

GATEWAY TO GROWTH

CBI/PEARSON EDUCATION AND SKILLS SURVEY 2014



SUPPORTED BY

PEARSON

PEARSON

About the sponsor

Pearson aspires to be the world's leading learning company. It offers many different forms of learning, delivered in a personal style, in over 70 countries around the world. In the UK, the company has an educational heritage rooted in names like Longman, Heinemann, Prentice Hall, BTEC and the exam awarding body Edexcel.

Every part of the Pearson family is connected to learning and all of them demonstrate our commitment to the very highest standards of learning around the world. In the UK and many other countries, Pearson has built a reputation for improving learning through innovation in education. We are committed to continuing that process for years to come.

'Always learning' is not just what we believe, it's what we do. Learn more at www.pearson.com/uk

For Pearson, contact:
Martin O'Donovan
Director
Strategic Communications
Pearson UK
One90 High Holborn
London
WC1V 7BH
United Kingdom

D: +44 (0)20 7190 5372
E: martin.odonovan@pearson.com
W: www.pearson.com

CONTENTS

<i>Foreword by Katja Hall, CBI</i>	4
<i>Foreword by Mark Anderson, Pearson</i>	5
<i>Executive summary</i>	6
Chapters	
<i>1 The education and skills landscape in 2014</i>	10
<i>2 The seventh education and skills survey</i>	16
<i>3 The recovery faces a mounting risk of skill shortages</i>	18
<i>4 STEM skills in short supply</i>	24
<i>5 Businesses are stepping up skills investment</i>	32
<i>6 Shaping a fully effective apprenticeship system</i>	40
<i>7 Raising the performance of our schools</i>	44
<i>8 Businesses recognise the need to support schools</i>	56
<i>9 Careers advice: not yet fit for purpose</i>	62
<i>10 Developing the right skills in graduates</i>	66
<i>11 Businesses and universities: partnering for growth</i>	72
References	75

Katja Hall

FOREWORD



Employers know that there is no more important issue facing our economy than getting the education and skills system right – it is crucial to cementing recent improvements in growth sustainably over the longer term. It's essential we build the right skills base if we're to support a rebalancing towards those high-value, high-skill activities that will underpin our role in the global marketplace.

The CBI's *First Steps* report set out the business priorities for education. Our focus must be on striving to develop rigorous, rounded and grounded young people that are better prepared to succeed and better able to help businesses thrive. The Education and Skills survey year on year reflects this analysis: employers rate attitudes and aptitudes in school and college leavers as their top priority. We've started to see progress but there's no doubt we're only a short way along this path to successful reform.

The 2014 edition shows that business is clear that we must keep up the push for progress. Reform of the education system needs to clearly set out what we want our schools to deliver – young people with not only knowledge and skills but also with the characteristics and behaviours that set them up for success in life and work – and effectively hold schools to account against this. We've got to make sure that all young people receive an education that will enable them to fulfil their potential – in every school across the UK, whatever the area and whoever is in charge.

This year's survey also shows us that many businesses remain concerned about the challenges they have with filling the roles of the future that will require more high-skilled employees. Beyond schools, a more responsive and demand-led system of skills development is needed to overcome this. The increased take up of advanced and higher apprenticeships and commitment to funding training at higher levels is a promising development, but it's

also vital that this doesn't result in a continued drop-off in numbers undertaking apprenticeships at an intermediate level.

Employers want to play a bigger part too. There have been encouraging steps taken to move towards the employer-driven skills system we need, but increased business engagement in schools can add even more value to the school environment – from engagement within careers guidance and professionals volunteering as governors, to sponsoring academies and supporting curriculum development related to their industry. Business is already doing a lot to support young people in this way – but there is real potential to scale this up for the benefit of all. A local system of brokerage to support these links could be of significant value.

It's obvious that it will take time before the full effects of the reforms seen over the last 12 months take hold. But in the meantime, we must continue the journey of reform to make sure we support the development of the skills, knowledge and people that will enable British businesses to grow and compete now and in the future.

Katja Hall
Deputy director-general, CBI

Mark Anderson, Pearson

FOREWORD



Young people in our country are trying to adapt to a fast changing world, full of new opportunities but also facing a tough economic climate and a fight for jobs. Last year we spoke to over 8,000 learners in our My Education census, and we heard from an ambitious generation who know it will be challenging to find work. They sent a clear message: they wanted to develop more of the skills required to succeed in the workplace.

Conversely, we know through our work with the CBI on this survey in recent years that employers are regularly voicing concern over the job readiness of too many young people. This is echoed by voices in higher education, who feel that many incoming students lack some of the qualities they will need to succeed.

Adding to this backdrop – and in order to rejuvenate our economy so we remain competitive against the levels of academic and technical prowess of young people in other countries – significant reforms are being made in education.

I want Pearson to be one of the companies that helps to bring these complementary demands and changes together. We agree that young people should receive more of the skills, know-how and support they crave as they contemplate their future career; as an employer we think it's important that the young people we recruit have the skills we need if we are to continue to succeed; and as a global education company we understand the need to reform education to meet the challenges posed by globalisation and rapid technological advances.

Critical to meeting these challenges will be the vital role that apprenticeships and vocational qualifications like Pearson's BTEC can play in ensuring we have the highly-skilled and versatile workforce we will need in the future.

BTECs are currently being reformed to meet the needs of future employee and employer alike, and the reforms we are making are informed by the advice and guidance of a panel of international education

and employment experts, under our world class qualification programme. We are determined that BTEC represents valuable, stretching and engaging learning, enabling progression into the next stage of education or into a good job. And what is more, through our work on the efficacy of our products and services, we are committed to collecting the data and evidence that will enable us to prove the progress that learners make through BTEC.

It is particularly encouraging that the report confirms the upward trend in employers involved in apprenticeships, with two thirds of those offering apprenticeships planning to extend their programmes in future. When we look at best practice around the world (in places like Australia, Denmark, Germany, Singapore, and Switzerland) the common denominator is that they have well-developed national vocational systems. Apprenticeships cannot be some kind of "last resort" but rather a strong potential choice from early secondary school – and part of a range of options that keep choices and opportunities open. We strongly welcome the commitment made in the UK to Apprenticeships.

This report underlines the demand for a much greater focus on improved vocational learning. Employers and learners alike demand nothing less.

Mark Anderson,
Managing Director, Pearson UK

Executive summary

The education and skills landscape in 2014

- The recovery continues to advance, with stronger growth and higher levels of employment than seen in recent years – however improved education and skills are needed to secure these positive developments.
- Too many young people are still leaving school without the core of literacy and numeracy they need to be successful in life and work – with 36.4% not achieving a C in GCSE English and 42.4% not reaching this standard in maths.
- The UK's position in international education rankings has stagnated, highlighting the need for action.
- Whilst youth unemployment levels have improved over the last 12 months, they remain high, and we must ensure the right structures are in place to support young people in their transitions from school.
- Employers continue to support staff through training and development, but it is crucial that skills being developed reflect the needs of the labour market.

The seventh education and skills survey

- The CBI/Pearson education and skills survey was conducted in the spring of 2014
- Usable responses were received from 291 employers, collectively employing more than 1.4 million people. Participant organisations are drawn from all sectors of the economy and are of all sizes

The recovery faces a mounting risk of skill shortages

- Most employers consider overall skill levels among their employees have been satisfactory for their functions to date, with more than two thirds (69%) rating the skills of their high-skilled employees as good
- But more than half of employers are aware of weaknesses in the core competencies of at least some of their employees in literacy (54%), numeracy (53%) and IT skills (61%)
- The drive towards a higher-skill economy means that over the next three to five years, far more businesses expect to increase the number of jobs requiring leadership and management skills and higher skills than expect to reduce them (positive balances of +73% and +71% respectively)
- Almost as many employers expect to decrease the number of low-skilled employees in the next few years as to increase the number (producing a small positive balance of +5%), meaning there will be tough competition for jobs among those with lower skill levels
- Demand for more people with higher-level skills is expected to be particularly strong in sectors central to growth such as engineering (+95%), manufacturing (+76%) and construction (+69%)
- Growing numbers of businesses are worried there will not be sufficient skilled people to meet this rising demand as the economic recovery gains pace (with a balance of -23% not confident they will be able to fill all their higher-skills roles)
- The confidence deficit on the availability of enough people with the right high-level skills applies across firms of all sizes, in all nations of the UK and all major sectors.

STEM skills in short supply

- Nearly two in five firms (39%) that need employees with STEM skills and knowledge currently have difficulties recruiting staff at some level and over half (53%) expect problems in the next three years
- Shortages of STEM-qualified technicians are particularly widespread, with more than a quarter (28%) of firms in STEM-based sectors reporting current difficulties in recruitment and more than a third (35%) anticipating problems over the next three years
- Shortages of STEM graduates are also starting to be experienced (by 19%) and are expected to affect many more STEM-based firms (28%) in the coming years
- Difficulties in recruiting people with STEM skills are expected to be most severe in the construction sector as major new projects get under way, with firms anticipating problems in the next three years in finding technicians (48%), graduate recruits (37%) and suitable people to train as apprentices (36%)
- Businesses have concerns about both the quality (48%) and quantity (46%) of STEM graduates, and report that too many lack general workplace experience (39%)
- To fire interest among young people in studying STEM subjects and pursuing STEM careers, businesses recognise that they have a key role in engaging with schools (57%) and offering more STEM-based apprenticeships (57%). They also see the need to work with universities to ensure the business-relevance of courses (54%)
- There is a critically important role for government in ensuring there is an adequate supply of specialist science and maths teachers in schools to equip young people with knowledge and enthusiasm for STEM (cited by 50% of respondents).

Businesses are stepping up skills investment

- Far more firms plan to increase their investment in employee training and development during the coming year than plan to cut back (producing a positive balance of +26%)
- The positive balance of firms planning increased investment over those planning reductions is particularly strong in construction at +44%, reflecting recognition of the need to tackle skill shortages
- Businesses are having to divert some of their training investment to tackle weaknesses in basic skills of numeracy, literacy and IT competence, with nearly half of employers (44%) saying they have organised training in at least one basic skill area in the past year for adult employees and more than a quarter (28%) for some young people joining from school or college
- Most businesses rely on external training partners to at least some extent, with 49% of training on average delivered by external providers
- While private providers lead on every satisfaction measure, the great majority of businesses give a positive rating too to FE colleges and universities on essential issues such as the quality of trainers and the relevance of course content to skill and business needs
- To drive forward employer ownership of the skills agenda, basing qualification design on employer needs and industry standards is cited as among the leading priorities by more than four in five business (84%) and as the single most important one by over half (54%).

Executive summary

Shaping a fully effective apprenticeship system

- The proportion of employers involved in apprenticeships has risen to more than two thirds of our survey in the past two years (69% in 2013 and 68% in 2014) from only half (51%) in 2009
- Two thirds of those offering apprenticeships (69%) plan to extend their programmes in future while across all respondents one in eight (13%) plans to start offering apprenticeships in the next three years
- Provision of apprenticeships is spreading into new sectors such professional services (where 42% of businesses now have at least some apprentices)
- Leading priorities for action to encourage expansion in apprenticeship programmes include more relevant qualification programmes (44%), giving firms greater purchasing power by routing the apprenticeship grant directly to employers (34%) and reducing bureaucracy (31%)
- Greater simplification and streamlining of the system and action by schools to prepare young people would encourage increased provision by SMEs – currently half of SMEs have no apprentices compared to less than one on ten (8%) firms with over 5,000 employees.

Raising the performance of our schools

- Businesses are becoming concerned about the increasing educational divergence between different UK nations: two thirds (67%) believe it is important that qualifications are directly comparable and readily understood by employers
- Levels of awareness about the new vocational qualifications are very low among businesses, with 85% knowing little or nothing about them.
- The most important factors employers weigh up when recruiting school and college leavers are their attitudes to work (85%), their general aptitudes (63%) and literacy and numeracy (44%). These rank well ahead of formal academic results (38%)

- Many businesses are not satisfied with the attitudes and skills of school leavers in important areas including attitudes to work (33%), teamwork (36%), basic numeracy (38%), problem solving (50%) and communication skills (52%)
- Businesses want to see primary schools concentrating above all on developing pupils' literacy and numeracy (85%), with these also as the most commonly cited priority (by 62%) in the 11-14 phase of schooling
- For the 14-19 age group, employers believe the top priority for schools and colleges should be developing awareness of working life with support from businesses (52%)
- Almost two thirds of businesses (65%) value foreign language skills among their employees, particularly in helping build relations with clients, customers and suppliers (28%)
- French (50%) and German (49%) are the leading languages in demand by firms, but those geared to business in China are increasingly seen as useful (with those valuing knowledge of Mandarin up from 25% in 2012 to 31% in 2014).

Businesses recognise the need to support schools

- Eight out of ten businesses (80%) now have links of some type with at least one school or college
- Over the past year, the balance of firms increasing their links with schools and colleges over those reducing them has climbed to +51%
- While two thirds of businesses have links with secondary schools (64%) and FE colleges (63%), only a third (31%) have links to primaries
- Among employers with links to schools and colleges, the most common forms of support are offering work experience placements (77%) and providing careers advice and talks (67%)
- Other widespread forms of business support include involvement in schemes to promote study of particular subjects (36%), employees acting as governors (32%) and employees becoming student mentors (31%)

- Progress is slow on tackling barriers to business involvement, with widespread uncertainty over how to make work experience worthwhile (31%), lack of interest among schools or pupils (19%) and problems in fitting involvement with the school timetable (19%)

Careers advice: not yet fit for purpose

- The great majority of employers believe the quality of careers advice for young people is not good enough (by a balance of -77%)
- The quality of careers advice young people receive to help them make informed decisions about future options in education is also seen as inadequate (by a balance of -44%)
- These weaknesses in careers advice are reported by a large majority of businesses in every part of the UK
- There is a readiness among employers to play a greater role in delivering careers advice, with two thirds (66%) willing to do more
- Short-term work placements of a week or two are by far the most common type of work experience offered by businesses (89%), but almost half (46%) also offer longer-term paid internships.

Developing the right skills in graduates

- Many more businesses have increased their graduate recruitment in the past year than have cut back, with a positive balance of +18% taking on more graduate recruits
- Businesses are looking first and foremost for graduates with the attitudes and aptitudes that will enable them to be effective in the workplace – nearly nine in ten employers (89%) value these above other factors such as degree subject (68%)
- Traditional graduate recruitment channels such as advertisements (used by 70%) and recruitment fairs (47%) are being supplemented by the use of social media (43%)

- A degree in a STEM subject gives graduates a clear advantage in the jobs market, with nearly half of employers (48%) reporting that they prefer graduates with these qualifications
- While many graduates leave university with the skills needed for working life, businesses still find too many do not: 17% report shortcomings in graduate applicants' use of English, 23% in problem-solving and 26% in communication skills
- Businesses want to see higher education institutions doing more to improve the business relevance of undergraduate courses (49%) and to help students become job-ready (47%)
- They would also like to see a boost to the number (42%) and quality (27%) of STEM graduates.

Businesses and universities: partnering for growth

- More than two thirds (70%) of businesses have developed links of some type with universities and nearly half of firms (48%) are looking to grow their ties with universities in the future
- The links take many forms, including activities to enhance the business-relevance of HE by providing 'real-life' projects and resources to help students understand the practical relevance of their courses (38%) and taking part in degree programme advisory boards or contributing to course content design (28%)
- More than a third of firms (37%) currently partner with universities for research and innovation, seeking to draw on their wealth of expertise and creativity
- When selecting partner institutions, by far the most important factor for businesses is a university's field of expertise/specialism (79%), followed by its flexibility and responsiveness (62%) and its location (52%).

The education and skills landscape in 2014

SECTION 1

The seventh CBI education and skills survey, run in partnership with Pearson, comes at a time when the economic outlook for the UK has begun to look more positive and employment is on a rising trend. But we face a period of increased political risk in the run up to the 2015 general election. The challenge will be in ensuring that uncertainty does not negatively affect the positive steps towards reform in education and skills over the past 18 months.

KEY POINTS:

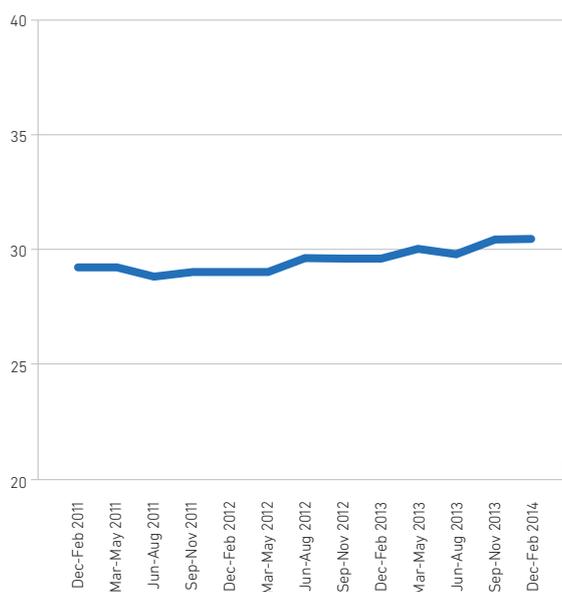
- The recovery continues to advance, with stronger growth and higher levels of employment than seen in recent years – however improved education and skills are needed to secure these positive developments.
- Too many young people are still leaving school without the core of literacy and numeracy they need to be successful in life and work – with 36.4% not achieving a C in GCSE English and 42.4% not reaching this standard in maths.
- The UK's position in international education rankings has stagnated, highlighting the need for action.
- Whilst youth unemployment levels have improved over the last 12 months, they remain high, and we must ensure the right structures are in place to support young people in their transitions from school.
- Employers continue to support staff through training and development, but it is crucial that skills being developed reflect the needs of the labour market.

