

Contents

Foreword	3
Executive summary	4
Higher skills – an economic and social imperative	6
We have strengths to build on, but we need a faster pace	10
Barriers to the success of learn-while-you-earn options must be addressed	16
References	26

Foreword



People are fundamental to achieving tomorrow's growth. Without a talented workforce equipped with the skills to maximise future business opportunities, the UK will fall short in delivering the rebalancing towards investment and exports that is essential to paying our way in the world.

But the skills needs of tomorrow's economy will be different to the needs of today's. Rebalancing will reshape the UK around high-value, high-skill activities, with a rejuvenated approach to industrial strategy tilting the field towards key sectors of competitive strength. Businesses already report major skills shortages in areas like manufacturing and engineering – a situation expected to become more acute as the economy picks up – and when it comes to filling high-skilled jobs in the future, almost half of businesses do not have confidence in finding sufficient recruits.

Our higher skills challenge must be about making sure we address the shortages we see now, and being ready to jump a higher bar in future. This requires raising overall skill levels in the workforce and responding to the specific skills needs of growing sectors. In short, we need many more people to achieve appropriate higher-level qualifications. This all takes place against the backdrop of major reforms to our higher education sector, the full impacts of which are not yet fully understood. Tuition fee changes in particular seem to be leading students to review choices at 18 with a much more critical eye, and with a much greater focus on the end goal of sustained employment.

What is clear, however, is that what is now viewed as the 'default route' of an undergraduate degree is not suitable for all – young people have different talents and learn in different ways, while re-skilling and up-skilling the existing workforce also necessitates much more flexible ways of learning. Meeting the higher skills challenge rests on the extent to which we can widen gateways into skilled work and promote routes to higher skills that appeal to individuals for whom a degree may not be the best option.

There is a burgeoning community of interest in this area and, in part, this report sets out to signpost innovative new business-university collaborations and the dynamic marketplace in 'learn-while-you-earn' models of study. Typically, these new approaches will require students to be able to support their study and career development by remaining in work or building links with the workplace.

With the economic and social imperative for expanding alternative routes clear, we need to look much more closely at the barriers to expanding the market in more flexible provision. Our recommendations in this report focus on the practical steps that can be taken by government, business and the higher education sector to break down these barriers, including issues around student finance, poor levels of information about options, and incentives for businesses, universities and colleges to come together.

This report aims to advance the debate about how the UK can meet the higher skills requirements of our future economy. It's time to stop talking about Germany and start building a British skills system that works.

A handwritten signature in black ink that reads "Katja Hall". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

Katja Hall
CBI Chief Policy Director

Executive Summary

The changing nature of the UK economy means that the majority of people will need a route to higher skills if we are to compete in an increasingly competitive global marketplace. To meet this higher skills challenge, we need to expand and promote apprenticeships and other 'learn-while-you-earn' schemes to equip people with the right skills to deliver tomorrow's growth. This report makes the case for expanding the use of these models – signposting innovative new collaborations between businesses and the higher education sector, examining the barriers to making them more widespread and identifying how this nascent market can be developed.

Higher skills – an economic and social imperative

Tomorrow's growth requires a fundamental rebalancing towards investment and exports, reshaping the economy around high-value, high-skill activities that will enable us to pay our way in an intensely competitive global economy. To achieve this, we have to think more strategically about getting the fundamental drivers of growth right. This means putting a high-skill workforce centre stage – investing in human capital not only promotes long-term growth but is also the single most effective way of distributing its benefits more fairly.

The jobs of the future will increasingly need higher skills, particularly in key sectors that will drive the UK's industrial strategy. Anticipated changes to occupational structure mean that by 2020 nearly half of all employment will be for highly-skilled roles. Meeting this challenge will require us to maximise the potential of different routes into higher-skill roles, particularly vocational and technical pathways, for both young people and experienced workers. These pathways will also open routes to higher paid careers for a wider group of talented people.

We have strengths to build on, but we need a faster pace

The UK has a strong track record on higher skills achievement, with the most recent OECD data placing us 6th in the world for attainment at degree level. But with emerging market economies driving expansion of the proportion of higher level skills in their workforces, the UK's enviable international position is by no means guaranteed. And strong overall performance on higher-skills participation must not be allowed to mask the skills shortages already impacting upon key sectors of the economy, which point to a mismatch between supply and demand.

One way to address this is to develop more partnership-based provision, with greater levels of business involvement in colleges and universities, as well as boosting apprenticeships. But the market in 'learn-while-you-earn' models – such as higher apprenticeships and more flexible degree programmes like part-time study – is underdeveloped. We need to pick up the pace, and there are signs that higher education fee reform in England is helping to drive this as potential students review options with a more critical eye.



Barriers to the success of learn-while-you-earn options must be addressed

While overall data is lacking, there are many good examples of collaboration between businesses and higher education institutions on courses, particularly since the fee reforms were enacted. But our analysis suggests there are significant barriers to developing the market, which must be tackled:

- **Finance is a core concern for students:** support for those studying part-time must be addressed; and marketing of finance options for students needs improvement.
- **Information asymmetry blights the system:** access and visibility to learners of all ages must be improved; data on numbers studying alternative routes should be centrally collected; and national and local structures to support the development of a critical mass of activity should be established.
- **Incentives and goals must be aligned to the growth of the market:** HE places that are fully-funded by employers should be removed from the student numbers quota; universities, colleges and businesses need to forge longer-term partnerships; and universities should be given freedom to design short courses for business.
- **We should build a focus on the end goal of sustained employment:** young people should be helped to identify courses designed in collaboration with industry and offering work placements; and public funding for skills should become genuinely demand-led.

Summary of recommendations

Finance is a core concern for students

- ▶ The government, business and the higher education sector should identify further exemptions from the Equivalent or Lower Qualification policy and consider arrangements to mitigate the removal of the part-time premium
- ▶ A clear communications strategy should be put in place to ensure that both students and employers understand finance options for part-time higher education study and Advanced Learning Loans
- ▶ The CBI will undertake further work on how better to tilt the field towards meeting skill needs in key sectors for growth, including using finance options.

Information asymmetry blights the system

- ▶ Deliver careers inspiration in schools and colleges – underpinned by a support network for the new statutory duty on schools, to ensure vocational routes get highlighted
- ▶ Build a vocational UCAS-style system, with similar prominence
- ▶ Create a national focal point designed to support progress in building local clusters for vocational higher-skills development
- ▶ Centrally collect data on take up of alternative routes and analyse trends.

Incentives and goals must be aligned to the growth of the market

- ▶ Remove higher education places that are fully-funded by employers from the student numbers quota
- ▶ Consider reforming student finance arrangements to better incentivise the provision of shorter courses that can respond to employer need more flexibly
- ▶ Businesses need to look at their skills procurement policy – are HR teams equipped with the understanding to specify the skills the business really needs?
- ▶ Universities and colleges need to develop business-outreach into a core function that has influence over curriculum design.

We should build a focus on the end goal of sustained employment

- ▶ Highlight industry collaboration through changes to the Key Information Set
- ▶ Route apprenticeship funding directly through employers and consider the merits of an apprenticeships tax credit run through PAYE
- ▶ Consider how current funding mechanisms could be better utilised to help broker relationships between universities and local businesses.

Higher skills – an economic and social imperative

- ▶ **We need a new approach to generating economic growth...**
- ▶ **...with a high-skill workforce centre stage**
- ▶ **The jobs of the future will increasingly need higher skills**
- ▶ **Different routes into higher-skill roles – for both young people and experienced workers – are fundamental to meeting this challenge**

We need a new approach to generating economic growth...

Tomorrow's economic growth requires a fundamental rebalancing towards investment and exports, reshaping the economy around high-value, high-skill activities that will enable us to pay our way in an intensely competitive global economy. Growth in key sectors will boost employment and stimulate demand across the economy, generating greater prosperity. Better routes to higher skills will not only help us compete in this world, but also open up routes to higher skills to a more diverse group of people, widening the talent pool and tackling inequalities.

