

**Fit for
growth:**

investing in a
stronger skills
base to 2020

Edited by
Tom Frostick



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CENTRE FORUM

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■ Contents

List of contributors	4
Foreword – Rt Hon Dr Vince Cable MP	5
1. Introduction – the skills challenge	7
2. Better preparing young people for work	20
3. Higher quality tertiary education	33
4. More opportunities for lifelong learning and training	44
5. Recommendations	49

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■ Foreword - Rt Hon Dr Vince Cable MP

This is a welcome initiative from CentreForum and the Chartered Insurance Institute bringing together some thoughtful ideas on the future direction of skills policy.

Investing in skills is not only vital to creating a stronger economy, but crucial to making our society fairer through greater social mobility. In coalition government, we have worked hard to meet these dual objectives by doubling apprenticeship numbers and ensuring that more people can enter higher education than ever before. We have also created more opportunities for vocational learning, such as university technical colleges for school children and national colleges for higher apprenticeships to train the engineers and technicians of the future.

At the other end of the education system, we have made unprecedented levels of investment in the early years and introduced policies such as the pupil premium to ensure that no disadvantaged child gets left behind. By raising educational standards at every level, and in vital areas like literacy and numeracy, we have ensured that more young adults will leave school or college with the skills and qualifications to succeed in life.

There is clearly more that can be done. While the UK is recovering from the financial crisis and recession, our economy still suffers from serious skills shortages. Government must continue to work with the private sector to ensure that employers can obtain the skills that they need. And this must be supported by flexible immigration policies which recognise that skilled migrants help our economy.

There is also a need to think about our ageing society and the impact this will have on the labour market. We must encourage opportunities for adult learning and training which enable greater flexibility and longevity for individuals in work. I have sought to protect adult community learning to help the large numbers of adults who cannot access formal education or accredited vocational training. Further attention must also be paid to the development of transferable skills, which a lot of in house company training is – quite understandably – not able to provide.

As the authors of this publication collectively highlight, there are no simple solutions. Effective adult learning skills policy requires a coordinated approach involving policymakers, businesses and individuals. The context is one of continued government funding constraints but skills training is one area where additional investment is imperative to avoid choking off recovery.

It is important that we rise to this challenge so that the UK labour market of tomorrow is characterised by high skills and high productivity as well as flexibility.

Rt Hon Dr Vince Cable MP
February 2015

: 1 Introduction - the skills challenge

The link between skills investment and economic performance is well established. In fast moving global markets, competitive advantage is gained from having a flexible and high skilled workforce. A country that invests too little in skills will find it harder to support high value employment. Productivity and wages will fall. The country's growth rate will suffer, along with its ability to compete with other nations.

Making improvements to the skills base has long been pursued as UK government policy. But it is ever more important as the country emerges from recession and endures a period of weaker productivity (more individuals are employed today but output per worker and wages remain low). Strengthening the skills supply will help boost productivity and pave the way for higher wages and growth in future.

Investment in skills matters moreover because of the UK's rising life expectancy. As people are living longer, they will have to work longer before retiring. That in turn will require more flexible approaches to employment – people must be better prepared to switch jobs and gain new skills as their career progresses. It is therefore vital to encourage investment in lifelong learning and training opportunities, and to ensure that when older adults do retire, they are replaced by a sufficient quality and supply of younger workers.

A further reason to invest in skills is the advancement of social mobility. For the proceeds of skills based growth to be shared across the population, more individuals must be given the chance to move upwards through the labour market. By international standards, the UK has a relatively large share of working age graduates but a relatively small share of individuals with intermediate qualifications – GCSEs (A*-C), A-levels and their equivalents. The result is a polarised skills base that restricts progression from lower to higher skilled roles, and traps those at the bottom in low wage employment.

In subsequent chapters, we bring together a selection of authors who look at how policy can meet these challenges in future. Collectively,

they map out a skills system that promotes choice and flexibility and is more responsive to employer demand. The paper begins though with an overview of the labour market to identify ‘weak spots’ in the current skills base, and this is followed by a look at policy across the main political parties.

Whoever wins the general election faces the challenging prospect of investing in skills at a time of continued public spending constraints. In this context, it is probable that levels of spending in this area will remain broadly flat whichever parties are in government from 2015 to 2020. Likewise, the current focal points of skills policy – identified here as the need to prepare young people for work; ensure higher quality tertiary education; and create more opportunities for lifelong learning and training – will no doubt persist.

Note

Education and skills policy is a devolved responsibility in the UK. The recommendations in this paper mainly concern England, though the text refers to the UK where it is necessary or more appropriate to consider the country as a whole.

While there are both supply and demand side challenges in skills policy, here we focus on supply side reforms – namely, increasing the quantity of workers that businesses want to employ, while giving those already in employment greater opportunities to develop their skills.

UK skills mismatches

In determining future investment in skills it is crucial that decisions are informed by what employers want, but do not currently get, from the skills supply. This is particularly important when the amount of money available for skills development is limited by efforts to reduce government spending. While some degree of mismatch between demand for skills and their supply is to be expected, the UK is hindered at present by the prevalence of skills shortages, gaps and underutilisation. Long term investment in skills must be aimed at tackling these structural weaknesses.

First and foremost are skills shortage vacancies. A survey by the UK Commission for Employment and Skills (UKCES), for example, found that 22% of job openings in 2013 remained vacant because of inadequate

skills, qualifications and experience among applicants.¹ More than half of the employers surveyed by the CBI and Pearson in 2014 said they were “not confident of being able to recruit sufficient high skill employees in the future”.² Similarly, the annual survey of the Chartered Insurance Institute (CII) found that almost three quarters of businesses reported hard to fill vacancies in 2014 – rising from 59% in 2013.³ The consequence of these reported shortages is not just inconvenience for the firms affected but extra costs, delayed expansion and lost business, with wider implications for productivity growth.⁴

Some but not all skills shortages can be attributed to failings in primary, secondary and tertiary education. Among the skills that businesses can find difficult to obtain are literacy and numeracy – which, it is widely agreed, need to be developed earlier than the point at which a person enters the labour market.

Deficiencies in literacy and numeracy

The 2014 CBI skills survey with Pearson found significant numbers of employers diverting resource to tackle shortcomings in basic skills, around a fifth providing remedial training for school leavers in literacy and numeracy.⁵ In both of these areas, and numeracy in particular, the UK underperforms by international standards, with one in five young people leaving secondary school with reading, writing and maths skills below the level expected of an 11 year old.⁶ Even among graduates, the UK’s performance in literacy and numeracy is below the level seen in other developed economies.⁷

Though often used synonymously with the term ‘skills shortage’, the second type of mismatch – a skills gap – is where individuals are underproficient at the role they have been given. This is often the result of a person being new to the role or having insufficient training, meaning responsibility for workplace training and development falls to their

- 1 UK Commission for Employment and Skills, ‘UK Commission’s employer skills survey 2013: UK results’, January 2014
- 2 Confederation of British Industry, ‘Gateway to growth: CBI/Pearson education and skills survey 2014’, July 2014
- 3 Chartered Insurance Institute, ‘Skills survey 2014’, October 2014
- 4 UK Commission for Employment and Skills, ‘The labour market story: the state of UK skills’, August 2014, pp 22-23
- 5 ‘Gateway to growth’, July 2014, p 35
- 6 See P Marshall (ed), ‘The Tail: How England’s schools fail one child in five – and what can be done’, Profile Books, London, February 2013
- 7 Organisation for Economic Co-operation and Development, ‘Education at a glance 2014: OECD indicators’, September 2014

employer. According to UKCES, some 15% of all UK employers report skills gaps, citing “a lack of relevant training available in the market” and “barriers to accessing training” as reasons why they persist.⁸ This indicates that more needs to be done to facilitate workplace training across the labour market.

The third type of mismatch – skills underutilisation – concerns individuals having more skills than they need to perform their job. Around 30% of workers in the UK consider themselves overqualified for the positions they occupy.⁹ This not only leads to low job satisfaction but to a deterioration of employees’ competencies known as skills atrophy. Skills underutilisation can be seen starkly in the large pool of individuals – low, intermediate and even higher skilled workers – currently vying for low skill, low productivity jobs, some of which involve zero hours contracts. These sorts of roles have increased as a share of total UK employment in the last few years,¹⁰ and it helps to explain why unemployment has been falling without a corresponding rise in output and wages.

Unlike the first two types of mismatch, however, skills underutilisation is primarily a demand side weakness (employers are not using their employees’ skills effectively/not enough suitable roles are being created) and as such it is outside our scope. To address the problem of skills gaps and shortages, it is necessary to look at the attainment of individuals currently entering the labour market.

UK qualifications attainment and ‘work readiness’

Compared to other OECD countries, the UK has a relatively low share of individuals with intermediate qualifications – QCF levels 2 and 3 – but a large share of individuals with higher qualifications – QCF level 4 and above.¹¹ In a functioning labour market, the higher a person’s level of attainment, the higher their chances of labour market entry and progression – the greater their value is to employers. The large share of individuals in the higher skills band can therefore be considered a positive characteristic of the UK’s skills base overall. Conversely, the relatively large share of individuals in the lower band is a cause for concern. Figure 1 explains how the QCF attainment levels work.

