

Work and Learning

IFLL Thematic Paper 7



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NIACE has a broad remit to promote lifelong learning opportunities for adults. NIACE works to develop increased participation in education and training, particularly for those who do not have easy access because of class, gender, age, race, language and culture, learning difficulties or disabilities, or insufficient financial resources.

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Thanks are also due to those who submitted evidence to the workplace learning theme and who participated in the consultation seminar. For more details, see the 'Contributors' section.

Jenny Williams and Tom Wilson

Foreword

This is the seventh Thematic Paper to be published from the Inquiry into the Future for Lifelong Learning (IFLL). The Inquiry was established in September 2007 and published its main report, *Learning Through Life*, in September 2009. The Inquiry was sponsored by NIACE, the National Institute of Adult Continuing Education, with an independent Board of Commissioners under the chairmanship of Sir David Watson. Full details of the IFLL can be found at: www.niace.org.uk/lifelonglearninginquiry.

The overall goal of the Inquiry is to offer an authoritative and coherent strategic framework for lifelong learning in the UK. This involves:

- articulating a broad rationale for public and private investment in lifelong learning;
- a re-appraisal of the social and cultural value attached to it by policy-makers and the public;
- developing new perspectives on policy and practice.

The Thematic Papers form the core initial substance of the Inquiry's work.

Already published are the following:

- *Demography and Lifelong Learning: IFLL Thematic Paper 1*. Stephen McNair (2009)
- *Technological Change: IFLL Thematic Paper 2*. Simon Mauger (2009)
- *Migration, Communities and Lifelong Learning: IFLL Thematic Paper 3*. Stephen McNair (2009)
- *Well-being and Happiness: IFLL Thematic Paper 4*. John Field (2009)
- *Crime and Lifelong Learning: IFLL Thematic Paper 5*. Tom Schuller (2009)
- *Poverty Reduction and Lifelong Learning: IFLL Thematic Paper 6*. Leisha Fullick (2009)

Further Inquiry outputs

- *Context Papers*. These provide a broad overall picture of expenditure on all forms of lifelong learning, a paper on participation trends, and one on funding models.
- *Sector Papers*. These discuss the implications of lifelong learning for each of the sectors involved in providing learning opportunities: pre-school, school, further education, higher education, private trainers, cultural institutions and local authorities.
- *Public Value Papers*. These look, from different angles and using a variety of techniques, at the 'social productivity' of lifelong learning; i.e. what effects it has on areas such as health, civic activity or crime.

- *Learning Infrastructures*. This strand provides resources designed to promote debate on how to integrate the physical environments of learning, the virtual environments of learning technologies, and people's competences and behaviour.

Published papers are available from the IFLL website:

www.niace.org.uk/lifelonglearninginquiry.

The seventh Thematic Paper, by Jenny Williams (former project manager for the Inquiry and now Head of Policy at LSIS) and Tom Wilson (an Inquiry Commissioner, and head of Unionlearn at the TUC), deals with lifelong learning in relation to employment. It is a theme which has seen major changes since the Inquiry began its work.

This paper draws on the analysis and recommendations of the Inquiry's main report, *Learning Through Life*. The report presents an approach to the educational life course which reflects demographic and labour market trends, and projects a new modal working life of 25–75. Our policies and practice on learning at work should reflect this, with learning opportunities reaching all ages.

The report also suggests a set of learning entitlements, including some which relate to learning at work, and argues for a major shift in the way we think about supply and demand in relation to skills; we need to move away from the simplistic focus on supply which has dominated much of the debate in recent years. It shares key features with the detailed work carried out by the UK

Commission on Employment and Skills (UKCES), which has recently published its analysis of the skills situation (see **www.ukces.org.uk**).

The picture will surely change again as the country emerges from recession. The longer-term effects of this are unpredictable. This Thematic Paper is a significant contribution to the broader thinking required to cope with that unpredictability.



Tom Schuller



David Watson

Executive summary

The workplace is both a platform and a site for lifelong learning. As a result it has been present through the whole Inquiry into the Future for Lifelong Learning. This paper looks specifically at **learning at or for work** and relates it to the Inquiry's theme of **prosperity, employment and work**. It has been written during the economic crisis at a time of rapid change in the economy, which has had profound implications for work and learning.

The 2006 Leitch Review of Skills is our starting point.¹ We broadly agree with the ambitions it sets out for the UK to become a world leader in skills by 2020: the UK's success and future prosperity will depend on more of us having higher skills and the capability to put them to good use in an increasingly complex world. But we do not believe that an exclusive focus on improving the supply of skills is sufficient: more needs to be done to raise demand from employers for skills development, and to promote skills utilisation. We should re-focus the collective investment we currently make in learning for work to secure greater value from it, and over time, we will need stronger measures to increase that investment, if we are to make best use of all our talents.

Recommendations

1. Increase employer demand: for both skills development and utilisation; and with that, increase investment in learning.
2. Deploy a range of levers to drive up investment: conditions on the £3.7 billion spent on tax relief, active public procurement, more licence to practice requirements and greater transparency on training budgets.
3. Review the current framework of entitlements and incentives for individuals: to ensure fair access to public funding, and to stimulate more investment and co-financing from individuals who can afford to pay.
4. Promote a more flexible system of qualifications and provision with room for providers to innovate in response to individual and employer demand.
5. Pursue educational equality relentlessly, for all our sakes.

Employer demand

According to the most recent projections, 50 per cent of all future job demand is expected to be in the top three occupational groups, and it is striking how the recession has already accelerated the process, singling out for unemployment those with few or no skills. Surveys of employers' skills needs suggest employers appear to believe that

¹ HM Treasury (2006).

demand for skills is broadly being met, though the latest evidence indicates that skills gaps have opened up in the last two years, particularly in 'lower level' occupations.² Still, however, we argue that employers are not being demanding enough, either about the skills they require, or about how those skills can be used to best effect. It is not enough simply to improve the skills and qualifications of workers. They need jobs designed to use their skills. We need a better understanding of the ways in which work can be designed to encourage skills to be used effectively, linked to strategies for improving performance and promoting individuals' well-being. That applies for all. Low-skilled jobs are expected to persist, but if the aim is to make best use of all our talents, that must include looking at quality of work across the board, and creating engaging learning environments to support learning for work for those who have traditionally had fewer opportunities.

We propose measures to support employers, based on sharing existing good practice, through public sector employers giving a lead, and through sectoral and local networks: we firmly support the UKCES's approach to this. However, we do believe that smarter use of policy levers would further stimulate employer demand and investment.

The key levers we propose are:

- making tax relief contingent on raising levels of participation and accreditation in learning at work geared to specific groups of employees;
- public procurement to drive up levels of investment in skills throughout the supply chain, particularly to support skills development in the emerging 'green' economy;
- stronger forms of licence to practice which extend requirements into more sectors/occupations to raise the levels and use of skills.
- prioritising limited training subsidies on additional training activity; and
- requiring employers to publish basic details of their expenditure on training to encourage equality and help customers, employees and shareholders.

Public expenditure on the provision of learning for work of £12.9 billion currently levers £7.7 billion from public sector employers, and £19.35 billion from private and voluntary sector employers – a total of around £27 billion.³ There is scope for more co-funding, and we recommend further research on which forms of public investment lever the most co-contributions from employers: both in money and time.

Changing demographic, economic and social contexts

Notions of 'prosperity', 'employment' and 'work' all need reviewing in the light of the economic crisis. Prosperity means much more than material income, taking us into the territory of well-being at work and elsewhere;⁴ employment patterns are changing as

² UKCES (2010).

³ See Williams, McNair and Aldridge (2010).

⁴ Stiglitz, Sen, Fitoussi (2009).

young people take longer to settle into jobs and older people take longer to leave work; and work will increasingly involve unpaid as well as paid work. Future arrangements for learning at work will need to take account of:

- changes in age demography which will re-shape the labour market and require a greater emphasis on intergenerational learning for work;
- a new modal working life often starting at 25 and stretching for many into the early and mid 70s (though not all full time and not immediately) and different patterns of time use. These will emphasise the need for part-time learning opportunities that can be balanced with work and personal commitments;
- different mixes of part-time work, both paid and unpaid, that will be necessary to support the development of informal public/civic work, resulting in the need for more and different opportunities for part-time learning that can help us with a wide range of roles; and
- the evidence of how persistent inequality will limit future prosperity and well-being for us all, if not addressed. The relationship between learning and inequality is a complex one, but it should not divert us from a relentless pursuit of greater educational equality.

This points to the need for greater flexibility: for individuals to choose the learning that best meets their needs (with appropriate support and safeguards for equity); and for providers to be free to innovate, responding to learning needs close to where people live and work.

We believe that greater flexibility could be secured through:

- a framework of entitlements and incentives based on individual learning accounts which trusts individuals to know what they need and encourages them to invest in their own learning;
- a long-term commitment to, and sustainable business model for, the provision of effective information advice and guidance for all;
- positive implementation of the new right to request time to train;
- a clear and flexible credit framework enabling access to part-time, short periods of learning and allowing individual credits to be built up over time into full qualifications;
- greater autonomy for providers to respond flexibly and innovatively to individuals' and employers' needs, and more organic systems of accountability in which local learners' and employers' voices are valued; and
- public investment focused on those who cannot afford to pay and have learning needs. That applies to both individuals and employers: smaller firms have a particular call on government support and their interests should be prioritised.

Access to tax relief for training is at present inequitable: employers can claim it; individuals cannot. As part of the current reviews of co-investment in both further and higher education, we recommend further research into the types of incentives most likely to encourage individuals to invest in learning, including through the tax system.

Introduction

Work is changing. There's nothing new in that. But since the Inquiry started in September 2007 – the month that saw queues round the block outside branches of Northern Rock – the economy has been rocked by financial crisis and recession. Patterns of work have been adapted in efforts to sustain employment: shorter working weeks, and breaks in production used as an opportunity to train staff. Policy responses have prioritised strategic sectors for growth and investment in skills – the new 'skills activism' – encouraging a focus on sectors in which there is most likely to be job growth in future. These include low carbon industries, advanced manufacturing, the digital economy, and industries to support an ageing society, as well as public services.

According to recent projections, 50 per cent of all future job demand is expected to be in the top three occupational groups, and it is striking how the recession has already accelerated the process, singling out for unemployment those with few or no skills. Recent statistics on the take-up of apprenticeships suggest that this is the first recession where investment in skills seems to be holding up (although the 2009 National Employer Skills Survey⁵ shows a reduction in employer training overall). The casualties are young people unable to get into employment and older people looking to return to the labour market. The data on employer investment indicates that just one in five employees in the private sector receives training, compared with two in five in the public sector. The distribution of training continues to favour the most well qualified, and the UK's poor record of job matching underlines the progress still required to make best use of *all* employees' skills and abilities.⁶

Caution is needed, however, not to confuse skill trends with projected numbers of low-skill jobs. The notion of a uniform trend towards high-skill jobs is less clear once you get out of the South-East and look at regional variations. In most of the regions around the edge of the UK, the demand is for people to fill low-skill jobs. Of course, this does not mean we should lower our skills sights. But it does mean looking much harder at issues to do with the quality of work, and with how far people are stuck in low-skill jobs without the possibility of moving on.

Society is changing too. In 2011, the first of the 'baby boomer' generation will reach retirement age. This will herald a retirement wave greater than any experienced in history, and leave in its wake a shortfall in those ready to take the boomers' jobs, without renewed migration. Meanwhile, younger people are taking longer to settle into careers, and technology is creating different perspectives on future work patterns. Changes in age demography are slowly but profoundly re-shaping work and the rhythms of our working lives are already in flux. The current economic crisis may

⁵ UKCES (2010).

⁶ According to a study by The Work Foundation (see Coats and Lehki, 2008) the UK has the lowest level of job matching in the EU – that is, where employee skills and abilities are matched to the demands of their job.

obscure these effects in the short run, but not indefinitely. Intergenerational learning needs a greater emphasis in our future plans for work and learning, not only because it binds us together, but because we will need to share our resources for the biggest effect. We need to make sure we pass on the knowledge, skills and experience of older workers, while taking full advantage of the digital flair, networking ability and new approaches to work that young people bring to the labour market.

The 'baby boomers' are big social capitalists: in caring, voting and volunteering. Their transitions out of paid work are becoming as fuzzy as those of young people entering the labour market. Increasingly, they combine paid and unpaid work in different 'part-time' patterns. This is likely to become a more common way of life for all 'working age' adults, as the consequences of the tighter public spending encourage fresh thinking about how to combine professional and informal support across public services, and as we re-evaluate how to prosper. We will need to invest in learning for unpaid as well as paid work: the estimated £350 million⁷ spent on volunteer training will be nowhere near enough. Materials, resources and support will be required for learning that can be fitted in with new rhythms of living and working.

How we use our time – daily, weekly, annually and over the course of our working lives – is a recurring theme. *Learning Through Life* proposes the age range of 25–75 as the new modal working life (though not all full-time and not immediately).⁸ The time squeeze on those in mid-career is pronounced – life satisfaction is at its lowest in our early 40s – as people juggle the responsibilities of work and home life. A more even spread of work time over a working life would help to counteract the pressures felt between the age of 25 and 50, open up opportunities for sustained (part-time) work up to 75 (and even beyond) and could help to alleviate the costs of mental health – certainly for employers, but for those who suffer ill-health, their families, colleagues and society too.

Different patterns of time use have already opened up during the recession. More could follow, including more time for learning which, despite the participation statistics, appears to have but a small place in the lives of those in full-time work.⁹ This new 'mosaic of time' calls strongly for greater opportunities for part-time study, combined with opportunities to build up credits for learning over time.

So, much is changing, but inequalities persist and, what's more, accumulate across the life course. According to the National Equality Panel's recent report,¹⁰ income inequality is high, compared with other industrialised countries and compared with 30 years ago. Recently, there has been some narrowing of the gap, but overall there remain deep-seated and systematic differences in economic outcomes between social groups, including between men and women, between different ethnic groups, between social class groups, between those living in disadvantaged and other areas, and between

⁷ Williams, McNair and Aldridge (2010).

⁸ Schuller and Watson (2009).

⁹ New Economics Foundation (2010).

¹⁰ National Equality Panel (2010).

London and other parts of the UK. Despite the elimination of differences in educational qualifications that often explain employment rates and relative pay, significant differences remain between men and women and between ethnic groups.

According to the UKCES,¹¹ the UK is the 24th least equal of the OECD countries in terms of the distribution of disposable income. On the human development index of life satisfaction, we rank 21st out of 30, and the relationship between our life expectancy and economic growth has leveled off. Social mobility has flattened out too since the 1980s, and is less than in several other countries, including the Netherlands and Scandinavia. Recent evidence¹² suggests that it is not just those on low incomes who 'suffer' from inequalities, but everyone. In other words, reducing inequality may benefit us all.

The relationship between learning and equality is a complex one. We have no doubt that learning at work improves life chances, and at its best it can reverse some of the negative experience of school – NIACE's research shows that those who are least likely to learn anywhere are, if they are to learn at all, most likely to do so at work. However, as the Labour Force Survey shows regularly, those with the least educational qualifications and shortest schooling are the group of workers least likely to be offered learning at work. Analysis from the recent book by Richard Wilkinson and Kate Pickett, *The Spirit Level* backs this up: high levels of inequality affect educational performance. In other words, the significant causal direction is from inequality to educational performance, rather than the other way round. This is a sobering result. It challenges us to 'right size' the claims we make for learning while maintaining our belief in its force for good.

What does all this mean for the future of learning for work? Broadly, we support Leitch's world class ambitions: the UK's success and future prosperity will depend on more of us having higher skills and the capability to put them to good use in an increasingly complex world. However, those ambitions do need re-thinking in the context of an economy with very different prospects for growth to those that were in mind back in 2006, and a society in which ever greater levels of inequality cannot be tolerated. We believe there are ways we could secure greater value from the collective investment we currently make and that, over time, we will need to increase that investment if we are to make best use of all our talents.

Overview of the paper

This paper is in two sections. In Part 1, we take stock of current levels of engagement in learning at/for work and consider the implications of the Inquiry's original study of investment in lifelong learning. Together with a brief review of the evidence of returns to learning for prosperity, employment and work, we use this as the basis for opening

¹¹ UKCES (2009).

¹² Wilkinson and Pickett (2009).

up new thinking about co-financing learning and how to focus precious public funding in future.

In Part 2, we argue that to meet the economic, demographic and social challenges ahead, developments are required on five fronts:

- to increase employer demand: for both skills development and utilisation and, with that, to increase investment in learning;
- to deploy a range of levers to drive up investment: conditions on the £3.7 billion spent on tax relief; active procurement policy; more licence to practice requirements; and greater transparency on training budgets;
- to review the current framework of entitlements and incentives for individuals: in terms of how access to public funding is weighted, and to stimulate more investment and co-financing from individuals who can afford to pay;
- a more flexible system of qualifications and provision with room to innovate in response to individual and employer demand; and
- a relentless focus on equality, for all our sakes.

We conclude with proposals for measuring progress.

Underpinning the paper is a fuller review of the current situation. Annexe 1 sets out the skills policy context, reviews the size and shape of the labour market, and summarises the evidence on participation in learning and workforce qualifications. We draw on this evidence for both sections of the paper, but have consigned the detail of it to an annexe as much of it has been previously reported.¹³

Learning at or for work: its range

Although much of the research on the impact of learning for work is based on qualifications, we are wary of delimiting our definition to that which can be easily measured. Lifelong learning is an untidy field and any definition is problematic. We base ours on the Inquiry's overall definition, but with particular emphasis for our theme on learning **at** or **for** work. Our primary focus is on adult learning, and on adults returning to learn. The learning can occur in the workplace (on or off the job), in educational or training institutions, in the family, or in cultural and community settings.

We use 'learning' to refer to all forms of organised education and training (whether or not they carry certification), but we also include informal modes of learning where these have a degree of organisation and intention. So, for example, we would include mentoring, a form of employee development which is growing in scale and which many consider to be particularly effective. Although usually not so structured that it can be recorded and costed, it is intentional; that is, it doesn't happen by accident, but occurs as part of everyday life in an organisation.

¹³ UKCES, Felstead, Unwin, Fuller, NIACE, NALS, LFS, etc.

In this paper, we include formal and informal modes, on- and off-the-job learning, certificated and non-accredited learning, and work-related and non-work-related learning. We review their distribution to see whether our collective investment in them is being used to best advantage. We know that people learn best when they are motivated, and when the learning offer matches how, when and what they need to learn. The closer we can get to that for everyone, the better. At present there is room for improvement.