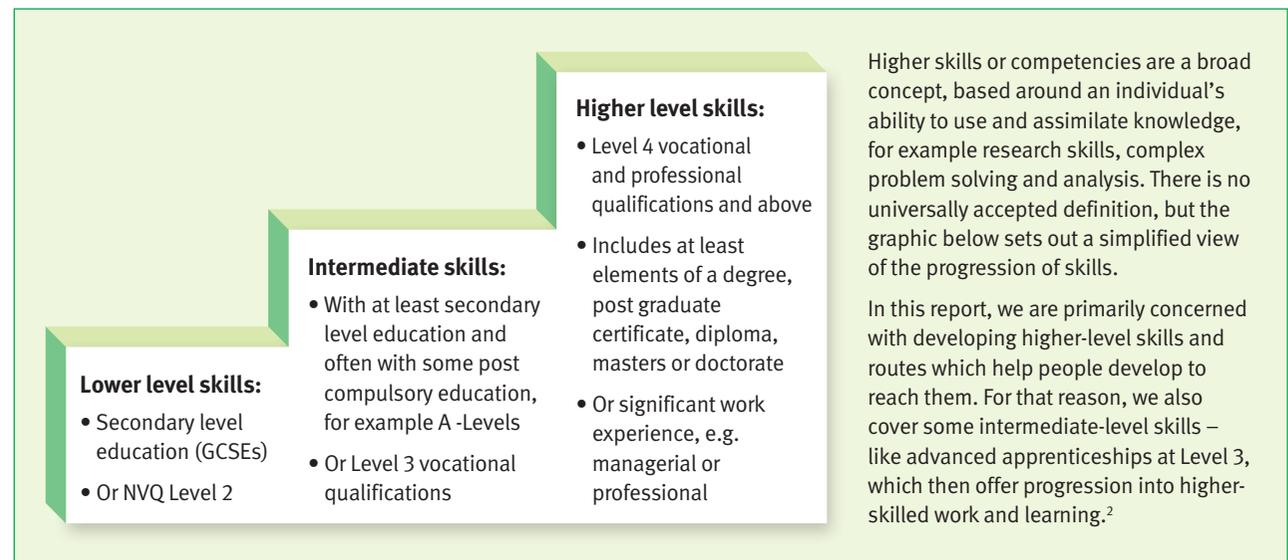
In the recent past, a return to sustained growth could be achieved by creating shocks to our economic system. 'Big bang' financial deregulation or labour market deregulation; large-scale privatisation; the discovery and exploitation of North Sea oil: all provided a shot in the arm to our economy and unlocked productive potential. Today, however, there is no obvious lever of long-term step-change available.

Instead, we have to think more strategically about getting the fundamental drivers of growth right. Capital investment, innovation, competition, enterprise and skills are all critically important. This is why the CBI has highlighted the need to refocus government spending on activities that will seed future growth – getting Britain building, improving the flow of finance to businesses and putting in place an effective industrial strategy.

...with a high-skill workforce centre stage

People are a central part of the strategy. In any debate about making Britain a great place to invest, access to skilled staff capable of carrying out high-skill processes or innovating to design new ones is an essential ingredient. A highly-skilled workforce is therefore the keystone in delivering tomorrow's growth.¹ This means raising skill levels across the board, but also increasingly tilting the balance of skills towards those sectors of competitive advantage that will be at the heart of a successful industrial strategy for the UK.

Exhibit 1: Defining higher skills





Skills have become the global currency of the 21st century. Without proper investment in skills, people languish on the margins of society, technological progress does not translate into economic growth, and countries can no longer compete in an increasingly knowledge-based global society.

Andreas Schleicher, OECD, 2012³



Businesses recognise the need to invest in skills, spending some £49bn in 2011 alone on training.⁴ CBI data also shows firms in key sectors maintaining and even increasing skills investment through the challenging economic conditions of recent years.⁵ For many businesses, the challenge is how to make that spend more effective through better provision of training.

While our changing economy makes higher skills an economic imperative, raising skill levels is also central to tackling inequality and promoting social mobility. For individuals, higher-skilled roles correlate with higher earnings and improved long-term career prospects.⁶ At a societal level, investing in human capital not only promotes long-term growth but is also the single most effective way of distributing its benefits more fairly. And investing in skills is far less costly in the longer run than meeting the bill for the poorer health, lower incomes, unemployment and social exclusion associated with lower skills.⁷ A valuable by-product of better linkages between businesses, universities and colleges to develop ‘learn-while-you-earn’ models will be increased opportunities for people from a diverse range of backgrounds to invest in their careers through skill development.

‘Learn-while-you-earn’ broadly relates to learning models that combine work and study, including apprenticeships and flexible higher education programmes, like part-time. Such courses generally give the student the opportunity to earn a wage whilst studying to obtain a qualification and costs of study may be met through a combination of employer contributions, public funding or fee loans (depending on whether it is vocational training or higher education). By combining workplace skills with the opportunity to apply knowledge, learn-while-you-earn schemes can ensure work ready graduates. **Exhibit 12** on page 17 provides examples of learn-while-you-earn-schemes involving CBI members and sets out some of the benefits for employers, individuals and providers.

The jobs of the future will increasingly need higher skills

The shape of the jobs market is changing. While some areas of lower- and intermediate-skilled work will grow – notably in fields like personal care in the face of an aging population – between now and 2020 the majority of jobs created will be high-skilled posts. This means that nearly half of all employment is set to be in managerial, professional or associate professional roles by 2020 (**Exhibit 2**).⁸

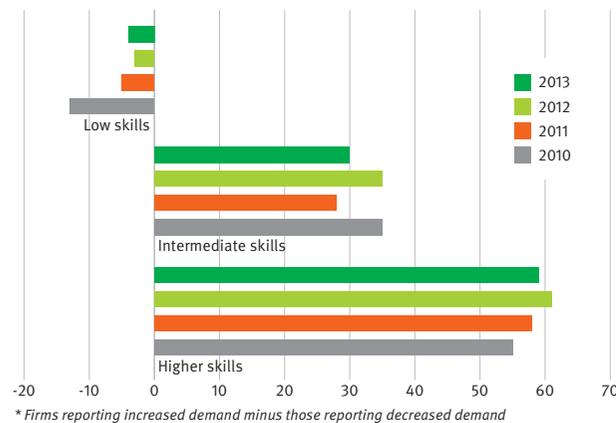
Exhibit 2: Change in occupational structure 1990-2020 (% share)

Occupation	1990	2000	2010	2015	2020	% change
Managers and Senior Officials	8	9	10	11	11	▲ 18%
Professional occupations	15	17	19	20	21	▲ 14.9%
Associate Professional and Technical	11	12	13	13	14	▲ 14%
Administrative and Secretarial	15	14	12	11	10	▼ 10.5%
Skilled Trades Occupations	16	13	12	11	10	▼ 6.5%
Personal Service Occupations	5	7	9	9	9	▲ 11.5%
Sales and Customer Service Occupations	8	8	9	8	8	▲ 0.1%
Machine and Transport Operatives	10	8	6	6	5	▼ 3.2%
Elementary Occupations	12	12	10	10	10	▲ 3.2%

Source: UKCES

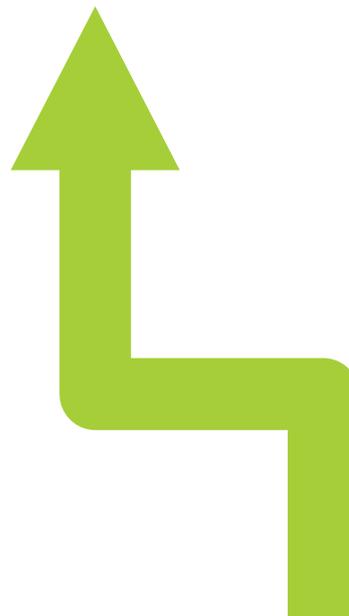
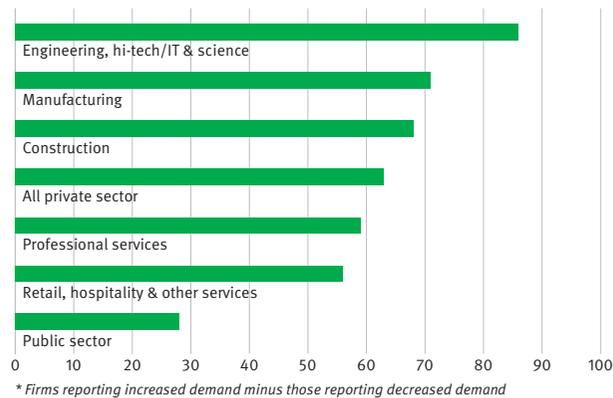
These anticipated changes in occupational structure are borne out by CBI data, which show growing demand among employers for increased levels of skills in the future, particularly in high-growth sectors. The results of the recent 2013 CBI/Pearson Education and Skills Survey point to the strength of the drive towards a higher-skill economy and the resulting changing future shape of skill needs (**Exhibit 3**).

Exhibit 3: Employer demand for different skills levels over next 3-5 years (%)*



Employer demand for more people with higher-level skills and competencies is expected to be particularly strong in the sectors that should be leading the return to sustained economic growth, namely construction (+68%), manufacturing (+71%) and engineering, hi-tech and science (+86%) (**Exhibit 4**).