The recovery continues to advance

Stronger economic growth seen in the first quarter of 2014¹ is expected to continue apace throughout the rest of the year and into 2015.² Positively, over the past year the jobs market has continued to strengthen. In the three months to March 2014 employment rose at its fastest pace since records began, meaning 30.4 million people were in work, up 722,000 on a year earlier.³

The unemployment rate has continued to fall hitting a five year low of 6.8% in the three months to March 2014.⁴ Encouragingly young people have also benefitted from a healthier labour market. There are now 868,000 young people out of work and looking for work, down from one million in mid-2012.⁵ As economic growth continues we expect the labour market to follow suit. However, with the election looming, political uncertainty remains a risk to the recovery.

Exhibit 1 Employment levels 2011-13 (millions)



Source: ONS

But we know that to secure long-term growth, education and skills must be the priority

Employers know that there is no more important issue facing the economy than getting our education and skills system right – this is the underpinning of growth and ensuring the UK remains internationally competitive.

Rising skill levels in other countries means that we need action to create the flexible, highly-skilled and motivated workforce needed to ensure British businesses can compete in the international marketplace.

We know that this is a challenge, and one that needs to be tackled from the earliest stages of education onwards.

Schools reform must be the first step towards achieving the education and skills system we need

Despite the continual focus on improving standards in education, too many young people are still leaving school without the core literacy and numeracy skills needed to be successful in life and work. Looking at the benchmark of at least a grade C at GCSE level in 2013 in each of these subjects we see that 36.4% of students did not achieve this level in English and a worrying 42.4% fell short of this grade in maths.⁶ The education system in the UK has for too long tolerated this long tail of low achievement alongside a trend of rising average performance – highlighting the need for the wide reaching reforms that we are currently seeing.

The challenge faced by education systems throughout the UK can also be observed at the international level by examining the OECD programme for international student assessment (PISA) survey, which is based on tests taken by 15-year olds. (Exhibit 2) Even taking into account the fact that an increased number of countries are participating in these tests, the UK’s performance can be seen to be stagnating around the average – a real worry as the standards of education of our international competitors continue to rise.

Exhibit 2 The UK’s ranking in international tests for 15-year olds in science, maths and reading 2000-09

Year	2006	2009	2012
Science	14	16	20
Maths	24	28	26
Reading	17	25	23

Source: PISA 2012 Results: What Students Know and Can Do – Student performance in mathematics, reading and science Volume 1, OECD, February 2014

While English and maths abilities create the foundation needed for all young people to be successful, what also matters to business are the wider attitudes and behaviours that set young people up for working life (chapter 7). We must ensure that the accountability framework within which schools operate incentivises a focus on this wider development of young people. We have seen some positive changes to league table measures, but as we set out in our report *First Steps*, an inspection framework that looks at how well schools are developing these wider attributes in young people is key to securing the outcomes we need.⁷

The wider community, and in particular business, also has a role to play in raising ambition and attainment in schools – and while this type of involvement is already widespread, there is scope to deepen and improve it (Chapter 8).

Support for transitions from school to work is key

Young people need to be supported in their transitions from education into employment in order to ensure that we are making the best use of their talent – and this must start with careers guidance. We know from research that the career aspirations of young people are not well linked to the reality of labour market demand.⁸ This needs to be tackled to ensure that we can fill the skills gaps of the future.

Careers guidance – especially in England – has never been good enough, but it remains to be seen whether recent changes will result in positive changes. For too long, the careers guidance young people receive has been irrelevant, disparate and disconnected from the jobs market – and not sufficient to enable young people to make informed decisions about their futures (Chapter 9).

Exhibit 3 Youth unemployment in the UK (000s) 2008-14



Getting this right has become increasingly important in recent years, as the employment market that young people are facing has become increasingly complex – and will continue to change as they go through the education system.

Youth unemployment statistics have improved over the last 12 months, but remain high in comparison to pre-recession figures (**Exhibit 3**). We need to build the structures that will ensure strong support for transitions from education and training to employment, and better signposting to the different career options available. Effective careers guidance that involves employers and inspires young people is at the heart of this.

Skills mismatches highlight the need for a demand-led skills system

Businesses know and recognise the value in providing training for their staff and investing in the skill levels of the workforce. UKCES estimates for example that two thirds of employers fund or arrange training for their staff at a cost to UK businesses of £42.9bn

a year.⁹ While the latest total investment figure is slightly down from 2011, this is in the context of a greater number of staff receiving training and a shift towards more on the job or internal provision (Chapter 5).

The question around how the government supports investment in skills with public spending remains, particularly in the face of concerns around mismatches between the skills being developed and relevant positions available in the labour market.¹⁰

This mismatch points to the need for a more demand-led system of skills investment and training, and we have begun to see progress towards this over the last 12 months. Successive reviews into apprenticeships (from Doug Richard,¹¹ Jason Holt¹² and the BIS Select Committee¹³) have recognised the vital role that apprenticeships play in delivering the training that is needed by employers and the necessity for the system to become more responsive and representative of need in order to deliver value for businesses and for the tax-payer. The challenge will be ensuring that the reforms encourage more

Exhibit 4 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, Working Futures 2010-2020: Main Report, August 2012 *Data reflects change in total numbers



almost half of all employment is set to be in managerial, professional or associate professional roles by 2020

businesses – particularly SMEs – to get involved. This means that changes must lead to a simpler system and reforms must be carefully piloted and phased in – as set out in our recent response to the government’s consultation on apprenticeship funding reform.

Data from the UK Commission for Employment and Skills (UKCES) highlights the continuing shift in the shape of the labour market, with the majority of jobs created between now and 2020 expected to be in high-skilled posts. Almost half of all employment is set to be in managerial, professional or associate professional roles by 2020 (**Exhibit 4**). This shift continues to raise concerns for employers about their ability to meet their future workforce demands (Chapter 3).

Prospective undergraduates are responding to changes to student fees and heightened competition in the UK jobs market by opting in increasing numbers for subjects that have good employment prospects and potential wage returns. Applications for undergraduate courses starting in 2014/15 by

March 2014 saw the largest increases compared with 2013/14 in technologies (15%), computer science (13%) and engineering (11%).¹⁴

In the 2014 budget the Chancellor announced funding of £20 million over two years to support the growth of higher apprenticeships up to postgraduate level.¹⁵ The emphasis on encouraging higher apprenticeships is reflected in levels of take-up, with the number of new starters increasing from just 200 in 2008/09 to 9,800 in 2012/13. This increase is part of a more general shift towards advanced and higher apprenticeships (**Exhibit 5**). While higher apprenticeship starts have increased by 165% in the last year, intermediate apprenticeship starts have decreased by 11%.¹⁶ Higher apprenticeships still represent a relatively small number of total starts, however, with intermediate still being the most common level. The total number of apprenticeship starts has increased by more than 230,000 since 2009/10, showing the programme’s importance as a skills pipeline.¹⁷

Exhibit 5: UK Apprenticeship starts, 2008-2013

	2008/09	2009/10	2010/11	2011/12	2012/13
Intermediate	158,500	190,500	301,100	329,000	292,800
Advanced	81,300	87,700	153,900	187,900	207,700
Higher	200	1,500	2,200	3,700	9,800

Source: BIS/SFA



The seventh education and skills survey

SECTION 2

The seventh CBI education and skills survey, run in partnership with Pearson, captures an authoritative snapshot of trends in business opinion and practice across a wide range of education and skills issues. Since 2008, successive surveys have mapped how education and training have evolved against a backdrop of economic turbulence. As the economic recovery now gathers pace, it is more than ever essential for the UK to make the most of skills across the current workforce and to ensure that people – particularly young people – develop the skills that will be needed for a prosperous future.

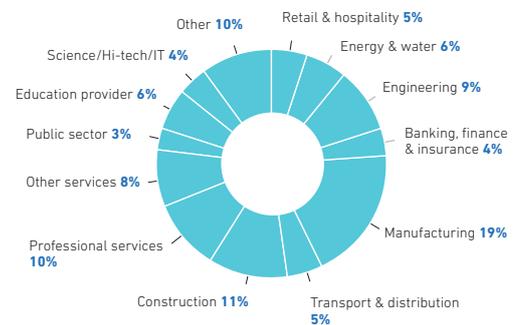
The survey was conducted in the spring of 2014, with usable responses received from 291 employers, collectively employing more than 1.4 million people, equivalent to 5.5% of all employees in the UK.¹⁸ Participant organisations are drawn from all sectors of the economy and are of all sizes, from very small firms to organisations with workforces of more than 5,000 people.

The survey was completed by a senior executive in each organisation. In small and medium-sized companies, this tended to be the managing director, chief executive or chairman. In larger firms, it was the human resources director or equivalent.

Sectoral analysis

Responses were received from across all sectors of the economy (**Exhibit 6**). Private sector respondents predominate, making up well over nine in ten participants (96%). Manufacturing firms form the single largest grouping of respondents, accounting for just under a fifth (19%), while construction and professional services businesses each make up close to a tenth of the sample (11% and 10% respectively). Engineering firms are also well represented (9%).

Exhibit 6 Respondents by economic sector (%)



A further one in ten firms (10%) self-classified into the 'Other' category. Their core business activities range from private healthcare and housing to media and the creative industries.

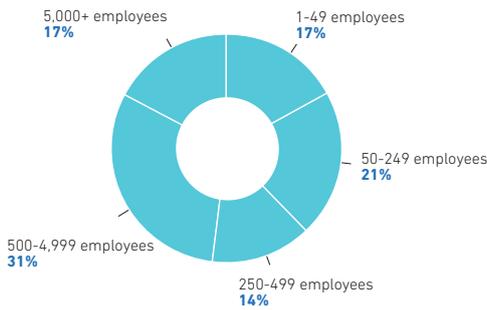
49% Respondents with some employees in devolved nations

Respondents by company size

Companies of all sizes participated in the survey. Just under one in five (17%) employ under 50 staff while at the other end of the scale the same proportion (17%) employ more than 5,000 people (**Exhibit 7**).

Using the official definition of small and medium enterprises (SMEs) as being those organisations employing fewer than 250 people, SMEs make up more a third (38%) of respondents to the survey.

Exhibit 7 Respondents by company size (%)

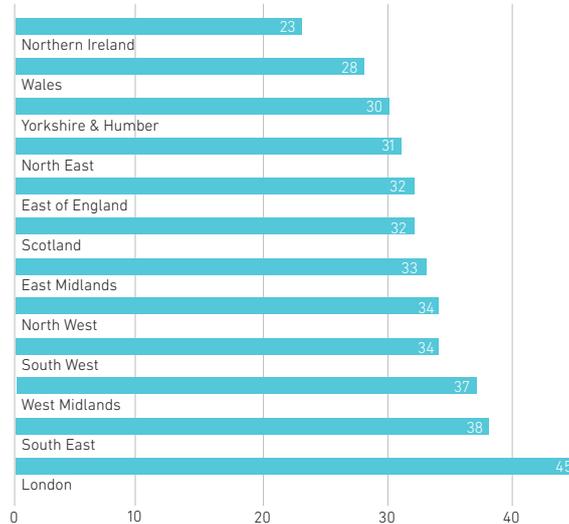


Respondents by location

The majority of respondents have employees based in several or most regions and nations of the UK (**Exhibit 8**). Respondents most commonly have at least some employees in London (45%) and the South East (38%). Across other localities, the range is from more than a third of respondents (37%) with at least part of their workforces based in the West Midlands to nearly a quarter (23%) with employees in Northern Ireland.

Taking the devolved nations together, half of respondents (49%) have employees based in one or more of them.

Exhibit 8 Respondents by region (%)



The recovery faces a mounting risk of skill shortages

SECTION 3

There is a serious risk that skill shortages will become a constraint as economic recovery gathers momentum and the pace of technological change increases. Worries about meeting the need for more and higher levels of skills are mounting rapidly. If British businesses cannot access people with the right skills on a sufficient scale, the UK's capacity to prosper and succeed in international markets will be undermined. Individuals will also not be able to progress at work and share in rising prosperity if their skills fail to keep pace with changing demand and fit them for new job opportunities. Skills that were adequate in the past will not suffice for the future.

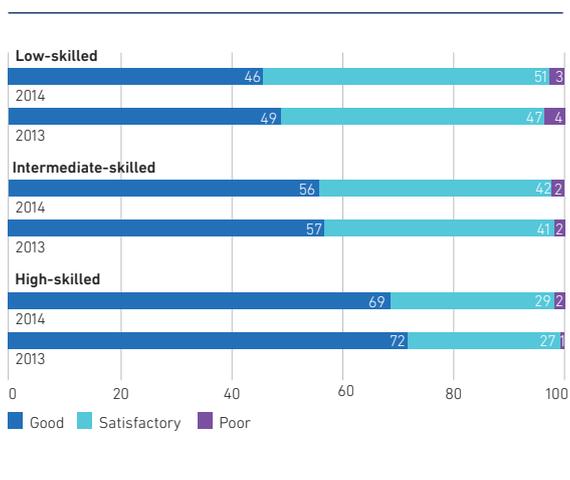
KEY FINDINGS:

- Most employers consider overall skill levels among their employees have been satisfactory for their functions to date, with more than two thirds (69%) rating the skills of their high-skilled employees as good
- But more than half of employers are aware of weaknesses in the core competencies of at least some of their employees in literacy (54%), numeracy (53%) and IT skills (61%)
- The drive towards a higher-skill economy means that over the next three to five years, far more businesses expect to increase the number of jobs requiring leadership and management skills and higher skills than expect to reduce them (positive balances of +73% and +71% respectively)
- Almost as many employers expect to decrease the number of low-skilled employees in the next few years as to increase the number (producing a small positive balance of +5%), meaning there will be tough competition for jobs among those with lower skill levels
- Demand for more people with higher-level skills is expected to be particularly strong in sectors central to growth such as engineering (+95%), manufacturing (+76%) and construction (+69%)
- Growing numbers of businesses are worried there will not be sufficient skilled people to meet this rising demand as the economic recovery gains pace (with a balance of -23% not confident they will be able to fill all their higher-skills roles)
- The confidence deficit on the availability of enough people with the right high-level skills applies across firms of all sizes, in all nations of the UK and all major sectors.

Skill levels have mostly been adequate to date...

Overall levels of skill among employees have been largely adequate for the jobs that currently exist and for the slow-growth conditions of recent years (**Exhibit 9**). More than nine out of ten businesses rate the skills levels of their current employees as satisfactory or good in low-skilled roles (97%), intermediate-skilled jobs (98%) and high-skilled posts (98%). But the past levels of skills are no guide to those that will be needed in the future. The bar is constantly being raised by international competition and technical change.

Exhibit 9 Ratings of employee skill levels (%)



... but there are widespread weaknesses in core competencies...

While employers consider their workforces' overall levels of skills have been sufficient to cope with their jobs to date, they are also aware of worrying weaknesses in core competencies. A clear majority of businesses report that they are aware of IT, literacy/ use of English and numeracy shortfalls to at least some extent within their current workforce (**Exhibit 10**).

As competitive pressures intensify and product mixes become more sophisticated, shortcomings in these basic skills become a greater challenge for businesses and individuals. While in 2009 around two in five business (40%) reported weaknesses among some employees in literacy/use of English and numeracy, the proportions have climbed above half in more recent years, reaching 54% for literacy and 53% for numeracy in 2014. When it comes to IT skills, close to two thirds (61%) of firms report they are aware of problems among current employees to at least some extent, up from 57% in 2009. As the proportion of jobs involving use of IT increases, it becomes increasingly important to tackle gaps in IT capability.

The levels of skills needed at work will continue to rise in the future. Achieving higher levels of productivity and added value depend on the right skills. So it is essential for our training and education systems to go further and faster to add to the skills of the current workforce and ensure that new entrants can cope effectively. As the OECD has recognised, low-skilled adults in the UK run the risk of getting trapped in a situation where their skills remain weak or deteriorate over time, making it harder for them to learn and progress.¹⁹

The consequences of weaknesses in basic skills are well-documented. They affect employees' ability to perform everyday tasks. They can hinder employees' ability to draw out information effectively from written texts and instructions, compose written communications, or work through calculations and make sense of numerical data. Shortcomings in IT skills affect more and more jobs as the use of technology spreads to new activities.