Please note, on 20 October 2010, the Chancellor of the Exchequer announced that the Train to Gain programme, referred to in these pages, would be discontinued

Part 1: Current engagement in learning for work

Introduction

The 2006 Leitch Review of Skills is the most recent in a succession of reports aimed at improving the effectiveness of the learning system in meeting both the needs of employers and wider economic goals through massive increases in the training of adults (particularly those holding jobs at the lower end of the occupational ladder).

NIACE's 2009 Participation Survey suggests that around 14 million or half of all UK employees have taken part in learning at work in the last three years. Importantly, those who are least likely to learn anywhere, if they are to learn at all, are most likely to do so at work. The Inquiry's own research suggests employers across the UK spend just over £27 billion¹⁴ a year on training provision, compared with the Department for Business, Innovation and Skills' £3.5 billion adult participation budget for 2010/11.

The danger with any stocktake of learning for work is that striving for clear, simple conclusions underplays the complexity of the issues. Adults and their learning lives are complex, firms are increasingly diverse and have very different learning needs, and the labour market overall has significant sectoral, occupational and spatial variances. As CBI Deputy General Secretary John Cridland reminded us at the Inquiry's seminar on workplace learning: 'the adult learning market is a very complex and multi-faceted market; as such it requires and needs, if any progress is to be made, a sophisticated analysis. We should be suspicious of broad-brush conclusions and motherhood and apple pie policy-making'. While there are some broad conclusions that may be drawn, it is also true that this is, necessarily, a complex area.

In this part, we take stock of current levels of engagement in learning for work, drawing in particular on the Inquiry's research on lifelong learning expenditure to give us a picture of the overall size and shape of the system. Together with a brief review of the evidence of returns to learning, we use this to open up new thinking about co-financing learning and how to focus future public investment in skills.

Demography

We live in an ageing society. In 2011, the first of the 'baby boomer' generation will retire, and population forecasts to 2050 indicate that far more older people will survive into later life, with fewer young people following them. The concept of the 'working age' population is changing as retirement ages rise, and more older people stay in some kind of work (paid or voluntary, full time or part time) beyond traditional retirement ages. There are clear implications for both work and learning of this profound demographic shift.

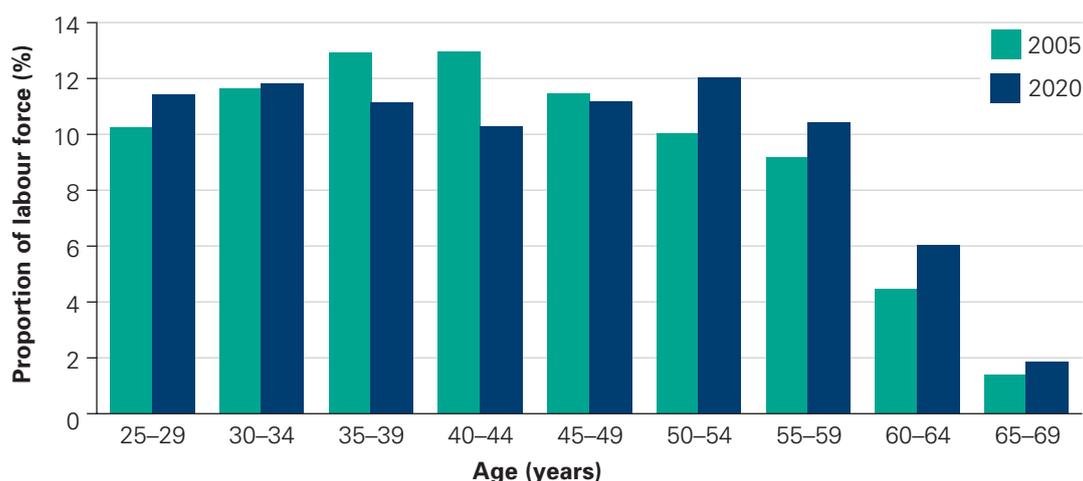
¹⁴ See Williams, McNair and Aldridge (2010).

Table 1: A snapshot of UK demography

UK population	60.9 million
Working age population (16–59 for women; 16–65 for men)	39 million (64%)
Under 16	Approx. 1 in 5 of the total population
Over retirement age	Approx. 20% of the total population

The knock-on effects on the generations that follow the baby boomers also require consideration. Those currently in their 30s and 40s are a smaller generation. There will be fewer of them to take on the senior roles in the next two decades. Figure 1 shows how demographic change will shape the composition of the labour market by 2020, with a significant dip in the 35–45 age cohort between 2005 and 2020.

Figure 1: Labour force change projection, 2005–2020



Source: Donkin, R. (2009) The Future of Work

It is this group that will bear much of the responsibility for securing improvements in productivity in response to the economic downturn and climate change, at the same time shaping new patterns of work in response to technological advancement, while juggling caring responsibilities for both young and old.

Labour market

The 2008 figures in Table 2 give an overview of the size of the UK labour market. Clearly, the economic crisis has changed this picture in the last two years, and it will continue to change as the effects of public spending cuts are felt right across the economy. The position of young people in the new labour market is particularly worrying: by mid 2009, youth unemployment stood at almost 1 million. The impacts of the recession on employment have been complex and unpredictable. It appears that some employers have sought to retain older, more experienced staff through

the downturn. It is not clear that these jobs would otherwise have been available to young people, but perhaps the effect has been to slow down changes in patterns of work. For older people outside the labour market, difficulties in finding work have been exacerbated by the recession, particularly for those with low skills/qualifications levels.

Table 2: A snapshot of the UK labour market (2008)

Employed/Self-employed	28 million
Full-time employment	17,920,000 (64%)
Part-time employment	5,880,000 (21%)
Permanent employment	22,960,000 (82%)
Temporary employment	1,400,000 (5%)
Private sector employment	21,714,000 (77.5%)
Public sector employment	5,600,000 (20%)
Voluntary and community sector employment	686,000 (2.5%) (plus approx. 15 million volunteers) ¹⁵
Self-employed	3,360,000 (12%)
Second jobs	840,000 (3%)
Claiming Jobseeker's Allowance	800,000
Lone parents receiving income support	800,000
Incapacity benefit	2.6 million
Between age 50 and state pension age – not working or in receipt of benefits	2 million

To complete the picture, we provide a snapshot of employers. There are clear differences between the training behaviours of large and small firms. Smaller employers tend to spend more on off-the-job training than on on-the-job training (the reverse is true for larger employers). However, smaller firms tend to have more informal approaches to workforce development. The 2009 National Employer Skills Survey, for example, shows very little Train to Gain reach amongst the smallest employers. Skills development largely occurs as a natural part of day-to-day work and is frequently a by-product of a business process. This suggests a key role for informal learning in smaller workplaces – one that is currently not well served by the focus of policy on formal, accredited learning for work. One note of caution here: although the evidence suggests small organisations are less likely to provide training than larger organisations, there is wide variation between smaller employers, and we should be wary about making broad generalisations about the small to medium-sized enterprise (SME) community.

¹⁵ Though this is an estimate of formal volunteers only: the number of informal volunteers will be much higher.

Table 3: A snapshot of UK employers (2008)

	Employers	Employees
Approx. total in UK	4,000,000	28,000,000
Fewer than 50 staff	3,840,000 (96%)	12,600,000 (45%)
50 or more staff	160,000 (4%)	15,400,000 (55%)
Fewer than 250 staff	3,976,000 (99.4%)	11,200,000 (40%)
250 or more staff	24,000 (0.6%)	16,800,000 (60%)

Further analysis of the shape of the UK labour market is included in Annexe 2. It is an important but complex factor in shaping both work and learning. Overall, we find the wider economy has a far greater impact on the structure of the labour market than education and training interventions. This raises a key question about the extent to which the learning system itself can motivate and support progression for employees and those seeking work, and its relationship to employer demand and the structural (dis)incentives to engagement in learning that are embedded in UK labour markets.

Participation in learning for work

Being in work is better than being out of work as far as general access to learning is concerned. People in paid employment participate more, but even being registered unemployed is more likely to mean participation than having no connection at all to the labour market. Even being in a low-ranking job offers a better chance of learning than being out of the labour market altogether. And we have already noted that those who are least likely to learn anywhere, if they are to learn at all, are most likely to do so at work.

But what about the distribution of learning across different kinds of work? Social class is the most salient feature of all participation over time. In the workplace, it includes related factors such as highest level of qualification, income and occupational status. Access to opportunities for learning at work varies by size of organisation, sector and occupation, and by personal characteristics such as gender, job status and prior educational attainment. The higher an individual's occupational status, the more likely he or she is to have access to both training and time for training. Those with most skills receive most training, and those with the least receive least.

Figures 2 and 3 and Table 4 reinforce the point.

Figure 2: Participation in job-related education and training in the 13 weeks prior to interview, by socio-economic classification, Q1 2008

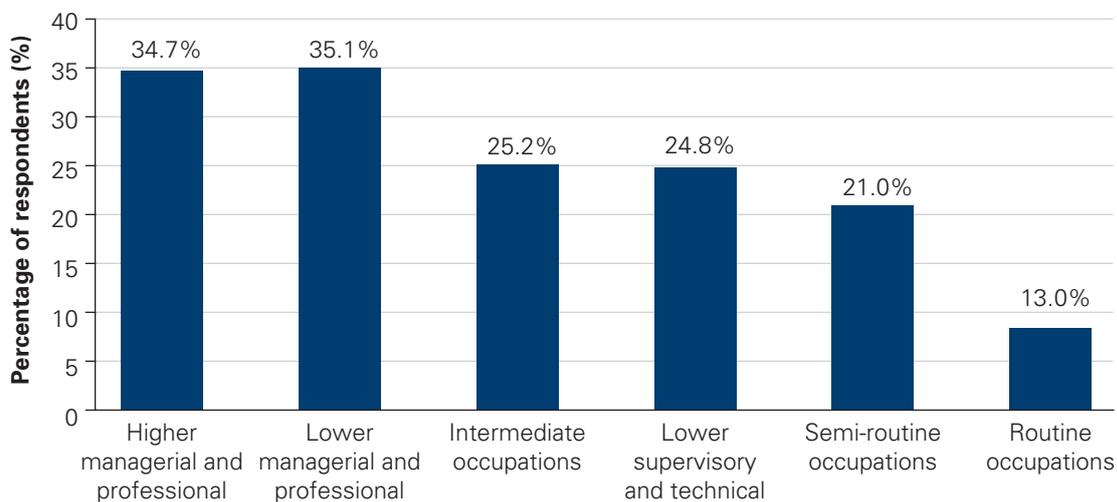


Figure 3: Access to training at work in last 13 weeks by sector

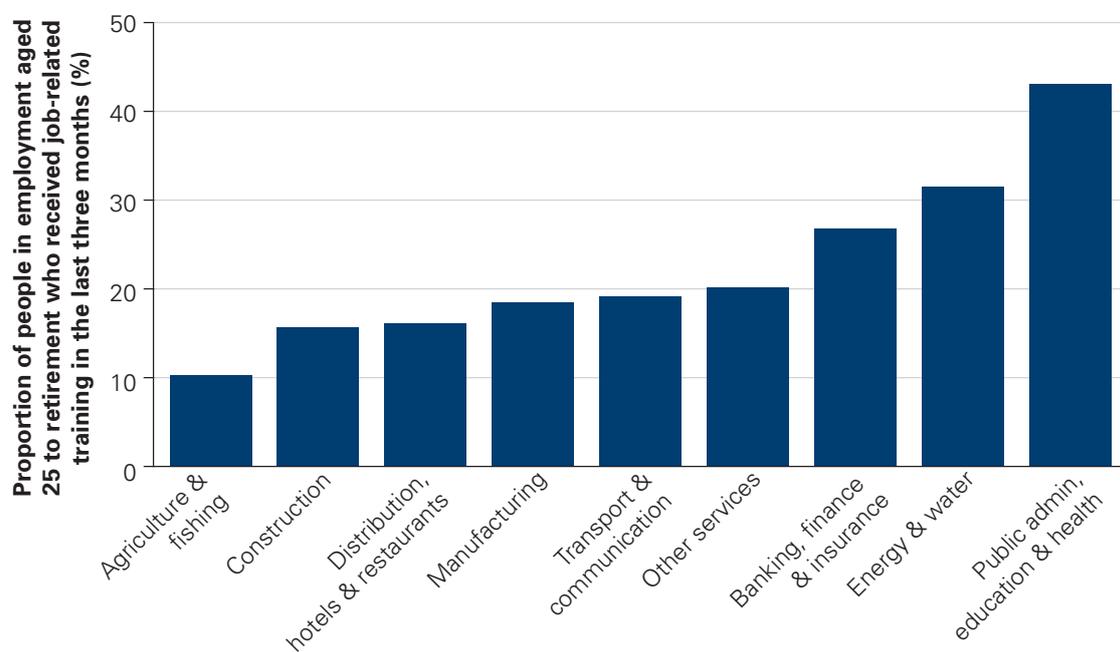


Table 4: Job-related training by highest level of qualification in the UK

Qualification	1998 %	2003 %	2008 %
Degree or equivalent	39.9	42.4	37.2
Higher education	38.7	40.9	35.4
GCE A-level or equivalent	24.3	27.3	25.6
GCSE grade A–C or equivalent	25.6	27.9	24.4
Other qualifications	17.1	21.9	18.7
No qualification	7.9	10.2	8.4
All levels of qualification	25.0	29.0	26.6

Note: data is 12 months ending March, not seasonally adjusted.

Right to request time to train

The TUC has recently conducted a representative poll of adults¹⁶ to find out who is likely to make use of the new legal right to time off for training when it is brought in by the government in April. The results are illuminating:

- 51 per cent of degree-educated employees say it is likely they will take advantage of the new law;
- this falls to 37 per cent of those educated to GCSE standard; and
- just 6 per cent among those with no qualifications.

One further point to emphasise: working in the public sector increases the chances of accessing learning very considerably. Over 40 per cent of public sector workers participate, compared with 21.8 per cent of those in the private sector. Overall, this means approximately 2.24 million public sector workers receive training, and 4.73 million private sector workers – a ratio of just under 1:2. We apply these figures to our expenditure analysis in the next section.

¹⁶ Mackinnon (2010).

Factors determining opportunities to learn at work

- Women in full-time jobs are more likely to receive training than their male colleagues, though women in part-time jobs still have fewer opportunities than men; this may well reflect the fact that women in full-time work are often in associate technical/managerial jobs such as nursing, teaching or social work; proportionately more women in part-time work are in very low-paid occupations such as cleaning, retail or catering which train far less.
- Levels of training vary dramatically between sectors, with 70 per cent of individuals in public administration, education and health receiving job-related help compared to less than 40 per cent in distribution, hotels and restaurants.
- The likelihood of participating in job-related training is boosted by: being under 30; having previous qualifications; working in a professional or associate professional occupation; and being a member of a trade union (this doubles the likelihood of being trained).
- Factors that decrease participation include: being male; being a machine operative; being single; being registered disabled; and living in Scotland.
- Most training (36 per cent) occurs in the workplace, followed by an employer's own training centre (20 per cent), a private training centre (19 per cent) and a further education college (18 per cent).
- It is usually the employer who pays for training.
- On the whole, it is occupation, rather than age, gender, sector or region which is the primary determinant of likelihood of being trained.

Source: *State-of-Science Review: Learning at Work: Opportunities and Barriers*, by Professor Lorna Unwin, Institute of Education, University of London, for Foresight Report on Mental Capital and Wellbeing

Before we move on, a cautionary note about the data on participation in learning for work which can appear contradictory. On the one hand, NESS, the National Employer Skills Survey (England only) reports that **63 per cent** of the employed workforce participated in training in the 12 months before the 2007 survey.¹⁷ On the other, figures from the rolling Labour Force Survey (LFS) (quoted in terms of participation in job-related training in the last four or 13 weeks) indicate that just **14.7 per cent** of the working population reported they had received training in the last four weeks, and **28.3 per cent** in the last 13 weeks (between April and June, 2008).¹⁸ The NIACE Participation Survey (2009) comes out somewhere in between – reporting approximately **48 per cent** of the working population were current or recent learners (in the previous three years).¹⁹

¹⁷ LSC (2008).

¹⁸ ONS (2008).

¹⁹ Aldridge and Tuckett (2009).

The differences are significant and point to the need for caution in drawing conclusions. They reflect the difficulties of collecting accurate data on learning that takes place beyond formal learning institutions with their requirements for comprehensive data returns. They reveal differences in who the surveys are aimed at, the definitions of learning they employ, and the questions that they ask. Perhaps the most important difference is that NESS interviews employers, while the LFS and NIACE surveys ask individuals. There are implications here for what people remember learning at work, what they recognise as and/or count as learning (i.e. on/off-the-job learning, or when does learning become work and vice versa), what employers count as learning (health and safety training, induction, etc.) and for what purposes (e.g. tax relief). The Inquiry's expenditure paper calls for a survey of individual investment in learning at least as comprehensive²⁰ as NESS's on employers. We believe this would be a significant step forward in building a more accurate profile of individuals' engagement in learning.

Expenditure on learning for work

We turn now to expenditure on learning for work. Expenditure is one important way of getting a grip on the overall size and shape of the learning system. The Inquiry's original research on lifelong learning expenditure offers some new ways of thinking about how much is spent, by whom and on what.²¹ It covers not only expenditure on provision, but also the opportunity cost of learning. For the first time, we are able to compare the amount of time invested by employers with that of individuals. And we identify a significant additional state contribution to learning in the form of tax relief to private firms on the costs of employee development.

Understanding how much is spent on learning only gets us so far. We also need to know how that investment is distributed and its overall effects: on skills development and qualifications; but also on prosperity, employment and work.

In this section, we examine the Inquiry's evidence on expenditure on learning for/ at work by employers, by individuals and by the State. We relate this to the data on participation at work and consider some of the evidence on the broader returns to learning.

Expenditure by employers

The Inquiry's analysis of training expenditure by employers is based on the existing National Employer Skills Survey (for England), aggregated for the UK and with the addition of data on the self employed. Here, we show the balance of expenditure by private, public, and voluntary and community sector employers; and between

²⁰ Though it is important to note that the data on training expenditure within NESS is based on a small sub-sample and broad estimates.

²¹ For more information, see Williams, McNair and Aldridge (2010).

expenditure on the costs of provision, and the wages of employees undertaking training.