8 ‘The labour market story: the state of UK skills’, pp 24-26

9 Organisation for Economic Co-operation and Development, ‘OECD Skills Outlook 2013: first results from the survey of adult skills’, November 2013, p 171

10 J Plunkett, A Hurrell and M Whittaker, ‘The State of Living Standards’, Resolution Foundation, February 2014, pp 33-34

11 D Bosworth, ‘UK skill levels and international competitiveness, 2013’, UK Commission for Employment and Skills, August 2014

Figure 1: Defining attainment levels

There are nine levels of difficulty under the Qualifications and Credit Framework (QCF) for England, Northern Ireland and Wales. Lower, intermediate and higher skills bands are defined here as follows:

- Lower skills – below QCF level 2
- Intermediate skills – QCF levels 2-3
- Higher skills – QCF level 4 and above

QCF attainment level	Types of qualification
Entry level	Below GCSE
Level 1	GCSE grades D-G
Level 2*	GCSE grades A*-C
Level 3*	A-level
Level 4*	Certificate of higher education
Level 5	Diploma of higher education, foundation degree and HND
Level 6	Bachelor degree
Level 7	Master's degree and postgraduate certificate
Level 8	Doctorate

Source: Ofqual.gov.uk

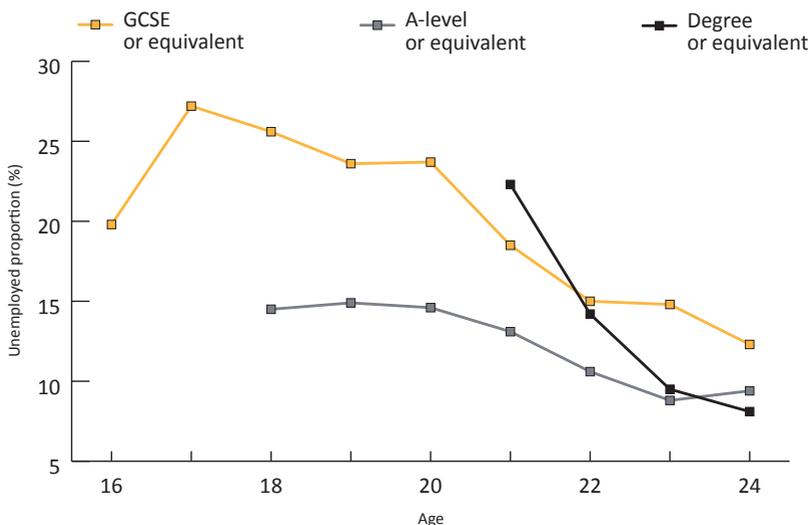
* Apprenticeships are undertaken at QCF level 2 (intermediate apprenticeship), level 3 (advanced apprenticeship) and level 4+ (higher apprenticeship)

The risk associated with having fewer qualifications is illustrated by data on youth unemployment. Figure 2 shows that while labour market participation is generally lower among individuals recently out of education, regardless of the qualification level, the unemployment proportion falls much more quickly for graduates than for those whose highest qualification is at GCSE level or equivalent.¹² Lesser qualified

12 Office for National Statistics, 'Young people in the labour market 2014', March 2014, pp 10-11

young adults are additionally at greater risk of unemployment than older individuals with the same level of attainment.¹³ And those who do find work will have lower incomes on average than their higher qualified peers. UK graduates are estimated to accrue a lifetime earnings premium of £168,000 (men) and £252,000 (women) over non-graduates.¹⁴ There is an additional earnings premium associated with postgraduate study.

Figure 2: Youth unemployment proportion at different attainment levels



Source: Office for National Statistics (ONS)¹⁵

Gaining more qualifications brings reward, in other words. Yet qualifications attainment is not the only indicator of workforce quality, nor a perfect measure of individuals' competencies. Important too are the type of qualifications that people acquire and the relevance of their skills to business. If we look beyond attainment, there is evidence of widespread dissatisfaction with the 'workplace readiness' of individuals about to enter the labour market. Of the firms surveyed by the British Chambers of Commerce (BCC) in 2014, for example, 88% said they believe school leavers "are not prepared" – citing a lack of soft skills,

¹³ 'Education at a glance 2014: OECD indicators'

¹⁴ Department for Business, Innovation and Skills, 'The impact of university degrees on the lifecycle of earnings: some further analysis', BIS Research Paper No. 112, August 2013

¹⁵ Office for National Statistics, 'Young people in the labour market, 2014', 5 March 2014, p 11

careers advice and focus from educational establishments on the skills needed for the workplace.¹⁶ An earlier survey by the Federation of Small Businesses produced similar findings, with more than half of respondents reporting poor communication skills among their youngest employees.¹⁷

The perceived lack of workplace readiness extends to higher achieving young adults as well. A survey by Kaplan found employers tend to value soft skills like effective communication and being a team player above technical knowledge when looking to recruit new graduates.¹⁸ Yet more than half of the businesses in the BCC survey believed that young people including graduates lack these attributes.¹⁹ Employer surveys also point to an undersupply of individuals with certain types of higher qualification – which is not reflected in the QCF attainment analysis of the numbers entering the higher skills band. Businesses voice significant concern over the lack of graduates with science, technology, engineering and mathematics (STEM) degrees, for instance. It can be concluded from the survey evidence that the education system is not fully meeting the needs of individuals and business.

The future labour market

In future, competition for jobs is set to become fiercer. As Figure 3 illustrates, the labour market is taking the shape of an hourglass, with growth in high and low skilled employment and a globalisation/technology driven squeeze in lower middle tier jobs. At the bottom end of the labour market, we are likely to see more individuals battling for basic employment. The Centre for Economic and Social Inclusion has predicted that by 2022, 9.2 million British workers will be chasing 3.7 million low skilled jobs.²⁰ A forecast by UKCES is equally gloomy, envisaging “low to medium skilled workers in constant competition for more hours – either in zero hour contracts...or as freelancers – offering employers low wage bills”.²¹ The worst case scenario, as others point out, is that the UK could finish the next decade as a ‘low road’ economy with large numbers of low paid employees and a high rate of in work poverty.²²

16 British Chambers of Commerce, ‘Young people need more support to make transition from education to work, says BCC’, July 2014

17 Federation of Small Businesses, ‘Businesses uncertain about the readiness of school leavers for work’, August 2012

18 Kaplan, ‘Graduate recruitment report: employer perspectives’, July 2014

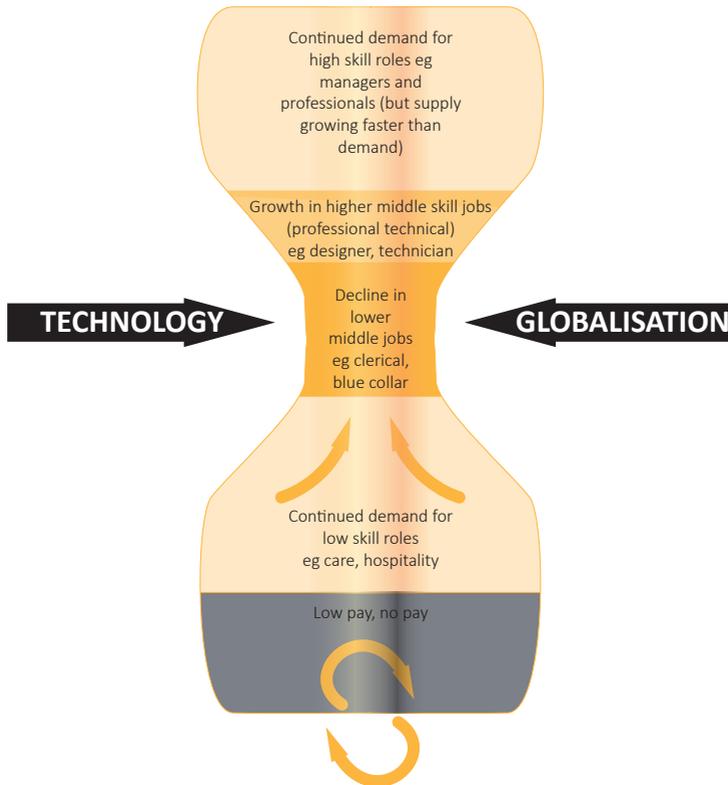
19 ‘Young people need more support to make transition from education to work, says BCC’, July 2014

20 Centre for Economic and Social Inclusion, ‘Realising talent: employment and skills for the future’, July 2014

21 UK Commission for Employment and Skills, ‘The future of work: jobs and skills by 2013 – Evidence report 84’, February 2014

22 See eg Chartered Institute of Personnel and Development, ‘Industrial strategy and the future of skills policy: The high road to sustainable growth’, February 2014

Figure 3: The future shape of the UK labour market



Source: UK Commission for Employment and Skills (UKCES)²³

Raising the population's skill levels is not an answer to all of these problems. The demand side of the equation needs addressing too. At the top end of the labour market, some two million additional higher skill roles are expected to be created by 2022, yet the supply of suitably qualified workers is predicted to exceed that figure – highlighting a need for faster job creation.²⁴ There is also the enduring problem of lower demand for skills, and lower educational attainment, in Britain's regions. Again, these demand stimulation issues are significant and require further attention from policymakers.

²³ UK Commission for Employment and Skills, 'The labour market story: an overview', July 2014, p 10

²⁴ UK Commission for Employment and Skills, 'Working futures: 2012-2022 – Evidence report 83', March 2014. For an example of how job creation could be stimulated, see Universities UK and UK Commission for Employment and Skills, 'Forging futures: building higher level skills through university and employer collaboration', September 2014

Skills policy

An important consideration when looking at future skills policy is affordability. With the UK budget deficit running at £91 billion in 2014/15, and the major parties committed to eliminating it in the next parliament, public spending will inevitably fall between 2015 and 2020. The continued pressure on public finances poses a challenge for government to make better use of existing skills budgets, while encouraging greater investment from individuals and business.

Currently, the majority of government spending on skills is in early years, primary and secondary education, where the balance of state investment will always be tipped. Beyond secondary school level, government spends less and expects individuals and employers to invest more – eg undergraduate tuition fees paid by individuals (but subsidised by government in the medium to long term) and employer led workforce training and development. An exception to this rule has been the recent increase in government spending on post-secondary vocational learning. Between 2010 and 2014, the apprenticeships budget for ages 16-18 and 19+ grew by 46%.²⁵ The government has also invested in new vocational institutions such as university technical colleges for students aged 14-19. This reflects a growing political desire to create a stronger “upper middle tier” of UK workers with good intermediate qualifications, who can escape the labour market squeeze illustrated in Figure 3.