Exhibit 10 Employers reporting concern about basic skills by competence (%)

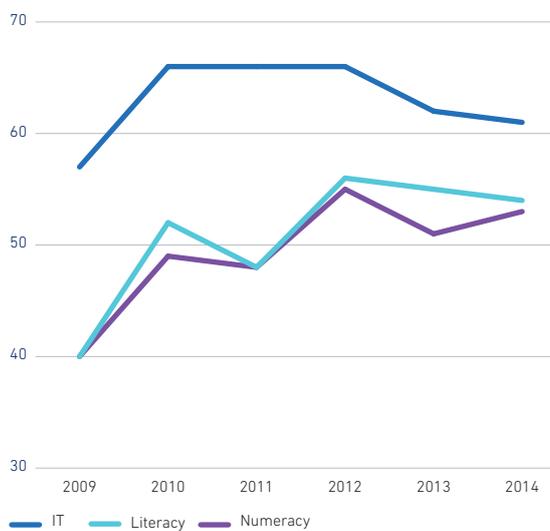
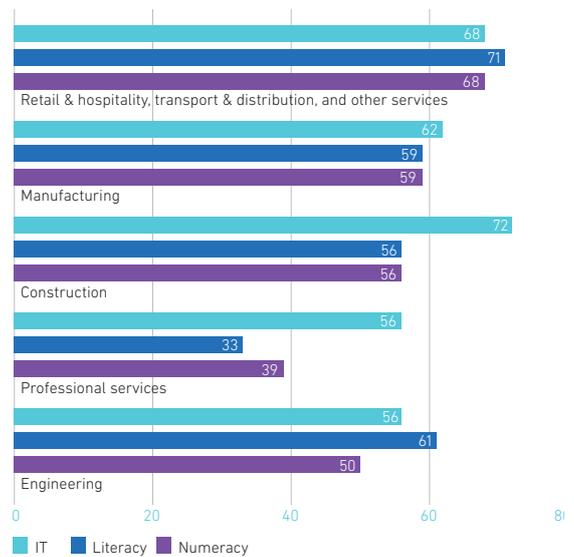


Exhibit 11 Employers reporting concern about basic skills by sector (%)



...and those weaknesses affect all major sectors

While shortcomings in basic skills vary from business to business, no major sector is unaffected (**Exhibit 11**).

Awareness of skills gaps is particularly widespread among construction firms, where close to three quarters (72%) report concerns over IT skills and more than half over literacy/use of English (59%) and numeracy (59%). Skills gaps are also seen as widespread in manufacturing – where the demands made on employees by new technologies and new processes are rising at a particularly rapid rate – with nearly two thirds of firms (62%) reporting weaknesses in the IT skills of at least some employees. Two thirds of firms (68%) across retail and hospitality, transport and distribution, and other services recognise shortfalls in numeracy among at least some employees, with 13% reporting weaknesses to a significant extent across their workforces.

Rising levels of skill will be needed in the future

In the years ahead, British businesses will need more people able to fill skilled jobs. The results of our survey show the strength of the drive towards a higher-skill economy and the changing future shape of skill needs (**Exhibit 12**). Sustained economic recovery will intensify the push towards greater levels of skill.

Over the next three to five years, far more employers expect to need more people with leadership and management skills than expect to need fewer (76% expect to need more, 4% to need fewer and 21% no change, producing a positive balance of +72%). The balance of businesses expecting to require more people with leadership and management skills has been above +60% every year since 2010, and it has gained added impetus as the economic recovery becomes more securely based. The positive balance

76%

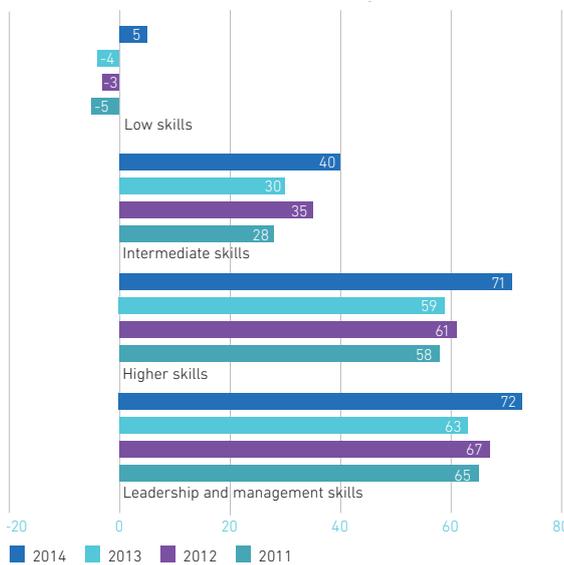
Employers expecting to need more staff with leadership and management skills in the years ahead

of firms expecting to need more employees with other higher skills has been only a little lower over the same period (climbing to +71% in 2014). Larger firms expect to lead the growth in demand for those with higher-level skills (with a positive balance of +78% among non-SMEs compared with +58% among SMEs).

As economic growth continues to pick up, survey respondents also expect to need more people with intermediate skills in the next three to five years. The balance of employers anticipating adding jobs over those cutting intermediate roles has risen from +30% in 2013 to +40% in 2014.

Only among roles in the low skills category are job prospects less strongly positive. Half (49%) of employers expect no change in their number of low-skill jobs in the years ahead, and almost as many expect to reduce the number of low-skilled posts as to increase them, producing a small positive balance of +5%. This trend – likely driven by the UK’s stronger economic performance over the past year, brings to an end the negative balances shown by our surveys since 2010, but the results highlight the tough competition for job openings among those with the lowest levels of skills. Among those businesses employing 250 people and above, the numbers planning to reduce low-skill jobs match those expecting to create new openings.

Exhibit 12 Employer demand for different skills levels over the next 3-5 years (%)*



* Firms reporting increased demand minus those reporting decreased demand

Demand for skills will be strongest in high-growth sectors

Employer demand for more people with higher level skills in the next three to five years is expected to be particularly strong in those sectors that should lead the rebalancing of the economy (**Exhibit 13**). Engineering (a positive balance of +95%) and manufacturing (+76%) head the list of sectors anticipating greater demand for recruits with higher skills, with firms in construction expecting to increase their demand both for those with higher skills (+69%) and intermediate skills (+59%). Achieving sustained growth depends on the capacity to meet these skill needs, particularly by encouraging more young people to recognise the opportunities open to them in these sectors.

Exhibit 13 Increased employer demand for skills over next 3-5 years by sector (%) *

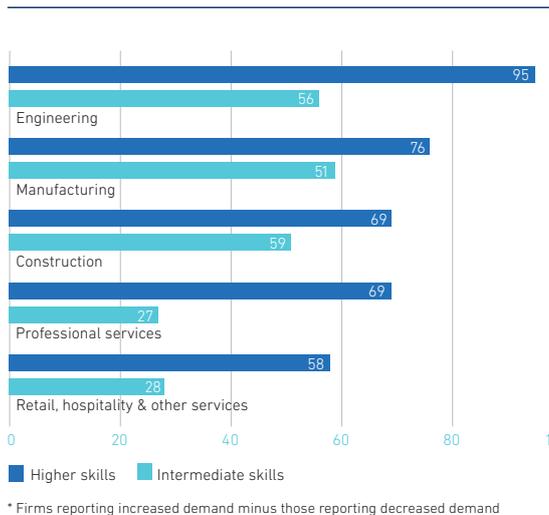
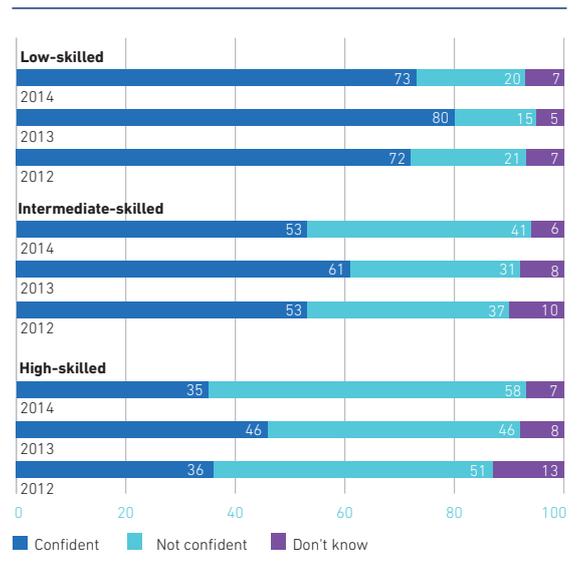


Exhibit 14 Employer confidence about accessing employees in the future (%)



Can the growing demand for more skilled employees be met?

Employers are losing confidence that they will be able to attract and retain the right skill mix of employees in the years ahead. As the economic recovery gains pace, businesses expect it will become much harder to fill their more skilled vacancies.

When it comes to filling high-skilled jobs in future (**Exhibit 14**), last year the proportion of businesses (46%) not confident they would be able to find sufficient recruits matched those (46%) who believed there would be enough people available to them (producing a 0% confidence balance). This year a big gap has opened up: more than half of employers are not confident they will be able to recruit enough high-skill employees (58%), while only a third are confident (35%), giving a negative confidence balance of -23%.

Worries over filling high-skilled posts apply across the UK...

Levels of confidence about being able to access sufficient high-skill employees in future have fallen sharply across all parts of the UK (**Exhibit 15**). The biggest turn around in confidence has been in Northern Ireland, with a drop from a large positive confidence balance in 2013 (of +29%) to a heavily negative -27% in 2014. Confidence about recruitment of those with high skills among businesses in Scotland too has swung from a positive balance (+1% in 2013) to a negative one (-24%) this year.

Exhibit 15 Employer confidence in accessing high-skilled employees in the future by country (%)*

	2014	2013
Northern Ireland	-27	+29
Scotland	-24	+1
Wales	-24	-14
All UK	-23	0

* Net balance of firms reporting 'confident' minus those reporting 'not confident'

58%

Employers not confident of being able to recruit sufficient high-skill employees in the future

Exhibit 16 Employer confidence in accessing high-skilled employees in the future by sector (%)*

	2014	2013
Professional services	0	+33
Construction	-48	-4
Retail & hospitality, transport & distrib, and other services	-7	-5
Manufacturing	-31	-24
Engineering	-59	-64

* Net balance of firms reporting 'confident' minus those reporting 'not confident'

...affecting firms of all sizes and key sectors

Concerns about filling future high-skilled openings affect firms of all sizes. Among SMEs, firms believing that in the coming years they may not be able to recruit sufficient employees with the high skills they will need outnumber those that are confident about future recruitment (by a balance of -12%). Worries are even more widespread among larger firms (with a negative confidence balance of -30%).

Within individual sectors (**Exhibit 16**), there have been big falls in confidence about being able to recruit sufficient highly skilled staff in future. Professional services firms, for example, have swung from a positive confidence balance of +33% in 2013 to 0% in 2014. Construction businesses have moved from a relatively small negative balance of -4% to -48% in 2014.

These findings highlight the urgent need for more action to boost skills if the pace of economic recovery is not to be held back. Ensuring continued success in the sectors where the UK has a competitive advantage will be at the heart of a successful industrial strategy for the UK. It is a real concern that sectors that are central to the UK's future growth anticipate problems accessing the skilled staff they will need.

STEM skills in short supply

SECTION 4

Science, technology, engineering and maths (STEM) skills underpin innovation and the UK's ability to compete successfully in high-value, high-growth sectors. Demand for these skills is rising strongly as economic recovery takes hold. This is already causing a rise in the proportion of businesses reporting current difficulties in recruiting technicians and experienced staff with STEM skills. And the shortage problems are expected to intensify in the coming years. There is an urgent need to improve the supply of STEM-skilled people if economic growth is not to be held back.

KEY FINDINGS:

- Nearly two in five firms (39%) that need employees with STEM skills and knowledge currently have difficulties recruiting staff at some level and over half (53%) expect problems in the next three years
- Shortages of STEM-qualified technicians are particularly widespread, with more than a quarter (28%) of firms in STEM-based sectors reporting current difficulties in recruitment and more than a third (35%) anticipating problems over the next three years
- Shortages of STEM graduates are also starting to be experienced (by 19%) and are expected to affect many more STEM-based firms (28%) in the coming years
- Difficulties in recruiting people with STEM skills are expected to be most severe in the construction sector as major new projects get under way, with firms anticipating problems in the next three years in finding technicians (48%), graduate recruits (37%) and suitable people to train as apprentices (36%)
- Businesses have concerns about both the quality (48%) and quantity (46%) of STEM graduates, and report that too many lack general workplace experience (39%)
- To fire interest among young people in studying STEM subjects and pursuing STEM careers, businesses recognise that they have a key role in engaging with schools (57%) and offering more STEM-based apprenticeships (57%). They also see the need to work with universities to ensure the business-relevance of courses (54%)
- There is a critically important role for government in ensuring there is an adequate supply of specialist science and maths teachers in schools to equip young people with knowledge and enthusiasm for STEM (cited by 50% of respondents).

People with STEM skills are becoming harder to recruit...

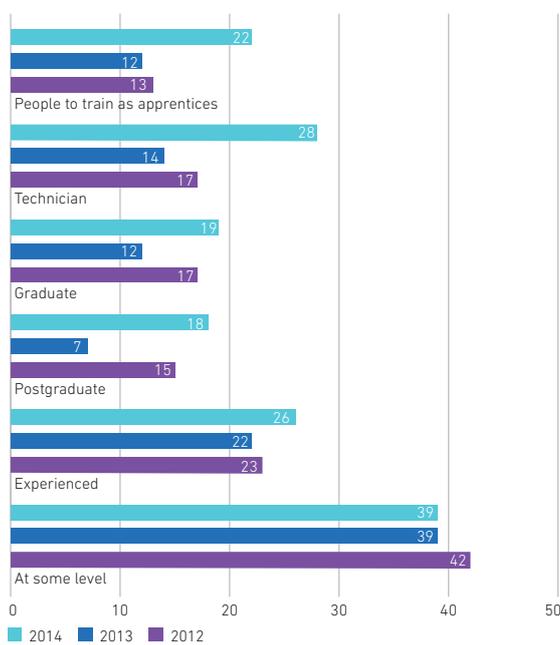
Science, technology, engineering and maths (STEM) skills are vital to the UK’s ability to sustain and develop high value-added industries – they underpin the UK’s future economic growth. Those with STEM skills are in demand at all levels from apprentice and technician level upwards.²⁰

Among those businesses that recruit employees with STEM skills and knowledge, well over a third (39%) report current difficulties recruiting STEM-skilled staff at some level (**Exhibit 17**). So despite STEM shortages being high on the agenda for both business and government, the supply of STEM skills is still inadequate and has worsened markedly at key levels as the recovery has gained traction.

More than one in four employers report difficulties in meeting their need for technicians (28%) and experienced staff with STEM expertise (26%). In both cases these figures are higher than in 2013 (in our last survey they were 14% and 22% respectively). Finding suitable graduate recruits has also become more of a problem, with nearly one in five (19%) reporting current difficulties in 2014 compared with 12% in 2013. There has been a jump too in the proportion of employers reporting difficulties in recruiting people with STEM skills to train as apprentices (from 12% to 22%).

Given the central role of STEM skills in the UK’s growth strategy, there is plainly an urgent need for action, as the recent CBI report on the contribution of STEM skills to our economic future shows (**Exhibit 18**).

Exhibit 17 Current difficulties in recruiting individuals with STEM skills and knowledge (%)



Those with STEM skills are in demand at all levels from apprentice and technician level upwards

Exhibit 18 Engineering our future²¹

With science, technology, engineering and maths (STEM) skills critical to the UK's success, the CBI report, *Engineering our Future: stepping up the urgency on STEM* sets out the need for a new impetus in expanding our STEM skills base. As the economy rebalances towards manufacturing, investment and exports, major growth sectors must be confident that the supply of skilled people will grow with their businesses in the years ahead. The report warns that skills shortages are threatening our recovery as demand for workers with STEM skills – particularly skilled technicians – outstrips supply.

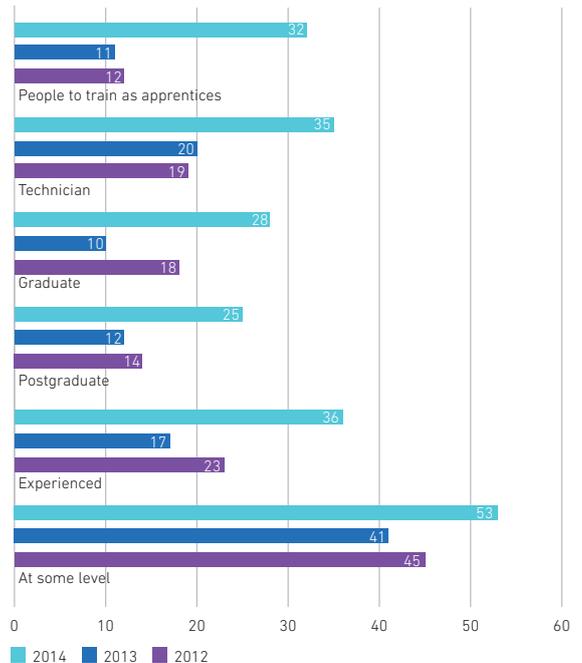
To increase the pipeline of STEM skilled workers we must ensure that the value of STEM-related qualifications and jobs are better showcased and more routes into such careers are created, especially for women who are poorly represented in many STEM fields. We need to tackle both long and short-term demand by retraining existing workers, creating more apprenticeships and ensuring that our education system supports young people to study STEM subjects.