Private employers

NESS 2007 estimates total employer expenditure on employee development in England to be £38.6 billion.²² Based on this, the Inquiry's research calculates £30.2 billion is spent by private employers across the UK, net of tax relief.²³ Of this, £16.2 billion is spent on provision. The remainder is expenditure on wage costs. Although NESS includes the wage costs of both on- and off-the-job training, our primary interest is in off-the-job wage costs. NESS includes the wage costs of employees on on-the-job training on the assumption that this leads to loss of output. We question that assumption and consequently exclude the wage costs paid to those on on-the-job training from our calculations.²⁴ This also enables closer comparison with the opportunity cost to individuals (see Table 5).

Public employers

The Inquiry's own research on public sector expenditure suggests the NESS figure of nearly £4 billion for employee development is something of an underestimate. It concludes that the figure is closer to £11 billion with the discrepancy resulting from two main factors: the exclusion from NESS of the expenditure by the NHS in the initial training of professional staff (around £4 billion) and an underestimate within NESS of the expenditure by central government departments, including the Ministry of Defence (MoD – around £4.2 billion).

Apart from the NHS and MoD, it was not possible to obtain information on the expenditure on staff training by central government departments, their agencies or Non-Departmental Public Bodies (NDPBs) from publicly available data. The most we can say is that the total civilian central government workforce is 634,000, of which nearly two-thirds are in the 'big four' departments – the Department for Work and Pensions, Home Office, HM Revenue and Customs and Ministry of Defence – and associated agencies, and these are therefore likely to be among the bigger spending departments on employee development. This area will benefit from the further study being done by Government Skills.

Adjusting the £11 billion figure for on-the-job wage costs brings our calculation of public employer expenditure to £7.7 billion. To this we add an estimated £3.7 billion of tax relief paid on vocational training, paid to private employers.

²² The latest National Employer Skills Survey published in March 2010 reports expenditure by employers in England of £39 billion, a fall of about 5 per cent in real terms after factoring in inflation.

²³ See 'Table 6: Estimated private employer expenditure across the UK net of tax relief' in Williams, McNair and Aldridge (p.23, 2010).

²⁴ We recognise that it may be appropriate to include some element of on-the-job wage costs in opportunity cost calculations. This could be quantified through further research as part of an updated approach to calculating the opportunity costs of learning for both employers and individuals.

Voluntary and community sector employers

To complete the picture of employer expenditure, we estimate expenditure by voluntary and community organisations on employee development to be at £5.3 billion (£2.8 billion on provision and £2.5 billion on wages), with an additional £0.35 billion on the training costs of volunteers.

The overall picture of employer expenditure on employee development is shown in Table 5.

Table 5: Summary of employer expenditure by provision and opportunity cost (£ billions)

	Provision	Opportunity cost	Opportunity cost less on-the-job wage costs
Employee development by public sector organisations	£7.7 billion	£3.4 billion	£1.7 billion
Employee development by private companies (including self-employed enterprises)	£16.2 billion	£14 billion	£4.6 billion
Employee development by voluntary and community organisations	£3.15 billion	£2.5 billion	£0.9 billion
Total employer expenditure	£27.05 billion		£7.2 billion
Tax relief	£2 billion	£1.7 billion	£0.2 billion

Distribution of expenditure per employee and learner

Of the 28 million adults of working age in employment/self employment, 5.6 million work in the public sector, and 21.7 million in the private sector.

According to Labour Force Survey data,²⁵ around 40 per cent of public sector employees receive training, and 21.8 per cent of private sector workers do. Notwithstanding the major caveats to this participation data, we can now offer a broad picture of the balance of public and private employer expenditure per employee and per learner, as shown in Table 6.

Overall then, average expenditure on learning per employee in the public sector (£1,375) is almost double that for the private sector (£747). This may not be that surprising, given the significant public sector budgets for medical and armed forces training: both life or death professions.²⁶ Looking at expenditure on those who participate, average expenditure is similar. For every two workers trained in the private sector, one receives training in the public sector. But whereas two-fifths of public sector workers receive training, just over one-fifth in the private sector do.

²⁵ See Annexe 3 for more detail.

²⁶ Indeed, expenditure on training by occupation in the private and public sector is broadly similar: administrative staff, for example, have similar opportunities wherever they work.

Table 6: Public and private employer expenditure per employee and per learner

	Public employers	Private employers
Size of labour market	5.6 million	21.7 million
Overall expenditure on learning (provision only, excluding tax relief)	£7.7 billion	£16.2 billion
% of total public and private employer expenditure (£23.9 billion)	32%	68%
Average expenditure on learning per employee	£1,375	£747
Number of employees participating in learning	2.24 million	4.73 million
% of total public and private employee participation in learning	32%	68%
Average expenditure on learning by participating employee	£3,438	£3,425

We cannot go into detail here about how employers spend their training budgets. In any case, employers' engagement with the learning system is variable and depends on size, sector, past experience and business need, among other things. However, there are three points to highlight:

- According to NESS 2007, around half of employers providing training use non-further education training providers. Around a quarter had provided training through a further education college, and 7 per cent used universities.
- NESS data (England only) shows that of the total expenditure by employers on off-the-job learning, only £2.95 billion is spent on fees to external providers, with the remainder going on in-house training costs. It is not currently possible to identify what proportion of this goes to providers, colleges or universities, though the IFLL Sector Paper on the private training market recommends 'that NESS is revised to capture data on employers' expenditure on private sector training provision'.²⁷
- Comparatively little private sector provision is qualifications based. Of that which is, vendor qualifications are often preferred to public qualifications. This is particularly true of the IT training sector, which accounts for around one-fifth of the employer training market. That said, there are recent examples of employers getting involved with the qualifications and credit framework – Macdonalds, B&Q and Norwich Union to name just three.²⁸

Expenditure by individuals

Although the expenditure by self-employed enterprises on training for their employees is included above, what self-employed people spend on their own business-related training is counted as an individual contribution to learning? The Inquiry calculates this at £3.9 billion.

In addition, the National Adult Learning Survey (NALS) 2005 provides a basis for splitting individual expenditure on learning between that for programmes to secure qualifications, skills, employability, and that for non-vocational learning aims. For the

²⁷ See Simpson (2009).

²⁸ See Schuller and Watson (2009, p.153) for more information.

purposes of this paper on work and learning, we include the 85 per cent spent on programmes which, broadly defined, aim for qualifications, skills and employability – a figure of £4.7 billion.

Our figure for the opportunity cost to individuals of participating in learning is based on original calculations.²⁹ For the self-employed, we calculate opportunity costs of £1.6 billion, with a further £1.1 billion added for the time spent in training by volunteers.

The opportunity cost of time spent by individuals following programmes which aim for qualifications, skills and employability is calculated at £20.5 billion. This is far in excess of the £4.6 billion spent on wage costs by employers. It represents a significant investment by individuals in learning that will impact on their work; one which, to our knowledge, has not previously been quantified.

Table 7: Summary of individual expenditure on learning

	Provision	Opportunity cost
Individuals	£4.7 billion	£20.5 billion
Self-employed own learning	£3.9 billion	£1.6 billion
Volunteer training		£1.1 billion
Total	£8.6 billion	£23.2 billion

There are, of course, many caveats to these figures. There is no agreed methodology for calculating the opportunity cost of individuals' time invested in learning. We have adapted the approach used in the National Employer Skills Survey (NESS) and applied this to individual participation data from the National Adult Learning Survey (NALS), but this issue would merit further study. Nevertheless, the overall picture raises new questions about co-financing learning, not least of which whether it is time for a more systematic approach to valuing opportunity cost contributions to learning.

Learners clearly value learning: they are making a serious commitment of time and money to it. Demand from employees, the self-employed or the unemployed, is of course highly variable and depends on age, prior learning, aspiration, employer and so forth. However, three clear features stand out:

- great value is placed on accredited qualifications and certificates which demonstrate achievement and have a currency in the wider labour market beyond their immediate employer;
- collective approaches to learning are valued; employees like learning together, they greatly value help from intermediaries such as union learning reps; confidence and engagement in learning, achievement and progression all rise when employees are learning in a collective environment – this is particularly true for the least skilled who may (after a poor experience of school) be least confident; and
- while learning for personal development and enjoyment is certainly important, there is a strong preference for learning which is directly work related and will help

²⁹ For details, see Williams, McNair and Aldridge (2010).

employees get on at work or get a better job – though of course for much lower-level learning, the literacy, numeracy or ICT skills will be as valuable outside work as in work.

A note on tax relief

Companies and self-employed enterprises with employees can claim tax relief on the costs of provision and wages. Self-employed people, however, can only claim tax relief on the costs of their training, not on their income foregone. Since the introduction of Individual Learning Accounts in the late 1990s there has been no tax relief available to individuals on their expenditure on learning.

The current reviews of fees in further and higher education, together with the pressures to come on public sector budgets make this a good time for an overall look at the framework of incentives and entitlements to learning.

Publicly funded learning for work

The final piece in the jigsaw is publicly funded learning at work. This is the funding we are most familiar with – the Department for Business, Innovation and Skills' (BIS) budgets for adult learner-responsive and employer-responsive learning and higher education.³⁰ This funding is, in theory at least, available to the general public, as opposed to the employer budgets described above which are restricted to employees.

The Inquiry's research separates publicly funded learning into two broad categories:

- '*National performance*' covers all the most obvious forms of post-compulsory education which takes place with colleges, training providers and universities. It deals with the costs of teaching and student support, including what is needed to build and run the institutions within which learning takes place. We label this 'national performance' to indicate that our position as a nation depends on it, but we are clear that performance is not solely related to economic goals. Total expenditure in this category is £15 billion. For the purposes of this paper, all funding within this category is within scope.
- '*Public programmes*' refers to provision which supports other public goods. Total expenditure in this category is £1.2 billion. Programmes in this category have no close link to employability, but cover broader citizenship and other public value programmes. They may be part of the formal education system, but figure strongly in the voluntary and informal sector. They may also be available at work, and we know that involvement in this kind of learning has positive well-being spin-offs for workplace performance. For ease of analysis here, however, we set aside expenditure on public programmes.

³⁰A small amount also flows from the Department for Children, Schools and Families (DCSF) (now the Department for Education).

National performance

In 2007–08, the year on which the Inquiry’s expenditure analysis is based, total spending on higher and further education for people aged 18 and over across the UK was £18 billion. Table 8 shows the split between higher education and further education, and between provision and learner support costs (which are akin to time/opportunity costs in our analysis of employers and individuals).

Table 8: Expenditure on higher and further education, 2007–08³¹

(£ millions)	Provision	Learner support	Total
Higher education	£8,622	£4,392	£13,014
Further education	£3,892	£182	£4,074
TOTAL	£12,514	£4,574	£17,088

In addition, overhead/infrastructure costs for the management of publicly funded learning amount to £1,171 million, making a total of £18,259 million.

The extract in Table 9 from the Skills Investment Strategy 2009 shows the plans for the £4.5 billion³² expenditure on ‘further education’ in 2010–11. The programme specifically focused on learning for work – Train to Gain – amounts to just under £1 billion. Of course, the adult learner-responsive funding of just under £1.4 billion contributes to raising the skills and qualifications levels of people of working age – it is part of our overall funding category of ‘national performance’.

But this overall picture of expenditure on learning for work raises an important question about the precious Train to Gain resource: given the wider picture of employer, individual and public expenditure on learning for work, including the estimated £3.7 billion tax relief, is the £1 billion pulling its weight, in terms of raising skills levels and their utilisation, and securing further investment – of time and money?

This is not to criticise Train to Gain. It has supported over 1.4 million learners, including many who might not otherwise have had the opportunity to secure qualifications, and around 200,000 employers have taken part. However, weaknesses have been identified – particularly regarding deadweight: the Public Accounts Committee reports around half of employers whose employees received training say they would have arranged similar training without public subsidy, and it is difficult to justify displacing existing public provision for theirs. Our purpose here is to reflect on whether the overall picture of expenditure on lifelong learning, developed for the first time by the Inquiry, can help to clarify future direction for policy for learning for work.

³¹The higher education figures include the cash cost of student loans for fees and maintenance. But students are also contributing through loan repayments for fees and maintenance. Adjusting for that, £11.75 billion and £2 billion are the resource costs of provision and learner support.

³² Includes management costs.

Table 9: Skills Funding Agency budget 2008–09 to 2010–11

Budget line	Financial years		
	2008–09 £000	2009–10 £000	2010–11 £000
Adult learner responsive¹	1,664,555	1,753,338	1,782,906
For planning purposes			
Foundation Learning (excluding Skills for Life)	158,399	175,081	182,857
Skills for Life	526,997	541,339	514,871
Full Level 2	228,276	293,107	327,791
Full Level 3	281,526	29,555	374,771
Level 4	17,147	15,694	17,164
Developmental Learning ²	424,056	330,769	186,696
6 month unemployment programme	–	26,500	56,500
Young person's guarantee	–	21,500	100,900
Employer Responsive Total	1,158,614	1,315,575	1,381,781
Apprenticeships ³	332,911	389,914	398,410
Train to Gain ⁴	825,703	925,661	983,371
Response to Redundancy (included in Train to Gain total)	–	–	50,000
Of which for planning purposes (Train to Gain):			
Foundation Learning (excluding Skills for Life)	8,163	4,774	5,031
Skills for Life	67,755	88,995	84,532
Full Level 2	522,744	550,576	552,786
Full Level 3	131,675	162,793	185,179
Level 4	11,840	10,726	11,843
Adult Safeguarded Learning	210,000	210,000	210,000
Offender Learning and Skills Service⁵	137,685	132,630	134,828
TOTAL PARTICIPATION⁶	3,170,854	3,411,543	3,509,516
Learner Support	146,087	154,087	155,998
FE Development, Capacity and Quality	308,221	271,779	240,588
Total Capital Grants	628,300	907,800	513,800
Total Administration ⁷	191,876	189,163	81,400
GRAND TOTAL	4,445,338	4,934,372	4,501,302
European Social Funds	181,618	302,904	243,491

Source: Skills Funding Agency

Notes

- ¹ Adult Learner Responsive total includes funding for University for Industry, Employability Skills Programme (£35.8m for 08-09, £47.7m for 09-10 and £58.9m for 10-11), 6 month unemployment offer and Young Person's Guarantee. This budget also includes funding for 19-25-year-old learners with learning difficulties and/or disabilities. From April 2010 local authorities will be legally responsible for 19-25 year olds that are subject to a learning difficulty assessment. A proportion of this budget will therefore be transferred to DCSF for 2010-11 to take account of this responsibility.
- ² Developmental Learning includes funding for activity not covered in other funding lines. The amounts set out for 2010-11 will enable the Skills Funding Agency to continue to protect the volumes of learning for learners with learning disabilities and/or disabilities
- ³ Enables delivery of an additional 20,000 advanced apprenticeships starts for 19-30 year olds as announced in the Skills for Growth White Paper.
- ⁴ The Train to Gain figures for 2009-10 and 2010-11 include £37m for brokerage which is transferred through RDAs, funding for leadership and management and funding for the Joint Investment Scheme announced in the Skills for Growth White Paper.
- ⁵ The offender learning budgets for 2009-10 and 2010-11 exclude some resource for the Prison Estate Capacity Programme which is still to be transferred from the Ministry of Justice.
- ⁶ The participation budgets shown include anticipated drawdown from end-year flexibility and departmental unallocated provision of £77.4m in 2009-10 and £117.6m in 10-11 which are yet to be confirmed. The capital grants funding similarly includes £100m anticipated drawdown from end-year flexibility which has yet to be confirmed.
- ⁷ The 2008-09 and 2009-10 figures are for the Learning and Skills Council. The 2010-11 figure is an indicative amount for the Skills Funding Agency. The final amount for the Skills Funding Agency will be confirmed prior to its establishment. This line and preceding lines do not include non-cash expenditure.
- ⁸ In previous years, we have set an indicative budget for adult skills for the London LSC to support the London Skills and Employment Board (LSEB) strategy. This year, the indicative amount of funding available to the London region is expected to be around £653m. The Skills Funding Agency will work with the LSEB to agree how this funding will support the Board's strategy.

Impact of learning on prosperity, employment and work

We turn now to consider evidence of the wider impact of learning on prosperity, employment and work. The broader effects of learning for work tend to be expressed at three levels: the individual, the firm, or the whole economy. They are primarily concerned with the relationship between education, employment and earnings (for individuals) and education and productivity (for firms and the economy as a whole). Beyond the evidence of the relationship between wages and qualifications, claims for the impact of learning should be tempered: there are so many things going on in adults' lives, and education has such diverse and diffuse effects, that it is misleading to claim direct causal effects.

Identifying the impact of learning on a firm's productivity is equally problematic, and yet much research seeks to isolate the impact of individual interventions (in this case, learning), rather than capturing the collective impact of linked interventions (for example, connecting product design with job design and learning). Attempting (not often successfully) to separate the impact of different interventions also bedevils public sector policy and performance measurement through the PSA framework. We address this issue in our proposals on measurement in Part 2.

The quest for impact evidence, whilst crucial in making the case for Treasury investment, supports what we know from experience about the potential for learning to be a force for good in our lives, whether in or out of work. The relationship between learning and economic impact is complex; solid data is important but is rarely simple.

Individuals

For individuals then, much of the research focuses on the impact of initial education and, therefore, on public funding. For academic qualifications, average wage returns are similar for men and women at around age 26–29 per cent for first or foundation degrees, around 14 per cent for two or more A-levels and around 9–11 per cent for five or more GCSEs A*–C. For vocational qualifications, there are clear returns to both men and women for intermediate and higher qualifications, but with some differences between men and women in respect of subjects studied. Low-level qualifications however, produce rather low rates of return for women and men. Returns to vocational qualifications improve when they represent people's highest qualification, particularly for lower achievers at school. Therefore, some Level 2 vocational routes can substantially improve the earning power of young adults who do not fulfil their potential at school.

Interestingly, the research demonstrates a continuing return to higher education, even in the UK, where higher education numbers have risen sharply in the last ten years. It suggests employers are still prepared (on the whole, there are of course differences by subject and institution) to pay more for graduates. This shows the way that apparent 'oversupply' (e.g. the doubling of graduate numbers between 1990 and 2008) has not

reduced the graduate wage premium, though this may disguise wide variance in the premium, with many graduates not getting it. Even though more graduates are initially employed in sub-graduate-level jobs, employers are prepared to continue paying more because they know that graduates are more able and likely to grow their jobs, for example by applying ICT skills. Supply push can thus raise the skill level required of jobs and improve employer demand.³³

For adult learners, most of the literature concerns work-related learning. Looking at changes in wages in Britain between 1981 and 1991, employer-provided training led to a rise in average earnings for men; the findings for women were not statistically significant. Courses leading to a *higher vocational qualification* (at Level 4 or above) produced an earnings return gain of 8 per cent for men and ten per cent for women. There are also higher returns for *longer courses*. For example, estimates for men suggest off-the-job training with a duration of more than a month yielded a positive increase in wages of 15 per cent, whereas returns for on-the-job training with a duration of less than a week yielded a wage increase of only two per cent – which was not statistically significant.