These investment patterns will likely persist whoever forms a government after the next general election. The Labour party appears as committed to vocational spending as the Conservatives and Liberal Democrats, having promised a significant increase in apprenticeships by 2025. There is also little probability a Labour led government would increase the public share of investment in undergraduate education (eg by lowering tuition fees and increasing public funding for individual students) or slow efforts to get employers doing more in workforce training and development. No party has committed to reducing government investment in early years, primary and secondary education but, in the context of continued public spending restraint, none is likely to allocate significant new investment either. At most, we can expect government to ringfence these budgets.

On the employer side, skills investment as measured by training volumes and duration has been in decline since the early 2000s, though survey evidence shows growing appetite among businesses to train more in future.²⁶ This suggests that the push to see employers take greater

25 J Mirza-Davies, ‘Apprenticeship statistics’, House of Commons Library, 10 February 2014, p 3

26 ‘The labour market story: the state of UK skills’, July 2014, p 14

responsibility for developing employees' skills is bearing fruit. However, it is clear from the UKCES analysis that there remain barriers around workplace training. Employers not only report problems with the relevance of courses being provided, but can also struggle to identify relevant qualifications for their staff to take.²⁷ The commission concludes that "greater employer involvement in designing and commissioning training is required". There could also be a significant role for professional bodies, as the CII argues on pages 46-48 below.

Importantly, while workplace training can raise the skill levels of existing employees, much of it will be company specific and of limited transferable value. For working age British adults, the acquisition of transferable skills is left largely in the hands of the individual, with little financial support available from government or employers. With the exception of funding for postgraduate taught courses – an undergraduate style loans scheme will be available in England from 2016/17 – little is being done in current policy to remove these financial barriers and unlock individual investment in lifelong learning.²⁸ Below we suggest that this can be addressed by enhancing the professional and career development loan scheme offered through Barclays and Co-op.

Also on the employer side is the provision of apprenticeships, for which government pays a proportion of the training costs. The Conservatives and Liberal Democrats have been eager to support apprenticeships as a viable alternative to going to university. Numbers have doubled since the two parties entered government in 2010, but it is clear that smaller businesses in particular need more help with the costs and risks of providing placements. According to a YouGov/The 5% Club poll in 2014, three quarters of SMEs surveyed thought that apprentices were necessary for the future success of their business. Yet the survey found that only a fifth said they were able to provide an apprenticeship in the next year.²⁹ On pages 38-41, the FSB argues that greater clarity is needed in the design of apprenticeships around funding and expected outcomes. Employers that do not offer apprenticeships might consider more structured approaches to internships and work experience, as the CII has outlined previously.³⁰

27 Ibid, p 26

28 In other areas – such as postgraduate research, professional qualifications, MBAs etc – career and professional development often comes down to whether individuals have the means to pay for it themselves. CentreForum previously found the longstanding professional and career and development loan (PCDL) scheme to be "inadequate" in its current form. See Chapter 4 below.

29 R Burn-Callander, 'Apprentices to drive growth in UK small firms', Sunday Telegraph, 12 October 2014, available from: <http://www.telegraph.co.uk/finance/yourbusiness/11155096/Apprentices-to-drive-growth-in-UK-small-firms.html>

30 Chartered Insurance Institute, 'Internships: A good practice guide', March 2012

Strengthening the skills base to 2020

Broadly speaking, there are two approaches that government can take to strengthen the skills base. It can increase the supply of skilled workers from abroad by adopting a more liberal approach to immigration, and it can invest in individuals who are already in the UK.³¹ Arguably it should do both in step. But here we focus on what policymakers can do to raise the skills and employability of the existing population through the forthcoming parliament.

The paper is divided into three parts. Chapter 2 looks at how we can help young people in the transition between education and employment; Chapter 3 at how we can improve tertiary education including apprenticeships; and Chapter 4 at how we can create more opportunities for lifelong learning and training. The paper's contributors come from a number of fields and include representatives from academia and business, a professional body and a trade association. Their expertise underpins our recommendations set out in Chapter 5.

The paper is framed around tackling three UK skills 'weak spots' identified as follows:

- Too many school leavers inadequately prepared for the workplace
- Tertiary education that fails to meet the needs of individual learners and businesses
- Not enough opportunities for older adults to retrain or 'upskill' as their career progresses

Better preparing young people for work

Weak spot: Too many school leavers inadequately prepared for the workplace

Chapter 2 proposes ways that we can address educational failure at primary, secondary and post-secondary/non-tertiary level to raise the employability of school leavers. We start by focusing on literacy and numeracy on the grounds that the UK performs particularly badly in these areas. The coalition government has begun to tackle the problem by requiring anyone with less than a C grade in GCSE English and maths to continue studying these subjects until they get better results. Below Professor Jeremy Hodgen, from the University of Nottingham, suggests that government should go further by introducing a vocationally focussed GCSE qualification in literacy and maths, which better engages those who

31 T Papworth, 'The business case for immigration reform', CentreForum, December 2013, pp 12-13

failed the traditional GCSE. He also calls for a stronger vocational focus in the new Core Maths qualifications with input from business.

In addition to the literacy and numeracy problem, there appear to be a number of young people in Britain who lack the softer skills and general ‘workplace readiness’ that businesses look for in employees. In the second section of Chapter 2, Baroness Tyler, Co-Chair of the APPG on Social Mobility, looks at how attributes such as a belief in one’s ability to succeed, the perseverance to stick to task and the ability to bounce back from setbacks are vital to success in the workplace.

This is followed by sections from education specialist Kim Catcheside and Catherine Brentnall, who manages an enterprise education programme in the North of England. Kim Catcheside makes three recommendations for sharpening careers guidance in schools. Catherine Brentnall considers how enterprise learning can be instilled in school culture, drawing on her experience in Derbyshire. Finally, CentreForum’s James Kempton considers ways that we can strengthen the link between the teaching profession and industry.

Higher quality tertiary education

Weak spot: Tertiary education that fails to meet the needs of individual learners and businesses

Chapter 3 explores how the tertiary education system including apprenticeships can better meet the needs of individual learners and business. At present the higher education system is in the grip of rapid expansion, with more providers entering the market and the removal of student number controls in England, meaning more young people will be able to go to university than ever before.

Thus, in the first section of the chapter, Nick Hillman of the Higher Education Policy Institute (HEPI) makes the case for primary legislation to respond to these challenges. He describes the current regulatory framework for higher education as an “unkempt meadow” rather than the “tidy playing field” promised in the government’s 2011 white paper. The next section by Professors Ken Starkey and James Devlin from Nottingham University Business School draws comparisons between universities and the banking sector. They argue that research is to universities what high risk investment has been to the banks, in that it has come at the expense of traditional, consumer focussed activities.

A further priority for the next decade is the continued creation of viable, non-university routes into the labour market. The recent emphasis on

apprenticeships has elevated the prestige of post-secondary vocational learning, but there remain barriers to take up. The FSB has found that apprenticeship provision is a particular problem for its members which are less resourced than larger businesses to provide high quality schemes (or schemes at all). It argues in Chapter 3 that greater clarity is needed in the design of apprenticeships around funding and expected outcomes.

The final piece considers how we can raise the status of flexible learning including part time undergraduate and postgraduate degrees and online courses. Dr Julie Robson, who runs the strategy and marketing department of Bournemouth University, urges closer links between flexible learning providers and professional bodies in the design of academic and professional qualifications.

More opportunities for lifelong learning

Weak spot: **Not enough opportunities for older adults to retrain or ‘upskill’ as their career progresses**

Chapter 4 opens with a section on improving the professional and career development loan underwritten by government. Professor Chris Bones of Manchester Business School highlights problems with the current scheme around access and uptake, and offers a three part recommendation for reforming it. Finally, the Chartered Insurance Institute advocates the use of professional bodies in adult skills development. These institutions already play an important role, at no cost to the exchequer, in helping to develop the skills and capability of UK workers.

■ 2 Better preparing young people for work

A common complaint among employers is that too many young people finish their education poorly equipped for the demands of the workplace. At present, one in five pupils leaves school with literacy and numeracy skills below the level expected of an 11 year old. Many of the same individuals, but higher achievers too, lack the non-cognitive skills needed to deal with setbacks – attributes such as self-belief or ‘grit’ for example. There is also insufficient training for the teaching profession on careers guidance and the knowledge and skills required to work in sectors outside education. The following contributions focus on tackling these problem areas.

Master the literacy and numeracy challenge

*Professor Jeremy Hodgen
University of Nottingham*

We have known for some time that numeracy and literacy in England need to be improved. Recent research by the OECD and the International Association for the Evaluation of Educational Achievement (IEA) indicates that the performance of our 14 and 15 year olds is average compared with other developed nations, well behind the high performing countries of the Pacific Rim.³² The OECD has also shown that England is one of the few countries internationally where 16-18 year olds perform worse than older adults in numeracy and literacy.³³ My own work shows that at age 14 English students’ mathematical understandings in algebra and multiplication have actually fallen since the 1970s.³⁴

International evidence suggests that a large part of the problem is the later stages of our education system. In fact, the IEA research with primary

32 See IVS Mullis, MO Martin, P Foy and A Arora, ‘TIMSS 2011 International Results in Mathematics’, International Association for the Evaluation of Educational Achievement (IEA), 2012

33 ‘OECD Skills Outlook 2013: First results from the survey of adult skills’, November 2013

34 J Hodgen, ‘We need maths to age 18 now’, Sutton Trust, 4 July 2013, available from: <http://www.suttontrust.com/newsarchive/jeremy-hodgen-need-maths-age-18-now/>

children shows that England's 10 years olds perform well above the OECD average in reading and maths. But this encouraging early performance is not sustained. One of the causes of this problem is that England is very unusual in encouraging young people to specialise early. As a result, few of our young people study mathematics or English after the age of 16. For example, my research for the Nuffield Foundation showed that only around 20-26% of our 16-18 year olds study mathematics, whereas in Germany more than 90% do.³⁵ Unsurprisingly, 18 year olds in Germany appear to perform better in numeracy and literacy. Indeed, Richard Layard and his colleagues estimate that this vocational skills deficit accounts for around half of the productivity gap between the UK and German economies.³⁶

It is worth considering what numeracy and literacy skills are needed for employment. In a study funded by the Sutton Trust in 2013, I examined what mathematics people need at work.³⁷ I reviewed more than 50 studies from across the world and overwhelmingly these studies indicated that, in most jobs, the mathematics that people need is relatively simple. Almost all of this maths is covered in GCSE, but our young people need to be much better at applying these concepts. For most jobs, what is needed is a better understanding of how to use, make sense of and communicate with the mathematics they have already covered at school – particularly proportional reasoning, estimation and simple statistics. It is similar for literacy. The actual skills required are relatively simple, but the contexts in which they are used are often complex.