...and businesses expect the difficulties to intensify

Businesses needing STEM-skilled staff believe the recruitment market will become much more difficult in the years ahead as the economic recovery gathers momentum. The proportion anticipating difficulties over the next three years has climbed from two in five (41%) in 2013 to more than half (53%) in 2014 (**Exhibit 19**).

More than a third of firms recruiting STEM staff expect difficulties in finding suitable technicians (35%) and experienced STEM staff (36%) in the next three years. For both groups the proportions of businesses in 2014 anticipating problems are much higher than last year (20% and 17% respectively in 2013). The supply of STEM graduates too is expected to be inadequate, with the proportion of employers anticipating problems in the next three years rising to 28% from 10% last year. At postgraduate level, the percentage of firms expecting recruitment problems has doubled (from 12% in 2013 to 25% in 2014). These are troubling findings.

Exhibit 19 Expected difficulties in next three years recruiting individuals with STEM skills and knowledge (%)



Shortage of STEM skills is impacting some of our key growth sectors hardest

The mounting difficulties in recruiting STEM-skilled people currently and in the future (**Exhibit 20**) are intense in sectors that should be driving future economic growth. The Government's industrial strategy sectors – aerospace, agri-tech, automotive, construction, education, information economy, life sciences, nuclear, oil and gas, offshore wind, and professional and business services – are amongst those most in need of increases in amount and quality of skills.²²

In manufacturing, nearly one in four firms (24%) reports current difficulties in recruiting technicians, while more than a third (36%) expect problems in the coming three years. In the construction sector too, one in four (24%) reports current problems in recruiting technicians, and nearly half (48%) of construction firms anticipate problems over the next three years as the sector expands rapidly. In engineering, well over a quarter (29%) of businesses report difficulties in finding suitable technicians and the same proportion expect those problems to continue.

More difficulties are also expected in recruiting suitable people to train as apprentices in the coming years as the economy strengthens, with over a third of firms in all these sectors foreseeing problems. These findings highlight the need for balanced, effective careers advice to help young people understand the range of opportunities open to them in these and related sectors. Major challenges are also foreseen over STEM graduate recruitment. In construction, for example, more than one in three firms (37%) expects difficulties in filling their vacancies in the next three years.

Exhibit 20 Difficulty recruiting individuals with STEM skills and knowledge by sector (%)

	People to train as apprentices	Technician	Graduate
Manufacturing – currently	26	24	19
–next three years	35	36	25
Construction – currently	18	24	11
–next three years	36	48	37
Engineering – currently	26	29	31
–next three years	35	29	38

The calibre of STEM graduates also needs attention

When asked about the barriers they encounter in filling jobs that require STEM-linked skills and qualifications, employers point to a range of concerns (**Exhibit 21**).

Heading the list is the troubling finding that nearly half of those respondents (48%) experiencing problems have concerns about the quality of STEM graduates. This ranks just ahead of the problem of a shortage of STEM graduates (at 46%). Compounding this problem – and probably a major factor behind the worries over graduate calibre – is that the content of qualifications at all levels is too often not relevant to business needs (33%). These findings highlight the need for firms and education and training

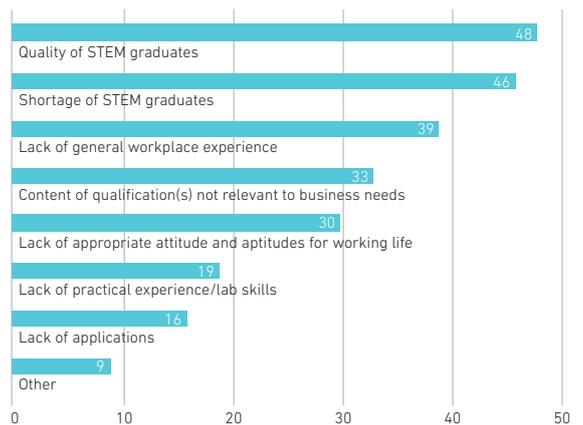


providers to work together to ensure programmes of study properly reflect workplace developments and technological advances in manufacturing and science-based industries.

A lack of general workplace experience among applicants (39%) and weaknesses in the attitudes and aptitudes for working life among candidates (30%) are also identified as common problems. These findings highlight the need for young people to develop their understanding and gain some experience of the day-to-day demands of the workplace, preferably in the sector where they aim to work longer term.

“
...the content of qualifications at all levels is too often not relevant to business needs
 ”

Exhibit 21 Barriers to recruiting STEM-skilled staff



“ There is a clear need for action to promote the study of STEM subjects and so increase the future supply of STEM-skilled employees. ”

STEM progress needs action by businesses and education...

There is a clear need for action to promote the study of STEM subjects and so increase the future supply of STEM-skilled employees. When asked how best to achieve this, respondents see essential roles for businesses, educational bodies and government (**Exhibit 22**).

Three priorities for action are identified by more than half of respondent businesses. First, businesses need to engage with schools to enthuse pupils about STEM study (57%). They can inject an invaluable 'real world' perspective, opening young people's eyes to the practical value and exciting creative scope of STEM subjects. Equally important is the creation of more STEM-related apprenticeships (57%). These are particularly important to tackle the current and impending shortages of technicians. Progress on this will in part rely on addressing the quality of vocational education through the newly introduced qualifications (see Chapter 7).

A majority of respondents (54%) also point to the need to tackle the low business relevance of some STEM qualifications. This requires employers and universities to work together more closely to develop STEM courses with built-in business relevance, with employers for example participating in degree programme advisory boards or the creation of entirely new degree courses. This can help tackle the worries over the quality of STEM graduates.

Firing young people's interest in STEM careers through schemes such as the STEM ambassadors' programme²³ is widely recognised as important. This is reflected in the view of more than a third of respondents (38%) that employees should be encouraged to become STEM ambassadors as part of meeting the current challenge. And there is the added challenge of encouraging more young women to

see STEM careers as open to them and an attractive option. Initiatives such as the *Women into technology and engineering compact* have an important part to play in this (**Exhibit 23**).

...but also by government

Government too has an essential role in fostering development of STEM-skilled young people. First, there can be no let-up in the push to recruit and retain more specialist STEM teachers in schools, with half of businesses (50%) pointing to the need for action. The government has recognised the importance of focusing funding on meeting the need for specialist teachers in England.²⁴ But after a period in which figures on initial teacher training suggested real progress was being made, the latest trends are worrying.²⁵ In 2013/14, the number of new entrants to maths teaching programmes was only 90% of the target, while for physics the numbers fell back to 72% of the target. Moreover, only two thirds of those trainee teachers held a first or 2.1 class degree (67% for maths and 65% for physics) compared with three quarters (74%) of trainee teachers as a whole.

Far from tackling the hangover of too few specialist STEM teachers in schools and colleges, there is a real risk that the problem may intensify: over a fifth of those in secondary schools in England teaching maths (22%) and chemistry (24%) and a third of physics teachers (34%) have no qualification in the subject beyond A level.²⁶ There is a pressing need for high-quality teaching by specialists to foster enthusiasm and interest among young people in maths and science. The announcement of the Maths and Physics Chairs programme from September 2014 to increase the supply of maths and physics teachers with high-level subject expertise in non-selective state schools is therefore a welcome development.²⁷

Action is particularly important if uptake of triple science GCSE – the best preparation for A-level and beyond – is to improve. Since 2009/10, the percentage of pupils in state-funded schools entered for triple science has risen from 19% to 28% in 2012/13,²⁸ but continuing that positive trend depends on having the right teachers in place.

In higher education, the government is already taking steps to weight funding support towards STEM as high-cost subjects. This type of support is essential, with two in five businesses (40%) highlighting the importance of the government tilting higher education in favour of STEM subjects.²⁹ There is also a case for better streamlining of the varied initiatives to promote STEM study (seen as a priority by 31% of respondents). While a variety of programmes and campaigns can mean different audiences are reached, there is a risk of confusion and duplication of effort. There could be a role for government in encouraging some streamlining and better co-ordination.

Exhibit 22 Priority action to promote STEM study

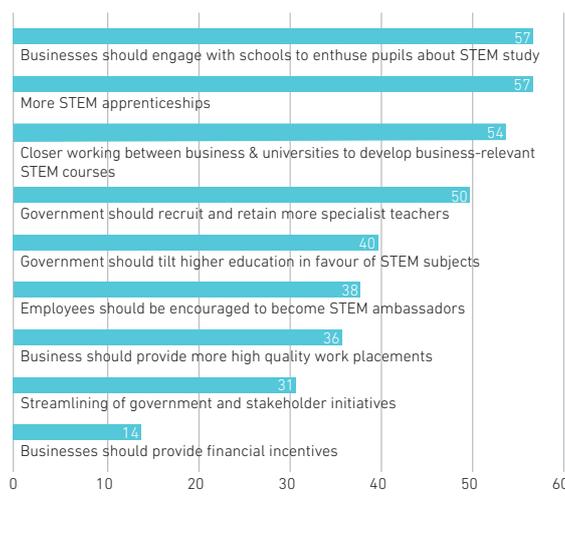


Exhibit 23 Women into technology and engineering compact

The *Women into technology and engineering compact* asks organisations to work together in a national partnership-led campaign of activity to boost female participation in technology and engineering. Supported by the CBI and other organisations, the aim of the compact is to support a step-change in how women and girls are encouraged to consider technology and engineering careers and the subject choices or vocational pathways – especially the study of maths and physics – that lead to them. The compact asks businesses to commit to concrete action in the following areas:

- Engaging with young people
- Contributing to a national campaign
- Increasing women in technology and engineering in their own organisation.



“ There is also a case for better streamlining of the varied initiatives to promote STEM study ”



Businesses are stepping up skills investment

SECTION 5

Businesses recognise their responsibility to develop the skills of their workforces to meet their future needs. They are planning for a step change in the scale of their investment in skills in response to the economic recovery. But they need schools, colleges and universities to be preparing young people to enter the world of work equipped with the right competencies and attitudes and for external training bodies to provide high-quality, flexible and cost-effective training. They also need scope to steer the skills agenda effectively.

KEY FINDINGS:

- Far more firms plan to increase their investment in employee training and development during the coming year than plan to cut back (producing a positive balance of +26%)
- The positive balance of firms planning increased investment over those planning reductions is particularly strong in construction at +44%, reflecting recognition of the need to tackle skill shortages
- Businesses are having to divert some of their training investment to tackle weaknesses in basic skills of numeracy, literacy and IT competence, with nearly half of employers (44%) saying they have organised training in at least one basic skill area in the past year for adult employees and more than a quarter (28%) for some young people joining from school or college
- Most businesses rely on external training partners to at least some extent, with 49% of training on average delivered by external providers
- While private providers lead on every satisfaction measure, the great majority of businesses give a positive rating too to FE colleges and universities on essential issues such as the quality of trainers and the relevance of course content to skill and business needs
- To drive forward employer ownership of the skills agenda, basing qualification design on employer needs and industry standards is cited as among the leading priorities by more than four in five business (84%) and as the single most important one by over half (54%).

Firms are planning a major boost in skills investment

Businesses recognise that it is more important than ever to maintain or increase their levels of investment in training to take advantage of the opportunities opened up by economic recovery. They are also keenly aware of the risks of potential skills shortages.

We asked respondents what impact the economic climate is having on their plans to invest in training and development of their staff over the next 12 months (**Exhibit 24**). The results show a third of firms (34%) plan to increase their level of spend, while just one in twelve (8%) plans to cut back, giving a positive balance of +26% intending to increase their training and development investment. This is far ahead of last year's positive balance of +6% and a zero balance in 2012. Overall, more than nine in ten businesses (92%) intend to maintain or increase their current spending on training in the coming year.

The determination to maintain or increase investment in training and development applies to employers right across the UK (**Exhibit 25**). In the devolved nations balances of those planning to increase investment over those planning reductions range from +30% in Wales to +34% in Scotland. Analysed by company size, a positive balance of +19% of SMEs intend to increase their training spend, rising to +28% among larger firms.

Exhibit 24 Employer's intentions for training and development of staff (%)

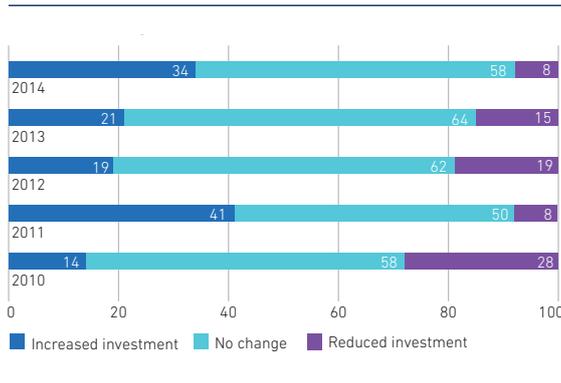
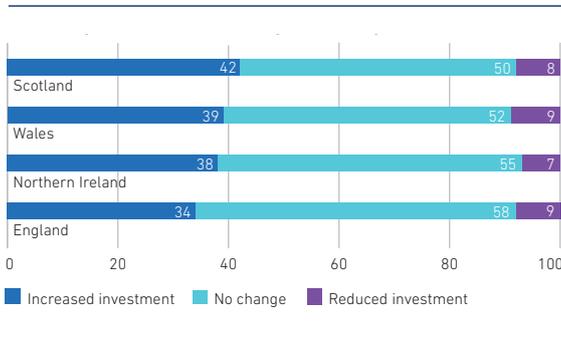


Exhibit 25 Employer's intentions for training and development of staff by country (%)



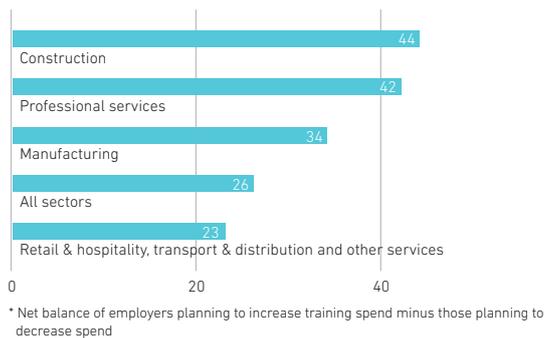
92% Employers planning to maintain or increase levels of investment in training

Construction leads the growth in training investment...

The results show major variations between sectors over training and development intentions in the coming year (**Exhibit 26**). The positive balance of firms planning increased investment over those planning reductions is particularly strong in construction at +44%, reflecting recognition of the need to tackle the risk of skill shortages holding businesses back. Other sectors where plans to grow training investment are well above those of firms as a whole include professional services (+42%) and manufacturing (+34%).

At a time when the UK needs to be renewing large parts of its infrastructure and expanding its high-value activities, it is encouraging that firms are responding in this way with targeted expansion of training and development investment.

Exhibit 26 Balance of employers by sector planning to increase/decrease training spend (%)*

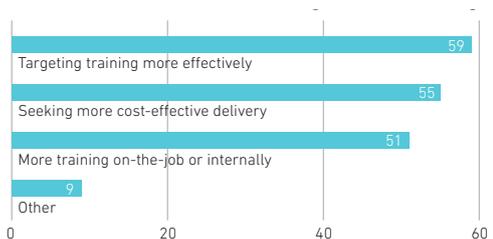


...and firms want that investment to yield good returns

Measuring levels of investment in training and development in cash terms is one side of the equation. The other is the effectiveness of that training in equipping employees with relevant skills to add value.

Over half of businesses (59%) report that in the coming year they intend to target training more effectively on those employees where it will make the biggest difference (**Exhibit 27**). A majority (55%) of respondents also intend to seek more cost-effective routes for delivering training. A particularly cost-effective approach – and one exactly geared to an organisation’s needs – is to conduct training on-the-job or deliver it internally. Just over half of businesses (51%) plan to increase the amount of training delivered in this way. Among the one in ten respondents (9%) planning other changes are moves to work collaboratively with other businesses to share delivery.

Exhibit 27 Planned changes in training delivery (%)



Too much training investment is still being diverted into remedial education

All too often, employers are having to divert funding and resources into remedial education to make up for shortcomings in basic competencies (**Exhibit 28**). Close to half of employers (44%) say that in the past year they have organised training in at least one basic skill area for adult employees. IT skills have been the most common area in need of attention, with 39% of businesses reporting that they have provided remedial training for at least some adult employees. There has been less widespread activity on literacy/use of English (15%) and numeracy (13%), but even these figures are disturbingly high, showing little improvement over the years.

More than a quarter of businesses (28%) report they have organised remedial training for at least some young people joining them from school or college. Most commonly this has been in literacy/use of English (22%), but even among young people one in 12

firms (13%) has had to provide help for at least some in acquiring basic IT skills. For graduate recruits, nearly one in six employers (15%) reports providing remedial training in at least one area during the past 12 months. The most common area for assistance has been IT skills (by 8% of businesses).