At Level 3, there is for example some evidence that in production-based sectors there is a return to qualifications (Lantra, Cogent, Improve Ltd, Skillfast-UK and Energy & Utility Skills for males, and Improve Ltd and Skills for Logistics for women), but in just under half of Sector Skills Councils (SSCs), the return to Level 3 vocational qualifications is, apparently, essentially zero. If these findings are correct (and the research is much contested; moreover, much everyday experience suggests that jobs requiring Level 3 are paid more than jobs requiring just Level 2), this raises a further question about how to stimulate demand for these skills, particularly given their anticipated loss to the economy through retirement over the next 5–10 years. (UKCES research indicates that over 44 per cent of all job demand in the construction sector between 2007 and 2017 will be in skilled trades.) That said, work presented to the House of Lords Select Committee on Economic Affairs (2007) showed that for young men, wage returns to Apprenticeships at NQF Level 3 are 18 per cent higher than returns to other NQF 3 vocational qualifications held by similar individuals. For young women, the wage premium for an Apprenticeship at NQF Level 3 is 14 per cent.

Learning generally raises wages for some

However, some recent research shows no evidence that an NVQ Level 2 produces earnings or employability gains for men, but there is some evidence of a delayed earnings gain for women workers. It is a mixed picture. Returns to Level 2 qualifications appear to be strongest when acquired through work. However, for many workers, Level 2 is a step to Level 3, which is where a wage premium does often exist.

³³ An international example of this is the case of India which invested heavily in ICT training at a level far beyond what the market would support, leading to accusations of people with PhDs in Computing pulling rickshaws – but the strategy quickly paid off as it helped grow a major software industry in which India is now a world leader.

So, although on average work-related training does lead to higher wages, only some workers gain from training. And workers who are selected to receive training are not representative of all workers. Rather, firms appear to identify those workers most likely to gain from training. Evidence also suggests that those workers who do not receive training would probably not gain higher wages from the training, had they done so. This raises a question about the extent to which there are earnings returns to training for all workers, but of course much depends on how work is organised to use training.

Union learning

Booth *et al.* (2003) found that unionised workers received more days of training, a higher wage growth and greater return to training than their counterpart non-unionised workers. Their results showed that workers in unions who received training earned almost ten per cent more than workers who received training but were not union-covered. A higher number of training days increased union workers' wages by one per cent. Unionised workplaces are more likely to organise work in a way which clearly includes and recognises added skills – for example through workplace learning agreements or through a higher incidence of job evaluation or similar techniques in unionised workplaces.

Learning can improve employability – but for adults more than young people

(Non)-employment is a key determiner of poverty. Whilst it is clear that skills can play a role in helping people to access work and progress in employment,³⁴ they are not the only enabler and many people face multiple barriers. According to UKCES, of the 4.6 million with no qualifications, over three-quarters fall into one of the other groups known to experience low levels of employment. These multiple disadvantages have an impact: lone parents with qualifications have an employment rate of 63 per cent, those without have an employment rate of 30 per cent. It seems that the more disadvantages faced by an individual, the greater the likelihood of being unemployed. In his study of disadvantage in employment, Berthoud³⁵ found that the non-employment rate among his sample ranged from just 3 per cent for those with none of the six disadvantages studied (family structure, low skill level, disability, being aged over 50, high regional unemployment rate, and being from an ethnic minority), to 91 per cent of those who faced all six.

A World Bank review of research on active labour market programmes concluded that training has little impact on the life chances of young unemployed people, but generally raises employability levels among the adult unemployed, and this is broadly

³⁴ Research indicates that an increase in literacy basic skills is associated with a higher probability of being in employment by age 34 for women. This is not the case for an increase in numeracy skills. For men, the opposite associations were found in that an increase in men's numeracy skills was associated with a higher probability of being in employment by age 34.

³⁵ Berthoud (2003).

consistent with the experience of the New Deal. It does, however, raise important questions about how we mitigate the impacts of the current recession on youth unemployment. If training impacts little on the life chances of young unemployed, what price strategies need to be implemented to retain young people in education and training over the next 2–3 years? Plainly training is not enough. It is likely that for the most disadvantaged young people (who are those most likely to be without skills or employment) a range of interventions will be needed; not just training, but also help with housing, life skills, money management, relationships and, possibly, substance misuse. None of that reduces the importance of training.

Firms

At the firm level, the overwhelming majority of studies have identified a positive association between a highly skilled workforce and the performance of a firm, most commonly measured in labour productivity. High value-added companies on average are better equipped with stocks of skills than other firms in the same sector, and top performing firms hire workers with, on average, higher levels of skills. Companies with higher levels of skills and training are more likely to survive in tough times and to thrive in better times.

For work-related learning, the Institute of Fiscal Studies suggests that an increase of five percentage points in the proportion of workers trained raises the value added per worker by four per cent. Cosh *et al.* found SMEs that train consistently achieve greater returns in terms of employment and sales growth.³⁶

The benefits of training for firms go beyond the straight acquisition of higher skills. Training has positive effects on job satisfaction, which in turn have been associated with lower absenteeism and quit rates. In contrast, self-funded training can have a negative impact on job satisfaction and any training provided has little impact on job satisfaction and performance unless workers are given the opportunity to apply the skills they had acquired. This highlights the importance of employer support, job design and matching. According to a study by The Work Foundation, the UK has the lowest level of job matching in the EU – that is where employee skills and abilities are matched to the demands of their job.³⁷ This may also explain why the skills premium is so uncertain.

Economy

For the economy as a whole, we are all too familiar with international comparison charts showing the poor performance of UK Plcs relative to other countries. Once again, there are dangers in seeking to isolate the contribution of skills to reducing the UK's productivity gap with countries such as France and Germany without

³⁶ Cosh *et al.* (1998).

³⁷ Bevan and Cowling (2007).

acknowledging the different labour market conditions in these countries (an apparently shorter working week in France, and more extensive licence to practice arrangements in Germany) and their impact on the relationship between skills and productivity.

In terms of initial education, research suggests increases in school enrolment rates tend to generate economic growth and an additional year of secondary-level education for the population as a whole would have the impact of raising economic growth by an additional one per cent per year. For adults, Dearden's work estimating that an increase in the proportion of workers trained by five percentage points could result in a four percentage point increase in value added per worker works out as an additional £40 billion on GDP.³⁸ For the economy as a whole, research for the OECD highlights wider labour market effects of learning for work, such as higher labour participation rates, lower unemployment, shorter unemployment periods and improved retention, as well as lower levels of sickness absence.

It is clear that, on the whole, higher skills lead to more prosperous economies and more profitable companies. Yet in the wake of the economic crisis, notions of 'prosperity', 'employment' and 'work' are being reviewed. According to UKCES, the UK is the 24th least equal of the OECD countries in terms of the distribution of disposable income. On the human development index of life satisfaction, we rank 21st out of 30, and the relationship between our life expectancy and economic growth has levelled off. Social mobility has flattened out too since the 1980s, and is less than in several other countries, including the Netherlands and Scandinavia. Recent evidence suggests that it is not just those on low incomes who 'suffer' from inequalities, but everyone. In other words, reducing inequality may benefit us all. The relationship between learning and inequality is a complex one. We have no doubt that learning at work improves life chances, and at its best it can reverse some of the negative experiences of school – NIACE's research shows that those who are least likely to learn anywhere, if they are to learn at all, are most likely to do so at work. And yet, the evidence from recent research shows that high levels of inequality affect educational performance: in other words, the significant causal direction is from inequality to educational performance, rather than the other way round. This is a sobering result. It challenges us to 'right size' the claims we make for learning while maintaining our belief in its force for good.

³⁸ Dearden *et al.* (2000).

Summary

From this overview of current levels of engagement and investment in learning for work and its returns to prosperity, employment and work, we conclude that there are ways we could secure greater value from the collective investment we currently make and that, over time, we will need to increase that investment if we are to make the best use of all our talents.

To respond effectively to the demographic, economic and social challenges we face, we believe developments are required on five fronts:

- to increase employer demand: for both skills development and utilisation, and with that, to increase investment in learning;
- to deploy a range of levers to drive up investment: conditions on the £3.7 billion spent on tax relief; active procurement policy; more licence to practice requirements; and greater transparency on training budgets;
- to review our framework of entitlements and incentives for individuals: in terms of how access to public funding is weighted, and to stimulate more investment and co-financing from individuals who can afford to pay;
- a more flexible system of qualifications and provision with room to innovate in response to individual and employer demand; and
- a relentless focus on educational equality, for all our sakes.

We consider each of these in Part 2.

Part 2: Securing greater value in future

Introduction

Broadly, we support Leitch's world-class ambitions: the UK's success and future prosperity will depend on more of us having higher skills and the capability to put them to good use in an increasingly complex world. However, those ambitions do need re-thinking in the context of the profound demographic changes that are already upon us – an economy with very different prospects for growth to those that were in mind back in 2006, and a society in which ever greater levels of inequality cannot be tolerated.

We have already set out some of the elements of that new context:

- strategic sectors in which future job growth is expected, including low carbon industries, advanced manufacturing, the digital economy, industries to support an ageing society, and public services;
- a recognition that low skilled jobs will persist, requiring an inclusive approach to creating learning-rich work environments for all;
- changes in age demography which will re-shape the labour market and require a greater emphasis on intergenerational learning for work;
- different patterns of part-time work, both paid and unpaid, to support the development of informal public/civic work;
- different patterns of time use during the working life which is likely to span the years from 25 to the early-mid 70s (though not all full time and not immediately) and the implications for part-time work and learning; and
- a recognition of how persistent inequality will limit future prosperity and well-being for us all if not addressed.

We turn now to the five areas we believe should be addressed to improve our learning for work system, to make it fit for the decade ahead:

- increasing employer demand for skills development and utilisation;
- deploying a range of levers to drive up investment;
- developing a new framework of entitlements and incentives for employers and individuals to ensure fair access to public funding and stimulate more co-financing from employers and individuals;
- a more flexible system of qualifications and provision; and
- a relentless focus on equality.

There is one further topic: measurement. In order to evaluate progress on the proposals we make in this section, measures of the skills system would need to extend beyond the current so-called 'Leitch' targets of individual qualification achievement. They would also require changes in definitions and in reporting. This part finishes therefore with a summary of proposals for future measures.

Employer demand

We start with employer demand. Evidence to the Inquiry argued that employers are not being demanding enough when it comes to skills.³⁹ Just one in five employees in the private sector receives training, compared with two in five public sector employees. And despite evidence of the benefits to all of greater equity, the distribution of training continues to favour the most well qualified. Missing from the current skills prescription are measures to tackle low employer demand. Leitch did propose a review in 2010 to consider whether the UK was on track to meet the targets, retaining the option of stronger pressure on employers if not. But that review has been pushed back to 2015, following the government's introduction of the right to request time to train.

We believe earlier work is needed on this, so in this section, we consider:

- how to get employers to invest more in skills development; and
- how to encourage employers to make effective use of the skills in their workforces.

More investment in skills development

How can employers be encouraged to be more demanding of the skills system?

There is a strong analogy with Research & Development (R&D) here. It is clearly in the national interest that employers invest in flourishing R&D. Yet many agencies that supply R&D (whether universities or private research establishments) believe that UK employers' demand for R&D is low and poorly informed, and this is exacerbated by UK higher education undervaluing knowledge transfer. Substantial moves have been made in recent years to tackle this problem by, for example: encouraging employers to work together; raising tax credits (within EU rules) for R&D spending; encouraging R&D suppliers to help develop their customers' understanding and so forth. That approach is working, broadly. UK R&D spending, while still patchy and below that of major competitor nations, is improving. Of course, the major difference with R&D is that individuals also benefit from training. Nonetheless, the example of R&D shows that a concerted drive can make a substantial difference. This is worth noting. The UK skills problem may be long-standing but is not intractable.

Unlike R&D, there are some elements of employer training which are non-voluntary:

- areas where employers statutorily must provide training; for example, some forms of health and safety training; and, in a limited number of occupations, other training required by legislation, such as food hygiene;
- licence to practice schemes. These are limited to the older professions (for example, teaching in state schools, medicine, dentistry, law and engineering) and to a few safety-critical occupations (gas fitters, aircraft pilots, etc). Within some

³⁹ For more information, please see Michael Davis's evidence to the Inquiry (from the Workplace Learning Seminar) at www.lifelonglearninginquiry.org.uk/docs/skills-in-context-Michael-Davis-CfE.pdf.

of the professions, certain levels of Continuing Professional Development (CPD) activity are also required by professional bodies. A form of licence to practice is being introduced into the social care sector. We believe each Sector Skills Council (SSC) should be asked to consider introducing a licence to practice where evidence showed persistent low levels of investment in training and a wider social or economic need. City & Guilds, for example, suggests the list should include electricians, plumbers, health workers, home care workers, micro-energy generation and insulation workers, as well as those involved in handling sensitive data and workers in the security industry; and

- the construction industry retains its levy scheme and there is a form of voluntary levy run by Skillset, the SSC for the media industry which covers about half of all employers.

So how much should employers be investing? Leitch suggested the following division (HM Treasury, 2006, p.15):

- the government should provide the bulk of funding for basic skills and the platform of skills for employability up to Level 2, with employers co-operating to ensure employees are able to achieve these levels;
- for higher intermediate skills (Level 3) employers and individuals should together make a much higher contribution, in the order of at least 50 per cent; and
- at Level 4 and above, individuals and employers should pay the bulk of the additional costs as they will benefit most.

It is important to note that Leitch and later DIUS⁴⁰ both made an assumption that individuals and employers would be willing to invest far more than in the past to meet the targets for Level 3 and 4 qualifications. It was unclear what proportions should each be borne by employers and learners. We explore this in more detail in our section on *Incentives and entitlements*.

On the face of it, these appear to be relatively straightforward guidelines. However, the LSC's response to the low take-up by employers of the Level 3 Train to Gain pilots (theoretically requiring at least a 50 per cent employer contribution) was to boost the state subsidy to between two-thirds and three-quarters, thereby reducing the employers' contribution to between one-third and 25 per cent. These Level 3 'compacts' being negotiated between the LSC and SSCs have now been scaled back substantially as Train to Gain funding is re-prioritised in the face of the recession. Similarly, the Level 4 pilots operated at a 70 per cent level of state subsidy. The notional 50/50 split with employers clearly (and rightly) varies by sector, but government subsidy is much higher than Leitch suggested.

The tension between government's desire to meet targets, its assumption that employers will invest to meet those targets, and employers' own demand for training (and therefore what they are willing to pay for) is clear. If the government

⁴⁰ HM Treasury, 2006; DIUS, 2007.

were willing and able to pay for all the additional learning and qualifications needed to meet the targets, this would not be such a problem. But this is not the case, and less likely still in the current financial and economic climate. Nor is it right in principle that the taxpayer should foot the bill for all employer or individual training, even if the deadweight problem could be overcome.

It is worth re-emphasising that employers are often behaving entirely rationally in maximising opportunities to gain government training subsidies, or in not investing much themselves. If the market provides them with little reward or incentive for training, then it is simply an additional uncompetitive cost. It is the market which needs reform: exhortations to employers alone will cut little ice. Part of the remedy is to reform the market through a combination of incentives on employers to train, and employees to be trained.

Information

One solution to improving the demand for work-related learning is to provide more information about the benefits of investment. This could be done at an individual level (based on certification of learning) and at the firm level. To provide more information to potential employees on the certification of individuals' learning first requires that learning to be certificated. The potential impact of certifying learning on the overall investment in learning is still largely unknown. There are some indications in the literature that certified training lowers the returns to training for employers by increasing the mobility and returns to training for the individual. (NESS 2007 suggests just 18 per cent of job-related learning in England is qualification based). However, certification *per se* appears to have a modest impact on individuals' willingness to step in and finance their own training. It is likely that, while learners value certification, it plays a small part in the much bigger and more expensive decision on whether to fund their own work-related learning.

Employers also need information. The adult advancement and career service will help them as well as individuals, just as Investors in People (IiP) does. For individuals, there might be a new adult advancement and careers service-based right to an annual 'skills MOT'.

Just as certification makes individual learning transparent, so a means of certifying employer training is needed. Company annual reports should disclose basic data on training. Firstly this could contribute to improving the matching between employers and employees – linking individuals who want to receive training to firms that provide training. Second, more company-based information would help investors to evaluate companies on their training investments: as shown by Bassi *et al* (2004), firms investing heavily in training are under-valued by the market.⁴¹

⁴¹ It is worth noting that training and R&D investments have a common problem in that they generate externalities. Ballot *et al* (2006) note that 'a firm is likely to get only a part of the benefits of innovations it generates because other firms and consumers will benefit'.

Tax policies

Tax incentives schemes that reduce the marginal costs of training increase the incentives for firms to invest in training. Research for the Inquiry estimates the current value of tax relief to employers and the self-employed in the UK at £3.7 billion per annum; that is, more than three times the entire Train to Gain budget. The net cost of tax incentive schemes is likely to be lower than the direct subsidy cost, since trained workers earn more (and thus pay more tax) and because of the higher productivity in firms providing training. Some of the costs of tax incentive schemes are therefore offset by increases in corporate and income taxes. To increase equity in training, certain tax incentives could be geared to specific categories of employees, such as those in place in the Netherlands for older employees. Evidence of participation levels in job-related training in the UK argues for equity gearing towards both older employees and those in lower socio-economic groups.

Overcoming deadweight

One of the major arguments against subsidy to employers for training is the 'deadweight' argument; that is, that it will simply substitute for what the employer would have otherwise spent anyway, with no more training, simply a saving to the employer. We have already noted that half of employers whose employees received training under the Train to Gain scheme say they would have arranged similar training without public subsidy. The strongest way of countering the deadweight objection to training subsidy is to link any such subsidy (whether Train to Gain or any other form) to existing training activity, to which it must be clearly additional. A requirement to publish training activity would be such a means of demonstrating additionality; in other words, employers would not receive any subsidy unless they published what they were already doing, however small or large. Tax incentives and information disclosure are thus complementary.