Exhibit 4: Increased employer demand for higher skills over next 3-5 years, by sector (%)*



Different routes into higher skills – for both young people and experienced workers – are fundamental to meeting this challenge

The UK's struggle to provide young people with effective routes into vocational education has been a persistent preoccupation of policymakers since Prince Albert established the Royal Commission in 1851.⁹ As Alison Wolf highlighted in her 2011 review of vocational qualifications, between a quarter and a third of young people aged 16-19 are not pursuing options that offer routes to higher-level skills or the prospect of meaningful employment.¹⁰

Countries that have historically placed a greater value on vocational education, such as Germany, Austria and the Netherlands, report much lower levels of youth unemployment than the UK.¹¹ This is reflected in the take-up of vocational options in upper secondary education: in Germany, more than half choose vocational routes. In Austria and the Netherlands, the figure is even higher, at 67% and 71% respectively. But in the UK it is just 32%.¹²

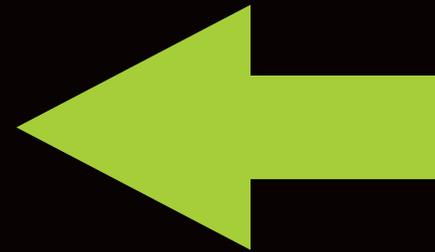
If high-skill sectors in the UK are to take advantage of growth opportunities, it's clear they must be confident about the future supply of people with the right skills, experience and competencies founded on strong links between businesses, educational institutions and students themselves. A key starting point has to be maximising the potential of new gateways to higher skills beyond academic A-levels. This could include the new Tech-Level recently announced by the government, and should certainly include boosting Advanced-Level Apprenticeships. Such steps will make sure we are opening up pathways for progression.

What is now seen as the 'default route' of an undergraduate degree is not suitable for all – young people have different talents and learn in different ways. To become informed consumers, young people need access to better work inspiration from primary school on: we should aim to inspire but also be realistic, setting out the costs and likely return on the options open to young people – including the vocational options that have long been undersold.

But we should not focus exclusively on the young. Rising retirement ages mean that businesses draw from an increasingly age-diverse pool of labour. The reality of longer and multiple careers over a lifetime means older individuals will have to re-skill and up-skill as technologies and ways of working change. This is already an issue – the recent CBI/Pearson Education and Skills Survey showed greater dissatisfaction among employers with their current workers' skills than with those of recent recruits from school or university. Without continuing investment in their skills, individuals become much more vulnerable in the labour market.¹³ Lifelong learning and continuing professional development are vital to businesses too in the fast-changing global economy – as is the capacity of individuals to undertake part-time study.

In brief, there is a community of interest in widening gateways into skilled work for the young and enabling skill development in mid-career for others. Typically, these new approaches will require students to be able to support their study and career development by remaining in work or building links with the workplace. How to achieve that is the focus of this report.

32%



Proportion of young people choosing vocational routes in the UK, compared to 67% and 71% in Austria and the Netherlands



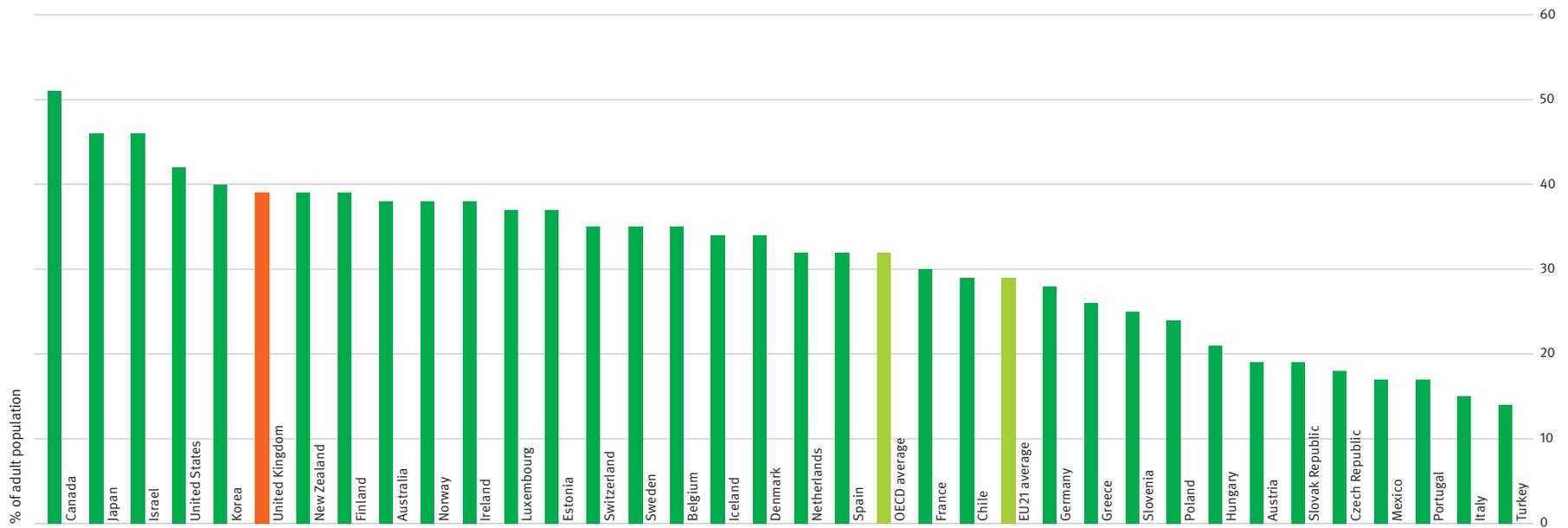
We have strengths to build on, but we need a faster pace

- ▶ The UK has a strong track record on higher skills achievement...
- ▶ ...but the world is changing around us
- ▶ Current provision is not well-matched to key sectors, with shortages already reported
- ▶ The market in learn-while-you-earn models is underdeveloped including for higher apprenticeships...
- ▶ ...and more flexible degree programmes, especially part-time ones
- ▶ Fee reform provides an opportunity for change, as potential students review options with a more critical eye

The UK has a strong track record on higher skills achievement...

As a nation, we can sometimes talk ourselves down. While demand for skills is rising, higher-level skills are already more widespread in the UK's workforce than in many of our competitors. In 2011, the UK ranked 6th in the OECD for the proportion of adults who have studied to at least tertiary level (**Exhibit 5**),¹⁴ showing a steady improvement on 7th in 2010, 9th the previous year and 12th in 2007.¹⁵ At this rate, the UK is expected to exceed ambitions for 40% participation¹⁶ at Level 4+ in 2020 by 2 percentage points.

Exhibit 5: Percentage of workforce with tertiary level qualifications in the OECD



Source: OECD 2013: Education at a glance, data refer to 2011

The challenge is that this success does not always map onto immediate and future business needs particularly well. Tertiary education is also dominated by the single-track academic route – A-levels followed by university for a full-time residential degree. That is an essential route, but we can do more. There is demand from businesses for greater involvement with universities and for technical and practical learning. But alternative pathways, based on partnerships between businesses and institutions, are relatively underdeveloped and under-used.

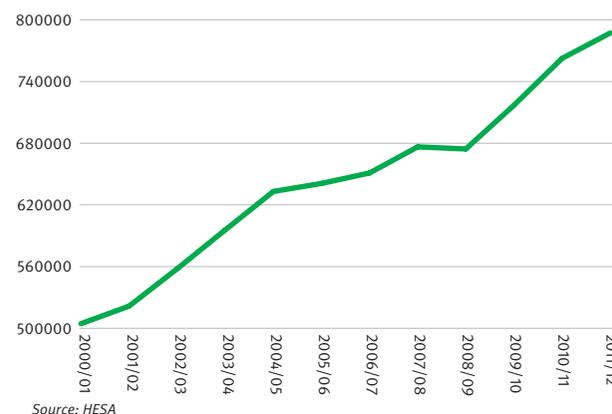
...but the world is changing around us

With emerging market economies driving expansion of the proportion of Level 4+ skills in their workforces, the UK's enviable international position is by no means guaranteed:

- India's government reportedly aims to massively expand the domestic university sector to raise tertiary education participation rates from 12% to 30% by 2025¹⁷
- Brazil has launched a federally funded programme, *Science without Borders*¹⁸, to send 100,000 Brazilian undergraduate, graduate and postdoc students to study in international host countries
- If current trends continue, the OECD predicts that China and India will account for 40% of all young people in education across G20 and OECD countries by 2020¹⁹
- The development of massive open online courses is extending the reach of higher education ever further.

Our own strong track record is underpinned by one of the most successful higher education systems in the world.²⁰ The number of student qualifiers from higher education in the UK has been steadily rising over the past decade (**Exhibit 6**).²¹ After an initial 7% drop in applications in 2012 following fee reforms in England, recent UCAS figures suggest applications for full-time undergraduate study are now holding up.²² We can therefore expect the overall supply of graduates in the workforce to remain strong. But it's more difficult to map the fit between these qualifications, vacancies in the economy and the skills that businesses really need.