The lack of improvement in these figures over the years shows there is deep-rooted underperformance in parts of our schools systems. The CBI's *First Steps* report³⁰ set out the case for a major rethink, based on identifying the outcomes we want our schools to achieve and the capabilities we want every school leaver to possess. The nations of the UK cannot continue to tolerate educational shortfalls on this scale – particularly as our competitors across the globe drive up their standards. We must ensure that all young people are better supported in developing the skills, attitudes and behaviours that they need for success in work and life.

Exhibit 28 Employers providing remedial training in past year (%)

	School/college leavers			Graduates			Adult employees		
	2014	2013	2012	2014	2013	2012	2014	2013	2012
Literacy/use of English	22	15	20	7	5	6	15	16	15
Numeracy	19	14	18	4	6	5	13	13	13
IT skills	13	13	23	8	8	14	39	39	50

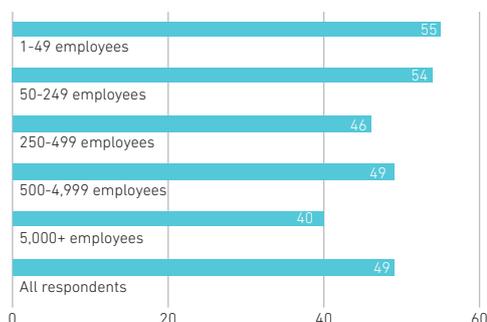
Training delivery depends on effective partnership

Businesses rely on a range of partners to help equip employees with the skills they need in their current jobs and to develop them for the future. While just over half of training (51%) is delivered in-house – through a combination of on-the-job and off-the-job development – on average 49% of training is carried out by external providers (**Exhibit 29**). With business confidence recovering fast and skill needs increasing, the proportion of training conducted by external bodies is well up on last year's average level (41%).

The increase in the use of external partners to train and develop employees applies across organisations of all sizes. The average proportion of training delivered by external specialists now ranges from 55% among the smallest businesses employing under 50 people to 40% among those with 5,000 employees.

Our survey shows some marked variations between sectors. While among professional services firms only just over a third (37%) of training and development is delivered by external partners on average, the proportion climbs to almost two thirds (64%) among construction businesses. Manufacturing is exactly in line with the all-sector average, with 49% of training on average delivered by external providers.

Exhibit 29 Training delivered by external providers by organisation size (mean %)



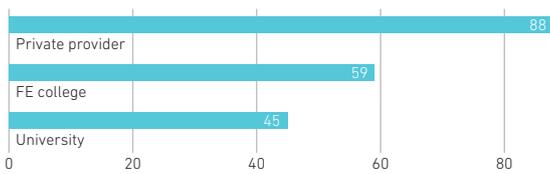
There's scope for training providers to up their game...

On almost every measure, employers over recent years have become more satisfied with the training delivered by external providers.³¹ But there is still scope for providers to improve their provision in important respects.

Private providers remain by far the most common choice for employers using external training and development provision (**Exhibit 30**). More than four in five (88%) of those firms in our survey drawing on outside providers look to private trainers. They are often called on to deliver short, unaccredited courses to address particular needs or changes. Further education colleges are also used by a clear majority (59%), particularly to support delivery of apprenticeship programmes and similar skills training. Although less commonly used, many universities have expanded their services to businesses in recent years. Among those firms using outside providers, close to half (45%) now draw on universities for at least some programmes.

Private providers achieve the highest employer satisfaction ratings on every measure (**Exhibit 31**). On overall responsiveness to an organisation's training requirements, for example, the balance of those businesses satisfied with private providers over those dissatisfied stands at +93%, far ahead of the positive balances for universities and FE colleges (+63% and +56% respectively). Nonetheless, across all categories of training provider, a high proportion of firms give a positive assessment on essential measures such as quality of trainers and the relevance of course content to skill and business needs.

Exhibit 30 Type of external providers used (%)



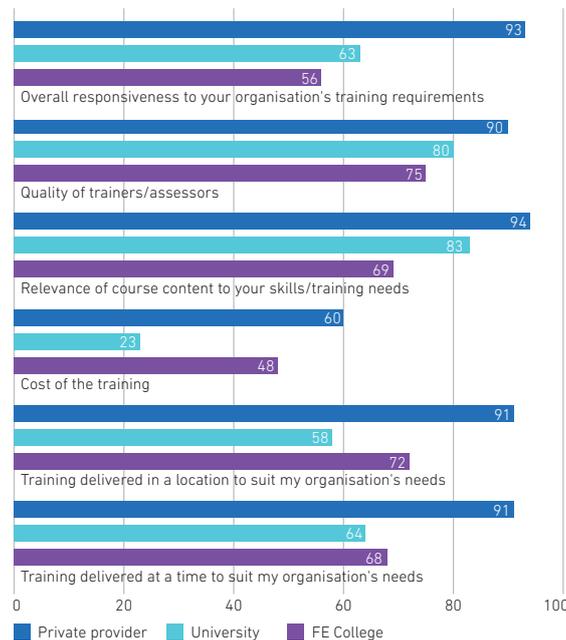
“
 On average, 49% of training is carried out by an external provider
 ”

...with flexibility to meet business operations in need of improvement

The costs of training will always be a concern for a business, with the positive balance of satisfaction dipping to as low as +23% in the case of the cost of university programmes. The other areas where there is still scope for progress concern conducting training in ways that fit with the day-to-day running of the business. Delivering training on employer premises or at another convenient location can often be important. But a positive balance of less than three quarters (+72%) of those businesses using FE colleges and +58% of those using universities report that training has been delivered in locations that suit their business needs.

The timing of training delivery matters too. While there are plenty of instances of training delivered, for example, to meet the needs of those working shifts and weekends, or at more quiet business periods, not all training providers adapt suitably. While a positive balance of nine in ten employers (+91%) using an external private provider say training is delivered at times to suit their organisation’s needs, that balance falls to +68% for FE colleges and +64% for universities.

Exhibit 31 Balance of employer satisfaction with training providers (%)*



* Net balance of employers satisfied or very satisfied minus those dissatisfied or very dissatisfied

Employers want greater control of qualification design

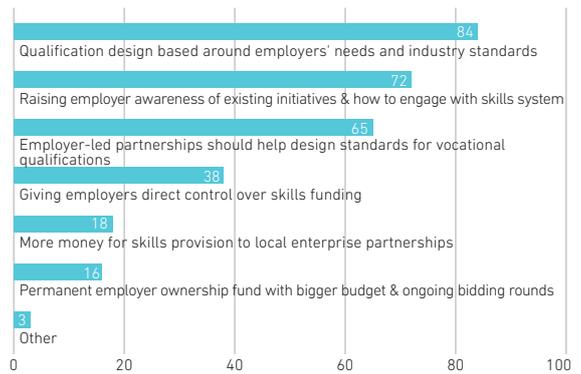
Achieving best use of resources by ensuring the business-relevance of training depends on employers taking ownership of the agenda. Over the past 18 months the government has taken steps to lay the foundations for a more demand-led system, ceding greater control of resource allocation to business. It is now widely recognised that too often in the past public resources committed to training and development have been poorly targeted.

This direction of policy is welcome, but there is much more to be done. Asked to identify their three top priorities for moving this agenda forward, respondents highlight the need to base qualification design on employers' needs and industry standards (**Exhibit 32**). This is cited as among their leading priorities by more than four in five business (84%) and as the single most important one by over half (54%). It is clearly at the very heart of employer ownership.

Respondents also see a broader need to raise awareness of the skills initiatives already under way and how businesses can engage effectively with these in practice (72%). Only if there is widespread involvement by businesses will employer ownership become a meaningful reality. Nearly two thirds (65%) of firms also see shaping of design standards for vocational qualifications by employer-led partnerships as an important issue to ensure those qualifications meet real business needs. This is seen as even more important than giving employers direct control of skills funding (cited as a priority by 38%).

Real progress is now being made. The plans, for example, for a new college to deliver the specialised training and qualifications required for high-speed rail to meet the needs of HS2 and other future infrastructure projects illustrate the potential.³² But all parties need to be moving further and faster.

Exhibit 32 Priorities for progressing employer ownership (%)



“
Only if there is widespread involvement by business will employer ownership become a meaningful reality”



Shaping a fully effective apprenticeship system

SECTION 6

Apprenticeships are vital to raising skill levels in our economy, enabling people to earn while they learn and opening the way to fulfilling, well-paid careers. The number of apprenticeship opportunities has grown rapidly in recent years as employers have recognised their value as a means of developing the skilled people they increasingly need. The government has rightly increased its support for apprenticeships, but there is still more to be done to develop a truly demand-led apprenticeship system under business leadership.

KEY FINDINGS:

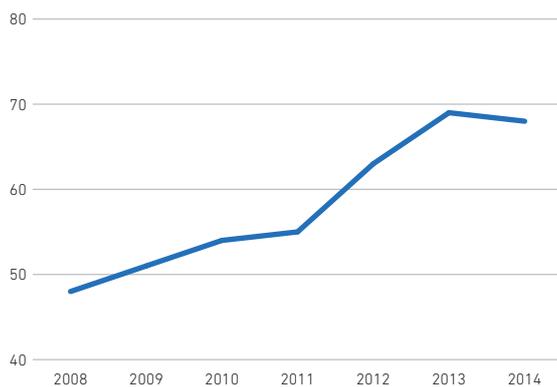
- The proportion of employers involved in apprenticeships has risen to more than two thirds of our survey in the past two years (69% in 2013 and 68% in 2014) from only half (51%) in 2009
- Two thirds of those offering apprenticeships (69%) plan to extend their programmes in future while across all respondents one in eight (13%) plans to start offering apprenticeships in the next three years
- Provision of apprenticeships is spreading into new sectors such professional services (where 42% of businesses now have at least some apprentices)
- Leading priorities for action to encourage expansion in apprenticeship programmes include more relevant qualification programmes (44%), giving firms greater purchasing power by routing the apprenticeship grant directly to employers (34%) and reducing bureaucracy (31%)
- Greater simplification and streamlining of the system and action by schools to prepare young people would encourage increased provision by SMEs – currently half of SMEs have no apprentices compared to less than one on ten (8%) firms with over 5,000 employees.

The apprenticeship system has seen rapid growth...

More than half a million people (510,200) started apprenticeship programmes in 2012/13. This is an encouraging figure, standing more than 230,000 higher than in 2009/10 and showing the strength of the drive to improve the UK skills pipeline.³³

Across our 2014 respondents as a whole, more than two thirds of employers (68%) are currently involved in providing at least some apprenticeship places (**Exhibit 33**). This means the growth in apprenticeships over recent years has been consolidated, following the climb in the proportion of businesses involved in apprenticeships from just under half of respondents (48%) in 2008 to above two thirds (69%) last year. The challenge now is to raise the proportion of businesses involved in apprenticeships still further.

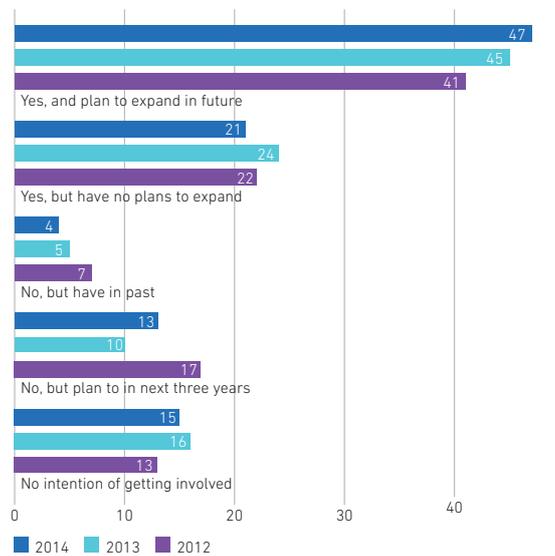
Exhibit 33 Employers involved in apprenticeships 2008-14 (%)



...and there is scope for further expansion

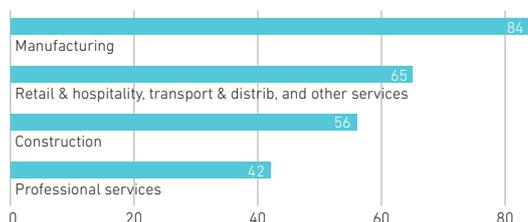
Prospects for further expansion of the programme are strong. Well over half (60%) of employers either intend to expand their current apprenticeship programmes or plan to start providing apprenticeship places in the next three years (**Exhibit 34**). The proportion of businesses that report they are already involved in providing some apprenticeship places and plan to expand their schemes in future has risen from 41% in 2012 to just under half (47%) this year. This is equivalent to more than two thirds (69%) of all those currently engaged in apprenticeship provision.

Exhibit 34 Employer involvement in apprenticeship programmes (%)



Involvement in apprenticeships has spread far beyond the sectors with which they are traditionally associated (**Exhibit 35**). While more than four in five respondents (84%) in manufacturing have apprentices, nearly two thirds of firms (65%) in retail and hospitality, transport and distribution, and other services, and two in five professional services businesses (42%) are also now engaged in apprentice training provision to at least some degree. The expansion of apprenticeships into more sectors shows the growing variety of businesses that recognise the value of this type of training and the new fields in which it can be applied.

Exhibit 35 Employer involvement in apprenticeship programmes by sector (%)



For continued expansion business must have the leading role

The past couple of years have been a period of reflection on the UK apprenticeship system. Reviews by Doug Richard,³⁴ Jason Holt³⁵ and the BIS Select Committee³⁶ recognised the vital role of apprenticeships in delivering business-focused training, equipping people with the skills and knowledge to carry out demanding roles, boost productivity and add value within their organisations. But while apprenticeships support people into fulfilling, well-paid jobs, enabling them to 'learn while

you earn' and opening the way to varied careers, the reviews also identified that the system needs to become more effectively demand-led to produce better value for businesses and the taxpayer.

Our survey asked employers about the three top measures that would encourage them to become more involved in apprenticeship programmes (**Exhibit 36**). The most important issue, cited by more than two fifths of respondents, is qualification programmes that are more relevant to business needs (44%).

Putting more purchasing power in the hands of firms by routing the apprenticeship grant directly to employers also ranks highly (34%). This is particularly an issue for larger businesses: some 38% of those employing 250 people and above identify this as a priority for action, compared with 27% of SMEs. Nearly a third of all respondents also want to see reductions in bureaucracy (31%) – a clearer and simpler system would be an important step in enabling businesses to exercise greater leadership over the apprenticeship system. These priorities are reflected in our response³⁷ to the recent government consultation on apprenticeship funding which highlighted the need for an apprenticeship system that works for firms of all sizes, that responds to businesses' demands for simplicity and which routes funding directly to employers.

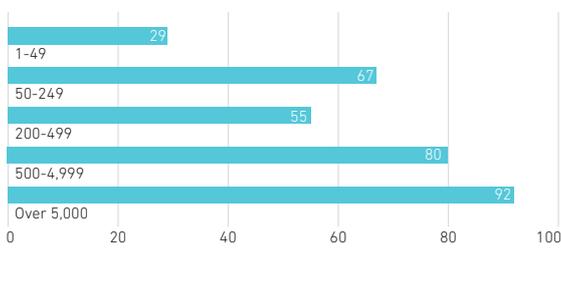
Other important areas in need of attention include greater flexibility for employers to be able to design bespoke apprenticeship frameworks (28%). This would be a valuable step towards ensuring apprenticeship training and qualifications fit more closely with business needs. Schools and colleges also have an important role to play in partnership with employers to ensure that more of the young people who apply for apprentice places are suitably qualified and motivated. Across businesses as a whole this is seen a priority by one in four (26%), rising to nearer one in three (30%) among SMEs.

“The imbalance in the scale of involvement by smaller businesses highlights the importance of reducing the bureaucracy around apprenticeships”

Exhibit 36 Action required to encourage employers to get more involved in apprenticeships (%)



Exhibit 37 Employer involvement in apprenticeship programmes by size 2014 (%)



There’s scope to involve many more SMEs

While more than a quarter of the smallest firms (29%) have some involvement with apprenticeships, that still leaves the great majority of these businesses – which include the major employers of the future – with no engagement at all with the apprenticeship system (**Exhibit 37**). It is also clear that medium-sized enterprises remain relatively under-represented among providers of apprenticeships. While four in five businesses (80%) employing over 500 people offer apprenticeship places (rising to over 90% among those 5,000 or more staff) only just over half (55%) of firms in the 200 to 500 employees band are currently involved.

The imbalance in the scale of involvement by smaller businesses highlights the importance of reducing the bureaucracy around apprenticeships and ensuring that programmes fit more closely with business needs. It also illustrates the need for effective support structures, such as through Apprenticeship Training Agencies or Group Training Associations, to simplify the process for smaller businesses and reduce the risks involved in participation. It is these factors rather than cost that smaller firms too often find off-putting. Jason Holt’s review set out a clear pathway to boosting apprenticeship uptake among SMEs by tackling these issues, but we have yet to see reforms having a major practical impact. There is scope for FE colleges – often the key training partners for apprenticeships – to up their game to ensure the relevance and quality of programmes.