Co-contributions

Another way of sharing the costs of training for firms is to employ some kind of co-financing agreement where the firm and the employee share the cost of training with an additional state supplement, perhaps through pooling Individual Learning Accounts. Here, research on expenditure on lifelong learning for the Inquiry is illuminating. While employers are responsible for three-quarters of all investment by employers and individuals in the direct costs of work-related learning (£27.05 billion),⁴² the majority of the estimated opportunity (or time) costs of participating in learning related to work are borne by individuals (83 per cent compared with employers' contributions of 16 per cent, valued at £23.2 billion and £4.6 billion respectively).⁴³

⁴² Compare with the total LSC Adult Participation Budget for 2009/2010 of £3.3 billion, of which £1.3 billion is for Adult Apprenticeships (mostly up to age 25) and Train to Gain.

⁴³ It is interesting to note that union learning reps (ULRs), who have an overall average 'facility time' (i.e. to carry out their learning work but in their employer's time) of some three hours per week are thus leveraging substantial additional employer investment in learning time.

The current research base (including NESS) does not attempt to value the contribution of time from individuals – the Inquiry’s work in this area is original. And yet there are examples of this contribution being a factor in arrangements to sustain employment during the recession. Faced with falling demand, the Honda Plant in Swindon had a choice between making 1,300 people redundant or closing for two months, retaining all 4,800 staff on basic pay. To retain its skills base, it opted for the latter, using the break in production as an opportunity to train some employees in business improvement techniques and other skills (though Honda drew union criticism for refusing Train to Gain funding and doing less training than many other similar firms with staff on short time, such as Nissan or Toyota).

As the recession prompts people to explore different balances between work, learning and leisure, and between income levels and happiness, we suggest there may be opportunities to look at the issue of co-contributions to work-related learning in new ways (see the *Incentives and entitlements* section later for more detail). Further research would be needed (it is positive that fees reviews in both further and higher education are underway), together with careful experimentation, but the significant contribution of individuals’ time should be part of future equations and debates about who should pay for learning – both work-related and personal/social learning. There are implications here for the Inquiry’s proposals on mode-free funding, linked to a more widely used credit framework, in order to secure more equitable access to part-time provision for part-time students (we consider this in more detail below).

Finally, there are a number of other means of encouraging employer demand which could be considered:

- Demand needs to be intelligent. Many employers, particularly SMEs, may have little internal HR or training capacity, for example, professionals able to design or commission training, or develop training plans. Sector Skills Councils (SSCs) should promote stronger employer training capacity or offering direct consultancy services.
- Introducing a reserve entitlement to a minimum level of paid educational leave (PEL) would provide a collective statutory underpinning (as with health and safety). Of course, it would need to be developed by each SSC in a way which made sense to their sector. Already the State provides free Level 2 learning – the major problem with take-up is individual workers finding the time. The minimum PEL entitlement could complement this by providing paid leave for attendance at a Level 2 course of duration and type agreed by the SSC. Further entitlements to a contribution to PEL (for example, to be matched by the employee) could be established for all employees, for example, providing for continual professional development on a scale giving most to highly work-related training and least (but still something) to the least immediately work related. Only where an SSC failed to agree a reasonable PEL system would the State legislate.
- The National Apprenticeship Service has a statutory duty to offer every would-be apprentice at least two places, though there is no duty on employers to provide

such places. In the same way, a statutory requirement could be placed on UKCES to establish and hold SSCs accountable, as a condition of licensing, for agreed sectoral training targets such as the proportion of employees reaching, for example, Level 3, action to tackle priority skill needs, and action on green skills.

- Similarly, requiring SSCs to show that they have established a transparent system for appropriate short-term cost-sharing, for example (but not necessarily) a levy or other means of overcoming the 'poaching' problem.
- Union learning reps have demonstrably had a major impact, but could be supported further through encouragement to employers to discuss and agree collective training plans; similar provision should be extended to learner reps where unions are not present.

Skills utilisation

As we have seen, targets for skills are very largely focused on improving the stock of qualifications held by the working age population. They are concerned with improving individuals' skills, which are seen as a key driver of organisational capability. But skills alone are not enough: the evidence is that how skills are actually used is as much, if not more, the central issue as the overall numbers of qualified people. Scotland has led the way on this debate – it has a higher-qualification but lower-productivity economy – but there is no easy way to address the issue. If the overall goal is to move to a more high-skill economy, the emphasis should be as much on how skills are utilised, as on how to improve their 'supply'. Again, the question is how to encourage employers to make good use of the skills of their workforce.

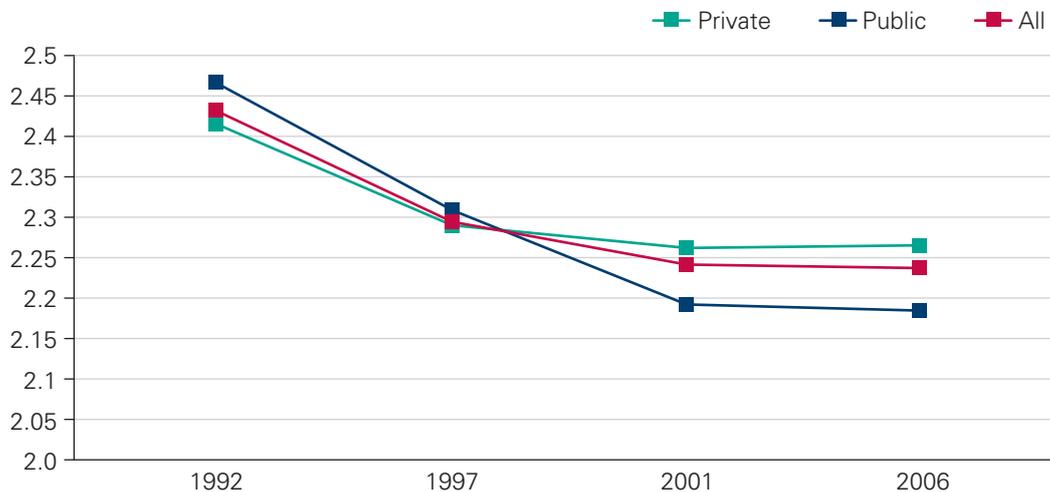
To understand how to create work environments that make good use of people's skills this takes us into job quality, the most important aspects of which are pay, skill, effort, autonomy and security. High-quality jobs are part of what we aim for as we grow more prosperous. For those with a job, satisfaction with it is a very important part of what makes us satisfied with our lives overall. Equally, research confirms strong links between being satisfied at work and good performance: greater well-being is associated with more commitment and voluntary overtime, improved organisational citizenship, less absenteeism, fewer incidences of counterproductive work behaviour, and lower labour mobility.⁴⁴

Skills levels have been rising over time, as we saw in the previous section,⁴⁵ but employees are reporting frustration at not being able to use the skills they have acquired. This appears to be connected in part to declining autonomy in the UK. Figure 4 shows an unambiguous drop in the index of task discretion in the 1990s, which levelled off in the noughties.

⁴⁴ Warr (2007).

⁴⁵ See also Figure 7 in Annexe 2 in this paper.

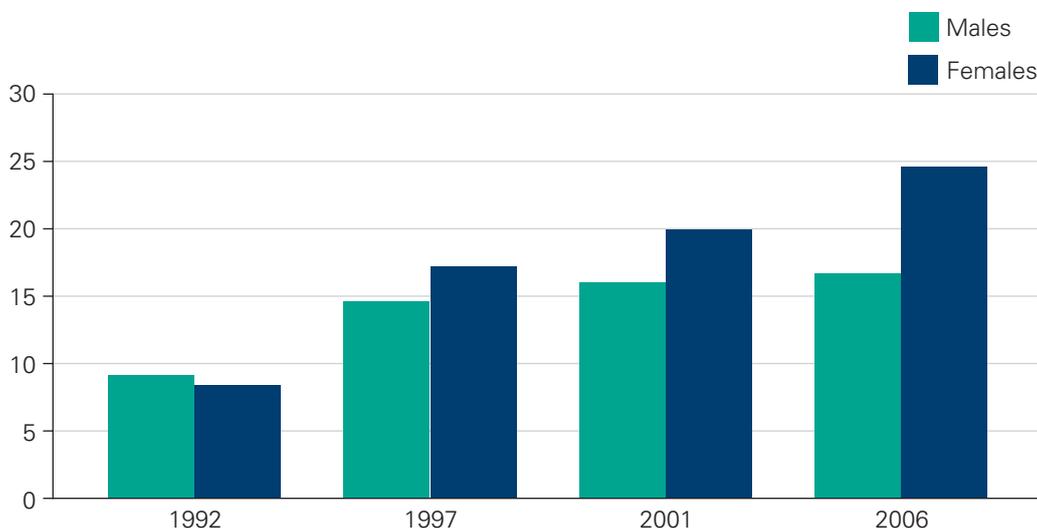
Figure 4: Index of task discretion, GB, 1992–2006



Source: Green (2009)

This signals a deterioration in job quality because it lessens the extent to which people can fulfil themselves through work. The more tightly controlled we are at work, the less satisfied we tend to be, leading to problems with retention and motivation. Having less opportunity for control has been found to lead to health concerns in situations when the pressure to work very hard is building up at the same time. Unfortunately, high effort jobs have come to overlap somewhat more with low discretion jobs, creating a toxic combination that is feared to be detrimental to health. As Figure 5 suggests, this trend appears to be happening most sharply among the jobs held by women.

Figure 5: Proportion of 'high-strain' jobs, GB, 1992–2006



Source: Green (2009)

All this poses some complex problems: specifically for us, how to make sure that people with skills work in environments which make good use of those skills. According to Unwin and Fuller, workplaces can be more 'expansive' or more 'restrictive' as learning environments.⁴⁶ Richer learning is found where environments are more expansive. Learning is often informal and tacit – an integral part of the conduct of work. How this is done depends on the particular working practices and processes, but involves different people working at different levels: there are roles for trainers, managers, trade unionists and individual workers. Integrating training with broader business strategies, developing leadership and management practice designed to make the best use of workers' skills, and enabling the skills and dispositions of workers to influence the nature of the working environment and shape the way jobs are designed, could all help firms move towards more expansive working.

Case study: Job design in action

Participative action research is often the process by which job re-design is implemented, involving collaboration between colleagues to identify problematic aspects of work organisation, and recommending changes that might address these problems. In one example, devolving responsibility to team members in a call centre for the planning and batching of work tasks led to a shift from problematic two-hourly work cycles to daily work cycles, which provided team members with more choice over when to complete particular tasks and when to take lunch and rest breaks.

To summarise, there is strong evidence that skills utilisation is as important as skills acquisition for improved economic performance, and that workplaces that have expansive learning environments are more effective in utilising skills. Furthermore, employers that invest in expansive learning environments are likely to improve other aspects of job quality, contributing to improved well-being of staff.⁴⁷ There is a final point: given the current economic climate, our conception of skills utilisation should extend beyond individual workplaces and paid work to encompass and value a wider range of ways in which people may use their skills through volunteering and to help others to contribute to the wider economy and society.

So, the case for increasing higher-level skills and their use at work appears compelling, but what more could be done to incentivise employers to adopt expansive working practices? One idea would be to establish a measure for organisational performance which could sit between the goals of securing productivity and well-being, and the development of individuals' potential. This would reflect the importance of creating effective learning environments – important not only in the context of workplace

⁴⁶ Unwin and Fuller (2003).

⁴⁷ With mental ill-health estimated to cost employers £25 billion a year, there are potential savings to be made, alongside the productivity gains.

learning, but across the lifelong learning system – from early years settings to further and higher education institutions, in public spaces and local communities.

A way of measuring progress would be to measure a combination of:

- learner achievement;
- employer effort as published in their annual report;
- expenditure on training as a percentage of payroll, compared to the sector average; and
- the presence of features of high-performance working.

Other approaches could include:

- encouragement to use the HSE's Stress Management Standards, the ACAS Good Employment relations model, the EHRC Equalities framework, and IIP's health business assessment;
- a sectoral focus on networking and sharing good practice on job design and skills utilisation, including good models of workplace learning entitlements such as the Ford EDAP model;
- the public sector acting as employers of best practice in relation to its own workforce;
- considering how public procurement and new models of ownership of firms in which government has a stake (e.g. the banks) could be used creatively to improve the quality of employment and workplace learning environments;
- a focus on creating engaging learning environments for people in low skilled jobs; and
- creation of a long-term (ten-year) Workplace Innovation Fund as part of a strategy to stimulate employer interest in making progress on high-performance working and skills utilisation.

Intergenerational learning

There is one further dimension to the discussion on expansive work environments. We have argued that changes in our demography will require a greater emphasis on intergenerational learning at/for work. This should be one element of an overall approach to securing 'learning-rich' workplaces. A framework for work-related intergenerational learning would give us a better understanding of what knowledge, skills and experience need to, and can be, transferred across generations, and in which directions. The point is that these transfers should go both ways: making sure we pass on the knowledge, skills and experience of older workers, while taking full advantage of the digital flair, networking ability and new approaches to work that young people bring to the labour market.

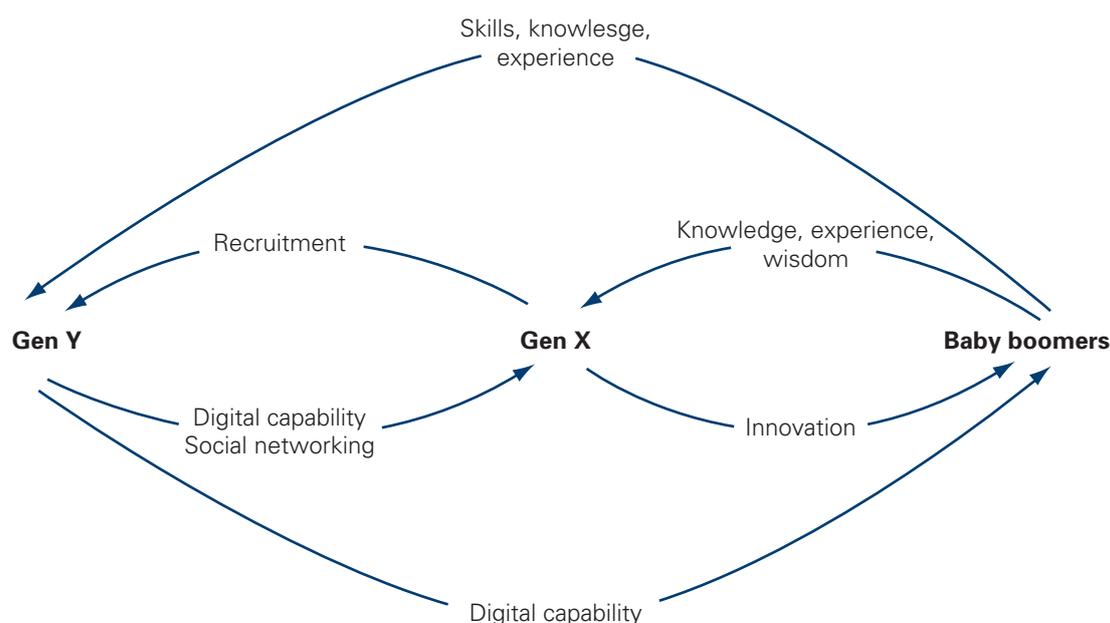
Learning Through Life considers the intergenerational transfer of investment in learning.⁴⁸ We adopt a similar approach to illustrate the sorts of learning transfers we envisage.

Transfers of learning: intergenerational links

We use the demographers' generation labels in Figure 6 to help us show the sorts of transfers between early, mid and later working life. They are sub-divisions of the Inquiry's overall four life stages, but help us to analyse the 'new modal working life' which *Learning Through Life* suggests will in future span the middle two stages, from 25–75. It also enables us to introduce evidence from LSN's employability research. This reinforces the familiar message that employers find it difficult to recruit young people with the necessary skills to work in their businesses. But, interestingly, it discovered evidence of a generational divide: the age of the recruiter came through as a key factor. Younger respondents were more prepared to employ school or college leavers and therefore had much less difficulty filling job vacancies. Older recruiters found it much more difficult to buy into what school or college leavers had to offer. LSN concludes: 'perhaps there is a real need for two-way communication that engages older generations in what "the youth of today" has to offer their businesses.'⁴⁹

This is one important strand of an overall framework of intergenerational learning for work.

Figure 6: Transfers of learning: intergenerational links



Generation Y: Born 1977–97; aged 13–33 in 2010

Generation X: Born 1964–76; aged 34–46 in 2010

Baby boomers: Born 1945–64; aged 47–64 in 2010

⁴⁸ Schuller and Watson (2009).

⁴⁹ Lanning, Martin and Villeneuve-Smith (2008).

Levers for investment

The interaction between supply and demand for skills and qualifications is a complex one. Demand means at least two very different things: the demand by employers for qualifications and skills which we have been discussing, and the demand by individuals for opportunities to gain qualifications/skills, about which more below. On supply, a qualification is not the same as a skill. A certificate should indicate something about what has been learnt, but it may not say much about what the holder can do. Supply and demand interact in relation to both qualifications and skills. The more people appear with qualifications, the higher the level of qualifications required for jobs goes. If people with high skills take jobs with lower skills requirements, they are likely to affect the skill content of the job, pushing it upwards.

The policy of making competition more effective in markets for public services was doubtless intended to encourage employers to be more demanding and providers to be more responsive, but has, somewhat paradoxically, resulted in a market for training that is still overly prescriptive in what can and cannot be learnt, and who is eligible for wider support.

The point here is to encourage thinking about the role of government in enabling the learning system to flourish. At present, it plays at least two roles. On the one hand, it acts as 'chief steward' of the learning framework, seeking to ensure there is a fair and equitable infrastructure for learning and that individuals and employers are fulfilling their responsibilities. On the other, it has become a 'market maker', reforming the rules and incentives governing the market, for example, by investing to stimulate demand from employers and learners. 'Chief steward' and 'market maker' may not be incompatible roles, but their interpretation by various actors and agencies at different levels and from different perspectives in the education and training world is variable and adds to the complexity of the picture overall.

We believe smarter use of indirect policy instruments would stimulate employer demand. The details are rehearsed above, but to summarise, the key levers we would propose are:

- making tax relief contingent on raising levels of participation and accreditation in learning at work among older employees and low-skilled workers;
- public procurement to drive up levels of investment in skills throughout the supply chain, particularly to support skills development in the emerging 'green' economy; and
- stronger forms of licence to practice which extend requirements into more sectors/occupations to raise the levels and use of skills.

To complement these measures, we are in favour of light-touch direct policy intervention in skills, trusting individuals to know what they need (with appropriate support and safeguards for equity) and freeing up the public market for learning to create room for innovation and real responsiveness close to where people live and work.

Incentives and entitlements

The needs of individual learners should be at the heart of a new framework of incentives and entitlements for learning. So far, we have focused on employer demand, but things work best when everyone has a stake in learning.