Exhibit 6: Higher education qualifications obtained in the UK 2000/01 to 2011/12



Current provision is not well-matched to key sectors, with shortages already reported

Strong overall performance on higher-skills participation must not be allowed to mask the skills shortages already impacting upon key sectors of the economy, pointing to a mismatch between supply and demand. And the impact of shortages on business growth is undeniable: they mean increased workload for existing staff, difficulties meeting customer service objectives, loss of business to competitors and delays in developing new products or services.²³

UKCES figures point to around 16% of all vacancies in the economy being attributable to skills shortages, with the impact felt more acutely in certain sectors and at particular occupational levels.²⁴ And with UK economic growth forecasted to pick up in the next couple of years, the impact of shortages could be felt even more acutely.²⁵

Shortages in higher-level engineering skills are particularly well-documented. According to SEMTA, meeting the UK's forecasted demand for engineers to 2017 will require recruitment of those with graduate-level skills to increase from 12,000 to 31,000 annually, with similarly pressing demand for those able to fill key technical roles.²⁶ This has led to some firms finding that their growth comes at the cost of hiring from essential partners, as firms chase the same scarce skills.

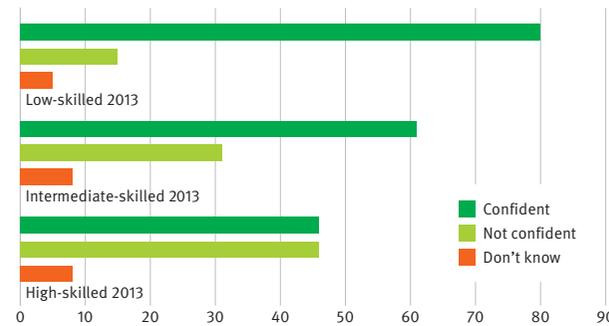


The growth in demand for our products has led to a significant number of new jobs being created at Jaguar Land Rover. However, for certain skills – particularly technical roles – we find that the overall technical skills shortage means that we have to be careful not to cause further problems by hiring from our supply chain. Although we run extensive apprenticeship programmes, we do find when hiring people later in life that there are too few applicants who decided to follow an apprenticeship route or that they do not meet the standards we require.

Jon West, Director, Employee Relations, Jaguar Land Rover

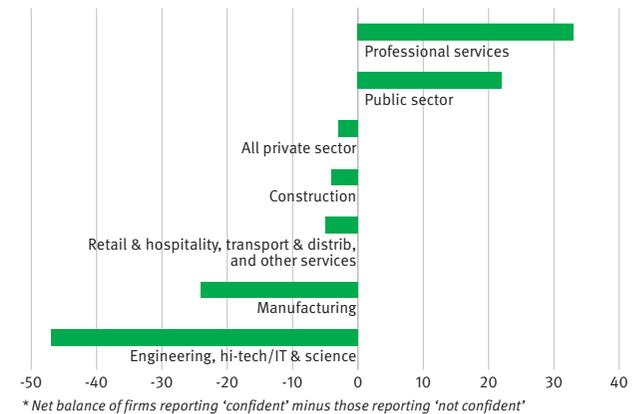
The present situation is compounded by employers' lack of confidence about meeting their future demand for more skilled employees. When it comes to filling high-skilled jobs in the future, CBI data shows almost half of businesses are not confident of finding sufficient recruits (**Exhibit 7**).

Exhibit 7: Employer confidence in accessing employees in the future (%)



While concerns differ greatly between sectors, there are worries over filling high-skilled posts in some of the sectors that will be at the heart of a successful industrial strategy for the UK (**Exhibit 8**). It's a real concern that sectors which are core to the UK's growth anticipate problems accessing the skilled staff they need in the future.

Exhibit 8: Employer confidence in accessing high-skilled employees in the future by sector (%)*



The guiding aim must be both to raise overall skill levels in the workforce and respond to the demands of growing sectors. The answer is not more qualifications in themselves but ensuring the workforce has the right mix of skills and experience, effectively deployed. Skills shortages suggest that we don't yet have this. The problem is at least in part attributable to poor matching between supply and demand, combined with too few well-marketed pathways that enable those who want or need to earn while they learn to progress to higher-level skills.

The market in learn-while-you-earn models is underdeveloped including for higher apprenticeships...

One way to address the skills mismatch is to develop more partnership-based provision, with greater levels of business involvement in colleges and universities, as well as boosting apprenticeships. While the figures show that the traditional undergraduate route remains the 'default' option, (see Exhibit 6, page 11) there are some signs that alternatives are becoming more popular – but progress is patchy and inconsistent.

Higher apprenticeships in particular are making up ground. Starts increased by 147% between 2009/10 and 2011/12 (Exhibit 9), with supportive government policies such as the Higher Apprenticeship Fund and changes to apprenticeship regulations to permit study up to Level 7, helping foster this growth.

Provisional figures suggest growth has continued in the first nine months of 2012/13, while Level 2 and Level 3 provision has declined a little this year, possibly because of new quality tests.

Even so, the challenge is clear: higher apprenticeships still make up less than 2% of apprenticeship starts overall, according to provisional 2012/13 statistics. Higher apprenticeship starts in 2011/12 – the last full year data – were over 350 times fewer than entrances to undergraduate study in that year.²⁷

...and more flexible degree programmes, especially part-time ones

Undergraduate study at a university can also be a great route to building career-relevant skills. But it takes investment to achieve better matching between course content and the skills businesses need while also supporting learning in-work as well as on-campus. One route to achieving this is through reviving the number of sandwich courses. But for most students it will mean a combination of developing courses with greater business input, and addressing the need for more sustainable part-time options.

Exhibit 9: Apprenticeships starts by level

	2009/ 10	2010/ 11	2011/ 12	2012/ 13 (prov)*	% change since 2009/10 – 2011/12
Intermediate Level (2)	190,500	301,100	329,000	217,100	73%
Advanced Level (3)	87,700	153,900	187,900	137,800	114%
Higher level (4)	1,500	2,200	3,700	5,300	147%
TOTAL	279,700	457,200	520,600	360,200	86%

Source: Skills Funding Agency, Statistical First Release: DS/SFR19

*Year to date (August to April)

The number of students taking part-time higher education courses is dropping catastrophically. A 40% downturn in enrolments and 105,000 fewer part-time students are reported by HEFCE since the 2012 reforms (Exhibit 10).²⁸ The reasons for this decline must be properly understood and tackled head-on. The flexibility provided by part-time study is especially crucial to ensuring that re-skilling and up-skilling of existing employees can fit with business requirements. For fast developing sectors such as low carbon and advanced manufacturing, which will require significant re-skilling and up-skilling, the availability of part-time study for employees can be a key enabler of growth.

40%

Drop in part-time undergraduate enrolments in 2012 compared to 2010

2%

Less than 2% of apprenticeship starts in the first 9 months of 2012/13 were at the higher level

Exhibit 10: The government's higher education reforms in England

In 2012, the government implemented a shift in the way universities and colleges in England are funded for the teaching of higher education. Moving away from block-funded HEFCE grants to universities, the majority of teaching in higher education is now met by the learner via tuition fees of up to £9,000 a year. Most students have access to fee loans to cover the cost of the increased fees upfront.

It is hoped that one of the direct results of putting students in control of university funding via fee loans will be to make the system more responsive to their needs. At the same time, universities are now required to publish more information, the Key Information Set (KIS), to help students to become 'informed customers'.

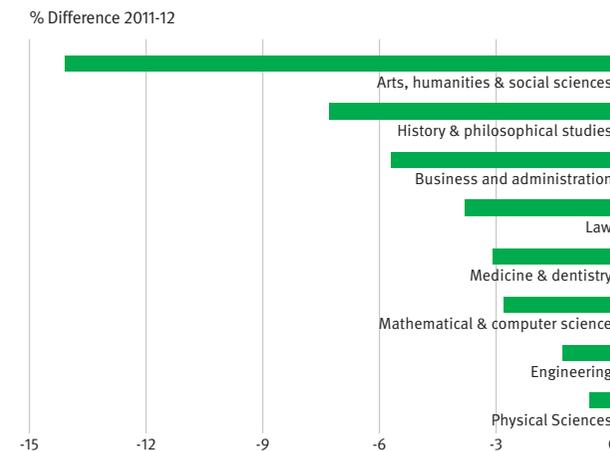
The government has also made changes to the rules on how many students a university can recruit – 'the student number controls' – in order to enhance the market in higher education, led by student choice. These include unlimited recruitment of students with grades ABB or above from next year. Institutions charging an average of £7,500 or lower are able to bid for additional student numbers from a pool created by deducting numbers across the sector – referred to as the "core and margin" exercise.