The government has recognised these problems and has taken steps to address them. For example, the Department for Education has accepted Alison Wolf's recommendation that all young people without a good GCSE (grades A*-C) in English and mathematics should continue to study the subjects to 18. In addition, there is cross party support for encouraging all students to study maths to 18 and a new qualification, Core Maths, will be introduced from 2017, targeted at those students who do not take A-level maths. However, the success of these policies will depend partly on the extent to which they address the needs of employment.

First, we need a more vocationally focussed GCSE qualification in English and maths for 16-18 year olds. Whilst Alison Wolf is right that GCSE

35 J Hodgen, D Pepper, L Sturman and G Ruddock, 'Is the UK an outlier? An international comparison of upper secondary mathematics education', Nuffield Foundation, 2010

36 R Layard, S McIntosh and Anna Vignoles, 'Britain's Record on Skills', London School of Economics and Political Science, May 2002

37 R Marks and J Hodgen, 'The Employment Equation: Why our young people need more maths for today's jobs', Sutton Trust, July 2013

English and maths are key to success, we cannot simply repeat the same GCSE course for these students, a course which has not succeeded in either motivating them or equipping them with the skills they need. Hence, we urgently need to introduce GCSE qualifications that are valued by young people and employers alike, and which focus on the skills they will need at work.

Second, the core maths qualification is currently largely seen as a preparation for higher education. Yet, mathematics is vital for all young people not just those that are destined for university. Hence, it is important Core Maths has a strong vocationally focussed pathway. Universities have been encouraged to take a key role in the development of post-16 qualifications. We should encourage a similar level of involvement from employers.

Finally, we can learn from a country that does better than England: New Zealand. Like England, New Zealand allows 16 to 18 year olds some choice over the subjects they study post-16, but, unlike England, they encourage students to study a broad range of subjects, including maths and English. Perhaps more significantly, New Zealand's maths and English options are highly valued by both students and employers. This has been achieved by engaging employers alongside other stakeholders in the design and development of these qualifications over many years. There is no reason why we cannot achieve something similar in England.

Foster true grit

Baroness Claire Tyler

All Party Parliamentary Group (APPG) on Social Mobility

There is a growing body of evidence that character traits and resilience are directly linked to being able to do well at school and in the workplace. This has led to growing consensus, across the major parties and society as a whole, that schools must look beyond just exam passes and make it part of their 'core business' to nurture broader individual qualities. Attributes such as confidence in communication, sticking at it and not accepting second best, are vital to building self-esteem and precisely what employers look for in potential recruits.

It is also the case that character and resilience building can lead to improvements in young people's literacy and numeracy scores. The argument for developing academic attainment and more intangible skills

in unison is therefore powerful. Qualifications do not by themselves guarantee success.

The APPG on Social Mobility has identified that character and resilience can be developed throughout a person's life, with opportunities especially strong in the formative stages. As with academic attainment, the 'gap in opportunity' emerges early and persists. Policymakers should look to remedy this from the early years through school and the transition from education to employment. There are already positive signs of that happening.

In the early years, the government has extended the pupil premium to cover disadvantaged three and four year olds, building on the APPG's call for an early years pupil premium in our 'Character and Resilience Manifesto' in February 2014. It will be hugely important in narrowing the gap before children reach school age.³⁸

Also in the manifesto was a recommendation to develop a best practice toolkit for aiding development of the non-cognitive base in the early years. In the time since the manifesto was published, the remit of the Education Endowment Foundation (EEF) has been extended to do just that. EEF says it will "conduct rigorous, independently evaluated trials of early years interventions as well as consolidating and disseminating the lessons that can be learnt from existing research".

But there is more to be achieved in early intervention. The APPG is in the process of launching an inquiry with the Family and Childcare Trust to identify present parenting support offered in the UK along with any barriers to delivery.

At primary and secondary level, recent months have seen government take action to make character and resilience a core business of schools and set the ambition that England becomes a global leader in teaching character.³⁹ A series of announcements totalling close to £10 million are offering new support to activities in schools that promote character in young people, including eight projects that will instil a military ethos in students. The work of schools in this area will be recognised through new Character Awards run by the Department for Education.

This agenda has widespread support. A speech by the shadow education secretary Tristram Hunt last December, evoked the "British spirit" in

38 C Paterson, C Tyler and J Lexmond, 'Character and Resilience Manifesto', APPG on Social Mobility with CentreForum and Character Counts, February 2014

39 Department for Education, 'England to become a global leader of teaching character', 16 December 2014, available from: <https://www.gov.uk/government/news/england-to-become-a-global-leader-of-teaching-character>

overcoming adversity and setbacks, and identified skills that such as resilience, curiosity, discipline and self-control are crucial to helping youngsters succeed in life.⁴⁰ Furthermore, the Early Intervention Foundation together with the Social Mobility and Child Poverty Commission and Cabinet Office, is in the process of reviewing the evidence on social and emotional skills, and what works to help young people develop these skills.⁴¹

One way that character and resilience can be further enshrined in school culture is to ask Ofsted to build it more thoroughly into the inspection framework, as the CBI argued in its response to a recent consultation. The CBI urges the “development of a clear, widely owned and stable statement of the outcome that all schools are asked to deliver [which] should go beyond the merely academic, into the behaviours and attitudes schools should foster in everything they do”.⁴² In addition, we can ensure that initial teacher training and CPD programmes factor in character building so that it becomes embedded in classroom practice.

There is also a role for employers, some of which already provide programmes aimed at building employees’ character. Examples include National Grid, which in partnership with Community Service Volunteers UK has an active programme for integrating volunteering and character building into its HR practices, and BT, which has chosen to factor resilience building into its wellbeing programme for staff.

With employer survey evidence frequently highlighting problems to do with younger people’s ‘soft skills’, a sustained focus from policymakers on character and resilience will not only be positive for individual advancement; it will help deliver businesses with a stronger pool of applicants with sought after traits.

40 Tristram Hunt MP, Speech to Demos, 8 December 2014, available from: <http://www.demos.co.uk/files/TristramHuntspeech.pdf>

41 For terms of reference, see: <http://www.demos.co.uk/projects/reviewsocialeotionalskills>

42 CBI, ‘First steps: A new approach for our schools’, November 2012

Offer better careers advice

*Kim Catcheside
Champollion*

Ofsted's September 2013 report on the state of careers advice in schools provided a compelling account of the dire state of provision across much of the sector.⁴³ Of the 60 schools investigated, only a fifth had ensured that all students received sufficient information to consider a wide breadth of career possibilities. Very few were fulfilling the spirit of their duty to give pupils access to external and independent advice, teachers acting as careers coordinators had no training and little understanding of the role and links to employers were weak or virtually non-existent.

This will have come as no surprise to anyone with even a passing interest in the issue. Bringing problems that are obvious to everyone else, to the attention of ministers, is one of the most valuable functions of our great regulatory bodies and in this regard Ofsted has done its job well. Their warning appears to have prompted changes which should, over time, improve matters.

Since April 2014, schools have been bound by a statutory obligation to ensure that all pupils from years 8 to 13 have independent and impartial careers guidance. This duty will form part of the schools inspection framework and so head teachers who want to attain or hold onto their status as "good" or "outstanding" schools will have to place a much greater priority on preparing students for the world of work, than some have done before. But there is a justifiable concern that without greater support many schools will be forced simply to go through the motions and take a tick box approach to the new duties, and that improvements will be patchy.

As with so many government policies, the guidance is long on vision and pretty short on cash or practical help. Schools are exhorted to inspire pupils to fulfil their career potential. They are urged to collaborate with local businesses to create work experience opportunities but also to encourage employees and employers to release their inner motivational speaker and come into schools to enthuse pupils about their experience of work. The problem is that many if not most schools are so far from this vision that government is guilty of willing the ends without providing the means.

The skills of the teachers who are appointed as careers coordinators are

⁴³ Ofsted, 'Going in the right direction? Careers guidance in schools from September 2012', September 2013

a major stumbling block to progress. Many have had little experience of work outside education and have had only cursory training for their roles. Lack of time is also an issue. Careers coordinators are being told that they have to go out into their communities to meet employers and persuade them to get involved. How is that supposed to fit into a few free periods in a packed teaching timetable? I would argue that to be really successful in forging links with businesses, careers coordinators need to have an outward facing and entrepreneurial mindset and a significant amount of dedicated time. So my first recommendation is that schools careers coordinators receive proper training in careers and entrepreneurship and that they have significant dedicated time to get out of their schools and meet employers.

Businesses are very good at complaining that schools and colleges are failing to equip students with the basic skills, attitudes and aptitudes that they need in future employees. But they aren't so good at getting together to explain what they want. No wonder there is a mismatch between the skills they need and the applicants they get. But it is not the job of schools or FE colleges or hard pressed small and medium sized businesses to map the particular employment requirements of their localities. That is the role of national agencies, government or local government. At the moment it seems to be done in a fairly patchy way by some or all of these kinds of organisations. So my second recommendation is that government needs to give someone the responsibility and the resource to assess local employer needs in a coordinated way and to a nationally set standard. Local enterprise partnerships or chambers of commerce would be well placed to fulfil this role. They could also broker relationships between employers and schools.

Ofsted has a major role to play in driving change. In their 2013 report they noted that careers advice was best delivered in schools which had made it a strategic priority and took a holistic view by building employability into teaching across the whole curriculum. My final recommendation is that the Ofsted inspections framework be enhanced so that inspectors are asked to assess the quality of employability and careers teaching and advice across everything that schools do. This is the way they are required to assess other critical factors such as behaviour and safeguarding. Preparing young people for the world of work is no less important. After all what are we educating our children for, if not to equip them for useful and fulfilled lives.