Raising the performance of our schools

SECTION 7

What happens at school is crucially important for individuals in their lives, for the businesses that employ them and for the wider economy. If the right standards are not set and achieved during education, people and their employers risk being disadvantaged. Moreover, standards of schooling that might once have been adequate are no longer good enough. Competitor nations across the world are continually driving up their educational standards. It is essential that the UK responds effectively and does not slip behind.

KEY FINDINGS:

- Businesses are becoming concerned about the increasing educational divergence between different UK nations: two thirds (67%) believe it is important that qualifications are directly comparable and readily understood by employers
- Levels of awareness about the new vocational qualifications are very low among businesses, with 85% knowing little or nothing about them
- The most important factors employers weigh up when recruiting school and college leavers are their attitudes to work (85%), their general aptitudes (63%) and literacy and numeracy (44%). These rank well ahead of formal academic results (38%)
- Many businesses are not satisfied with the attitudes and skills of school leavers in important areas including attitudes to work (33%), teamwork (36%), basic numeracy (38%), problem solving (50%) and communication skills (52%)
- Businesses want to see primary schools concentrating above all on developing pupils' literacy and numeracy (85%), with these also as the most commonly cited priority (by 62%) in the 11-14 phase of schooling
- For the 14-19 age group, employers believe the top priority for schools and colleges should be developing awareness of working life with support from businesses (52%)
- Almost two thirds of businesses (65%) value foreign language skills among their employees, particularly in helping build relations with clients, customers and suppliers (28%)
- French (50%) and German (49%) are the leading languages in demand by firms, but those geared towards business in China are increasingly seen as useful (with those valuing knowledge of Mandarin up from 25% in 2012 to 31% in 2014).

Businesses want young people who are rigorous, rounded and grounded...

There is no more important contributor to long-term economic success than education, so the quality of our school and college systems is of central importance to employers. Businesses want young people who are rigorous, rounded and grounded – with not only key skills and knowledge, but also, crucially, the attitudes and behaviours needed for success in life and work. Stretching academic standards are necessary but not sufficient to success in this, as emphasised in the CBI's *First Steps* report³⁸ (**Exhibit 38**).

With our international competitors pushing up levels of achievement every year, raising ambition for all in schools is of fundamental importance to business.³⁹ Employers look to schools to develop confident, motivated young people with the attitudes, core knowledge and behaviours that will prepare them for success in life outside the school gates.

“

Businesses want young people who are rigorous, rounded and grounded”

Exhibit 38 *First Steps*: A new approach for our schools

In November 2012, CBI published *First Steps*, a comprehensive look at businesses' priorities for the education system. Working with teachers, headteachers and business, we set out a pathway for reform that includes:

- Developing a clear statement of the outcomes all schools should deliver
- Ensuring the accountability system – particularly the Ofsted framework – is reformed to reflect this statement
- Empowering school leaders and teachers
- Closing the attainment gap at primary level
- Aligning the curriculum and examination at secondary level with the desired outcomes
- Encouraging business engagement

While some progress has been made in key areas, more still needs to be done to clearly specify outcomes and to ensure schools are held accountable for how these outcomes are delivered. In particular, we need reform of the Ofsted framework to ensure that both academic progress and the development of character are prioritised by schools.

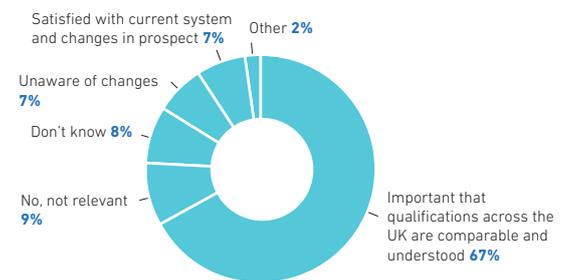
...with comparable standards across all nations of the UK

The increasing divergence of school and qualification performance in the different parts of the UK is becoming a concern for businesses (**Exhibit 39**). School and exam systems are one of the main responsibilities devolved to the administrations of the different nations of the UK, and recent reforms to qualifications have moved these systems even further away from each other. While devolution of control over schools is something businesses support, clarity over standards and exam rigour is an essential part of ensuring all young people get the education the need, and that employers are clear about the level students have reached. There is a risk of drift towards increasingly disparate arrangements and uneven levels of performance and assessment, so it is essential devolved authorities are able to learn from each other about what works.

The latest results from the OECD Programme for International Student Assessment (PISA), for example, illustrate the extent of differences within the UK in 2012 and the scale of challenge against international competitors in essential skill areas such as maths and science.⁴⁰

Across the economy as a whole, two thirds of employers (67%) believe it is important that qualifications from all parts of the UK are comparable and readily understood by employers. A particular concern here is where exams with the same name – for instance the English GCSE and the Welsh GCSE – are held to differing standards. Businesses need to be confident that they can recruit people with genuinely comparable levels of qualification and that they are clear about the level of skills and knowledge that can be expected among those recruits. Otherwise there is a real risk of the UK qualifications landscape becoming increasingly confusing, to the detriment of young people and their potential employers. We know from the example of the Scottish qualification system that a differentiated system can work well, but what is key here is clarity and employer confidence.

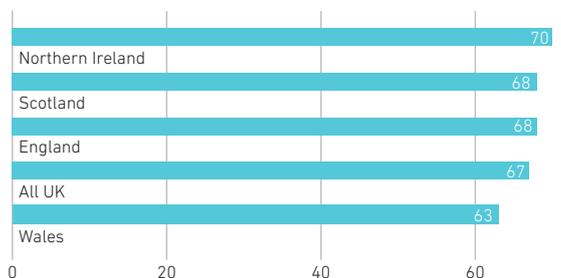
Exhibit 39 Concerns about divergence of school and qualification systems within UK (%)



The concerns about comparability and clarity in educational standards are held by a large majority of employers throughout the UK (**Exhibit 40**). Proportions of respondents viewing increased divergence as a cause for concern range from nearly two thirds in Wales (63%) to seven in ten (70%) in Northern Ireland.

Looking at levels of concern by organisation size, SMEs and larger businesses are virtually equally concerned (69% and 68% respectively).

Exhibit 40 Businesses seeing divergence as cause for concern (%)



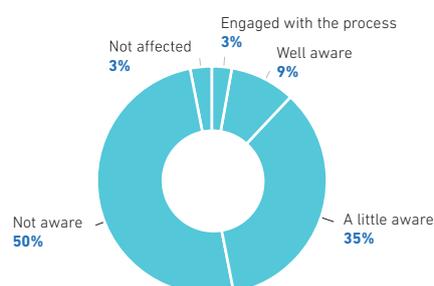
Most employers know little about the new vocational qualifications

A key driver of success of qualifications is confidence that they are equipping young people with skills and qualifications that are valued by employers. It is therefore important that changes in qualifications and the skills and knowledge they reflect are communicated effectively to businesses. The results from our survey show the government has a major job to do in explaining to business the new vocational qualifications for young people that will start to be delivered in England from September.⁴¹

The new Tech Levels and Applied General qualifications are an attempted answer to businesses' call for a gold standard vocational qualification to sit alongside the academic A Level at age 18. They are geared to the needs of students wishing to specialise in a technical career (for example in engineering, IT or accounting) or a range of other recognised occupations, and are recognised by relevant trade or professional bodies. Businesses remain concerned by the complexity of a two-qualification model.

Introduction of the new qualifications is an important development, although it is early days and it remains to be seen whether they deliver on their promise. But it is essential for employers to be aware of them and for more to engage with the process of approval to ensure their success and recognition in the employment market. Only one in eight businesses (12%) reports a high level of awareness, including just 3% engaged with the process. A troubling half of businesses (50%) are not aware of the new qualifications, while a further third (35%) have only a little awareness (**Exhibit 41**).

Exhibit 41 Business awareness of new Tech level and Applied General qualifications (%)



85%

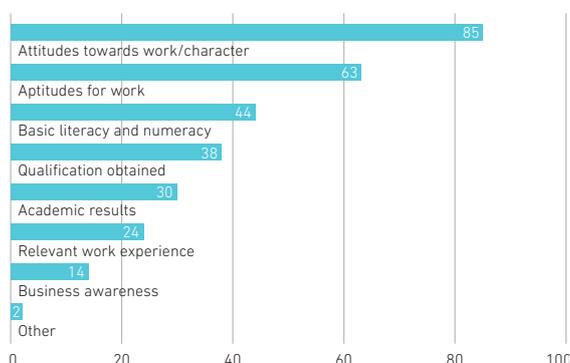
Proportion of businesses with little or no awareness of new English vocational qualifications

Attitudes to work among young people matter most

When it comes to recruiting school and college leavers, **(Exhibit 42)** our survey results show the overwhelming importance of young people's attitudes to work. More than four out of five employers (85%) rate this as one of their three most important considerations. This comes as no surprise and is in line with our previous research.⁴² The CBI has long pointed to the central importance of a positive attitude, demonstrated for example by a readiness to take part, openness to new ideas and activities, and a desire to achieve. It also involves understanding that hard work and effort yields results.

Also ranking ahead of formal academic results and qualifications are young people's aptitudes for work (cited as important by 63%) and core skills such as basic literacy and numeracy (44%). In day-to-day working life, personal attitudes, aptitude, ability to communicate and a sufficient capacity to cope with numerical data are key enablers. It is therefore critically important that our school system helps all young people develop as fully as possible in at least these areas by age 18.

Exhibit 42 Most important factors in recruiting school & college leavers (%)



Too many young people leave school underequipped for life...

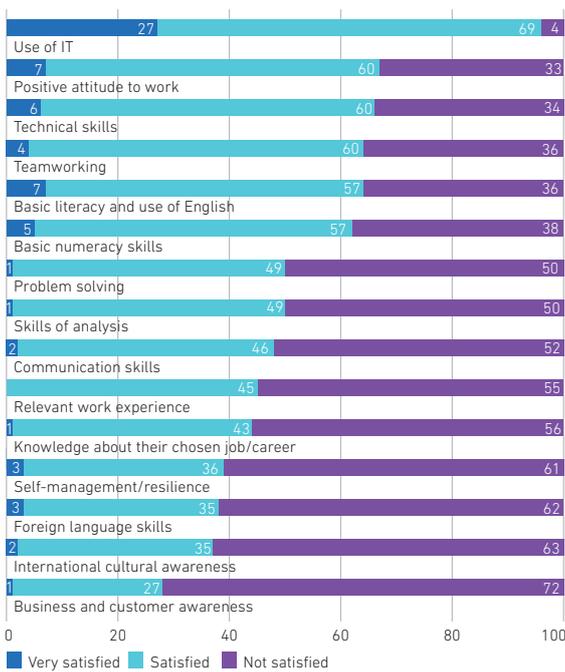
Too many young people are still leaving school and college without these attributes being adequately developed. **(Exhibit 43)**. It is particularly troubling that a third of employers (33%) are not satisfied with school and college leavers' attitudes to work. Since this is the single most important consideration when young people are seeking that critical first job opening, developing a constructive attitude during their schooling is fundamental to working life.

More than a third of firms are also not satisfied with the technical skills (34%), teamworking (36%), literacy/use of English skills (36%), and basic numeracy (38%) of young people entering the world of work. Half report dissatisfaction with young people's ability to analyse problems (50%) and to communicate effectively (52%). All these are essential skills for effectiveness in life. An undue emphasis on GCSE grades (or equivalent) and school league tables risks distracting attention from the need to equip every young person adequately with these capabilities.

More than half of businesses (55%) are not satisfied with young people's work experience. The government's decision to end the statutory duty on schools in England to provide every pupil at Key Stage 4 with work-related learning is therefore a matter of regret. While not every placement has been of uniformly high quality, the emphasis should have been on improving schemes, not abandoning the concept. For most young people their work experience gives them a first, critically important taste of workplace life and the chance to reflect on the lessons of it. With more than two thirds of employers (72%) not satisfied with levels of business and customer awareness among school and college leavers, work experience placements can help young people gain practical insight into why providing customer satisfaction matters and routes to achieving it.

The CBI has made the case for a broader definition of success at school that incentivises the progress of all young people and takes into account the wider package of attributes and competencies that they should have for success in life and work. A fresh approach of this type is needed to refocus our schools on tackling these important areas – an increased focus from Ofsted in inspections, for example, would encourage and incentivise schools to place a greater emphasis on these issues.

Exhibit 43 Employer satisfaction with school/college leavers' skills

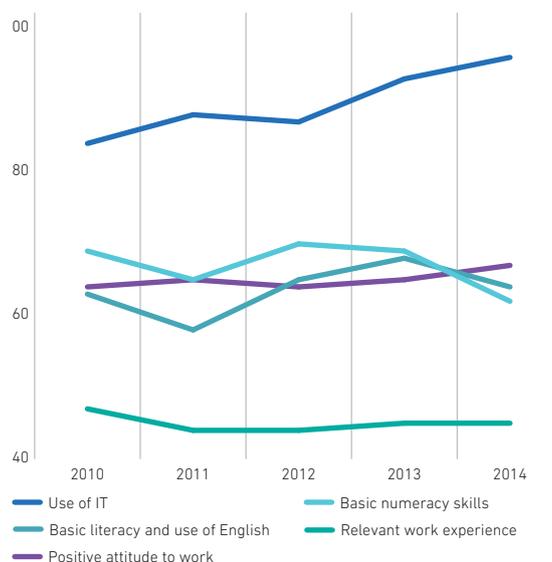


...with IT the only area of steady improvement

Viewing employer experience over a longer period (**Exhibit 44**), the one area of consistent progress has been school leavers' grasp of IT (now seen as satisfactory or better by 96% of employers). The emphasis in schools on English does not seem to have yielded lasting improvement, with the proportion of businesses considering standards satisfactory slipping below two thirds (to 64%) in 2014.

In other essential areas such as numeracy and attitudes to work, there has been no sustained improvement in recent years. The results show how much still needs to be done during their time at school to lay the essential foundations for people's working lives.

Exhibit 44 Employer satisfaction with selected skills of school/college leavers 2010-14 (%)

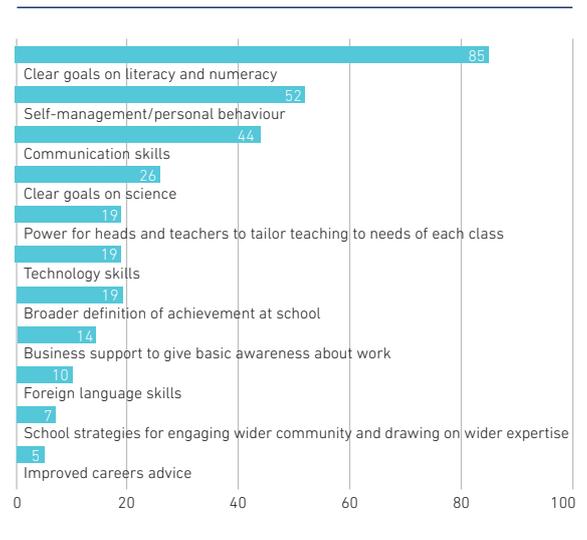


Employers want a clear focus on essential competencies in primary schools

Businesses want to see primary schools focusing on the essential competencies that make further learning possible (**Exhibit 45**). Asked to identify the three priority areas they believe primary education should focus on, the top response by a wide margin is establishing and achieving clearly defined goals in literacy and numeracy (85%). Without sustained progress in these areas during their time in primary education, evidence shows that young people will find it almost impossible to catch up. There is certainly no room for complacency: one child in four (25%) in England leaves primary school without reaching expected standards in reading, writing and maths combined.⁴³ In over 750 schools in England, under 60% of pupils attain the expected standard.

Businesses also see it as important for primary schools to help children develop appropriate self-management and personal behaviour (52%) and to make headway in developing the effective communication skills that are so essential later in personal and working life (a priority for 44% of respondents). These are important skills underpinning both effective future learning and success in any work environment. Unless these become firmly embedded during their time in primary school, it will be hard for young people to thrive later in life.

Exhibit 45 Priority areas for action in primary education (%)

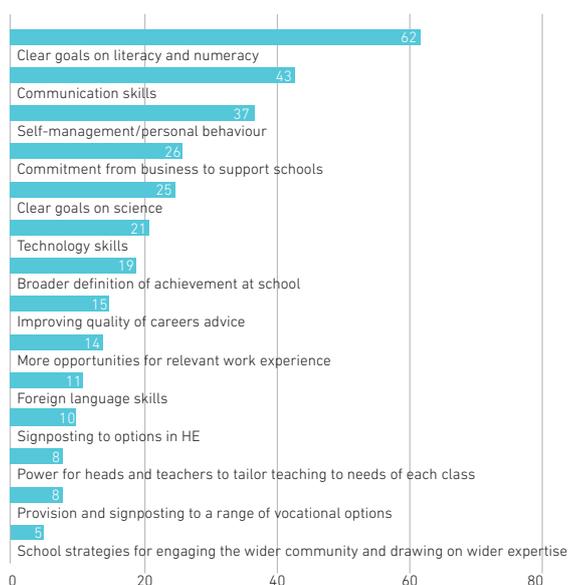


The focus should continue to age 14

Businesses believe the focus on literacy and numeracy at the outset of formal schooling needs to be maintained in the age 11 to 14 phase of education (**Exhibit 46**). This remains the top priority (cited by 62%). Communication skills and self-management also continue to rank highly (43% and 37% respectively) when business identify their top three priorities. Unless young people can master these essential enabling skills effectively, they will struggle to meet the demands of working life.