Similarly, despite the individual success of many of the Mixed Economy Group (MEG) colleges, BIS research shows little evidence of overall growth in higher education taught in further education colleges over the past decade.²⁹ Encouragingly, this could be changing. Since the implementation of new funding arrangements for higher education in 2012, allocation of additional places to colleges has allowed modest growth in provision.³⁰

Fee reform provides an opportunity for change, as potential students review options with a more critical eye

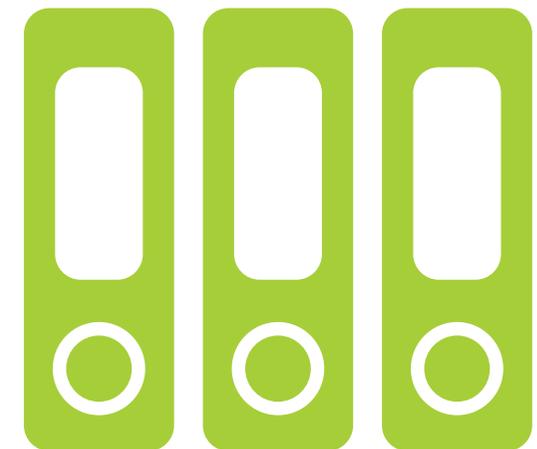
There are signs that the higher education reforms may be altering young people's decision-making behaviour. While comprehensive data about students' preferences is not available, UCAS figures on total university applications by subject represent a useful guide. Applications fell overall in 2011-12, but appear broadly to have held up better in subjects that can have clearer employment outcomes and greater future earnings potential upon graduation (**Exhibit 11**).

Exhibit 11: Drop in total UCAS applications by subject group³¹



Source: OECD 2012: Education at a glance, data refer to 2010

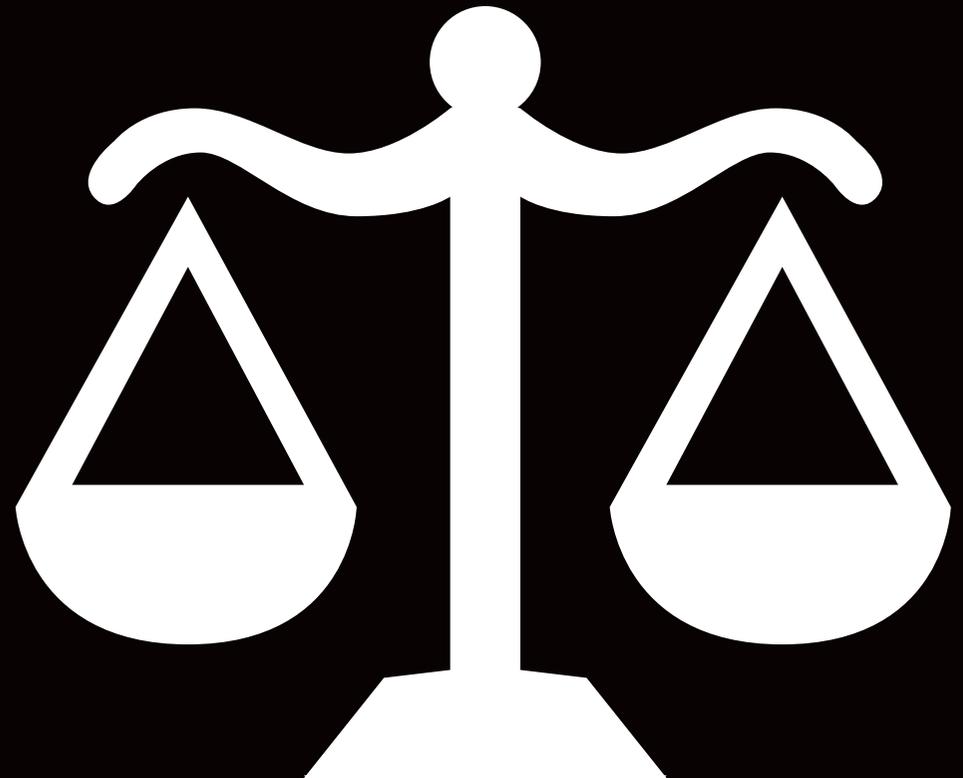
While demand for arts, humanities and social sciences courses fell by 14%, physical sciences held up the best of all subject groups and demand for professional and business degrees remained strong. Latest cycle data released in July suggest this trend is set to continue.³² For humanities, it is likely that the highest quality courses will fare better as students increasingly evaluate institutions on outcome measures. The data helps paint the picture of student decisions at 18 becoming more strategic and careers-focused, and this is something businesses have noted. Recent CBI surveys have shown an increasing interest amongst businesses in working more closely with universities and colleges to deliver more flexible, learn-while-you-earn options, ranging from sandwich courses and better part-time options through to higher apprenticeships and course co-design.



147%



Increase in higher apprenticeship starts in 2009/10 - 2011/12 – but from a very low base



Barriers to the success of learn-while-you-earn options must be addressed

- ▶ There are good examples of practice...
- ▶ ...but there are also significant barriers to developing the market, which must be addressed
- ▶ Finance is a core concern for students
- ▶ Information asymmetry blights the system
- ▶ Incentives and goals must be aligned to the growth of the market
- ▶ We should build a focus on the end goal of sustained employment

The previous two chapters set out the need to develop higher skills across the UK workforce and the current state of play. More flexible, business-relevant provision in companies, colleges and universities has the potential to address the challenges. In this chapter, we set out some good examples of current practice to highlight the breadth of possibilities. But we also ask why there is not more momentum behind use of these routes, given that businesses and higher education providers report increasing demand for and supply of alternative routes.³³ We must address some major barriers, with action by the government, business and educational institutions, if we are to make real headway in expanding take up of learn-while-you-earn options.

There are good examples of practice...

While our understanding of overall market provision is inhibited by a lack of data, CBI members tell of a marked increase in innovative new partnerships between businesses and providers, particularly since the higher education fee reforms were enacted.³⁴ Exhibits 12 and 13 give a flavour of some of the partnerships that have been forged by CBI members.

The north east has a highly skilled and motivated workforce but one of the main reasons we have invested so much time and energy into our higher apprenticeship scheme is because we found that even with graduates, we had to train them in the way that Accenture carries out its business. It seemed a logical step to have more say in the way that our staff are trained and developed as early as possible.

Bob Paton, Accenture



Exhibit 12: Examples of innovative delivery partnerships

Model	Summary	Examples
Business-designed courses	Universities, colleges and businesses work together to design programmes	<p>HP have entered into strategic partnerships with universities including Staffordshire University, Buckinghamshire New University, Coventry University, the University of the West of England and De Montfort University. These universities have integrated HP Institute into their curriculum and the universities work with HP to provide mentoring and guest lectures, internships for students and other collaborative ventures. HP will continue to seek new University partnerships in the future.</p> <p>Based at the University of Warwick, WMG collaborates with global companies including AstraZeneca, IBM, Jaguar Land Rover, Rolls-Royce, Tata Motors European Technical Centre (TMETC) and TVS Motor Company to develop collaborative research and taught programmes.</p> <p>The New College Nottingham Academy of Construction is the largest provider of construction training in the east midlands. Industry representatives, including the Nottingham Construction Forum, are proactively involved in the design of provision and focus of the college's construction portfolio to ensure alignment with local industry need.</p>
School leaver programmes	Employers hire school leavers at 18 and train them on a tailored degree course. School leavers are employees from day one and spend part of their time in the workplace	<p>KPMG has partnered with Durham, Exeter and Birmingham Universities to offer a six-year training contract that includes a relevant university honours degree and a professional accountancy qualification. From the outset of the programme and for its duration students receive an annual salary and have all their tuition fees and university accommodation costs paid by KPMG.</p> <p>The Rolls-Royce A-Level entry programme is designed to develop the next generation of manufacturing specialists and leads to a Master's degree at the University of Warwick. Alongside part-time university study, students undertake a series of mentored placements in areas such as forecasting and production planning.</p>
Advanced and Higher apprenticeships	Work-based training programmes, designed around the needs of employers that lead to Level 3 and Level 4+ vocational qualifications. Time is split between theoretical and practical, work-based learning	<p>PWC led a group of 40 employers in the professional services sector to design the content of the new Professional Services Higher Apprenticeship (PSHA), with pathways in audit, tax and consulting at level 4. A follow-on Higher Apprenticeship at level 7 became available earlier this year.</p> <p>British Airways have partnered with QA to develop a two and a half year Higher Apprenticeship in project management. Leading to a Level 4 Diploma, the apprenticeship combines formal training with practical work experience and mentoring.</p> <p>Co-operative models are also being developed by firms – Toyota in Derbyshire have preserved and developed capacity at their Apprentice Development Centre by working in partnership with providers to extend provision to suppliers and local businesses.</p>
Work-based learning programmes	Jointly designed, tailored university programmes, delivered either part-time or full-time for full-time employees, incorporating day-to-day workplace practices	<p>McDonalds has partnered with Manchester Metropolitan University to develop and accredit the retailer's Foundation Degree programme for restaurant managers.</p> <p>Anglia Ruskin University partners with many organisations, which have included Ridgeons, the RAF, Harrods and Willmott Dixon to provide work-based learning programmes. For example, working with East Anglia-based builders' merchant Ridgeons to develop a fast-track Foundation Degree which enables staff to build key management skills. Students study and work full time throughout the duration of the course.</p> <p>Hull College is among a number of further education colleges that provide tailored work-based learning programmes for employers. It has worked with employers including P&O, BAE, TNT and BP to deliver bespoke training programmes at Levels 3 and 4.</p>



Exhibit 13: Examples of learn-while-you-earn study programmes

North Midland Construction

North Midland Construction has engaged in partnerships with several local universities including Nottingham Trent, the University of Nottingham, the University of Birmingham and the University of Leeds to design better paths into work for potential employees. These see students coming into the business for periods of up to 12 months and then returning to university on a bursary from the firm. Feedback is extremely positive, with students getting an insight into the practical application of their learning, and the company being able to shape the understanding students have of the job while they are learning the theory, as opposed to afterwards.