Foster entrepreneurialism

Catherine Brentnall

Ready Unlimited

Much emphasis is often placed on the economic imperative for entrepreneurship education. We must help young people rise to the challenge of operating in a complex global economy. We must meet the needs of businesses and employers, and we must build the resilience, grit and determination necessary to find and make work in the 21st century. These are reasonable assertions, but they do not communicate one of the most powerful reasons why educators should care about developing entrepreneurial education: young people's engagement in learning.

Research that informed the development of my organisation, Ready Unlimited, showed that a critical factor in educational underachievement was young people's perceptions of the labour market and future opportunities.⁴⁴ Simply put, for some young people, if they don't know what's 'out there,' or don't think what's out there applies to them, what's the point of trying at school? And these attitudes were set at an early age.

But evidence captured by Ofsted and the SSAT shows that with the right leadership and support, teachers can harness enterprising and entrepreneurial education to provide a compelling context for young people's learning, improving engagement and thereby raising achievement and attainment.⁴⁵

Our recent experiences working with teachers to develop Derbyshire Ready demonstrate this. Head teachers and teachers took part in professional development, coaching and networking, so they better understood and appreciated entrepreneurial education and could apply this thinking to their practice. With this new entrepreneurial learning 'lens' a local history study became a chance for children to set up an events company and plan an exhibition for the community, a Christmas card rush became the opportunity for children to design and implement a postal system, children wanting a snack at break time became an opportunity for a pupil led tuck shop.

However, a critical aspect in all of these examples is not just what teachers did (the curriculum), but how they did it (pedagogy). Consider the range

44 Hoshin Ltd, 'Learning to Succeed: Understanding and addressing Key Stage 4 underachievement in Yorkshire and Humber', August 2007

45 Ofsted reports on and collates good practice case studies on economics, business and enterprise in schools. See eg <http://www.ofsted.gov.uk/inspection-reports/our-expert-knowledge/economics-business-and-enterprise>. See also Specialist Schools and Academies Trust (SSAT), 'Using business and enterprise to raise achievement: case studies of three outstanding schools', 2009

of entrepreneurial input required from children who are simply told “you will be setting up a tuck shop”, as opposed to those who see teacher rub their chin in bemusement and voice concerns about children being hungry at afternoon break. In scenario one, pupils are responding to an outcome that has already been set. In scenario two, the teacher is creating an experience where pupils will discover a problem and explore possible outcomes. Teachers who want learners to think and be entrepreneurial don’t tell them what to do, they create opportunities for them to spot and question them into coming up with and exploring ideas.

One Derbyshire Ready head teacher described the turnaround this approach had in her school: “You see the impact on their behaviour because children are really involved. It’s a privilege to be in the classroom. We had a child that kept getting excluded, but now he’s changed his behaviour to get into the classroom.”

A recent review of Derbyshire Ready Ofsted reports reinforces this picture, with 86% of Derbyshire Ready schools having positive comments about enterprise projects, skills or culture in their reports. Comments illuminated how enterprising approaches were improving teaching and learning through innovative curriculum design, impacting on behaviour by engaging and motivating pupils, improving attendance and raising achievement. Interestingly, Derbyshire Ready schools were twice as likely to have improved (gone up an Ofsted grade), than regular Derbyshire primary schools.

Other educators wishing to re-create this success should consider the following recommendations:

- Recognise that entrepreneurial learning is a powerful vehicle for school improvement. It isn’t a bolt on activity, but a whole school approach that impacts on culture and curriculum at every level.
- Like any other whole school innovation it requires a coordinated approach – driven by senior leadership, supported by a programme of professional development for staff, impacting on all children, and involving the wider learning community, parents and business.
- Finally, focus intentionally on creating an environment which reflects the entrepreneurial ‘way of life’ , one where learners experience uncertainty and complexity, make their own decisions and mistakes, and learn through initiating and developing entrepreneurial learning, projects and research.⁴⁶

46 A Gibb, ‘Creating conducive environments for learning and entrepreneurship: Living with, dealing with, creating and enjoying uncertainty and complexity’, *Industry and Higher Education*, Volume 16, No. 3, June 2002, pp 135-147.

Promoting a working culture in schools

James Kempton

CentreForum

Schools are under pressure to prepare young people better for the world of work. Recent initiatives include greater focus on improving literacy and numeracy skills and more rigour in the wider school curriculum and assessment more generally; and structural solutions like more university technical colleges and Labour’s proposal for new institutes of technical education.⁴⁷ Data will increasingly provide evidence of schools, colleges and higher education and training providers that best support their students to achieve positive education and training outcomes, including sustainable employment.⁴⁸

This section looks at whether there are underlying cultural issues in schools that also need attention. The business secretary touched on this in a speech to manufacturing industry executives, talking about the need to promote skills in the British economy. He accepted that successive governments had messed up careers advice in schools, but added:

“the underlying problem is, of course, that most teachers, particularly in the secondary sector, are graduates. They know how universities work, they know what you have to do to get an A-level, they know about UCAS forms – but they know absolutely nothing about the world of work.”⁴⁹

Classroom teachers can be influential figures in driving the curriculum choices and aspirations of their pupils. If it is true that teachers lack personal experience and understanding of the world of work, this should be addressed as part of the effort to improve careers guidance. But in order to understand Vince Cable’s claim that teachers “know absolutely nothing about the world of work”, it is important to consider both the

47 S Coughlan, ‘Teenagers have to keep studying English and maths’, BBC News, 2 September 2013, available from: <http://www.bbc.co.uk/news/education-23925033>. See also Tristram Hunt MP, Speech to Microsoft: ‘The Choice in Education – 70 Years of the Butler Settlement’, 18 August 2014, available from: <http://press.labour.org.uk/post/95085249764/the-choice-in-education-70-years-of-the-butler>

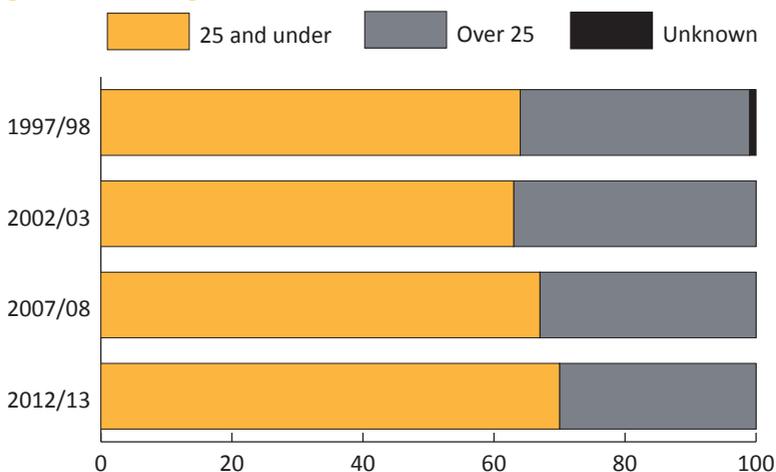
48 Department for Education, ‘Pupils’ destinations data to help parents choose the best schools’, 26 June 2014, available from: <https://www.gov.uk/government/news/pupils-destinations-data-to-help-parents-choose-the-best-schools>. See also Small Business, Enterprise and Employment Bill (2014-15) HL Bill 57 available from: <http://services.parliament.uk/bills/2014-15/smallbusinessenterpriseandemployment.html>

49 R Mason, ‘Vince Cable tells teachers: you know nothing about world of work’, The Guardian, 6 March 2014, available from: <http://www.theguardian.com/education/2014/mar/06/vince-cable-angers-teachers-careers-advice>.

demographics of the teaching workforce and teachers' level of exposure to their local business community.

The idea that there is a simple conveyor belt of A Level/university/teacher training/back to school is somewhat misplaced, as there is considerable diversity in the entry age into teaching. As Figure 4 demonstrates, consistently a substantial minority of teachers (on the latest figures 36% in secondary and 25% in primary) are aged 25 or over when they enter teacher training and will therefore have had some form of wider life experience. Unfortunately, no specific data is held centrally on the previous employment status of this group but it would seem reasonable to assume that in most cases this is likely to include a period of work. This might be some sort of low skills job associated with short term temporary employment, such as in retail or hospitality and catering. Equally, career changers will likely bring experience of more traditional graduate careers into the classroom.

Figure 4: Percentage of trainee teachers under 25/over 25⁵⁰



Source: Higher Education Statistics Agency (HESA)

Even if some teachers do bring more experience of the world of work than has often been suggested, this knowledge can soon become out of date (as CentreForum noted previously in its report calling for more industry secondments into FE classrooms to address the gap between

⁵⁰ Chart created by CentreForum using data provided by HESA. Note that the data is based on the HESA standard higher education population. This is a snapshot population of students enrolled as of 1 December of the reported year.

education and employers).⁵¹

The quality of careers guidance is not good enough and nor has it been for many years, so that many young people leave school or college with little knowledge of the workplace. Ofsted has also found that guidance for schools on careers advice is not explicit, the National Careers Service is not promoted well enough and there is a lack of employer engagement in schools.⁵² But in addressing this, the focus tends to be about getting more information in front of students rather than examining teachers' exposure to the local business community.⁵³

In contrast, the 1980s and early 1990s saw a period of increased dialogue between education and industry. 'Understanding British Industry', 'Heads, Teachers and Industry Ltd' and 'Head Teachers into Industry' all included teacher secondment schemes, varying in length from two weeks to a year. The schemes were created in response to the concern that school leavers were not prepared for the world of work. By familiarising teachers with business in practice, the schemes' developers believed that they would be better equipped to offer students good employment guidance.

