workers. *Review of Labour Economics & Industrial Relations* 23: 85-109.
- Fraser, L., K. McKenna, M. Turpin, S. Allen & J. Liddle (2009). Older Workers: An Exploration of the Benefits, Barriers and Adaptations for Older People in the Workforce. *Work* 33(3): 261-272.
- Fuller, A. & L. Unwin (2005). Older and Wiser? Workplace Learning from the Perspective of Experienced Employees. *International Journal of Lifelong Education* 24(1): 21-39.
- Gavondato, T. & M. Kim (2007). Policy Framework on Retraining for Older Workers through Specialised TVET Programs in T. Karmel & R. Maclean. *Technical and Vocational Training in an Ageing Society*. Adelaide: NCVET.
- Githens, R. (2007). Older Adults and E-Learning: Opportunities and Barriers. *Quarterly Review of Distance Education* 8(4): 329-338.
- Goldberg, C. (2007). Diversity Issues for an Aging Workforce. In K. Shultz & G. Adams (Eds) *Aging and Work in the 21st Century*. New Jersey: Lawrence Erlbaum Associates.
- Gray, L. & J. McGregor (2003). Human Resource Development and Older Workers: Stereotypes in New Zealand. *Asia Pacific Journal of Human Resources* 41(3): 338-353.
- Heckman, J. (2000). *Policies to Foster Human Capital*. Cambridge, Massachusetts: National Bureau of Economic Research.
- Hodkinson, H. (2006). Older People as Learners: Identity, Life Change and Well Being. Paper presented at International Conference of the Association for Education and Ageing, *Later Life Learning – Fit for Purpose*. Leeds: University of Leeds.

- Lahn, C. (2003). Competence and Learning in Late Career. *European Educational Research Journal* 2(1): 126-140.
- Lakin, M.-B., L. Mullane & S. Porter Robinson (2007). *Framing New Terrain: Older Adults & Higher Education*. Washington: American Council on Education.
- Lakin, M.-B., L. Mullane & S. Porter Robinson (2008). *Mapping New Directions: Higher Education for Older Adults*. Washington: American Council on Education.
- Lee, C., S. Czaja & J. Sharit (2009). Training Older Workers for Technology-Based Employment. *Educ. Gerontol.* 35(1): 15-31.
- Leitch, S. (2006). *Review of Skills: Prosperity for All in a Global Economy – World Class Skills*. London: HM Treasury.
- Lundberg, D. & Z. Marshallsay (2007). *Older Workers' Perspectives on Training and Retention of Older Workers*. Adelaide: NCVET.
- Marshall, V. (2001). *Canadian Research on Older Workers*. Presented at 'Problems of Older Workers' Symposium at the International Association on Gerontology Conference, Vancouver, British Columbia.
- Marshall, V. & M. Mueller (2002). Rethinking Social Policy for an Aging Workforce and Society: Insights from the Life Course Perspective. *CPRN Discussion Paper No. W118*. Ottawa: Canadian Policy Research Networks.
- Maurer, T. (2007). Employee Development and Training Issues Related to the Aging Workforce. In K. Shultz & G. Adams (Eds) *Aging and Work in the 21st Century*. New Jersey: Lawrence Erlbaum Associates.
- Mayhew, K., M. Elliot & B. Rijkers (2008). *Upskilling Older Workers*. Oxford: Ageing Horizons – Oxford Institute of Ageing.
- McGregor, J. & L. Gray (2002). Stereotypes and Older Workers: The New Zealand Experience. *Social Policy Journal of New Zealand* 18: 163-177.
- McNair, S., M. Flynn, L. Owen, C. Humphreys & S. Woodfield (2004). *Changing Work in Later Life: A Study of Job Transitions*. Guildford: University of Surrey.
- McNair, S. (2009). *Demography and Lifelong Learning: IFLL Thematic Paper 1*. Leicester: National Institute of Adult Continuing Education.
- Merriam, S. (2001). *The New Update on Adult Learning Theory*. San Francisco: Jossey-Bass.
- Molinie, A.-F. (2003) *Age and Working Conditions in the European Union* Dublin: European Foundation for the Improvement of Living and Working Conditions.
- Moseley, J. & J. Dessinger (2007). *Training Older Workers and Learners: Maximizing the Workplace Performance of an Aging Workforce*. San Francisco, CA: Pfeiffer.
- Moseley, J. & J. Dessinger (2008). Older Worker-Learners (OWLS) are Here... And They are Here to Stay. *Performance Improvement* 47(10): 5-8.
- Murray, P. & J. Syed (2005). Critical Issues in Managing Diversity in Australia. *Asia Pacific Journal of Human Resources* 43(2): 210-224.
- Newton, B., J. Hurstfield, L. Miller & P. Bates (2005). *Practical Tips and Guidance on Training a Mixed-Age Workforce*. Sheffield: Age Partnership Group.
- Nyhan, B. (2006). New Policy Thinking on the Relationship Between Age, Work and Learning in T. Tikkanen & B. Nyhan (Eds) *Promoting Lifelong Learning For Older Workers: An International Overview*. Luxembourg: Office for Official Publications of the European Communities/Cedefop.
- O'Connell, P.J., H. Russell, D. Watson and D. Byrne (2009). *The Changing Workplace: A Survey of Employers' Views and Experiences*. Dublin: The National Centre for Partnership & Performance.
- OECD (2003). *Beyond the Rhetoric. Adult Learning Policies and Practices*. Paris: OECD.
- Paloniemi, S. (2006). Employees' Conceptions of Age, Experience and Competence. In T. Tikkanen & B. Nyhan (Eds) *Promoting Lifelong Learning For Older Workers: An International Overview*. Luxembourg: Office for Official Publications of the European Communities/Cedefop.