Alongside approaches to stimulating employer demand, we need an effective approach to understanding, stimulating, guiding and responding to individuals' demand for learning for work. Crucial to this is ensuring a voice for all employees in the design and implementation of plans for workplace learning, both individually and collectively.

Currently there are at least three groups who have little opportunity to express demand for training:

- low-skilled employees whom employers have traditionally been least likely to invest in and who without appropriate safeguards could continue to miss out;
- employees who wish to change job and/or career and are looking to develop skills beyond those required by their current employer's overall business strategy; and
- people currently not in work, including both older unemployed and young workers unable to find their first job.

Measures to tackle these gaps and to increase overall employee demand must first consider employees' learning needs.

Greater role for learners at work

A greater role for learners should also be created. For example, SSCs are led by employers, but with very little role for learners other than the minority voice given to union representatives on SSC boards. At employer level, learners have a collective voice where there are unions which are active partners in learning, but not otherwise, though the right to request time to train will help give all individual learners a stronger voice. Colleges, but few private providers, give a limited voice to students as learners. All these routes should be further developed. Social partnership (between unions and employers) is well developed in Europe and has helped develop skills systems which are frankly much more dynamic and responsive than those in the UK.

Again, evidence suggests that market-driven approaches are unlikely to be sufficient: a range and mix of incentives – both regulatory and non-regulatory – is required. Some of these incentives will impact on people’s behaviours in relation to the labour market – judgments about whether a combination of the minimum wage and working tax credits will yield greater returns than a benefit cheque, for example, or whether the investment of time, energy and effort in taking a learning course will result in promotion/higher wages. Others will directly impact on the costs/ease of access to learning itself – for example, free literacy and numeracy provision, or the (re) introduction of learning accounts.

A framework of entitlements to learning was set out initially in *Learning Through Life*.⁵⁰ It has a strong universal element, reflecting the Inquiry’s central proposition that the UK’s lifelong learning system should be underpinned by a life-course approach. Our position is that the entitlement mechanism should also contribute to the aim of securing greater equity in the take-up of learning opportunities for work. The following principles for an entitlements framework are, therefore, suggested:

- State investment in individuals’ learning for work should prioritise the three groups outlined above in pursuit of equality. There should be particular emphasis on tackling skills discrimination for a range of specific groups, including black and minority ethnic workers, disabled employees and older workers, along with further development of ongoing initiatives aimed at women. For example, apprenticeships policy should encourage more women to enter higher-paying occupations such as engineering.
- This means continuing to give particular priority to low-skilled workers and people outside the labour market, including those with literacy and numeracy needs. More highly skilled workers should be encouraged to invest more in their own learning, for which there will also be a larger wage premium.
- State support for low-skilled workers’ skills acquisition should become dependent on an employer demonstrating plans for skills utilisation.
- More highly skilled workers looking to change job/career should generally be expected to contribute to the costs of learning which will yield them private as well as public gain. The state contribution may be higher where there is a greater state need or lesser private gain.
- State funding should support a system of entitlements for priority groups and the delivery infrastructure for learning generally. Additional income to support providers’ delivery and infrastructure costs should be generated from learners who pay for themselves or by their employers.

In addition to these specific proposals, a wider range of interventions could impact on the regulatory/labour market environment and complement a range of social/welfare policies to support learning for all adults.

⁵⁰ Schuller and Watson, 2009, pp.142–3.

These are some approaches worth considering:

- Tax relief for individuals investing in their own learning. Employers already have the opportunity to offset their expenditure on training against corporation tax. Individuals should have similar opportunities. (As an example, tax relief is already available on union subscriptions to the extent that the union activities are deemed to be educational). The definition of learning for individual tax relief purposes should be comparably generous to that available to employers – i.e. more generous than the vocational training tax relief that used to be available to individuals before the introduction of Individual Learning Accounts.
- Rather than focusing on a narrow conception of ‘skills account’, the creation of ‘learning budgets’, drawing on the experience of individual budgets in social care, would create real flexibility and innovation in the education and training system. For people seeking work, this would have the particular benefit of enabling all state welfare support to be collapsed into one stream and a personal budget established and commissioned with a personal adviser from the adult advancement and careers service. At the commissioning level, this would also help practically to embed learning into wider welfare interventions (dependent, of course, on appropriate support and brokerage from a personal adviser).
- Low wage workers should be able to use ‘learning budgets’ to borrow and save, so that they have access to resources to co-fund higher-level learning.
- The new right to request time to train is an important step because it changes the terms of the debate: to ask employers why they are not investing in training, with a range of reasonable responses for saying no, preventing unreasoned refusal. It will be important to monitor the data showing how many requests are rejected, to inform the debate about future legislation.
- Government should examine options to enable trade unions to negotiate more collective arrangements, such as Learning Agreements, and extend the right of union learning reps to support workers in associated but non-union firms (as with ‘roving safety reps’).
- SSCs should be given as a core goal the task of attracting the widest pool of talent into an industry through the establishment of diversity goals for each SSC, thus tackling endemic occupational segregation.
- Government should explore ways to align strategically the interests of employers and employees. There should be a review of different ownership models of firms, with a particular focus on co-operative ownership where employees *are* the company, rather than just working for it, to explore what impact different forms of ownership have on employer-employee relations, the development of ‘good work’, and the alignment (or otherwise) of employers’ and employees’ learning interests.

As a minimum, we propose that:

- to encourage individuals' learning, tax relief should be extended to cover the whole cost of training (fees, books, IT, etc.), but (bearing in mind the equity principle) limited to basic rate tax relief;
- Learning or Skills Accounts should be developed (as in Scotland) into genuine vehicles for real payment, with appropriate safeguards, as well as a means of 'logging' all training undertaken and qualifications achieved; and
- collective funding, where for example a union encourages members to pool their entitlements and skills accounts, should be encouraged. For many employers it makes sense to train groups rather than individuals, and participation, success and progression are all higher when training is collective.

Information, advice and guidance

The creation of an adult advancement and careers service for individuals is welcome. Hopefully the integration of the skills and business brokerage services will also help employers. The longer-term ambition for information, advice and guidance services should be to stimulate, identify and signpost support for individuals' learning needs. Services for both individuals and employers should recognise the wider contexts in which lifelong learning might be sought, developed and deployed. Information, advice and guidance services must be encouraged and enabled to work collaboratively with other organisations effectively to integrate services, for example social/welfare services for individuals, and wider economic development services for employers.

A more flexible system

So far, we have discussed a range of developments to stimulate demand for learning from individuals and employers. We move on now to consider how a more flexible system of qualifications and provision would improve the interaction between supply and demand.

Qualifications

Qualifications matter. They matter to employers rather more than many admit: when they are selecting new recruits, at which point they can be as important for their symbolic value as for their specific content; where licence to practice applies (in this context, qualifications are often industry-specific rather than publicly certificated); and as an indication of the motivation or commitment of existing or new staff.

They matter to individuals as a passport to employment; as a tool in securing new or better employment (which in practice often means changing employer, hence employers' reluctance to support staff to acquire qualifications unless they relate to external requirements); or as a tool for protecting against future redundancy/

unemployment when they may be needed to secure new employment. For adults, qualifications can be seen as a 'confirmer' as much as a 'driver' of change. Many learners appreciate the fact that their employer has invested in them, even if it is simply to accredit existing skills.

Qualifications tend to matter less to employers once an individual is inside an organisation where there are more direct ways of establishing and developing competence. They may matter less to individuals who wish to and are able to stay in stable employment in the same organisation. Some individuals may believe that the most significant learning they do happens outside formal education processes.

Part of the tension between government policy and employer/individual demand is that government remains interested in qualifications though employers may have less interest. When employers do look for qualifications, they often value industry certification over publicly supported qualifications. In the IT sector, for example, 40 per cent of technical training is working towards a recognised vendor-specific qualification, though government moves to allow employer accreditation may help.

For individuals, demand for qualifications varies at different stages. Clearly, for young people qualifications are an important factor in entering and establishing oneself in the labour market. On the other hand, what most older people want is short, focused training related to current work. There is almost no demand from the over 50s for formal qualifications (evidence indicates most of those who do qualifications courses after 50 seem to be doing it because they think the course will be more serious, or because they are taking on a personal challenge, but very few think it will improve employability). Unemployed people over 50 are more likely to think that a qualification will get them back into work, but the evidence is thin – what gets people back is work experience, and a chance to demonstrate competence – training linked to work placement or a real job – an 'older apprenticeship' – might help.

The training for older people that is most likely to keep them economically active is short and sharp, and much cheaper than full Level 2 or 3.

There are problems in linking public funding to full qualifications: it excludes those who want to test out training and who would have begun to recognise its benefits. Short periods of learning are much more likely to appeal generally to adults whose memories of school have led them to the conclusion that learning isn't for them. A short taste of learning can be a powerful trigger for 'unlearning' previous assumptions, replacing them with new, positive experiences. This is exactly what union learning reps do. They show workers who can identify with them that their experience of learning has paid off. Where people are disengaged from learning, short, flexible learning options are a better means of encouraging unlearning of previous experience. This is not to diminish the role and value of qualifications, but to emphasise the need for a balanced approach. For people returning to learning after a period of mental ill-health, for example, the prospect of immediately pursuing a full qualification is very stressful. Publicly funded provision will be more effective if it can bridge the gap between

people's choices and government priorities. Less initial emphasis on qualifications may result in more eventual qualifications.

There is one other point here. We have already looked at the importance of creating good environments in which skills can be used effectively, through learning which is often tacit and informal. Much accreditation of learning is focused on skills development, though arguably the NVQ framework aims to accredit both the *development* and *deployment* of skills. Whether skills development happens at the workplace or off-site with a provider, we should recognise and accept that further workplace learning, post qualifying, will be required to gain the full benefit of a qualification, and plan accordingly for learning in the workplace. Further research on how qualifications can lead to further learning should be a priority.

Public policy on qualifications should focus on:

- supporting those individuals seeking to enter the workforce or to change jobs, and people at points of transition in their lives, for example people leaving institutional care or prison. Here it is logical that there should be a strong emphasis on generic knowledge, skills and qualities which will support long-term employability;
- programmes in sectors with high labour turnover or uncertainty, and in regions, localities and communities with high levels of unemployment; and
- particular encouragement and support, perhaps through an employability support allowance or relaxation of the 16-hour rule, for those adults without skills for life.

Public funding should be focused on covering new learning (but not necessarily on new *levels* of learning). Verification of pre-existing learning can also be valuable where desired by learners or employers, but should not be the focus of public investment. Where an employer receives a public subsidy, this should be contingent on a plan for utilising skills in the work context.

Credit

The danger with a policy emphasis on 'full fat' qualifications is that it leads to an 'all or nothing' approach: learning is either for a full qualification (just 18 per cent of employer-funded training) or is informal and non-accredited. A clear and flexible credit framework should be an integral part of a qualifications system. The QCF makes this link, allowing individual credits to be built up gradually into qualifications.

We have already seen that both employers and individuals often want shorter periods of training. Individuals are generally more keen than employers to have their learning certificated, since this gives them more options in the labour market if they choose to move jobs. Employers are more concerned about how training can boost their productivity than whether government qualifications targets are met. A credit framework supports individuals' desire for recognition and accreditation. It is also, argues Schuller and Watson in *Learning Through Life*, a way to drive up demand from employers:

The greater relevance of these shorter periods will give the skills greater purchase in the workplace. As credit develops, employers will change their expectations of what counts as learning as employees' access to learning increases.

That is why *Learning Through Life* recommends that:

Employers should be encouraged and incentivised to integrate the training they offer into a credit framework [and] this should form part of their reporting requirement.

This could be helped along by:

- requiring each SSC to set a benchmark figure for the percentage of accredited training in their sector, with a plan to raise levels and monitor progress; and
- making tax relief, grants and subsidies contingent on training being accredited unless there is a demonstrable reason why not.

The implications of this for the qualifications system are covered in some detail in *Learning Through Life*. We do not repeat them here, except to stress that this is a long-term proposal – one that will likely take more than one parliament to secure.

Part time

Developing a system to enable the build-up of credits through short episodes of learning implies a re-balancing away from long qualifications, especially where these are full time. We have already seen how important it is for working people to be able to fit in learning around increasing complex living and working patterns. It makes sense for more learning to be part time, and a credit framework would help to give structure to this.

Innovation, responsiveness and accountability

There is an inherent tension in our 'demand-led' system, which on the one hand leaves it to the market to decide what is required, but on the other exercises indirect control through the rationing of public funding, achieved in part by determining which qualifications are eligible for public support.

Of course it is important that publicly funded learning has clear value in the labour market, and systems of quality assurance are therefore necessary to ensure people are able to select relevant, up-to-date courses. The views of employers need to inform the design of qualifications and, by extension, programmes of learning. SSCs have been placed as intermediaries between employers, qualification agencies, providers and individuals: their role is to approve qualifications and judge what is 'economically valuable', making them gatekeepers to public funding. But there are difficulties with this.

The pace of change in labour markets makes it difficult to keep up: in fast-moving markets like the IT industry for example, where around 40 per cent of technical training is towards a recognised vendor qualification, rather than a publicly certificated qualification, it is difficult to forecast future sectoral skills needs. Equally, designing qualifications and programmes of learning fit for the future requires, not only knowledge of a sector, but experience of curriculum design. Employers rightly call for ‘employability’ skills, but these are hard to capture in qualifications. What is required is knowledge of the forms of learning that will develop rounded ‘work-ready’ employees and an understanding of the importance of organisational context in creating a positive environment for the deployment of skills. Michael Eraut sums it up, arguing that we should: ‘abandon the myth that it is either possible or desirable to incorporate all workplace learning into qualifications and focus on what is important.’⁵¹

If our accountability systems are over-prescriptive, we inhibit opportunities to create new demand through innovation. Often, this is best achieved through creating new ‘products’ altogether. But this is best done close to employers and people themselves who know most about their local labour markets and their own futures. It requires a flexible system in which providers are free to innovate. That in turn means developing more organic, bottom-up systems of accountability and greater autonomy for providers. As Ursula Howard puts it in her further education paper for the Inquiry:

*Colleges should have more powers to design and award qualifications and to implement a unit-based and credit-based curriculum within a nationally recognised system to ensure transferability and portability of learning outcomes.*⁵²

A framework for greater autonomy should:

- ensure the involvement of individuals and employers in the developing and delivering provision, not just as ‘consumers’ of that provision but as partners in the process;
- enable innovation to take place as close to delivery (i.e. at local level) as possible. The review of ownership models proposed for firms should be extended to consider models of ownership and governance for providers in the lifelong learning system which encourage the most innovative and flexible approach; and
- encourage collaboration, both between providers and with other social and economic partners. *Learning Through Life* proposes further education colleges as the institutional backbone of a local learning landscape, but as part of an ecological model of partnership with informal and private providers, and with local employers.⁵³

⁵¹ Eraut (2001). Michael Eraut also submitted evidence to the Inquiry, which can be found at: www.niace.org.uk/lifelonglearninginquiry/docs/WPL0006i.pdf

⁵² Howard (2009).

⁵³ For more on local learning ecologies, see Hodgson and Spours (2009).

San Diego Community College

In the USA, San Diego Community College organised a course in Heating and Air Conditioning within six weeks of being asked to do so by local firms. How so? They certainly have employers on the board (but no more so than in the UK) but, crucially, have much better funding and community support than their UK counterparts. Teaching salaries are higher, successful students can progress to local HE institutions by right, and facilities (e.g. the latest heating and ventilating apparatus on which to learn) are more up to date. Greater innovation and flexibility will not come without this added support and investment from private as well as public sources.

Places, technology and people

Finally, in this section on developing a flexible system for learning for work, we consider briefly some of the implications for future infrastructures: for places, technology and people.

To introduce it, we use a fictional story set in the future (Jamal's), drawn from the Inquiry's work on scenarios for future learning infrastructures.⁵⁴

Jamal's story

Jamal thought that there could be a real future in having a rurally-based garage business. Nevertheless, it was a big decision to take his family to the countryside, as it meant moving the kids' education across to the school's rural division and his wife Patti having to leave her modelling work. As it turned out, it seemed to suit everyone. In sorting out the kids' school move, Jamal had talked to the Apprenticeship Faculty and soon realised there was an opportunity to be part of one of the training co-operatives in the rural area. Through this involvement he had found it far easier to find a reliable employee – Megan had just finished her EcoProduct Apprenticeship and was on the lookout for a job that could also give her some time to explore the opportunities with the OpenCourse higher qualification programme. Life seemed to be very much 'win-win' at the moment.

Jamal was a bit nervous about his afternoon appointment though. He had signed up to the tutor training as part of the agreement with the Apprenticeship Faculty. It seemed a very sensible idea – if a business took on apprentices, then one or more employees received support to train up as a tutor. In fact, for most businesses on the scheme, it actually became part of the business, because you could work with

⁵⁴ For a fuller discussion about the implications for future learning infrastructures, see the report of the Inquiry's scenario work at: http://web.me.com/theomanager/IFLL_Scenario/Home.html

apprentices in other businesses, and that could lead to all sorts of opportunities like virtual work placements and community service support. Today, Jamal had his assessment panel meeting. In one way he felt pretty confident. Yet the thought of the six apprentices he was currently supporting being there with the professor and team from the Capability and Utilisation Faculty all in one go was quite disturbing. Virtual conferencing was a great thing, but sometimes the way in which it could bring together so many people was a bit much. 'But', thought Jamal, 'that's quite enough prevaricating' – he tapped his mobile and Megan's picture came up on screen. He said he'd be down to the workshop in a minute to sort out today's jobs.

Places

We have already made a strong case for the importance of a strong local perspective on learning for work. This is particularly important for smaller employers, and we support the UKCES's emphasis on developing local employer networks as a mechanism for raising training standards and commitment. But it applies also to larger employers, who may contribute to a local learning culture through supply chains, procurement policies (particularly in the case of public sector employers – local authorities and strategic health authorities to name but two), and by opening up union learning centres to the community.

Colleges, according to Ursula Howard, 'should be first and foremost local organisations', and vocational education should remain central to their mission. A major legacy from the Learning and Skills Council's programme in England will be the significant updating of, and improvements to, the physical infrastructure for lifelong learning, despite the recent freeze in college building. This is welcome for its benefits: to young people choosing a college education; for employers who have access to better facilities and equipment for training, innovation and enterprise (for example in high tech engineering and manufacturing or the creative industries); and for communities who have new facilities and re-invigorated focal points for learning and purposeful community activity.