The launch of the Teacher Industrial Partners' Scheme, supporting teacher placements in engineering suggests renewed interest in this area. Funding would be an issue in creating wider opportunities but making the case about the relevance this experience brings to a school is just as important.⁵⁴ It should certainly be a priority for those involved in setting up the College of Teaching and thinking about the skills and attributes needed for a modern teacher.⁵⁵ The additional data matching earnings to where pupils went to school will become available following the passing of the Small Business, Enterprise and Employment Bill – which is likely to raise more questions about the role of schools in preparing pupils for employment. Understanding what this tell us about schools' performance in this area and how this data can be used to inform the school accountability process will need careful consideration.

51 J Kempton and S Tomlin, 'Train Too: industry secondments into Further Education', CentreForum, July 2013

52 'Going in the right direction? Careers guidance in schools from September 2012'

53 For examples of the former, see <http://www.thejobjunction.co.uk>; <http://www.speakers4schools.org>; and <http://futurefirst.org.uk/>

54 To build better links between colleges and local labour markets, the Labour Party has also called for all vocational teachers to spend time in industry refreshing their skills. See 'The Choice in Education – 70 Years of the Butler Settlement' available from: <http://press.labour.org.uk/post/95085249764/the-choice-in-education-70-years-of-the-butler>

55 Department for Education, 'A world-class teaching profession: Government consultation', 9 December 2014, available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/383987/DfE_cons_overview_document_template_for_World_Class_Teachers_Consultation_voo3BR.pdf

Recommendations:

- Understanding industry should be included among the skills and attributes needed for both teachers and head teachers and addressed as part of continuous professional development.
- Industry secondments should be more widely available, including as an optional module for the National Professional Qualification for Headship.
- Further consideration should be given to how to measure a school's success in the area of employability and preparing pupils for work.

3 Higher quality tertiary education

If competition, choice and quality are the hallmarks of a strong tertiary education sector, Britain still has some way to go. This chapter considers the case for regulatory reform to the university sector through primary legislation; the development of a sustainable employer led apprenticeships model; and the growing importance of flexible learning, including part time and distance.

Higher education – the more things change, the more they stay the same

Nick Hillman

Higher Education Policy Institute (HEPI)

Higher education in 2015

Higher education has been utterly transformed by the coalition government: fees tripled; student numbers liberalised; supply side reform unleashed; postgraduate funding reformed; and research spending ever more concentrated. Or so it is said.

In fact, if you read the history books, the challenges facing UK universities are much the same as they have ever been. How do we ensure each student has a sufficient sum spent on their education? How do we deliver more places? How do we ensure an appropriate level of diversity in a sector governed by national rules (at least within each of the four devolved areas)? How open should we be to international influences? And how do we ensure better incentives for excellent teaching alongside those that exist for the best research?

One explanation for the sense of frenetic change, while many of the core issues have remained the same, is that there has been no substantial new primary legislation on higher education. I wish I had £10 for each time I had read that the coalition have passed a Higher Education Act. In fact the most controversial thing they have done is to change one figure

in some secondary legislation left by Tony Blair, which increased the undergraduate fee cap from a little over £3,000 to £9,000.

Ideology or evidence?

Lib Dem opposition to fees at the 2010 election and the anger that met their ‘broken promise’ afterwards has encouraged the idea that higher education policy has generally been, and should be, driven by ideology. That would be distinctly odd, given that the raw material of academia is evidence. Fortunately, in England, recent higher education policy has been driven more by practicalities than ideology – which explains why all three parties have lost so much political capital on it when in office.

The result has been a lot of flux and some counterintuitive positioning. For example, while the main political parties have all said negative things about tuition fees in recent manifestoes (for example, the Lib Dems in 2010, the Conservatives in 2005 and New Labour, despite introducing fees in 1998, in 2001), all three have increased them in office. Moreover, the Labour rebels who forced the Blair government to commit to a review of tuition fees after three years of operation were part of the campaign against fees, but ended up providing the very mechanism for raising them.

So the two parties making up the current coalition have acted in line with previous governments in putting the interests of the higher education sector before their own electoral fortunes. But they have been much more timid than their predecessors in providing an updated legal framework that reflects the logic of their decisions on finance. The most pressing challenges in English higher education now stem from the lack of new legislation.

An unkempt meadow

In ‘Unfinished Business? Higher education legislation’ for HEPI, I listed over a dozen pinch points worthy of reconsideration, including:

- different rules on fees and loans, which mean undergraduates at some higher education institutions have their tuition loans capped at £6,000 and their fees uncapped, while the majority have their fees and loans both capped at £9,000;
- a mix of degree awarding powers that are held in perpetuity by traditional universities but only on a six yearly renewable basis by other institutions; and

- the fact that some students are, in reality, better protected against institutional failure than others.⁵⁶

Absurdly, as Million+ pointed out in January 2015, the current funding rules even limit the ability of universities to offer accelerated degrees that take two years rather than three.

We are left with an unkempt meadow rather than the tidy playing field that was promised in the 2011 white paper, 'Students at the Heart of the System'.⁵⁷ It needs a mow.

Equal or equitable?

That will not be easy, as the pinch points have grown up incrementally and accidentally. It may even be possible to backfill an intellectual rationale for some of them, but certainly not for all of them.

There is still a strong case for having the same rules for different sorts of providers. But the last few years have suggested there is probably an even stronger case for having an equitable, rather than an equal system, characterised by risk based differences.

Despite recent scandals affecting some alternative higher education providers, which new legislation could help stamp out, there is no case for the sort of general clampdown on new entrants that some people have argued for. That would reduce student choice, limit competition among institutions and stifle innovation. The British higher education sector has always rejuvenated itself by allowing new providers to offer a new approach and a competitive challenge. That should not change.

The political parties have been studiously avoiding parliamentary votes on higher education and, sadly, it remains unclear how and when any legislation will appear. When it does, it needs to enhance student choice by further improving the information available, protect the student interest and sort out the haphazard obstacle course faced by new providers.

56 N Hillman, 'Unfinished Business? Higher education legislation', Higher Education Policy Institute, February 2014

57 Department for Business, Innovation and Skills, 'Students at the Heart of the System', June 2011

Higher education – lessons from the financial crisis

*Professors Ken Starkey and James Devlin
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The current section draws an analogy between the financial crisis and the university sector, arguing that current incentives and a pervasive and potentially corrosive culture are aligning to produce behaviours that are not in the long term interests of students, universities and society more generally.

The precise causes of the financial crisis will be the subject of debate for some time, however, the prime suspects have been identified with a reasonable degree of consensus. Many institutions became increasingly focussed on the potentially highly profitable areas of investment banking, arguably neglecting tradition retail customers and failing to invest sufficient time and energy into forming meaningful relationships and serving such customers well. Added to that, industry “superstars” in the investment banking sector enjoyed huge rewards, based partially on bonuses linked to short term performance. Of course, these top performers were also highly marketable and commanded large premiums in the job market.

In such circumstances, it is hardly surprising that a strong focus on a narrow definition of success (short term returns) became the cultural norm and that a macho, performance driven, ruthless culture developed in many institutions. Adhering to such cultural norms and buying into the dominant narrative was soon viewed as essential to ensure respect from colleagues, enhanced remuneration and career progression, particularly for younger aspiring members of the industry. No doubt dissenting voices were soon shouted down in the clamour for increased rewards and recognition. Of course, underlying the tolerance of such behaviours were benign corporate governance and risk management practices and acquiescence on the part of senior management and shareholders who welcomed enhanced profitability (in the short term) in a highly competitive marketplace.

So what are the parallels and attendant lessons from the financial crisis for the apparently dissimilar context of higher education? Whilst not obvious at first glance, there are arguably a number of similarities. The current government argues regularly that universities need to give better value to students/consumers, with a better quality of engagement with their clients. This echoes calls for banks to give more attention and better service to retail customers and to return to the basics of banking. The

debate around the student experience suggests that at some universities students have become a means rather than an end and that student fees, particularly international student fees, are treated as capital to be leveraged with a lack of transparency in terms of how they are contributing to an improved student experience. If students are the 'means' then the main end is research excellence, or rather a particular narrow narrative or interpretation of what constitutes research excellence.

Of course, world changing research is to be encouraged and lauded, but arguably too much research activity is focussed on publications in top academic journals, much of which lacks impact and relevance. In current parlance, it fails to 'add value' beyond the narrow confines of academia. Research activities have also become increasingly heavily audited and metricised providing an obvious yardstick for use in recruitment, promotion and salary level decisions. The net result is a culture dominated by a focus on publications and research achievements, with those with many high ranking outputs enjoying by far the best promotion prospects and commanding large salary premiums in the employment market. University administrators and senior managers have tolerated and even encouraged such an approach, as it has provided obvious mechanisms for punishing perceived underachievers and for enhancing the reputation of their institutions. Anecdotal tales of increasingly macho approaches to performance management abound and, in common with banking, those who challenge the dominant narrative of hyper performance are shouted down as complicit in maintaining the old status quo rather than embracing a brave new world. The net result has considerable parallels with the situation prior to the financial crisis, as students and their fees are taken for granted by a culture obsessed with research excellence in much the same way as banks were focussed on the glamour and profitability of investment banking at the expense of more traditional activities.

Despite the obvious parallels, however, it is unlikely that issues in higher education will come to a head in quite the same manner as was the case with the financial crisis. In that case, there was an obvious and profound tipping point, the lack of solvency of some major players, followed by a swift and significant loss of confidence in the system as a whole. Anger soon arose at the use of public money to bail out banks and a very public debate focussed on the lack of accountability and of contrition in banks ensued. In higher education, the more likely scenario is a gradual shift in priorities as students become more vocal and demanding over time and the increasing application of metrics to the teaching and learning

experience, not least the National Student Survey, increases the spotlight on the quality of the student learning experience. Those working in the sector will be aware that such a process has already begun.

Others are more apocalyptic than us in arguing that we are approaching a tipping point in universities driven by globalisation, changing student expectations, new for profit entrants and the increasing redundancy of existing delivery modes due to technological innovation. In our opinion, however, it is too early to say that we are at a point identified recently by the Economist where only creative destruction of the old ways will save the sector or that the challenges we face really constitute the ‘avalanche’ proclaimed in a much discussed recent policy report.⁵⁸ Universities are one of society’s longest established institutions and one of their core competences has been the ability to muddle through and adapt to changing contexts. In this they may prove more resilient than those banks whose business models were proved dysfunctional by the banking crisis. Indeed, universities have a lot to teach other sectors and organisations about how to align the interests of a broad range of stakeholders, internal and external, in the search for new forms of knowledge. Perhaps in the wake of the financial crisis banks should become more like the best universities in creating long term stakeholder value.