In this early phase of secondary schooling, one in four employers (26%) also sees a need for businesses to support schools in giving young people a basic awareness of the world of work. Businesses have an important part to play from this stage of education onwards in helping young people understand the 'real world' relevance of the knowledge and skills to be gained at school, boosting their motivation to engage fully with learning.

Exhibit 46 Priority areas for action in 11-14 education (%)



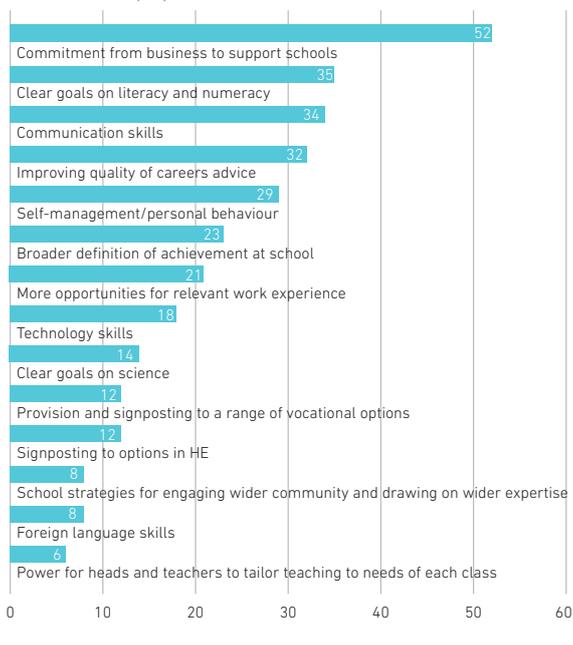
Businesses see the need to support schools...

For young people in the 14-19 age bracket, employers want to see a much greater focus on work awareness (**Exhibit 47**). Asked to identify their three top priority areas for action in education for this age group, respondents highlighted the need for businesses to commit to supporting schools (52%). This includes helping them improve young people's understanding of the skills and attitudes required at work and enthusing them about the options open to them. Young people themselves recognise the need for help in this area.⁴⁴ They report that all too often they find it difficult to connect the relevance of school and learning to their future work aims. Current activity in this area is reviewed in more detail in Chapter 8.

A third of firms (32%) also want to see a step change in the quality of careers advice. Young people need help to gain a better understanding of the varied routes open to them and the qualifications they will require to pursue them. The government has recognised the need for change, issuing new guidance for schools.⁴⁵ Ofsted will also be looking more closely in future at the quality of careers advice and support available when they inspect schools. This follows a report last year in which Ofsted found three quarters of the schools visited were not implementing their duty to provide impartial careers advice effectively.⁴⁶ We return to this issue in Chapter 9.

In parallel with developing work and careers awareness among the 14-19 age group, businesses also highlight the importance of continuing to reinforce the core areas of literacy and numeracy (35%), communication skills (34%) and self-management and personal behaviour (29%). Almost one business in four (23%) sees it as a priority at this stage in education to recognise a broader definition of achievement, going beyond formal academic results to recognise the positive attitudes and behaviours valued in a work context.

Exhibit 47 Priority areas for action in 14-19 education (%)



“

Young people are increasingly thinking about their next steps and what pathways they will follow to success”

'My Education'

The Pearson and Teach First *My Education* report published in November 2013 examines the views of young people on their own experiences of the education system – bringing together the opinions of over 8,000 young people aged 14-21 across the UK.⁴⁷

My Education looks at issues ranging from teaching and assessment to the future ambitions and aspirations of young people, showing that what young people want is an education that will prepare them for success in life and work.

The findings of research undertaken showed that young people themselves are focusing clearly on their future prospects, with 41% of those surveyed citing a desire to achieve future careers goals as the main driver that encouraged them to work hard at school.

When asked what they thought would be important factors in helping them to achieve their goals, over 90% of those questioned highlighted high-quality qualifications that are respected by universities and employers, with 88% citing more of a focus on practical life skills such as CV writing and 83% believing that more opportunities for work experience and better careers advice are important.

This research showed that young people want to learn more about getting a job, managing money, different cultures and languages, and generic work skills – matching some of the areas where businesses report lower levels of satisfaction with the skills of school and college leavers (**Exhibit 43**).

Students were also asked what they thought the most important skills they needed to learn at school were, and again this reflected many of the priorities that business has for the education system. 94% of the young people surveyed, for example, thought that communication skills were important to learn at school, 92% saw confidence and motivation as important and 89% agreed that employability skills should be developed at school.

What this research highlights is that young people are increasingly thinking about their next steps and what pathways they will follow to success, and that their priorities often reflect those of employers. We must ensure that the education system and the structures around it are geared towards supporting and incentivising schools to deliver the education that develops young people that are prepared to succeed in work and life.

Language skills can smooth the path to business

While a focus on foreign language skills is not seen by many as a top priority area for action in education, only around one third of businesses (35%) have no need at all for foreign language skills in their employees – and this is likely to decrease as we shift towards a more export-led economy.

English is the international language of business – in itself a real benefit for the UK. But there can be great advantages for British businesses if employees can communicate with at least reasonable proficiency in the language of clients, customers and suppliers (**Exhibit 48**).

The vast majority of businesses (94%) do not require a high level of foreign language fluency as an essential core competence of their operations. But conversational fluency in another language helps in the conduct of business and can assist staff in their careers. Over two in five employers (41%) see foreign language ability as beneficial to the business although not a recruitment requirement, while more than one in four (28%) finds it helpful in building relations with overseas suppliers, customers and other contacts. Around one in six (16%) says language skills assist staff mobility within the organisation, facilitating international working.

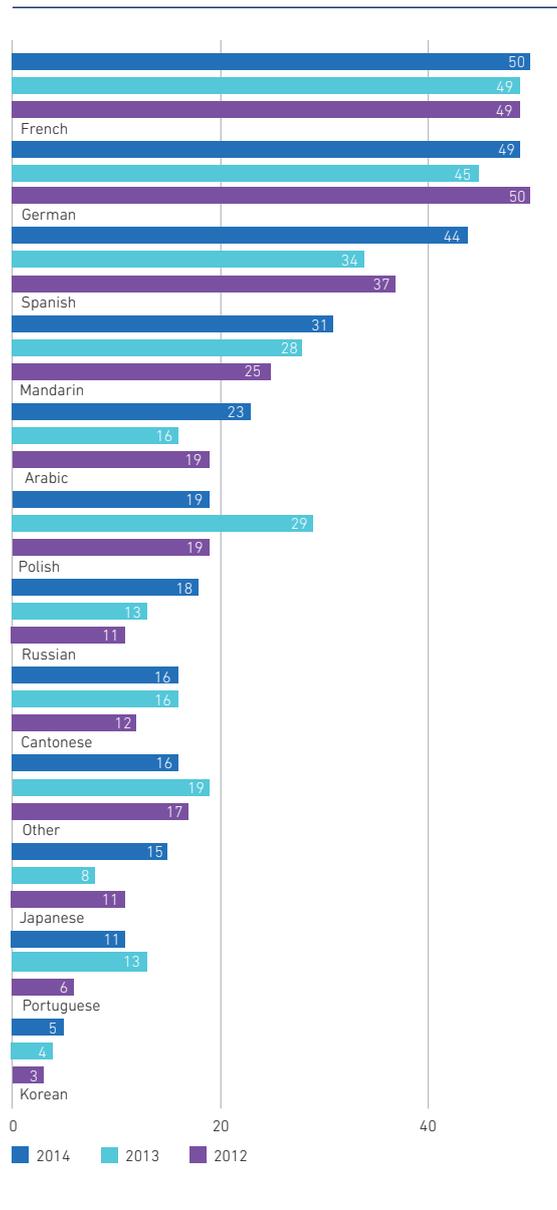
Language skills are more highly valued in those sectors leading the rebalancing towards a more export-oriented economy. For example, over half of manufacturing firms (51%) and a third (33%) of professional services businesses say foreign language skills among staff are helpful in building relations with overseas contacts.

Given the dividends language skills can pay for businesses, it is concerning that foreign language study in schools has been under pressure in recent years. There are some encouraging signs of change: some 50% of state schools in England report an increase over the past three years in the numbers of pupils taking at least one language at Key Stage 4.⁴⁸ In about one in five schools, however, take-up for languages remains persistently low (below 25%) with no indication of an increase. The jury is still out over whether recent government initiatives to revive foreign language learning will bring about a much needed resurgence.

Exhibit 48 Need for employees who can speak foreign languages (%)



Exhibit 49 Foreign languages rated as useful to the organisation (%)



Languages for new markets on the rise

The major European languages continue to be those most commonly mentioned as being in demand (**Exhibit 49**), led by French (50%) and German (49%). The major European economies still represent – along with the US – large export markets for British goods.

Over recent years, however, there has been a steady rise in the proportion of businesses rating Mandarin as useful. By 2014 this has come to be seen as useful by close to a third (31%) of those respondents identifying particular languages, reflecting the phenomenal growth of the Chinese economy and the expanding trade and investment links of British firms. Spanish too is widely cited as useful (by 44% in 2014). Outside Europe, much of the Spanish-speaking world is experiencing solid economic growth, opening export and investment opportunities for the future where some knowledge of the language may help.

Businesses recognise the need to support schools

SECTION 8

Achieving a greater focus on work awareness among young people at school depends on a high level of business involvement. Schools, colleges and businesses need to work together as partners with the shared aim of raising ambition and levels of attainment for all. By providing work experience and becoming involved in other ways, employers can spell out the value of the skills and knowledge developed at school and open pupils' eyes to career opportunities. They can also bring their expertise into schools and colleges through roles such as governor.

KEY FINDINGS:

- Eight out of ten businesses (80%) now have links of some type with at least one school or college
- Over the past year, the balance of firms increasing their links with schools and colleges over those reducing them has climbed to +51%
- While two thirds of businesses have links with secondary schools (64%) and FE colleges (63%), only a third (31%) have links to primaries
- Among employers with links to schools and colleges, the most common forms of support are offering work experience placements (77%) and providing careers advice and talks (67%)
- Other widespread forms of business support include involvement in schemes to promote study of particular subjects (36%), employees acting as governors (32%) and employees becoming student mentors (31%)
- Progress is slow on tackling barriers to business involvement, with widespread uncertainty over how to make work experience worthwhile (31%), lack of interest among schools or pupils (19%) and problems in fitting involvement with the school timetable (19%)

Business/school partnerships are widespread...

The CBI has long championed business partnerships with schools and colleges. As part of the wider community, business recognises its obligation to help schools raise ambition and levels of achievement among young people – the workforce of the future. Many schools and businesses already have active links, with eight out of ten respondents (80%) to our survey having links of some type with one or more school or college (**Exhibit 50**).

Where links exist, most businesses have increased their scale of commitment (**Exhibit 51**). Over half of employers (55%) with some education links report they have increased their engagement over the past year, while just 4% have cut back. This means the balance of firms increasing their links with schools and colleges over those reducing them stands at +51%.

Exhibit 50 Employers linked with schools/colleges (%)

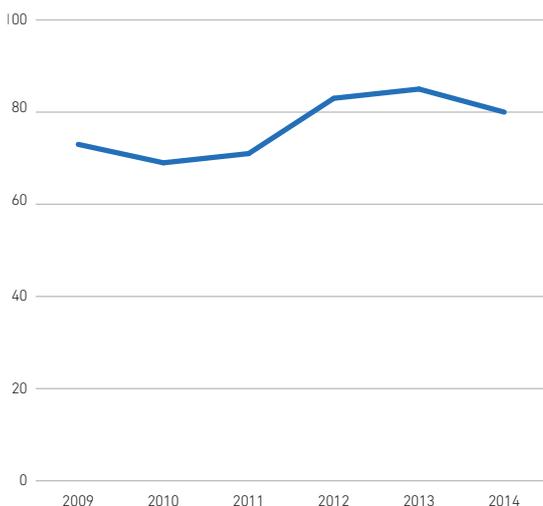
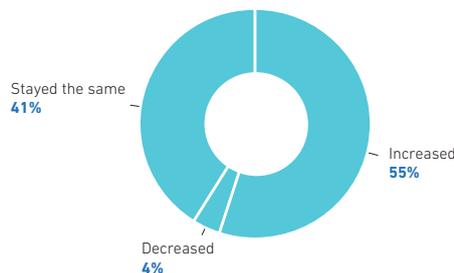


Exhibit 51 Change in scale of links with schools/colleges over past year (%)



...Particularly in secondary level education

Connections are most widespread between businesses and secondary schools (64%) and FE colleges (63%) (**Exhibit 52**). This reflects the priority employers attach to achieving a greater focus on work awareness among young people in the 14-19 age group (see Chapter 7). Links at the level of primary schooling are only half as common, with a third (31%) of businesses reporting links of some type at this level. There is a strong case for strengthening and expanding the scale of links between business and primary schools. It is at primary school that young people's attitudes, aptitudes and basic competencies are being developed, so helping pupils understand how much these matter for life beyond school can be an important motivator. Links with students at primary school age can also help to generate inspiration and ambition around particular career pathways and sectors from an early age.

Levels of engagement are highest among the largest businesses employing more than 5,000 people. In this category more than eight in ten firms have links to secondary schools (89%) and FE colleges (84%) and half to primary schools (49%). Even among SMEs, however, nearly half have links of some type with secondary schools (47%) and FE colleges (49%) and a fifth (22%) with primary schools. In all, 70% of SMEs have links at some level.

Exhibit 52 Employers linked with schools/colleges by level (%)

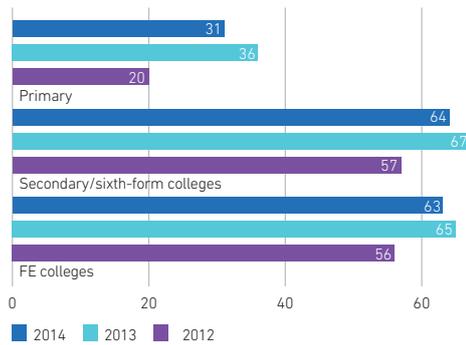
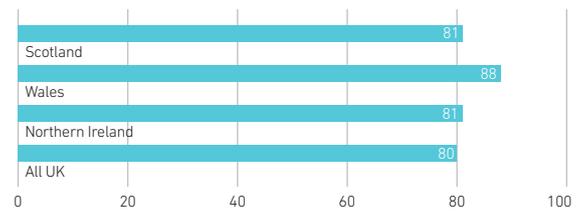


Exhibit 53 Employers linked with schools/colleges by nation (%)

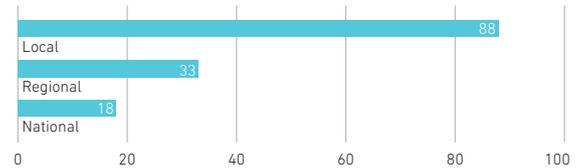


There are high levels of linkage across the nations and at varied levels

Links between businesses and schools/colleges are extensive in all parts of the UK (**Exhibit 53**). The scale of connections is at or above eight in ten firms in all four nations.

For the great majority of businesses (88%) with connections to schools or colleges, those links are made and managed at local level (**Exhibit 54**). A third (33%) of linked employers, however, report operating links at regional level and nearly one in five (18%) at national level, often complementing local tie-ups with individual schools and colleges. These links above the local level are often in the context of programmes to encourage young people in studying particular subjects, as we discuss below.

Exhibit 54 Scale of employer links with schools/colleges (%)



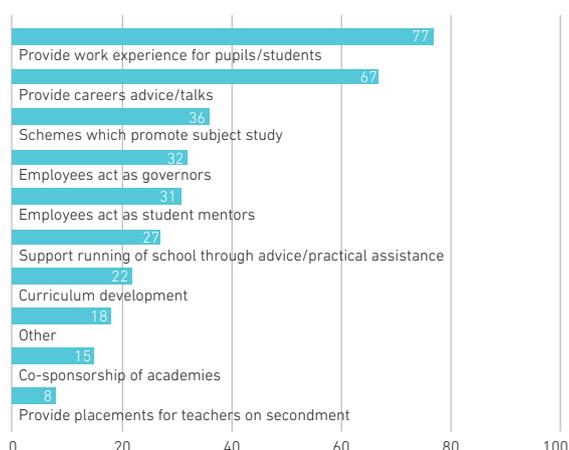
“ Over half of employers with some education links report they have increased their engagement over the past year ”

Business support is focused on work experience and careers advice...