Procter & Gamble Finance & Accounting Undergraduate Programme

“The Procter & Gamble Apprenticeship Programme is a major recruitment tool that enables us to tap into the talent supply of north east England, build the future of the Accounting Centre and the careers of the individuals”

Nikki Young, UK GBS HR Leader, P&G

In the past, P&G had largely hired graduates but found there was not always a good fit of skills and aspirations. In 2005 the firm looked at a programme offering school leavers a stretching and rewarding alternative to full-time study whereby A-Level school leavers could complete their Association of Accounting Technicians (AAT) qualification and gain practical work experience at the same time.

The Apprenticeship Programme is a partnership between P&G, the AAT and, since 2009, Northumbria University. P&G currently has 46 apprentices within the Accounting Centre who are either participating in the programme or are its graduates.

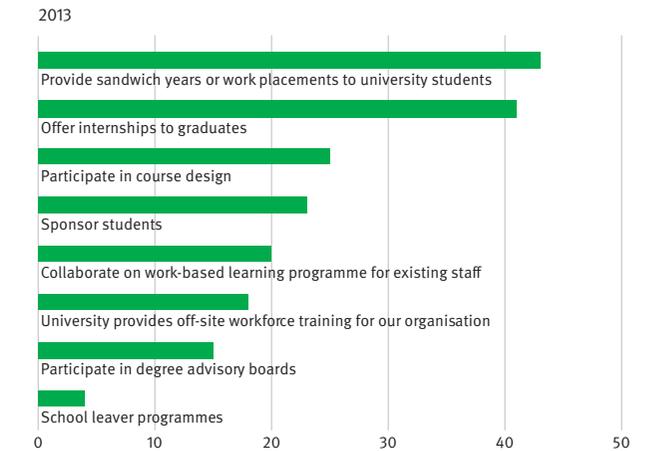
The benefits to the students are not just the obvious financial ones. The programme also addresses students’ increasing concerns about gaining employment once they have completed university and provides extensive work experience, a valuable commodity in the current marketplace.

Michael Walby, KPMG

For universities, such partnerships can lead to additional sources of funding, help in delivering the ‘access agenda’ and improve the employment outcomes of courses by linking with business recruitment practices. They can also mean a more rewarding career path for students – not just in financial terms but also by offering a clearer route to career progression.

These innovative models fit within a landscape of higher-skills provision that is growing increasingly complex but, as **Exhibit 14** shows, they are not yet widespread among businesses, with only 4% reporting involvement in school leaver programmes, only one in five (20%) involved in work-based learning programmes and a quarter (25%) participating in course design to any extent.

Exhibit 14: Employers involved in collaborative partnerships 2013 (%)



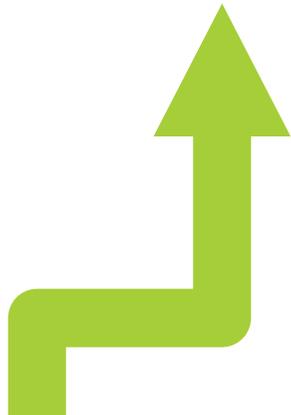
Source: CBI/Pearson Education and Skills Survey 2013

CBI data shows that more than three quarters of firms (77%) have links with higher education providers, but there is a strong correlation between the size of a business and its likelihood of entering into partnerships: for firms with fewer than 250 employees, the proportion drops to less than a quarter (24%).³⁵ Larger industrial firms have a strong track record, particularly for research, sandwich years and internships. Small and medium-sized businesses report particular difficulties in navigating the administrative aspects of a partnership, such as quality assurance, in addition to low levels of awareness about options and, often, a lack of confidence about achieving desired outcomes from investment.³⁶

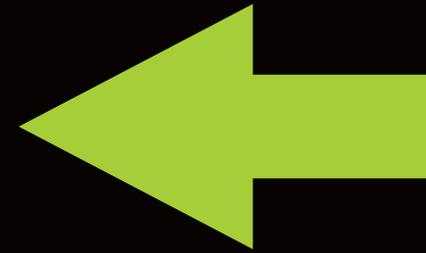
Medium-sized businesses, which are likely to be engines of growth in the years ahead, deserve particular attention. Support in brokering partnerships with higher education providers, whether operated by providers or independently, can help curb administrative burdens. In technical education, Apprenticeship Training Agencies (ATAs) and Group Training Associations (GTAs) are probably the most widespread forms, and many universities also operate employer-focused business units. CBI data reflects very positive feedback about brokerages where used, but too many firms (42%) are simply unaware of the role they can play.³⁷

...but there are also significant barriers to developing the market, which must be addressed

Skills shortages and low levels of confidence among employers about their future skill demands being met show the market in higher-skills development is not yet delivering the outcomes needed. And increased 'shopping around' by students suggests growing readiness to take up innovative, employment-led higher-skills provision on the other side of the market. Given this picture of supply and demand, the CBI set out to identify barriers slowing the growth of these models of higher-skills delivery.



77%



of businesses have links with universities



Demand and supply side barriers in the market place

Our analysis suggests there are a number of factors that need to be addressed for the most to be made of partnerships between providers and business, encompassing finance, information, incentives and building a focus on the end goal of sustained employment.



Information asymmetry



Perceived risk /
confidence concerns



Poor marketing
of finance options



Under development
and utilisation of
business-provider
customer relationships



System incentives
and goals

Finance is a core concern for students

Effective student financing is essential to drive inclusion and ensure that course fees do not act as a barrier to individuals seeking to achieve higher-level skills.

Support for those studying part time must be addressed...

2012 saw a 40% drop in applicants to study higher education part-time.³⁸ It is unavoidable fact that this drop coincided with the student fee reforms. Without anticipating the findings of the UUK Review of Part-time and Mature HE,³⁹ there are a number of factors in the mix impacting on part-time study, including the extension of fee loans to part-time HE students, eligibility for student support and loss of the part-time premium grant to universities.

In addition, since 2008, the government has not provided institutions with funding for students who already hold equivalent or lower qualifications (ELQ). Students also remain exempt from student finance options according to ELQ rules – impacting those who need to re-skill in particular. In an economy that will require significant re-skilling in the years ahead to meet skill needs and further individuals' employment prospects, we must do all we can to ensure adequate student financial support.

There are some important exemptions⁴⁰ from ELQ already, but there is a strong case for working to identify further exemptions that could help businesses in key sectors raise the skill levels of their workforces. A good starting point would be the sectors identified as driving the UK's industrial strategy, but we should also examine horizontal measures such as leadership and management skills, which are particularly important for medium-sized businesses. MBAs, for example, are not currently exempt from ELQ despite their role in business development.

The teaching grant to universities used to include a part-time premium, a fund that went directly to universities to cover the higher associated costs of part-time provision. While the current spending settlement will not allow for permanent restoration, it is right to look at alternative routes to providing additional support to these courses. There are existing widening participation and retention funds that could be used to support the recovery of the

part-time sector. Part-time HE provides a fantastic opportunity for working people to re-skill and upskill.

It's clear that part-time students are net contributors, paying tax and national insurance alongside study and bringing dividends to the workplace from the first year of study.⁴¹ With a number of policy levers available to reverse the drop-off in part-time applicants to higher education, the CBI stands ready to work with the government and universities to shape solutions. We will be undertaking further work on financing options to support more firms to up-skill and re-skill their workforces, particularly focusing on how to address the issue of skills provision for key industrial strategy sectors.

...and marketing of finance options for students needs improvement

The CBI welcomed the extension of fee loans to part-time students as a departure from the raw deal of exclusion from student finance support. However, evidence suggests that the roll-out was seriously hampered by poor communication of the changes and lack of support for prospective students about the practicalities of applying for loans. The government has been working with stakeholders to develop a communications plan so future prospective part-time students have the information they need to understand and make informed decisions about their finance options. This must be kept under review with key stakeholders until numbers recover and should include information for businesses on how they can support employees.