A sustainable employer led apprenticeships model

Federation of Small Businesses (FSB)

Economic prosperity is dependent on the success of the UK and the ability of our businesses to compete both domestically and internationally. A skilled workforce is critical to realising this so that businesses are able to adapt to the changing demands of the marketplace. Apprenticeships can help achieve this as they are an effective way to address business skills needs, develop sustainable employment and careers, and to help businesses grow.

It is therefore worrying that the UK’s apprenticeship system is not yet realising these opportunities. For example, in Switzerland over two thirds of young people are enrolled on an apprenticeship, with only a fifth going to university. In England less than 10% of young people enrol on an apprenticeship with over a third going to university.

58 The Economist, ‘Higher education: Creative destruction’, 28 June 2014, available from: <http://www.economist.com/news/leaders/21605906-cost-crisis-changing-labour-markets-and-new-technology-will-turn-old-institution-its>

The UK is being threatened by a significant skills shortage, particularly in STEM skills. Despite improving employment prospects, we are struggling to meet the skills needs of the fastest growth sectors. This has led to an increase in the number of job vacancies left unfilled because of a shortage of skills.

The FSB's own research tells us that over 60% of small businesses lack confidence in finding young people with the right skills for the job and less than a fifth take on apprentices. Firms that are unable to fill skills gaps will not be harnessing their full potential, denting their performance in the short term and ability to innovate and boost their output in the medium term. This may help to explain the UK's relative productivity decline compared to other advanced economies, with the productivity gap between the UK and the other G7 economies at its widest since 1992.⁵⁹

High quality apprenticeships will increase the quality of skills available and boost productivity. Research suggests that the average person completing an apprenticeship will increase business productivity by over £200 per week.⁶⁰ Apprenticeships offer an attractive package that combines work experience with training, a salary and a potential job at the end of it. However the figures suggest that apprenticeships lack the status of higher education, with half a million apprenticeship starts compared to 1.8 million undergraduate students in 2012/13.⁶¹ This is perhaps partly due to the difference in perceived status between the two routes, but also the disparity in job outcomes and wages and the guidance young people are receiving. This has led to an overinflated employment market with an increasing number of higher education graduates fighting for jobs. As a result, many graduates have settled for lower skilled posts, which in turn have left businesses struggling to gain the skills they truly need to grow.⁶²

The limited number of small businesses taking on apprentices suggests that the system is not accessible and discourages take up. The apprenticeship system has been dogged by targets on learner take up and qualification results, with business needs and apprenticeship

59 Office for National Statistics, 'International comparisons of productivity – final estimates 2012', February 2014.

60 Centre for Economics and Business Research, 'Productivity Matter: The impact of apprenticeships on the UK economy', March 2013.

61 Skills Funding Agency (Department for Business, Innovation and Skills), 'Apprenticeship starts by framework 2002/03 to 2012/13', March 2014, available from: <https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships>. See also Higher Education Statistics Agency, 'Students by level of study 2000/01 to 2012/13', available from: <https://www.hesa.ac.uk/stats>

62 Institute for Public Policy Research, 'Winning the global race: Jobs, skills and the importance of vocational education', June 2014

outcomes being a secondary thought. This is one reason why the FSB welcomed the Richard Review's outcome focussed recommendations that recognised the pivotal role businesses play in the process.⁶³ Through meeting the needs of business, employers will be more likely to take on apprentices because they can reap the benefits of business specific training to increase productivity.

Following that review, the current apprenticeship reforms centre on the employer led philosophy on funding through to training and assessment. Businesses are also rewriting apprenticeship standards to meet their sector needs through the government's Trailblazers scheme – a mass consultation process involving hundreds of businesses – which will link training with sector needs as defined by businesses. These standards will require apprentices to undertake an independent assessment to be able to complete the apprenticeship. This will demonstrate that they have acquired and understood the skills they have gained, thereby boosting apprenticeship standards.

These are welcome changes and bring with them a sense of empowerment for businesses, but are they sustainable? This depends on the willingness of businesses to engage long term. The FSB has pressed the point that a reformed system should be easy to understand and designed to encourage, not restrict, the take up of apprenticeships. For small businesses this means understanding the impact taking on an apprentice will have, the amount of funding available, and the accessibility of the system. This should be communicated clearly and early to businesses to allow time to react to them so that they can reap the rewards of the investment as early as possible. This will also allow time to address weaknesses in the system and work with businesses to improve the framework.

A sustainable model will not be achieved through greater business engagement alone. The education system must be willing to embrace apprenticeships as a worthwhile alternative to higher education, and teachers must have the knowledge and confidence to promote them to students. Two thirds of teachers said they would rarely or never advise a student to take an apprenticeship if they had the grades for university.⁶⁴ This perception must change for students to be given advice on the range of post-school opportunities so that they can choose the right route to meet their aspirations.

63 D Richard, 'The Richard Review of Apprenticeships', Department for Business, Innovation and Skills, November 2012

64 I Nash, 'Higher Ambitions Summit: Rapporteur Report', Sutton Trust, July 2014

Research suggests that if the number of apprenticeships continues to rise at current rates then between 2012/13 and 2021/22 apprentices could contribute £3.4 billion of net productivity gains to the UK economy, in real terms.⁶⁵ To realise this, the apprenticeship system must be outcome focussed, employer led, and accessible. Failure to address these will result in a widening skills gap that does not meet the needs of the UK. Embracing them will lead to greater confidence and participation in the system which will, in turn, lead to sustainable and successful outcomes.

Enhancing flexible learning arrangements

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Flexible learning is generally defined in terms of the place, pace and mode of learning. In other words, the where, when and how of learning. Universities and colleges have embraced flexible learning providing potential students with a wide range of study choices. Such choices include accelerated, part time and extended study, work based, open, distance and blended learning to name but a few of the options.

Courses delivered flexibly allow those who cannot commit to the full time study of a degree, for example those in full time employment, the opportunity to study in a way that suits them best. However, demand for such courses remains relatively low. HEFCE data highlights a 46% decline in part time student numbers between 2010/2011 and 2013/2014.⁶⁶ Data from the US reveals that MOOCS (massive open online courses), seen as the future for flexible learning, have largely been embraced by those who already hold a degree rather than those without. In addition, part time courses and MOOCS have lower completion rates. For MOOCS it can be as low as 4-10%.⁶⁷ The reasons for these figures are likely to be many and complex. MOOCs may be used by potential students as a taster before they register for a degree delivered by other means. In addition, the recession will have had an impact on the take up of part time courses.

On the other hand, blended learning has been well received by both full

65 Ibid.

66 Higher Education Funding Council for England (HEFCE), 'Pressure from all sides: Economic and policy influences on part-time higher education', April 2014

67 Department for Business, Innovation and Skills, 'The Maturing of the MOOC: Literature Review of Massive Open Online Courses and other forms of online distance learning', BIS Research Paper No. 130, September 2013

time and part time students as it exploits the benefits of a combination of face to face and online learning. Initial reports on accelerated degrees, studied intensively over shorter time periods, also suggest good results in terms of completion rates and student grades – although it is still early days and student numbers are low.

How then can flexible learning be enhanced to encourage take up and raise completion rates? I would suggest that we need to look beyond the where, when and how of flexible learning – this is essentially about the delivery mechanisms being used. Our focus needs to return to the what of flexible learning – the core of learning in terms of content, experience and standards. Let me expand on each of these points in turn.

First, content concerns the curriculum – the subjects being studied. Individuals in employment want courses that complement their knowledge, skills and expertise, a curriculum that builds on their professional qualifications. Examples already exist of degrees at undergraduate and postgraduate level that build on CII qualifications – however the choice remains fairly limited given the size of the sector. Sector specific courses can however be problematic for universities and colleges as the market is often disparate, can be difficult to reach and as a result cohort numbers can be low. Universities and professional bodies therefore need to work more closely together in the design of their qualifications to map learning outcomes and content to provide seamless routes between academic and professional qualifications. This requires closer relationships and long term exclusive, or limited, partnerships to ensure sustainability.

Second, student experience, and in turn student satisfaction, is an essential part of any degree and is linked to student performance and completion rates. Student experience goes beyond teaching, learning and the curriculum and includes student life in general and the advice and mentoring they receive from peers and faculty. This area can be a challenge for students on full time traditional degrees as well as those on flexibly delivered options. More research needs to be undertaken by universities and higher education bodies to identify the needs, expectations and experience in terms of students' experience and satisfaction in the different flexible learning contexts and between different student bodies.

Third, a UK degree is known worldwide for its standards of quality and rigour. Current conversations around flexible learning have asked whether too much flexibility could run the risk of lowering standards. This is essentially a question of pedagogy and much work has already

been undertaken by the Higher Education Academy to provide guidance to academics in this area.⁶⁸ This work needs to continue to ensure parity across the different flexible learning options to avoid the emergence of a two tier system and reassure students choosing flexibly delivered degrees that their time, effort and money invested in study is worthwhile.

Flexible learning is about providing students with a choice on the where, when and how of learning. The challenge going forward will be to ensure that the what – ie the content, student experience and standards – are addressed to provide students with a degree that meets the needs of individuals, their employers and the wider market.

68 See: <https://www.heacademy.ac.uk/workstreams-research/themes/flexible-learning/flexible-learning-projects/flexible-pedagogies>

: 4 More opportunities for lifelong learning and training

The final chapter looks at how more opportunities for adult skills development can be created through an enhanced professional and career development loan scheme. This is followed by a reminder of the role that professional bodies can play in providing workplace training.