However, some of the evidence considered in this paper raises some questions about the traditional model. Are new college buildings and other learning centres the most effective infrastructures for supporting work-related learning? How is the utilisation of skills in the workplace context to be addressed? Increasingly, we will need ways of connecting learning *for* work with learning *at* work. Colleges will not only need to be the 'institutional backbone' of local learning arrangements, but will need to develop outreach strategies for working in partnership and in situ, with employers. In measurement terms, such a shift would require a re-balancing of colleges' volume measures of participation and achievement, with wider value for money indicators of overall employer satisfaction and productivity.

Technology

Linked to this is the rapid development of technological-based approaches to learning. The E-Skills UK forecast in 2007⁵⁵ stated that employers would spend up to 30 per cent of their training budget on e-learning by 2010. The success of Learndirect bears this out. In 2008 it reached the 10 million learning episodes mark – almost all reached via online learning. Union learning is also rapidly expanding online delivery in the workplace. The use of technology extends not just to the delivery of learning content and the use of electronic diagnosis and assessment, but also to the management of the relationship between learner and tutor. The Inquiry's scenario planning project on future learning infrastructures suggests that 'blended learning' which combines technology and human inputs is likely to become even more prominent in future. This has implications not only for learning infrastructures, but for the capabilities of the lifelong learning workforce.⁵⁶

People

We welcome the emphasis already being placed by the Institute for Learning and Lifelong Learning UK on the need to develop the e-learning capabilities of tutors, and the ongoing programme of support for union learning reps who have already supported hundreds of thousands of learners to get involved.

Other areas for development include:

- materials to enable tutors and workplace learning representatives to understand the relationship between skills development, skills deployment, good work and job design, to help them jointly plan learning for effective skills utilisation;
- support for other 'intermediaries', in both professional and voluntary capacities, to champion learning for both paid and unpaid work;
- materials to support information, advice and guidance workers in particular to understand how the combined effects of disadvantage (family structure, low skill level, disability, being aged over 50, high regional unemployment rate, and being from an ethnic minority) affect participation in learning; and
- further research on how to develop positive, enriching learning environments for those learning outside the workplace, as well as for those learning in work, including how to foster effective intergenerational learning. Attention should be paid to institutional and community-level approaches to securing expansive learning cultures for all.

A relentless focus on educational equality

We turn finally to equality and its relationship with work and learning. As the recent report of the National Equality Panel confirms, inequalities persist. Patterns of full-

⁵⁵ E-Skills UK (2007).

⁵⁶ See the report of the Inquiry's scenario work at: http://web.me.com/theomanager/IFLL_Scenario/Home.html

time and part-time employment are significantly gendered. Men are much more likely to work full time than women. And women in professional/managerial occupation households are much more likely to be employed full time than women from routine households. Women in lower-paid part-time work are likely to be fitting in a number of part-time roles around their caring responsibilities, with little control over their time. The low level of hourly pay for part-time work reflects both the low value accorded to it and a failure in the way we organise work, including the lack of opportunities for training and promotion. We need to open up part-time opportunities beyond routine and low-paid occupations, and to open up career progression for part-time workers. For some, part-time work is their preferred option, but for others, working part time is the result of constrained choices reflecting limited childcare options and assumptions about gender roles. Once again, we need to think carefully about how learning can support our unpaid work, as well as paid work, and about how changes in the way work is organised could secure greater equality for both part-time work and learning.

Perhaps the most telling finding is that the gaps between the more and less disadvantaged *within* each social group are usually only a little narrower than those across the population as a whole. They are much greater than the differences *between* groups. So, for example, there are considerable differences in wealth within each age group, with a range from £28,000 to £1.3 million between the tenth and 90th percentiles of those aged 55–64. Participation data for minority ethnic adults shows markedly different levels: over 70 per cent of black African women participated in 2006, compared with just 42 per cent and 34 per cent of Pakistani and Bangladeshi women respectively.⁵⁷ It is clear that the steepest gradients relate to socio-economic status and place.

(Non) employment is a key determinant of poverty. Helping people to access work will benefit them economically, as well as having well-being and social advantages. Yet, while learning can play a role in helping people to secure work and progress in employment, the causal relationships are complex. High levels of inequality affect educational performance – in other words, the significant causal direction is from inequality to educational performance, rather than the other way round. And even when educational performance levels rise, as they have for women (more women now have higher education qualifications than men in every age group to 44), income inequality remains: women are still paid less than men – 21 per cent less in terms of hourly pay for all employees (13 per cent less than men for those working full time). Nevertheless, this should not distract us from pursuing greater educational equality. Learning should complement social and labour policies aimed at securing sustainable employment.

⁵⁷ ONS Labour Force Survey 2006, taken from Aldridge, Lamb and Tuckett (2008).

Employability

Learning Through Life draws on the work of Nobel laureate Amartya Sen to propose a framework of capabilities:

Reduced to their simplest terms, 'capabilities' constitute the capacity to achieve well-being. ...All individuals and groups should have the opportunity, not only to realise their full potential, but also to raise the level they aspire to achieve. Sen's deep concern with reducing inequalities in societies stresses the obstacles to achieving capability which different individuals and groups encounter.⁵⁸

An important dimension of the Inquiry's capability framework is employability: the capability to undertake work, progress within work and to transfer between different types of work. It is central to the pursuit of equality.

There have been numerous attempts by employers, academics, policymakers, practitioners and, most recently, the UKCES to define 'employability skills'.

The employability challenge

The UKCES report defines employability skills as:⁵⁹

- skills relating to the foundation of a positive approach; i.e. being ready to participate, make positive suggestions, accept new ideas and constructive criticism and take responsibility for outcomes;
- functional skills; i.e. using numbers effectively, using language effectively and using IT effectively (digital life skills); and
- personal skills; i.e. self-management, thinking and problem solving, working together and understanding the business.

There has been a tendency towards comprehensive definitions that can be accredited and which will help influence school and college teaching. These may provide a useful core of potential skills, but it is likely that full employability will only be achieved after using skills in context. Expecting new recruits to be fully 'work ready' is unrealistic. For older people particularly, what gets them back is work experience, and a chance to demonstrate their competence and employability – training linked to work placement or a real job – an 'older apprenticeship' – is more help than a qualification.

Aspects of attitude and motivation are often included in descriptions of 'employability skills'. They are important to the deployment of individuals' skills in an 'expansive' work environment.⁶⁰ Thinking of employability as a capability reflects the importance of the organisational context in encouraging positive attitudes towards the utilisation of

⁵⁸ Schuller and Watson (2009, p.166).

⁵⁹ UKCES (2009).

⁶⁰ Mountfield (2009).

skills. It reinforces once more the importance of developing working environments that can make effective use of people's skills.

Employability, at the appropriate level, equips a person not just for one role, but also to progress within or to a different field. It is equally relevant to people involved in different forms of work, such as self-employment, volunteering and informal work. In our increasingly turbulent labour market, the resilience that helps to maintain confidence and competence will be increasingly decisive in enabling people to shape their future working lives, whatever form they take.

Finally, employability interacts with the four core capabilities proposed in *Learning Through Life*: digital, civic, health and financial. At first look, they are not self-evidently employment related, other than digital capability. Yet all underpin employability, directly or indirectly. They profoundly affect the control we have over our lives and, therefore, our ability to find and maintain employment: someone having difficulties managing their finances will often carry that into work, affecting their performance there, and that in turn can affect their health. Participation in civic activity helps reinforce people's sense of identity and well-being, which in turn helps them maintain their links to the labour market. They highlight the interdependencies between our working and wider lives.

Equalities legislation

The Equalities Bill was passed into law in April 2010. It harmonises and in some cases extends existing discrimination law covering the 'protected characteristics' of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.

Among its provisions it creates a unified public-sector duty, intended to promote equality in public policy and decision-making, and proposes a new public sector duty related to socio-economic inequalities.

Cutting or sharing?

The current public sector cuts run the risk of further disadvantaging the disadvantaged, and with the likelihood of tight public spending for the period of the next parliament this will become a more and more pressing concern. Already, it is clear that there are tensions between the PSA targets for increasing qualifications levels, and the existing equalities duties.

In times of tight public finances, the choice is between cutting and sharing.⁶¹ Sharing is generally less likely, but cuts fall disproportionately on the disadvantaged. Throughout

⁶¹ From a lecture given by Professor Avner Offer at the RSA on 24 February 2010: 'Is Prosperity Without Growth Possible?' Find the audio file of this lecture at: www.thersa.org/events/audio-and-past-events/2010/is-prosperity-without-growth-possible (Accessed September 2010)

this paper we have argued for greater employer and individual investment in learning from those who can afford it. We see this as part of an approach to sharing which enables public funds to be focused on the most vulnerable, and those who cannot afford to pay but who need learning. That applies to both individuals (the working poor and those looking for work) and firms (SMEs).

Measurement

Last, but by no means least, we turn to measurement. The proposals we have outlined for strengthening learning for/at work affect not only the means of achieving an overall set of objectives, but the ends themselves. The PSA targets which measure individual achievement of qualifications are a necessary, but not sufficient, set of measures with which to evaluate overall progress.

We have proposed a range of additional measures and summarise these here, as well as including some further thoughts. Some relate directly to the proposed measures set out in *Learning Through Life* for a more intelligent system, reflecting the central place of learning for/at work in an overall framework of lifelong learning.

Overall, we favour a combination of individual and organisational measures, of participation, qualifications and other achievements, and investment of both money and time. We prefer the use of measures 'after the event' as a way of evaluating impact, ensuring accountability, and informing adjustments to future plans, with an emphasis on securing greater equality over time. We welcome the UKCES's work on 'targets in tension'. Particularly in the area of equality, this type of approach is important for guarding against the unintended consequences of single-track initiatives.

Individual measures

- **Participation in learning for/at work**

Bringing together the various surveys such as the Labour Force Survey (LFS), the annual NIACE work and the National Adult Learning Survey (NALS) into a coherent form, repeated regularly and covering a full range of factors: gender, ethnicity, disability, etc., and also good regional and local information. This should include information on the money and time spent by individuals on learning – both on courses and self-directed study – to assist future comparisons with the NESS data.

- **Qualification levels**

Detailed information on these is already gathered, but over time, the system should enable the collection and reporting of sub-qualification-level accreditation through the QCF.

- **Other achievements**

Participation leads to achievements other than certification, for example, the successful deployment of new skills in the workplace, or for union learning reps,

supporting new colleagues into learning. We need an appropriate means of recognising wider learning achievements in the workplace.

Organisational measures

- Extend and strengthen the National Employer Skills Survey so that, in particular it:
 - is UK wide;
 - includes self-employed people;
 - strengthens data on expenditure patterns, particularly between provision and wage costs, and between public and private employers; and
 - includes appropriate means of signaling on-the-job, informal learning.
- Require firms to publish data on training levels, performance and expenditure in their annual accounts and/or as part of an enhanced Corporate Social Responsibility framework.

Public value

Perhaps the greatest measurement challenge is how to capture the indirect impact of the State's investment in learning at/for work, rather than simply measuring what the government pays for directly. In a system in which employers and individuals increasingly contribute, how should the State's role in stimulating demand and regulating the market be signalled? This is an area we believe would benefit from further consideration.

Conclusions

Key messages

To meet the demographic, economic and social challenges ahead, developments are required on five fronts:

- to increase employer demand: for both skills development and utilisation; and with that, to increase investment in learning;
- to deploy a range of levers to drive up investment: conditions on the £3.7 billion spent on tax relief; active procurement policy; more licence to practice requirements; and greater transparency on training budgets;
- to review our framework of entitlements and incentives for individuals: in terms of how access to public funding is weighted, and to stimulate more investment and co-financing from individuals who can afford to pay;
- a more flexible system of qualifications and provision with room to innovate in response to individual and employer demand; and
- a relentless focus on educational equality, for all our sakes.

Employer demand

According to the most recent projections, 50 per cent of all future job demand is expected to be in the top three occupational groups, and it is striking how the recession has already accelerated the process, singling out for unemployment those with few or no skills. Surveys of employers' skills needs suggest employers appear to believe that demand for skills is broadly being met, though the latest evidence indicates skills gaps have opened up in the last two years, particularly in 'lower level' occupations.⁶² Still, however, we argue that employers are not being demanding enough, either about the skills they require, or about how those skills can be used to best effect. It is not enough simply to improve the skills and qualifications of workers. They need jobs designed to use their skills. We need a better understanding of the ways in which work can be designed to encourage skills to be used effectively, linked to strategies for improving performance and promoting individuals' well-being. That applies for all. Low-skilled jobs are expected to persist, but if the aim is to make best use of all our talents, that must include looking at quality of work across the board, and creating engaging learning environments to support learning for work for those who have traditionally had fewer opportunities.

We propose measures to support employers, based on sharing existing good practice, through public sector employers giving a lead, and through sectoral and local networks:

⁶² UKCES (2010).

we firmly support the UKCES's approach to this. However, we do believe that smarter use of policy levers would further stimulate employer demand and investment.

The key levers we propose are:

- making tax relief contingent on raising levels of participation and accreditation in learning at work geared to specific groups of employees;
- public procurement to drive up levels of investment in skills throughout the supply chain, particularly to support skills development in the emerging 'green' economy;
- stronger forms of licence to practice which extend requirements into more sectors/occupations to raise the levels and use of skills;
- prioritising limited training subsidies on additional training activity; and
- requiring employers to publish basic details of their expenditure on training to encourage equality and help customers, employees and shareholders.

Public expenditure on the provision of learning for work of £12.9 billion currently levers £7.7 billion from public sector employers, and £19.35 billion from private and voluntary sector employers – a total of £27 billion.⁶³ There is scope for more co-funding and we recommend further research on which forms of public investment lever the most co-contributions from employers: both in money and time.

Changing demographic, economic and social contexts

Notions of 'prosperity', 'employment' and 'work' all need reviewing in the light of the economic crisis. Prosperity means much more than material income, taking us into the territory of well-being at work and elsewhere;⁶⁴ employment patterns are changing as young people take longer to settle into jobs and older people take longer to leave work; and work will increasingly involve unpaid as well as paid work. Future arrangements for learning at work will need to take account of:

- changes in age demography which will re-shape the labour market and require a greater emphasis on intergenerational learning for work;
- a new modal working life often starting at 25 and stretching for many into the early and mid 70s (though not all full time and not immediately) and different patterns of time use. These will emphasise the need for part-time learning opportunities that can be balanced with work and personal commitments;
- different mixes of part-time work, both paid and unpaid, that will be necessary to support the development of informal public/civic work, resulting in the need for more and different opportunities for part-time learning that can help us with a wide range of roles; and
- the evidence of how persistent inequality will limit future prosperity and well-being for us all if not addressed. The relationship between learning and inequality

⁶³ See Williams, McNair and Aldridge (2010).

⁶⁴ Stiglitz, Sen, Fitoussi (2009).

is a complex one, but it should not divert us from a relentless pursuit of greater educational equality.

This points to the need for greater flexibility: for individuals to choose the learning that best meets their needs (with appropriate support and safeguards for equity); and for providers to be free to innovate, responding to learning needs close to where people live and work.

We believe that greater flexibility could be secured through:

- a framework of entitlements and incentives based on Individual Learning Accounts, which trusts individuals to know what they need and encourages them to invest in their own learning;
- a long-term commitment to, and sustainable business model for, the provision of effective information, advice and guidance for all;
- positive implementation of the new right to request time to train;
- a clear and flexible credit framework enabling access to part-time, short periods of learning and allowing individual credits to be built up over time into full qualifications;
- greater autonomy for providers to respond flexibly and innovatively to individuals' and employers' needs and more organic systems of accountability in which local learners and employers voices are valued; and
- public investment focused on those who cannot afford to pay and have learning needs. That applies to both individuals and employers: smaller firms have a particular call on government support and their interests should be prioritised.

Access to tax relief for training is at present inequitable: employers can claim it; individuals cannot. As part of the current reviews of co-investment in both further and higher education, we recommend further research into the types of incentives most likely to encourage individuals to invest in learning, including through the tax system.

Measurement

A focus on individual outcomes is a necessary but not sufficient measure. Complementary measures for organisational performance and other outcomes (for example success in finding work, or contributing to the creation of the 'green economy') should also be established. These should not be restricted to measuring the impact of what the government pays for directly, but should signal the wider impact it secures through, for example, strategic regulation, tax relief and public procurement.

Further research

- Public expenditure on the provision of learning for work of £12.9 billion currently levers £27 billion from employers.⁶⁵ There is scope for more co-funding and we recommend further research on which forms of public investment lever the most co-contributions from employers: both in money and time.
- Access to tax relief for training is at present inequitable: employers can claim it; individuals cannot. As part of the current reviews of co-investment in both further and higher education, we recommend further research into the types of incentives most likely to encourage individuals to invest in learning, including through the tax system.
- Further work should be undertaken to develop a consistent approach to quantifying the opportunity costs for employers and individuals of investing in learning, both on and off the job.
- Better understanding is needed of on-the-job learning in order to improve the way skills and knowledge developed 'off the job' is deployed,
- There should be a review of different ownership models of firms, and providers, with a particular focus on co-operative ownership where employees *are* the company, rather than just working for it, to explore what impact different forms of ownership have on employer-employee relations, the development of 'good work' or training provision, and better alignment of employers' and employees' learning interests.

⁶⁵ Includes private, public, and voluntary and community sector employer expenditure.

Annexe 1: A review of education and training policy

In the last 25 years, four goals have shaped successive education and training, and latterly skills, strategies:

- provision of a 'permanent bridge between school and work' that would allow the broad mass of young people to acquire the skills needed by employers;
- the reform of traditional apprenticeships to provide vibrant work-based routes for initial education and training;
- a massive increase in the training of adults (particularly for those holding jobs at the lower end of the occupational ladder); and
- a substantial increase in the proportion of young people entering HE.

The question of how to structure the relationship between supply and demand in the education and training 'market' is at the heart of the debate and revolves around three mutually reinforcing themes:

- exhorting and encouraging companies to invest in training;
- harnessing the interests of individuals as a means of bringing pressure to bear on employers (particularly through an Individual Training Credit); and
- improving the operation of the training market to make it easier for companies to define, and obtain from external providers, the training they require (which has included making further education colleges more responsive to employers and improving local labour market information).

Binding these three themes together have been calls for the development of a 'clear structure of qualifications based on the achievement of set standards or competences'. The policy pendulum has swung towards each of these themes at different times over the past 25 years, with the current emphasis on the first and third.

Ewart Keep's comprehensive list of measures, which have been used in various combinations, to address these themes is revealing.