From August 2013, loans are also being introduced for those aged 24 and over studying at Level 3 and above (24+ Advanced Learning Loans). The government must draw on the experience of the loan transition for part-time study in developing the communications plan around the roll-out of 24+ Advanced Learning Loans.

ACTIONS

- ▶ The government, business and the higher education sector should identify further exemptions of strategically important subjects from the equivalent and lower qualifications (ELQ) policy and consider arrangements designed to help mitigate the removal of the part-time premium
- ▶ A clear communications strategy should be put in place to ensure that both students and employers understand finance options for both part-time higher education study and the new Advanced Learning Loans
- ▶ The CBI will undertake further work on how better to tilt the field towards meeting skill needs in key sectors for growth, including using finance options.



Information asymmetry blights the system

The market in higher-skills provision is becoming increasingly complex as a result of fee reforms, the changing jobs market and growing numbers of innovative collaborations between businesses and providers. But students and businesses often lack information about the options open to them for meeting higher-skill needs, and their relative benefits.

Improve access and visibility to learners of all ages...

If students are to make informed choices about alternative routes, they need to be sure about the costs, finance options and likely returns on options available. When it comes to information and advice, timing is everything – particularly for young people as they move through the education system. Evidence suggests that mature learners are more likely to be risk-averse when it comes to taking out fee loans, so it's even more important that financing options are clearly communicated to them.

Learners need access to the right information and at the right intervals to be able to make informed decisions. But there are questions about whether our careers advice system is up to the task. And we need to tackle the perception that A-levels followed by the traditional residential university degree is the only route to a good career. Careers advice in England has never been as good as it needs to be, with vocational options long undersold as an option for young people. There is thus far little evidence that this is changing on the back of the new statutory duty on schools to provide careers guidance. We need a comprehensive new approach to advice and guidance, reaching young people as early as possible and based on an inspirational strategy that engages businesses with young people. Rather than handing out information, careers guidance has to be about helping young people navigate all the information they already have at their fingertips more effectively.

Research shows that students' employment prospects positively correlate with the number of interactions they have with the workplace throughout their schooling.⁴² While firms make considerable efforts to promote availability of their own learn-while-you-earn options to prospective students, we lack an overarching framework which signposts these options. A single portal with information on the full range of programmes available

– a vocational UCAS system with similar standing – would help improve visibility of these routes to young people and improve parity of esteem with traditional routes.

...centrally collect and analyse data on numbers studying alternative routes...

The lack of existing data on numbers of people studying via alternative routes contributes to a weak understanding of how changes to higher education are contributing to innovative provision. Rather than waiting for data, many businesses and universities are responding to external pressures and forging ahead with innovative partnerships now – some of which are highlighted above. But to take the next step and truly develop the market to its potential, government, business and the higher education sector must work together to produce reliable data to support marketing of alternative routes and improve responses to market demand.

...and establish national and local structures to support the development of a critical mass of activity

There are many great examples of meaningful and strategic partnerships between businesses and universities, but not all employers or universities understand the full possibilities of these relationships. The creation of a national focal point providing resources to help bring together potential partners could contribute to the development of a critical mass of activity.

In the field of research and innovation, the Technology Strategy Board plays a vital role in supporting business-led innovation, acting as a source of expertise, funding and advice that brings partners together. A similar model applied to the market in higher-skills provision could help provide the national focal point.

At a local level, LEPS, businesses and providers should work together to map and respond to local demand for higher skills.

While considerable variation in capacity and capability still exists, LEPS are ideally placed to map local skills needs and translate the results into longer-term skills strategies supporting economic growth in their area, particularly highlighting the 'skills leadership' role that universities and colleges play.⁴³

ACTIONS

- ▶ Deliver careers inspiration in schools and colleges – underpinned by a support network for the new statutory duty on schools, to ensure vocational routes get highlighted
- ▶ Build a vocational UCAS-style system, with similar prominence
- ▶ Centrally collect data on take up of alternative routes and analyse trends
- ▶ Create a national focal point designed to support progress in building local clusters for vocational higher-skills development, including working with LEPS.



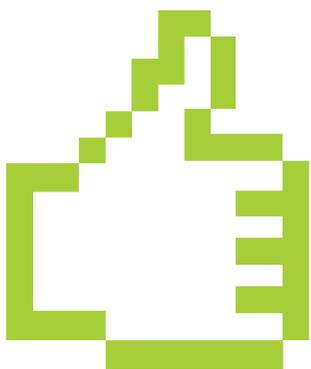
Incentives and goals must be aligned to the growth of the market

Adjusting system incentives to provide greater flexibility to respond to the needs of students and businesses is a prime way to improve market outcomes without requiring additional expenditure. Universities, colleges and businesses we spoke to all felt that the structure of the education system, and of businesses too, often mitigates against enhanced co-operation.

Remove HE places that are fully-funded by employers from the student numbers quota

Each year HEFCE sets a student number control allocation for each institution it funds, with the purpose of managing public spending on higher education. Government relaxations of the controls have not yet gone far enough and businesses report that provision of HE in Further Education Colleges has in particular been curtailed by tight student number allocations for colleges.

Where employers pay for the full cost of tuition fees, places represent no burden on the public purse and should be removed from the controls system. Such a move would allow provision relevant to business to expand, freeing up more publically funded places and incentivising colleges and universities to offer more places to employers. Further study is also required on the effect of fees on SMEs propensity to fund courses – anecdotal evidence from universities suggests there has also been a drop in this area.



Universities and colleges need to step up to longer-term partnership arrangements...

Business-university customer relationships are often underdeveloped, with both sides frequently citing difficulty in brokering relationships with each other. Partnerships often happen by chance – through existing connections or the will of strong leadership.⁴⁴ Improving understanding of the benefits of partnerships should help increase their numbers.

A key piece of feedback from businesses was how positively they felt many universities reacted to the possibility of collaboration on research, whereas curriculum collaboration proposals did not get as warm a welcome. The conclusion that many drew was that more institutions needed to expand their commercial efforts from research partnerships into the field of curriculum. This requires universities and colleges to ensure their commercial teams have the leverage to deliver through the objectives they give staff and the priority given to the activity in the business plan.

There is also a role for business in making this work – through greater collaboration at local level to build groups with a scale that makes it more cost-effective for universities and colleges to get involved.

Businesses and universities suggested that some of the most innovative delivery partnerships arise where universities have the sustainable infrastructure to broker relationships with local businesses. There are already successful examples of universities, such as Anglia Ruskin and Middlesex, that have developed sustainable business units specifically to liaise with employers and promote work-based learning provision.

...including better articulation of needs from a more expert team on the business side

Responsibility for the mismatch between the options that young people choose to study and the skills that employers need cannot be laid solely at the door of the education and careers systems. Businesses must get better at articulating skills needs. Businesses should invest in the in-house expertise that can effectively articulate business demand for skills – taking control as they would in other areas of the supply chain – and commit time to working with suppliers at a senior level. A particular challenge identified was in HR skills in defining the skills needed, not only in competency terms but also around later career pathways to senior level.

An important piece of feedback from the roundtables we held with business leaders for this report was that many felt that this was not currently the case. Committing key staff to articulating skills needs – both to internal commissioners of provision, such as HR teams, and providers themselves is vital. One Vice-Chancellor noted to our team, for instance, that they often had to check feedback from curriculum groups with the Chief Executive to make sure they were getting the right advice. Businesses need to ensure their teams are set up to give clear steers to providers.

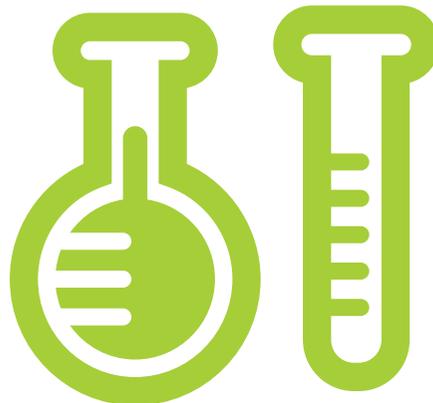
Universities should be allowed greater freedom to design short courses for business

Incentives also need to be reworked to encourage the provision of shorter courses that are responsive to business needs. Universities currently take only 1.2% of the £49bn that business spends on workforce training each year, representing significant potential for market expansion.

With greater flexibility in the types of courses that universities are able to provide, we could see them take a greater slice of overall business spend on training. For example, two-year compressed degrees can be an attractive option for students looking to obtain qualifications quickly and for businesses looking to fund individuals to respond to medium-term skills needs. But such provision can be less attractive to higher education institutions that are only able to set fees up to a maximum of £9,000 a year. With potential fee income capped at £18,000 for a two-year course, there is an incentive for universities to offer only standard three-year courses when a more flexible approach might otherwise work for all parties. The government should consider reforms to student finance arrangements to better incentivise the provision of shorter courses in response to immediate needs.