- Phillipson, C. & J. Ogg (2010). *Active Ageing and Universities: Engaging Older Learners*. London: Universities UK.
- Pincas, A. (2007). How do Mature Learners Learn? *Quality in Ageing and Older Adults* 8(4): 28-32.
- Platman, K. & P. Taylor (2006). Training and Learning in the Workplace: Can We Legislate Against Age Discriminatory Practices? In L. Bauld, K. Clarke & T. Maltby (Eds) *Social Policy Review 18, Analysis and Debate in Social Policy*. Bristol: Policy Press.
- Remery, C., K. Henkens, J. Schippers & P. Ekamper (2003). *Managing an Ageing Workforce and a Tight Labor Market: Views held by Dutch Employers*. Dordrecht: Kluwer Academic Publishers.
- Sloane, P., M. Jones, R. Jones & P. Latreille (2007). *Training, Job Satisfaction and Establishment Performance*. Research Report 22. Wath-upon-Deerne: SSDA (now UKCES).
- Sloane-Seale, A. & B. Kops (2007). Older Adult Learners: A Comparison of Active and Non-Active Learners. *Canadian Journal of University Continuing Education* 33(1): 17-34.
- Stratton, D. (2006). *Promoting Choices for Older Workers*. Dublin: Senior Select, Retain and Retrain.
- Swindell, R. (2009). Educational Initiatives for Older Learners. *USA Online*.
- Taylor, T. & J. Rose (2005). Bridging the Divide: Older Learners and New Technologies – ICT and Older Learners: Strategies and Case Studies. *Australian Vocational Education and Training Research Association Conference*, Brisbane.
- The Sloan Centre on Aging at Work (2009). *Education and Training in the Multi-Generational Workplace*. Boston: Boston College.
- Tikkanen T., L. Lahn, A. Withnall, P. Ward & K. Lyng (2002). *Working Life Changes and Training of Older Workers. Research Report*. Trondheim: Norwegian Institute of Adult Education.
- Tikkanen T. (2006). The Lifelong Learning Debate and Older Workers in T. Tikkanen & B. Nyhan (Eds) *Promoting Lifelong Learning For Older Workers: An International Overview*. Luxembourg: Office for Official Publications of the European Communities/Cedefop.
- Towers Perrin (2007). *Profit from Experience: Perspectives of Employers, Workers and Policymakers in the G7 Countries on the New Demographic Realities*. Washington: AARP.
- Towers Perrin (2008). *Investing in Training 50+ Workers: A Talent Management Strategy*. Washington: AARP.
- Walker, A. (1998). *Managing an Ageing Workforce: A Guide to Good Practice*. Dublin: The European Foundation for the Improvement of Living and Working Conditions.
- Tyler-Smith, K. (2006). Early Attrition Among First Time eLearners: A Review of Factors that Contribute to Drop-Out, Withdrawal and Non-Completion Rates of Adult Learners Undertaking eLearning Programmes. *Journal of Online Learning and Teaching* 2(2).
- United States Department of Labor (2009). *Aging Worker Initiative: Strategies for Regional Talent Development*. Washington, DC: United States Department of Labor.
- Weiss, E. & T. Maurer (2004). Age Discrimination in Personnel Decisions: A Reexamination. *Journal of Applied Psychology* 34: 1,555-1,562.
- Wolf, M. (2009). Older Adult Women Learners in Transition. *New Directions for Adult and Continuing Education* 122: 53-62.
- Wooden, M., A. VandenHeuvel and M. Cully (2001). *Barriers to Training for Older Workers and Possible Policy Solutions*. Melbourne: Department of Education, Training and Youth Affairs.
- Zeytinoglu, I., G. Cooke and K. Harry (2007). *Older Workers and On-The-Job Training in Canada: Evidence from the WES Data*. Hamilton: Social and Economic Dimensions of an Aging Population.

FURTHER INFORMATION

This report and related documents can be accessed through the City & Guilds Centre for Skills Development's website <http://www.skillsdevelopment.org.uk/>



City & Guilds Centre for Skills Development
24-30 West Smithfield
London EC1A 9DD
United Kingdom

T +44 (0) 20 7294 4160

F +44 (0) 20 7294 4199

E info@skillsdevelopment.org

W www.skillsdevelopment.org

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. City & Guilds' products and services are, however, subject to continuous development and improvement. The right is reserved to change products and services from time to time. City & Guilds cannot accept responsibility for any loss or damage arising from the use of information from this publication.

© 2011 The City & Guilds of London Institute. All rights reserved.

City & Guilds is a trademark of the City & Guilds of London Institute.

City & Guilds is a registered charity (charity number 312832) established to promote education and training.