Skills policy measures

- The development and promotion of case studies that showed the business benefits of investing in training.
- National training awards to recognise best practice; the incorporation of information about training and its benefits in management training provision.
- Development of Investors in People to provide a yardstick of good practice and tools to help employers.
- The development of simple measures of training activity that companies would be required to report on (this was dropped) in annual reports.
- Tax incentives to train.
- Grants and subsidies.
- Sectoral training targets.
- Extension of licence to practice and compulsory continuing professional development schemes.
- The development of local arrangements for supporting employers' training efforts.
- Support for unions to develop learning among their members and work with employers to promote learning.⁶⁶

Many of these measures are recognisable in our current arrangements though their interpretation within the current policy environment gives them a different flavour from the past.

In 2009–10 the world, and the place of skills policy within it, has been fundamentally transformed. Improving national skills is seen as a major government priority. Much education and training activity is designed, managed and directly funded by central government and its agencies. The relationship between government and employers dominates thinking about skills policy. Efforts to improve the education and training market have until recently been focused on making supply more responsive to employer demand. However, since autumn 2008, partly prompted by the economic crisis and the recognition that leaving major economic policy levers to simply being 'demand led' was not enough, there has been a growing emphasis on 'skills activism'. This has opened up more room for government to back (but not pick) winners, to target skill support, to encourage Green Skills, to prompt employers to work together, to use good practice and procurement, to set clearer expectations (e.g. the need for employers to take on apprentices) and to align this new skills activism strategy with a national 'industrial activism' policy.

⁶⁶ Keep (2008).

Nonetheless, the new approach still falls short of formal new requirements on employers save for legislation giving employees the right to request time to learn.⁶⁷ Again, though government policy falls short of the kind of social partnership which is typical in Europe, there is strong encouragement and support for unions, for example through the Union Learning Fund and through statutory rights for union learning reps – of whom 25,000 have now been trained.

The Leitch Review of Skills re-positioned the role of skills no longer as ‘a driver for prosperity and fairness’, but increasingly as ‘*the* key driver’ (emphasis as in original, HM Treasury, 2006, p.3). Three years on from the publication of the Leitch report, however, while many commentators support the Leitch analysis, questions are being asked about the Leitch prescription of a drive to radically increase the proportion of the workforce with qualifications, aiming at 90 per cent with Level 3 and 95 per cent with Level 2 by 2020. The issue is whether a qualification-dominated approach to individual skills development in the workplace is sufficient to achieve the report’s ambitious economic and social goals.

The targets are right, but they are not enough. The importance of skill *deployment* or ‘utilisation’, as well as skill *development*, is increasingly being recognised, leading to interest in not only how individuals learn, but how organisations learn and can create positive learning cultures. These ‘post-Leitch’ questions will need further development in the light of the economic crisis.

The most detailed education and training policy targets are set out in the government’s response to Leitch: *World Class Skills*, which established a ‘new’ framework of success measures to position the UK as a ‘world leader in skills by 2020’.⁶⁸

Skills targets

- 95 per cent of adults to have the basic skills of functional literacy and numeracy.
- More than 90 per cent of adults to have gained at least a Level 2 qualification.
- 1.9 million more people achieving Level 3.
- 500,000 people a year in apprenticeships.
- More than 40 per cent of all adults to have a higher education qualification (at Level 4 or above).

The current range of measures to address these targets includes the following:

- A substantial increase in the proportion of public funding for ‘adult training that is ‘demand-led’, i.e. creating the £1 billion Train to Gain budget giving employers

⁶⁷ Introduced for firms with over 250 employees on 6 April 2010.

⁶⁸ DIUS (2007).

substantially free training up to Level 2 and some subsidy to Level 3; small (under 50 employee) employers also had wage costs of trainees reimbursed.

- An expectation that individuals and employers will take much more responsibility for improving their own skill sets and qualifications.
- A 'new partnership for the workplace' between government and employers, signified through employers' commitment to the 'Skills Pledge'.
- A key role, and funding, for union learning reps to encourage more workers to participate in training.
- The development of an 'integrated employment and skills system' with DIUS (now BIS) and DWP working together.
- The adult advancement and careers service.
- Individual skills accounts.

These plans, forged in a climate of economic growth are already being radically adapted to reflect the realities of increasing unemployment. The Train to Gain budget, initially underspent due to insufficient employer demand, has more recently been under siege and has been rationed due to massively increased demand. Extended in response to the recession to include: unemployed people; the relaxing of the original 'full Level 2 or 3' qualifications requirement to enable units, as well as full awards, to be funded; and the prioritising of support for small and medium-sized enterprises, these measures show how the original wholly (employer) demand-led approach is being radically altered. Although some of these flexibilities have now been withdrawn, more new policies have been launched, including the Future Jobs Fund, a £1.2 billion initiative to support every 18–24 year old out of work for over a year to get a job, which must include training. New targets have been set for apprentices employed in the public sector, and the latest skills strategy (Skills for Growth, November 2009) has prioritised advanced apprenticeships for 19–30 year olds.

The learning these measures are designed to deliver remains primarily qualifications based. Nonetheless, the government white paper on informal adult learning⁶⁹ recognises the importance of informal learning in the workplace, which is a very positive step. It is not yet clear to what extent the idea of 'working as learning' has permeated policymakers' thinking, but there is more recognition of the value of informal or 'on-the-job' work-related learning in the workplace.

Progressive moves towards a centrally planned and funded education and training system took another step in April 2010 with the split of the Learning and Skills Council – the body responsible for funding and planning all post-16 learning other than higher – into three bodies. Control of 16–19 provision now sits with local authorities alongside a new Young Persons Learning Agency; the National Apprenticeships Service (established in 2009) co-ordinates the expansion of the government's apprenticeships

⁶⁹ DIUS (2009).

programme; and the Skills Funding Agency manages the new 'demand-led' system for adult learning. Meanwhile, the new UKCES is prioritising work to: simplify the system (much needed); to improve skills utilisation; to overhaul employability skills; and to strengthen school/college/work links.

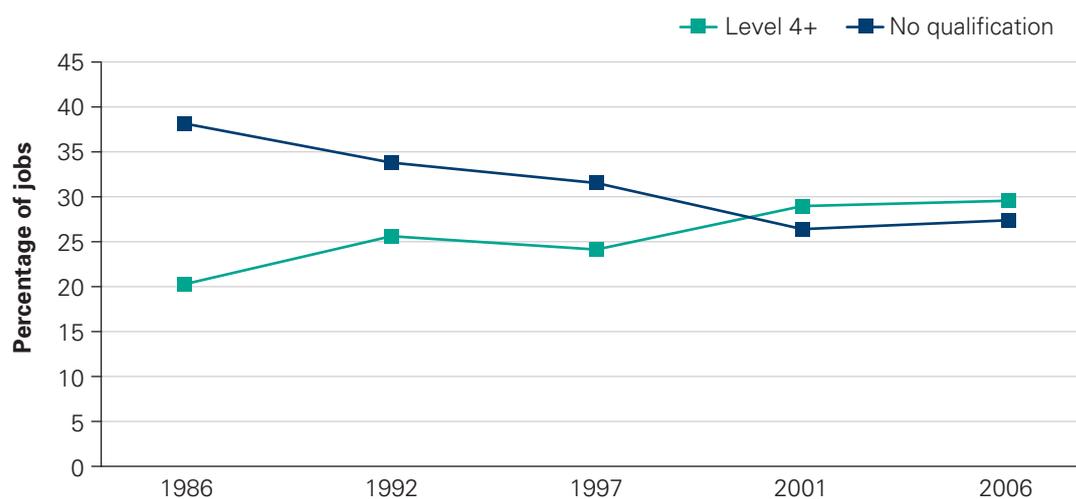
What do we make of all this? Certainly the moves away from an almost total reliance on an (employer) demand-led approach and towards a more activist/interventionist approach are welcome. Is it sustainable? On the one hand, government acts as the 'chief steward' of the framework, seeking to ensure there is a fair and equitable infrastructure for learning and that individuals and employers are fulfilling their responsibilities. On the other, it is becoming a 'market maker' (i.e. reforming the rules and incentives governing the market), e.g. by investing funding to stimulate demand from employers and learners. 'Chief steward' and 'market maker' may not be incompatible roles, but their interpretation by various actors and agencies at different levels and from different perspectives in the education and training world is variable and adds to the complexity of the picture overall.

Annexe 2: The shape of the labour market

Labour market structure

According to Labour Force Survey data, the structure of the UK's labour market based on shares of permanent, temporary, full-time and part-time employment has scarcely changed in the last 20 years. Yet the same cannot be said for the occupational structure. The most striking development is the decline in the number of elementary jobs and the growth of employment in the top three occupational groups (managers, professionals and associate professionals).

Figure 7: Trends in broad skills: required highest qualification, 1986–2006



Source: UKCES (2009)

According to the most recent projections, continued major growth in high-level skills is predicted between 2007 and 2017, with 50 per cent of all job demand predicted to be in the top three occupational groups.⁷⁰

However, we should be cautious of thinking in terms of a single 'knowledge economy' labour market, advised John Cridland from the CBI, who spoke at the Inquiry's Workplace Learning Seminar in November 2008.⁷¹

The mantra that everyone is becoming knowledge workers, going up the skills spectrum is not sustainable. A large part of economy is – it's very painful and like climate change we need to get on with it. But a large part of the economy is personal services that are not internationally tradeable. They are not unskilled

⁷⁰ UKCES (2009).

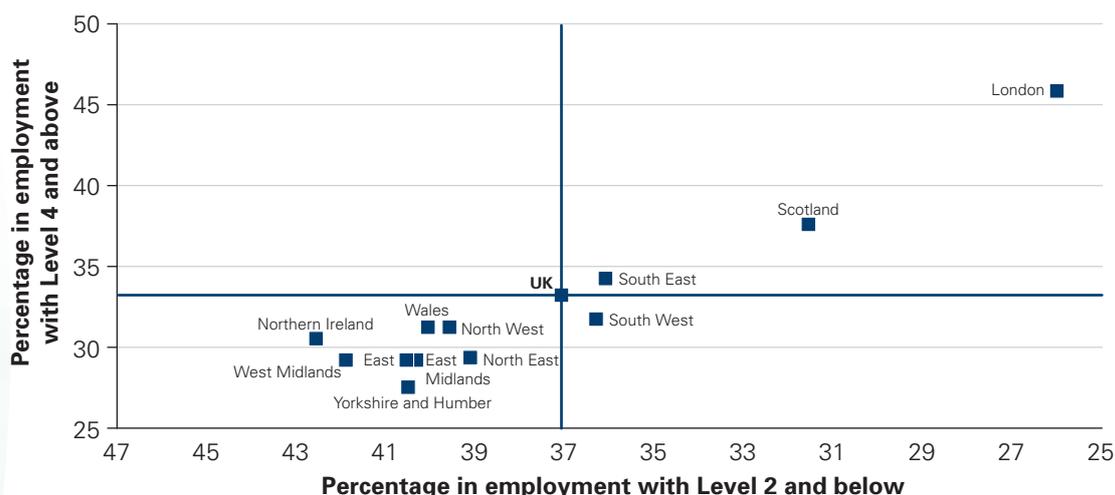
⁷¹ More evidence and discussion from the Workplace Learning Seminar is available at: www.lifelonglearninginquiry.org.uk/themes/prosperity-work

occupations; they don't not need training or qualifications. But they represent a different market, one that is less susceptible to qualifications.

Others would question that view and believe that there will be very few jobs less susceptible to qualifications; indeed, only half a million are forecast by 2020, down from 5 million in 2008. It is striking how the recession has already accelerated the process, singling out for unemployment those with few or no skills. Almost a million of the 2.5 million unemployed in mid 2009 were young people, many of whom had few or no qualifications.

Of course, regional labour markets have different shapes, as do those by sector. Skills levels vary widely across the UK, and these are associated with employment rates – higher levels of skills generally mean a higher probability of employment. Figure 8 shows the regional skills gap across the UK.

Figure 8: The regional skills gap across the UK, 2007



Source: UKCES (2009)

Overall, the wider economy has a far greater impact on the structure of the labour market than do education and training interventions. This raises a key question about what role the lifelong learning system plays in motivating and supporting progression for learners, and its relationship to employer demand and the structural (dis)incentives to engagement in learning that are embedded within UK labour markets.

In other words, learning for work may be affected far more by learners' experience *within* work than by the education and skills system *outside* work. It follows that policies to encourage more learning for work must pay much more attention to the workplace and the nature of work itself. Moves in this direction include: the right to request time to train; more emphasis on employee engagement;⁷² more attention

⁷² For example, MacLeod and Clarke (2009).

being paid to skill utilisation and job design; and recognition of the vital role being played by union learning reps. These are all welcome, but more will be needed.

In his evidence to the Inquiry's Workplace Learning Seminar, Michael Davis, now at UKCES, argued that current surveys of employers' skills needs demonstrate that employers appear to believe that demand for skills is broadly being met: there is little evidence of employers reporting that they perceive extensive and persistent unmet skills shortages.⁷³ And yet we know that the economy will demand far more higher-level skills. Employers are not, we suggest, being demanding enough.

⁷³ For more information, please see Michael Davis's evidence to the Inquiry (from the Workplace Learning Seminar) at www.lifelonglearninginquiry.org.uk/docs/skills-in-context-Michael-Davis-CfE.pdf.

Annexe 3: Participation in employer training

NESS offers insights into the balance of training received by employees in England. Of the approximately 14 million who (employers said) had received training in the previous 12 months, just 18 per cent had trained towards a qualification, suggesting employers have other reasons for investing in training. Two-thirds of training provided by employers was 'on the job and informal', one-third 'off the job'.⁷⁴ A key finding from the UKCES's research, however, is that employers who provide formal training are also more likely to adopt informal practices, and those who have never funded or arranged formal training are least likely to adopt informal training practices. That is to say, informal training practices appear to be adopted to complement more formal training, rather than as an alternative.

In terms of organisational engagement in learning, UKCES reports⁷⁵ that 48 per cent of employer establishments have a training plan and 36 per cent have a budget for training expenditure. Four in five reported employers using supervision structures to develop the skills of their employees, offering opportunities for staff to spend time learning through watching others and allowing staff to perform tasks that went beyond their strict job role, and providing them with feedback on performance.

The nature of training is also crucial. A feature of the UK (unlike Europe) is that much job-related training received by employees is very short. Labour Force Survey data⁷⁶ suggests more than 40 per cent of training received by employees had lasted for less than a week. Comparative information from a pilot survey across 18 countries suggests that the average hours people spend participating in formal learning in the UK is significantly fewer than for all other countries.⁷⁷ Much of this short UK training is, in fact, to comply with regulatory requirement. Figures from the Learning and Skills Council show that for about a quarter of employers, at least half of the recorded training is on induction and statutory items, such as health and safety or food hygiene – illustrating the extent to which the regulatory framework influences employer behaviour.

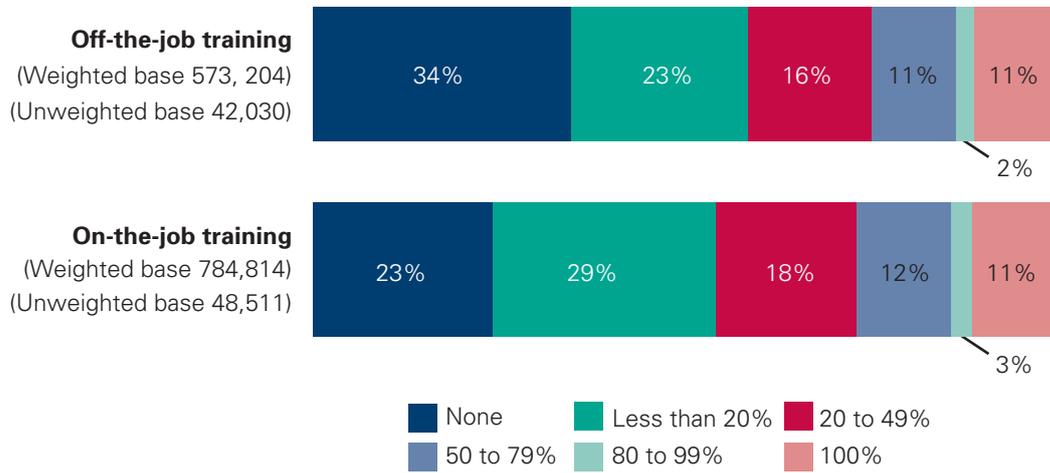
⁷⁴ See Williams, McNair and Aldridge (2010).

⁷⁵ UKCES (2008).

⁷⁶ Quarter 2, 2008.

⁷⁷ OECD (2008).

Figure 9: Proportion of training accounted for by health and safety or induction training



Source: Schuller and Watson (2009)

Annexe 4: Workforce qualifications

According to the UKCES, in international rankings the UK is now 17th on 'low' level skills, 18th on 'intermediate' level skills and 12th on 'high' level skills. While the overall profile of qualifications is improving over time, too many people are still in danger of being left behind: one in eight adults of working age still have no qualifications; more than a quarter are not qualified to Level 2; and just under half are not qualified to above Level 2. Of the 11.5 million working age adults without a Level 2 qualification, almost 7 million are currently in employment – that's a quarter of the employed workforce. Moreover, as other countries are improving their skills profile too, the UK's relative position has changed little.

Table 10: Changing distribution of qualifications in the UK and four countries, %

	2007	2020 Ambition	Gap
UK			
Level 4	31	40	+9
Level 3	20	28	+8
Level 2	20	22	+2
Below Level 2	17	6	-11
No qualifications	12	4	-8
England			
Level 4	31	40	+9
Level 3	20	28	+8
Level 2	20	22	+2
Below Level 2	18	6	-12
No qualifications	11	4	-7
Wales			
Level 4	28	36	+8
Level 3	20	29	+9
Level 2	22	24	+2
Below Level 2	16	6	-10
No qualifications	15	5	-10
Scotland			
Level 4	36	46	+10
Level 3	20	27	+7
Level 2	17	18	+1
Below Level 2	13	5	-8
No qualifications	13	4	-9
Northern Ireland			
Level 4	27	36	+9
Level 3	20	29	+9
Level 2	21	23	+2
Below Level 2	11	4	-7
No qualifications	20	7	-13
Total	100	100	100
Note: Working age people 19–59/64			
Source: ONS, Labour Force Survey			

Source: UKCES (2009)

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HMPS HR Learning and Development
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Lancashire County Council
Learning and Skills Council (LSC)
Leeds Strategic Health Authority
Lifelong Learning UK
London Skills and Employment Board
Medway NHS Trust
Merseytravel
Monmouthshire Youth Service
Museums, Libraries and Archives
Partnership
NHS Institute for Innovation and
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Open University
Public and Commercial Services Union
(PCS)
Prime Timers at LSE
QIA
RNIB (Royal National Institute of Blind
People)
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