ACTIONS

- ▶ Remove HE places that are fully-funded by employers from the student numbers quota
- ▶ Consider reforming student finance arrangements to better incentivise the provision of shorter courses that can respond to employer need more flexibly
- ▶ Businesses need to look at their skills procurement policy – are HR teams equipped with the understanding to specify the skills the business really needs?
- ▶ Universities and colleges need to develop business-outreach into a core function that has influence over curriculum design.



We should build a focus on the end goal of sustained employment

Raising the bar on higher-skills provision means developing individuals with skills for a purpose. The end goal must be preparing people for sustained employment and rewarding careers in areas where there is real business demand. Part of the challenge here is to help individuals make the right choices about the routes they take, but it is also about ensuring that the provision itself meets business needs.

Implement new KIS measures to allow young people to identify courses that have been designed in collaboration with industry and which courses offer work placements

As students become more career-focused in the choices they make about study after 18, there is great potential for business involvement in course design to be a real differentiator. Our research has identified many examples of high-quality curricula designed in collaboration with industry,⁴⁵ but information is not always readily available to students about the role that business has played in designing and developing courses.

A straightforward improvement could be to add this information to the comprehensive existing source of information about university courses, the Key Information Set (KIS). Making industry collaboration and work placements searchable options on the KIS would enable students to easily pinpoint courses with business involvement, helping them to choose routes that address clear business needs and focus on the end goal of sustained employment after study.

Reforming the way that skills funding is channelled would have a big impact on the outcomes from the system, helping make it genuinely demand-led

For too long, our skills system has encouraged provision based around what government is prepared to fund, rather than what businesses need. The system can also be complicated to navigate: higher apprenticeships, for example, incorporate elements of both Skills Funding Agency and HEFCE funding, in addition to the commitment of employers.

The ramifications of this on business growth are clear, where growing firms are struggling to recruit highly-skilled staff without hollowing out their supply chains. In the area of apprenticeships, a tax credit or similar approach of aiming funding where it will have an immediate productivity and employment pay-off would help keep training relevant to business needs and reduce bureaucratic inefficiencies. This has the potential to deliver better outcomes within the current skills budget, but any changes have to be piloted and the transition carefully managed, particularly to ensure the new system works for businesses of all sizes. In particular, good current provision might benefit from “grandfathering” protection during the transition.

Abolished along with the teaching grant in 2011/12, the HEFCE employer engagement co-funding programme was an important source of seed funding which helped universities to establish sustainable infrastructure needed to reach out to employers. Rather than establish a new funding stream, the government should consider ways that current funding pots could be better utilised, such as looking at whether UKCES Employer Ownership of Skills (EOS) funding could be specifically targeted at higher-level skills provision.

Channelling funding through business through schemes like EOS has several advantages. By imposing a demand-led model, it ties provision to industry needs without government intervention and ensures quality standards because employers will not invest in training that is not fit for purpose. It also encourages businesses to show leadership in the skills agenda, which must be at the heart of an expanded learn-while-you-earn sector.

ACTIONS

- ▶ Highlight industry collaboration through changes to the Key Information Set
- ▶ Route apprenticeship funding directly through employers and consider the merits of an apprenticeships tax credit run through PAYE
- ▶ Consider how current funding mechanisms, such as the UKCES Employer Ownership Pilots, could be better utilised to help broker relationships between universities and local businesses on higher – as well as intermediate-skills provision in lieu of the previous HEFCE fund.

References

- 1 E.g. DfE, BIS, *Rigour and Responsiveness in Skills*, April 2013
- 2 For further detail about qualification framework levels please see <http://ofqual.gov.uk/help-and-advice/comparing-qualifications/>
- 3 OECD, *Better Skills, Better Jobs, Better Lives, A Strategic Approach to Skills Policies*, 2012
- 4 Including staff costs *UKCES, Employment and Skills Survey 2012*
- 5 CBI/Pearson, *Education and Skills Survey 2013*
- 6 UKCES, *The 2010 Report Ambition 2020: World Class Skills and Jobs for the UK Key Findings and Implications for Action*
- 7 OECD skills strategy, Feb 2012
- 8 UKCES, *Working Futures 2010-2020 : Main Report*, August 2012
- 9 <http://www.royalcommission1851.org.uk/>
- 10 Wolf, *Review of vocational education – The Wolf Report*, March 2011
- 11 In 2012, UK unemployment averaged 21 per cent among people aged 16 to 24. In Germany, the figure was 8.1 per cent; in Austria, 8.7 per cent; and in the Netherlands, 9.5 per cent.
- 12 Eurostat. Figures are for 2010
- 13 UKCES, *The role of career adaptability in skills supply: Evidence report*, August 2011
- 14 ‘Tertiary education’ is used by the OECD to describe and study trends in post-secondary education, including further and higher education
- 15 OECD, *Education at a Glance 2013, 2011 and 2009*.
- 16 UKCES, *The 2010 Report Ambition 2020: World Class Skills and Jobs for the UK Key Findings and Implications for Action*
- 17 <http://www.bbc.co.uk/news/business-12597815>
- 18 <http://sciencewithoutborders.international.ac.uk/>
- 19 OECD, *Education Trends in Focus*, May 2012
- 20 <http://www.timeshighereducation.co.uk/world-university-rankings/>
- 21 HESA, <http://www.hesa.ac.uk/content/view/1897/239/>
- 22 UCAS, *Demand for full-time undergraduate higher education (2013 cycle, March deadline)*, July 2013
- 23 Responding to the UKCES Employment and Skills Survey 2012, firms experiencing skills shortages reported increased workload on other staff (85%), difficulties meeting customer services objectives (47%), losing business or orders to competitors (44%) and delay developing new products or services (45%) as among the impacts of skill shortages.
- 24 UKCES, *Working futures: 2010 – 2020*, August 2012 – significant shortages are reported in associate professional, skilled trades, personal service and professional occupations.
- 25 The latest (May 2013) CBI economic forecast predicts growth of 2% in 2014: <http://www.cbi.org.uk/business-issues/economy/economic-forecast/>
- 26 Cited in: *Meeting the challenge: Demand and supply of engineers in the UK*, Institute of Mechanical Engineers 2011
- 27 According to HESA, 1,344,810 students entered into undergraduate study in 2011/12. HESA SFR 183, *Higher education student enrolments and qualifications obtained at higher education institutions in the UK 2011/12*, January 2013
- 28 HEFCE, *Higher Education in England: Impact of the 2012 Reforms*, March 2013
- 29 BIS RESEARCH PAPER NUMBER 69, *Understanding Higher Education in Further Education Colleges*, JUNE 2012
- 30 <http://www.hefce.ac.uk/news/newsarchive/2012/name,69551,en.html>
- 31 UCAS, *2012 Applicant Figures – January*, 30 January 2013
- 32 UCAS, *Demand for full-time undergraduate higher education (2013 cycle, March deadline)*, July 2013
- 33 Meetings with CBI members including Employment and Skills Board and CEO task and finish group
- 34 Ibid.
- 35 CBI/Pearson Education and Skills Survey 2013
- 36 Ibid.
- 37 Ibid.
- 38 HEFCE, *Higher Education in England: Impact of the 2012 Reforms*, March 2013
- 39 Professor Sir Eric Thomas is currently leading a review of part-time and mature higher education
- 40 There are exemptions for students with disabilities, who are in receipt of the Disabled Student’s Allowance (DSA), and students on foundation degrees, subjects associated with medicine, strategically important subjects and a course of initial or in-service teacher training
- 41 HECSU, *Futuretrack: Part-time higher education students: The impact of part-time learning two years after graduation*, February 2013
- 42 Macdonald, S et al, (2007) *Informal mentoring and young adult employment*, *Social Science Research*, 36: 1328 –47; Yates, S et al (2010) *Early Occupational Aspirations and Fractured Transitions*; *Journal of Social Policy* 40: 1-22
- 43 See CBI: *The UK’s Growth Landscape*, 2012
- 44 CBI interviews with members
- 45 See, for example Exhibit 12

For further information, contact:

Holly Hardisty
Senior Policy Adviser, CBI
Centre Point, 103 New Oxford Street
London WC1A 1DU
T: +44 (0)20 7395 8261
E: holly.hardisty@cbi.org.uk



July 2013

© Copyright CBI 2013

The content may not be copied,
distributed, reported or dealt
with in whole or in part without
prior consent of the CBI.

CBI
Our mission is to promote the conditions in which
businesses of all sizes and sectors in the UK can
compete and prosper for the benefit of all.

To achieve this, we campaign in the UK, the EU and
internationally for a competitive business landscape.

www.cbi.org.uk