Widening opportunities for professional and career development

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For working age adults, accessing finance to develop skills, or gain new ones, has always been challenging. Only at the postgraduate taught level, for which an undergraduate style loans scheme will be available from 2016/17, has government taken significant steps to improve access to funding. In other areas, the answer for some time has been professional and career development loans (PCDLs), which are currently available from Barclays and Co-op.

A PCDL is like any other bank loan. Individuals can apply through one of the banks participating in the scheme, their application is credit scored and, if successful, a loan of £300 to £10,000 is offered to them at commercial interest rates. By design, PCDLs are available to people aged 18-69 to help with the cost of taking any accredited full time, part time or distance learning course that will lead to employment, or develop the person's skills. The only difference between a PCDL and other types of bank loan is that the government pays the interest while the borrower is undertaking their course of study, plus one month.

Problems with PCDLs

It is clear that the scheme's small repayment holiday places a significant risk on those out of work or on a low income. If a person takes out a PCDL of £6,000, and has the maximum five year period in which to repay

it, they are liable to pay back £100 a month plus interest as soon as they finish their course. The conditions of repayment are sufficiently onerous that MoneySavingExpert.com advises people to take out private personal loan to pay off their PCDL in full, and then pay back the private loan on preferential terms.⁶⁹

CentreForum previously found that less than half of those who applied for a PCDL in 2010 were offered one, and even fewer chose to take it out. Uptake of loans dropped between 2011 and 2012, and government support for the programme was forecast to fall in cash terms to around £7.3 million in 2015.⁷⁰ The pressure on government to enhance or replace the scheme has been growing.⁷¹

Enhancing PCDLs

There is another way that would ensure PCDLs are a more viable source of finance. The first problem the government can address is the low rate of success at the application stage. Provided a person is accepted on to a recognised course of study at an accredited institution, the government should be prepared to underwrite the risk of that person completing the course and repaying their debt.

Eligibility for the course should be determined by the course provider. But to ensure that quality is assured, and the risk to government is minimised, the applicant would have to meet a certain set of standards. These must be independent and concern both the course selected and the application process associated with it. If a course provider accepts a PCDL applicant on to the course who does not meet the set criteria, or fails to go on and complete the course, then the risk of that person repaying their debt would be transferred to the course provider.

An accompanying measure would be to extend the repayment holiday period beyond one month. A smaller scheme administered by Northumbria University with credit union Moneywise requires no repayment for the first 15 months following enrolment. The same should apply to PCDLs. If deemed necessary, the government could levy a small fee on individuals who took advantage of the extended repayment holiday. Alternatively, the government could absorb the full cost of the extension without levying a fee.

The advantage of enhancing PCDLs, rather than replacing them, is that they offer flexibility to adult learners who do not necessarily want (or

69 See: <http://www.moneysavingexpert.com/students/career-development-loans>

70 T Frostick and T Gault (eds), 'Postgraduate education: better funding and better access', CentreForum, June 2013

71 E Gibney, 'Willetts wants banks to fill postgrad funding gap', Times Higher Education, 18 July 2013

qualify for) a postgraduate taught degree. They can be used to finance a variety of courses that can be up to two years in length, or three if the course involves a year of work experience. This can include technical or management training, a professional qualification or even an additional bachelor's degree.⁷² Individuals who might benefit from an enhanced PCDL could include:

- A maternity/early years care returner to the workforce
- Someone with intermediate qualifications looking to add a professional qualification (for example, ACCA or CIPD where no company sponsorship is possible)
- SME/sole trader needing to finance skills to be able to run their business effectively
- A mid to later life redundancy looking to retrain so they can keep active in the labour market

The case for widening access to PCDLs is strong if it ensures more opportunities for lifelong learning and training.

Use the expertise of professional bodies to provide training

Daniel Pedley
Chartered Insurance Institute (CII)

Professional bodies and the education they provide are not a modern phenomenon. Professions, as we think of them today, are largely perceived as a Victorian concept. Times have moved on since then and so have professional bodies. The adaptability of professional bodies means we are able to keep pace with developments, which in turn has helped secure the support and trust of industry and learners alike.

The benefits that professional bodies confer are many. In short, the high quality education and standards we oversee help provide the public with confidence in the professionals they deal with. Chartered, what it stands for and encompasses, is something that has resonance with the public. Professional bodies also exist at no cost to the state, having nurtured a learner/employer led funding model from our inception.

As a chartered body the CII is bound by a Royal Charter which provides a clear mandate for our role as an educator. We must “secure and justify

72 J Papworth, 'A students guide to career development loans', The Guardian, 21 August 2010, available from: <http://www.theguardian.com/money/2010/aug/21/student-guide-career-development-loans>

the confidence of public and employers by the conduct of reliable test of competence of persons...employed in insurance". In designing qualifications professional bodies should act as guardians of standards and quality, incorporating necessary rigour and driving the public interest angle we are able to secure the standing of the profession.

This tradition provides stability within educational and professional landscapes. Across academic and vocational spheres alterations to qualifications, awarding bodies and even government departments are commonplace. This flux is not a characteristic within the professions. Professional bodies are long established, not changing with governments, offering quality assurance and well embedded qualifications. The value of this cannot be underestimated, especially as familiarity with these support public understanding and trust.

That is not to say professions operate in a world where time stands still. Far from it. In a regulated profession like financial services, rules change. Firms and individuals have to adapt to regulations and so qualifications have to reflect this. Responding to such changing needs does not take place in a vacuum either. Professional bodies specialise in market led design.

The current government's focus on an employer led skills system is not a new concept. Such an approach has existed within insurance and financial services for many years. The CII's Major Users Forum, made up of practitioners, works as a sounding board for exams and qualifications development, considering proposals and putting forward suggestions.

As well as giving people what they want in terms of content, we also have to ensure that delivery is flexible. Professional education, more often than not takes place alongside employment. Therefore our offering has to be flexible. Technological enhancements continue to increase such opportunities, for example allowing us to offer online exams every day. Such developments provide learners with greater freedom and choice – allowing them to study on their own terms.

Professional bodies' specialisation enables us to offer detailed knowledge and insight into specific areas that others cannot. We have an intimate knowledge of our sector and our people have extensive experience of working within it. And it is not just in the UK that bodies like the CII are well respected. There is demand across the globe for UK professional education. British chartered brands travel well, and are much prized internationally as a guarantee of high quality.

Of high importance in tough financial times is that professional bodies

exist at no expense to the public purse. Instead our funding comes from members and practitioners – for example in the form of membership fees and exam revenue. Purchasers take our services on trust – continuing to do so shows that we are meeting the market’s needs. However, there remains myopia from government towards those things that it does not fund. Whitehall needs to better understand what professional bodies can bring to the table. This is changing, albeit slowly.

The reputation of the various professions is built on history – the familiarity of our offering, our distinguished track record and the stability we bring. Professional bodies are not forever rebranding or rebuilding qualifications. This is a real benefit in the eyes of the industry and the public at large – not subject to the shifting policy sands that impact publicly funded qualifications. However there is the constant need to ensure that content is up to date and relevant, and that methods of teaching are practical and meet the needs of learners.

Professional bodies play an important role, at no cost to the exchequer, in helping to develop the skills and capability of the UK and so any central skills strategy needs to recognise and draw upon this. The expertise, experience and stability we bring, as well as the excellent employer links should be one of the central pillars of future skills policy. Professional bodies are here for the long haul, make the most of us.

■ 5 Recommendations

This paper has explored how the UK can remain competitive by creating a skills system that promotes choice and flexibility and is more responsive to employer demand. The recommendations below, which are drawn from analysis in previous chapters, seek to address some of the challenges identified in the survey evidence including concern over young people's 'workplace readiness'; the persistence of skills gaps and shortages; and the lack of opportunities for lifelong learning and training.

Early years, primary and secondary education

Literacy and numeracy

- Government should introduce a vocationally focussed GCSE qualification in literacy and maths which better engages those who failed the traditional GCSE.
- A strong vocational focus in the new Core Maths qualifications is needed with input from business. Lessons can be learnt from New Zealand where employers have long been involved in the design and development of intermediate qualifications.

Character and resilience

- Policymakers should develop more evidence based parenting initiatives. This could reflect CentreForum's Five to Thrive scheme, being rolled out across local authorities in England and Scotland, which conveys simple child development messages to parents.
- Ofsted should be asked to build character and resilience more thoroughly into the inspection framework.
- Initial teaching training and CPD programmes should factor in character building so it becomes embedded in classroom practice

Careers guidance

- Schools careers coordinators should receive proper training in careers and entrepreneurship and have significant dedicated time to get out of their schools and meet employers.
- Government should give local enterprise partnerships or chambers of commerce the responsibility to assess local employer needs in a coordinated way and to a nationally set standard.
- Ofsted inspections framework should be enhanced so that inspectors are asked to assess the quality of employability and careers teaching and advice in schools.
- There is also scope for employers or professional bodies to inform young people of sector specific career paths open to them. An example is the CII's Discover Risk website which allows users to match their skills and qualifications to jobs in insurance.

Bridging the gulf between teaching and industry

- Understanding industry should be included among the skills and attributes needed for both teachers and head teachers and addressed as part of continuous professional development.
- Industry secondments should be more widely available, including as an optional module for the National Professional Qualification for Headship.
- Further consideration should be given to how to measure a school's success in the area of employability and preparing pupils for work.

Higher education and apprenticeships

Higher education

- New legislation is required to enhance student choice by further improving the information available, protecting the student interest, and removing the many unnecessary obstacles faced by new providers to the higher education market.
- Closer links should be established between flexible learning providers and professional bodies in the design of academic and professional qualifications.
- More research must be undertaken to examine students' experience and satisfaction in the different flexible learning contexts and to ensure that flexibility is not diminishing the quality of courses.

Apprenticeships

- Greater clarity is needed in the design of apprenticeships around funding and expected outcomes. Schools must start to champion apprenticeships as a worthwhile alternative to higher education.

Adult skills development and learning

Widening opportunities for professional and career development

- Government should enhance the professional and career development loan scheme along the lines proposed in Chapter 4.

Workplace training

- The use of professional bodies in adult skills development should be actively promoted by government and the private sector.