The single most widespread way in which businesses support schools and colleges is by providing work experience placements for students (**Exhibit 55**). Close to four out of five employers (77%) with links to schools and colleges offer placements. Among those firms employing more than 5,000 people, the proportion climbs to nearly nine in ten (88%). Readiness among businesses to provide this type of support is critically important in view of the widespread concerns about the inadequate extent of school leavers' workplace experience (see Chapter 7).

Two thirds (67%) of those businesses with links to schools are involved in delivering careers advice and talks. Given the long-standing shortcomings in the machinery for delivering careers guidance, a high level of business involvement is essential if young people are to have a sound grasp of options and opportunities and the qualifications they need to secure.

Exhibit 55 Nature of employers' work with schools/colleges (%)



...but businesses are also delivering practical support

Schemes in which employers engage with schools to promote study of particular subjects are widespread, with one in three businesses (36%) taking this approach. In particular, there are a range of initiatives to enthuse and inspire young people about studying STEM subjects to try and tackle the shortfalls in these skills areas (Chapter 4).

School governance is another area where business involvement can make a highly valuable impact. Success in our education system depends on excellence in its school leaders, backed and held to account by assertive, confident and capable governing bodies (**Exhibit 56**). A third of employers (32%) now have members of staff acting as governors, who can draw on their business expertise to help schools and colleges run efficiently and effectively. This is an important level of contribution, but there is scope for further expansion. Recruiting good governors is often still difficult for special schools and schools in disadvantaged areas or under pressure from Ofsted for rapid improvement.⁴⁹ Their governing bodies need exactly the qualities those from business can inject, such as asking challenging questions, accepting collective responsibility for the conduct of the school and the ability to work as a team on complex issues.

Other valuable forms of business support include enabling employees to act as student mentors (31%) – particularly important in raising aspirations among young people from deprived backgrounds – and advice or other help related to running of the school (27%) or development of the curriculum (22%).

Exhibit 56 Leading the way

Strong leadership and governance are essential to driving school improvement, but as the CBI report *Leading the Way* sets out, too many schools are not performing well enough in this area. Strong and effective governance is about giving headteachers strategic guidance and challenge, and many of the skills needed on a governing body are linked to – and often developed in – a business setting. These include the ability to think strategically, understand and interpret balance sheets, human resources expertise and general management awareness.

There should be a real focus on encouraging more individuals from business to volunteer as governors in schools and colleges in order to drive up standards, and that is why the CBI is now working with a range of partners – including the DfE and BIS – on the new 'Inspiring Governors Alliance' (www.inspiringgovernors.org). The alliance is focused on championing and promoting the role that school and college governors play and ensuring that the right people with the right skills, such as those from business, are in place on governing bodies.

Barriers to business involvement still need to be tackled

Although the great majority of businesses now have at least some links with schools and colleges, that involvement could be extended and deepened if current barriers were tackled effectively. The results of our survey show slow progress in doing so (**Exhibit 57**).

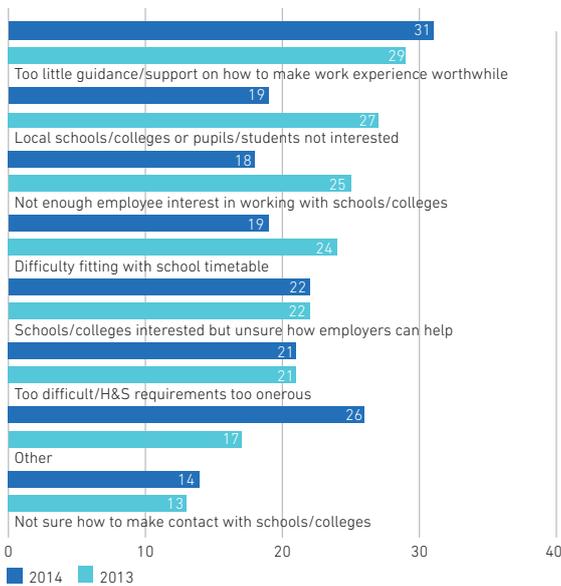
When asked about any barriers to building links with schools and colleges, close to a third of employers (31%) say there is insufficient guidance and support on how to make work experience placements worthwhile. This has long been an area of concern to businesses and the government's decision to end compulsory work experience in England sends a negative signal about the perceived value of placements.

Lack of interest is seen as a further barrier, but declining in importance – a welcome sign that the school system itself is becoming more responsive to the strengths of working with business. A fifth of

respondent businesses (19%) report that local schools or colleges, or their pupils, are not interested in ties to business. This is well below last year's levels (27%). There has also been a drop in the proportion saying not enough of their employees are interested in working with schools and colleges (down from 25% last year to 18% in 2014). Taking charge of young people on work experience, fulfilling the responsibilities of a governor and the demands of mentoring or giving career presentations are not only valuable to schools and their students, but can play a useful part in the development of employees – these opportunities should be valued.

Other problems include the fit of work experience or other involvement with the school timetable (19%), the perception that involvement will be unduly onerous (21%) and uncertainty over how best to make contact with schools and colleges (14%). Businesses report there is no well-publicised one-stop shop for becoming involved.

Exhibit 57 Barriers to building links with schools/colleges



“
...involvement could be extended and deepened if current barriers were tackled effectively
 ”

Careers advice: not yet fit for purpose

SECTION 9

The UK's economic prosperity depends on making full use of talent at all levels and everyone deserves the chance to progress and make the most of their abilities. But as the world of work becomes increasingly complex, young people need guidance and support to enable them to understand the options open to them. And they need support in navigating a route into their chosen career area. The school-to-work transition is currently far too haphazard a process. Businesses believe the quality of careers advice is simply not good enough and is in need of major improvement.

KEY FINDINGS:

- The great majority of employers believe the quality of careers advice for young people is not good enough (by a balance of -77%)
- The quality of careers advice young people receive to help them make informed decisions about future options in education is also seen as inadequate (by a balance of -44%)
- These weaknesses in careers advice are reported by a large majority of businesses in every part of the UK
- There is a readiness among employers to play a greater role in delivering careers advice, with two thirds (66%) willing to do more
- Short-term work placements of a week or two are by far the most common type of work experience offered by businesses (89%), but almost half (46%) also offer longer-term paid internships.

Young people need the right help to prepare for working life

We need to do much more to help young people prepare for working life. That is both the view of businesses and of young people themselves.⁵⁰ Nowhere is the need for improvement more important than in the transition from school to work.

Millions of people in the UK today work in jobs that did not exist when their parents left school and first started work. Changes in technology, markets and customer demand open up new, constantly evolving career opportunities. Arrangements to help younger people into work that may have been adequate in the past in a simpler, slower-changing economy are no longer fit for purpose. If in future we are to make the most of people's talents and ambitions, we need a radically different approach.

Better careers advice is urgently needed...

Effective careers guidance and inspiration is at the heart of helping young people navigate the transition between education and work. Current provision is simply not up to the mark and businesses are seeing no sign of improvement, judging by our survey results (**Exhibit 58**).

Four out of five businesses (80%) across the UK feel the quality of careers advice young people receive is not good enough to help them make informed decisions about future career options. Only 3% consider the quality of current careers advice to be adequate, producing a negative balance of -77%.

These worrying results are even more negative than the views expressed by businesses in previous years. In 2011 and 2012, a balance of more than two thirds of respondents (-68% and -67% respectively) viewed the quality of careers advice as failing to deliver to the standard required. So there is a long-standing problem that needs urgent action.

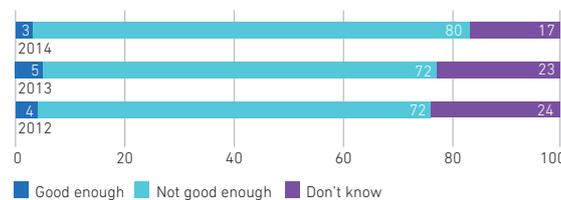
Careers guidance in England has never been good enough, but handing over the entire responsibility to schools without extra resource or support – as we have seen – is unlikely to result in a system that effectively supports all young people to progress through education and into employment. Analysis from the National Careers Council has also highlighted the need for a rethink around careers guidance in schools.⁵¹

Recent steps from the government – such as the publication of new statutory guidance for schools on careers – are welcome, but not sufficient to drive the improvements needed to ensure that all young people are prepared for life outside the school gates.⁵² We particularly welcome the references within this guidance to strong employer engagement, as businesses have a key role to play in helping to make young people aware of the opportunities available to them, to inform them about what it is employers are looking for in potential recruits, and to inspire them to follow particular pathways.

However schools, colleges and businesses can't do this alone – what is needed is some kind of system to broker the relationships between these stakeholders, to ensure all young people have access to the information and inspiration they need to succeed in life and work.

But real change will only come with government acknowledgement of the scale of the challenge and practical steps to apply a comprehensive new approach backed by adequate resources. Careers advice must move from being about provision of information to being about helping people to navigate information in a way that leaves them inspired and sets them on a practical path to achieve their goals. This is particularly important for young people.

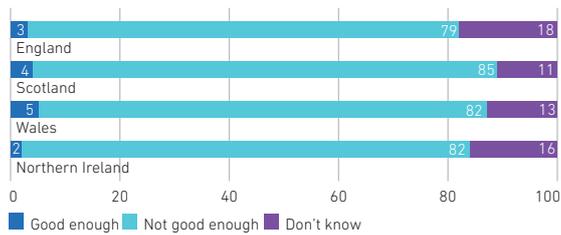
Exhibit 58 Business views on the quality of advice about careers for young people



...across all parts of the UK

It is essential that the careers provision available to young people – and indeed to adults as well – keeps pace with change in the working world. Our findings show there is good reason to believe that it has failed to do so in every part of the UK (**Exhibit 59**). The scale of dissatisfaction ranges from three quarters of firms on England (a negative balance of -76%) to over eight in ten firms in Scotland (a negative balance of -81%) believing the quality of careers advice is not good enough. This is a problem which requires urgent attention from administrations in all parts of the UK.

Exhibit 59 Business views on the quality of careers advice by nation (%)



Advice on education options also needs improvement

The quality of careers advice young people receive to help them make informed decisions about future options in education is also in need of improvement (**Exhibit 60**). Less than one in five businesses (17%) view the quality of advice relating to education options for young people as good enough, while six in ten (61%) consider it is not adequate, producing a negative balance of -44%. All too often, young people are not given sufficient understanding of the qualifications they need to enter the career fields they aspire to or which subjects are likely to equip them best, with the result that they find doors closed to them when they leave school.

Once again, the pattern of weakness applies across the UK (**Exhibit 61**). While in Wales a negative balance of -39% of firms believe advice for young people is not good enough when it comes to helping them select education options, the negative balance rises to -47% in Scotland.

Exhibit 60 Business views on the quality of advice about education options for young people (%)

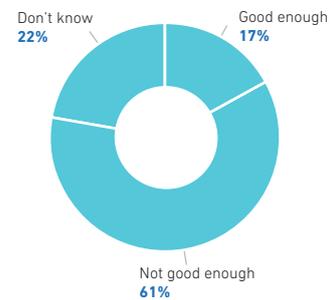


Exhibit 61 Business views on the quality of advice about education options by nation (%)

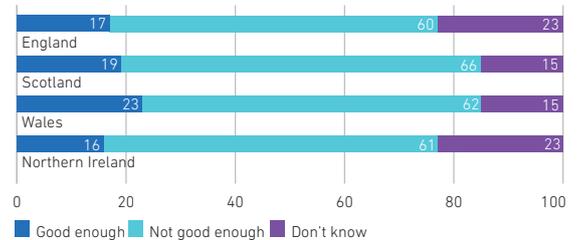
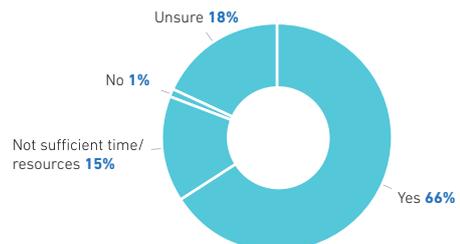


Exhibit 62 Employers willing to play a greater role in delivering careers advice (%)



Businesses are ready to expand their input

Business involvement is an essential component in ensuring that advice and information for young people is inspiring, relevant, and – importantly – grounded in the realities of the evolving labour market. Supporting schools and colleges through involvement in careers guidance, such as through delivering inspiring talks, is already very widespread (see Chapter 8). Our results show that businesses of all sizes are ready to step up their commitment and further help to achieve improvement (**Exhibit 62**).

Two thirds of businesses (66%) report that they are willing to play a greater role in delivery of careers advice in schools and colleges, strengthening existing initiatives. If this readiness to help among employers can be combined with a step change on the calibre of other aspects of careers advice, there would be major benefits for young people and for the economy.

But what we need is a system in place to support schools and businesses in developing these relationships to ensure that all young people are benefitting from this kind of engagement – a nationally mandated, locally run system of brokerage is something that deserves serious consideration.

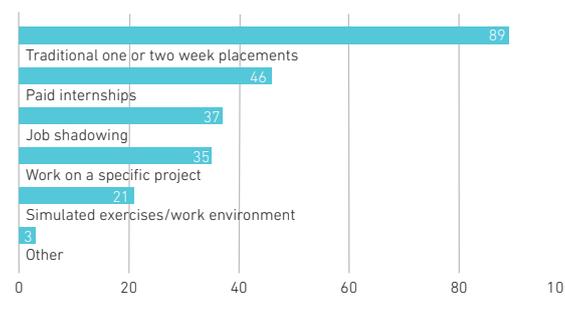
Work experience openings take many forms

Weaknesses in practical work experience are seen as widespread among many young people, as we noted earlier (in Chapter 7). Traditional work placements for a week or two are by far the most widespread form of work experience offered by businesses (by 89%) (**Exhibit 63**). These provide many school pupils with their first taste of the workplace and what goes on there. While they are a valuable introduction, their limited nature means they can achieve only so much.

Almost half of respondents (46%) also offer paid internships, normally geared to a somewhat older age group and running for longer periods. These can help students develop the attitudes and work-relevant skills that are so important to employers. They also give young people the chance to gain a taste of a particular career or field of work so they can better judge whether it is right for them.

Other approaches designed to give those on work experience placements a better understanding of work include job shadowing (37%), work on a specific project (35%) and simulated exercises or working environment (21%). All of these should be encouraged, as interaction with employers and experience of the workplace are some of the most valuable experiences a young person can have in preparing them for working life.

Exhibit 63 Forms of work experience for young people (%)



Developing the right skills in graduates

SECTION 10

There will be growing demand for degree-level skills in the years ahead as high-value, high-skill products and services increasingly dominate economic activity in the UK. When this trend is combined with the current upturn in the economy, it is no surprise that our survey shows job prospects for graduates are improving. For the majority of employers, the attitudes and aptitudes of graduates for work are more important than the specific degree studied, so there is a need for graduates to strengthen their work-related skills. Universities should be looking to do more to help them prepare for the transition into work.

KEY FINDINGS:

- Many more businesses have increased their graduate recruitment in the past year than have cut back, with a positive balance of +18% taking on more graduate recruits
- Businesses are looking first and foremost for graduates with the attitudes and aptitudes that will enable them to be effective in the workplace – nearly nine in ten employers (89%) value these above other factors such as degree subject (68%)
- Traditional graduate recruitment channels such as advertisements (used by 70%) and recruitment fairs (47%) are being supplemented by the use of social media (43%)
- A degree in a STEM subject gives graduates a clear advantage in the jobs market, with nearly half of employers (48%) reporting that they prefer graduates with these qualifications
- While many graduates leave university with the skills needed for working life, businesses still find too many do not: 17% report shortcoming in graduate applicants' use of English, 23% in problem-solving and 26% in communication skills
- Businesses want to see higher education institutions doing more to improve the business relevance of undergraduate courses (49%) and to help students become job-ready (47%)
- They would also like to see a boost to the number (42%) and quality (27%) of STEM graduates.

Graduate-level skills are in growing demand...

Employees with graduate-level skills bring organisations the advanced knowledge, capabilities and subject-specific expertise needed to drive their future productivity and growth. Across the economy as a whole, businesses will be increasing their demand for people with higher-level skills and leadership and management skills in the years ahead (**Exhibit 12**, Chapter 3).

The demand for graduates and the value they bring to firms is reflected in the fact that graduates are more likely to be in work than those with lower levels of qualification and less likely to become unemployed. By the age of 35, graduates on average earn nearly twice as much as those whose highest qualification is equivalent to an A* to C grade at GCSE, with the highest earnings among those who studied science, engineering and maths-based subjects.⁵³

...and firms of all sizes are expanding their graduate recruitment

Nearly nine in ten businesses (88%) have maintained or increased their levels of graduate recruitment during the past year (**Exhibit 64**). Just one in eight businesses (12%) have cut back on graduate recruitment while nearly one in three (30%) report increasing their graduate intake, giving a positive balance of +18%.

This represents an acceleration of growth in graduate recruitment since our 2013 survey (**Exhibit 65**). At that time the positive balance figure was +8%, based on 23% of firms expanding their graduate intake over the previous year and 15% reducing it.

The increase in graduate recruitment has been occurring across firms of all sizes (**Exhibit 66**). Among the largest businesses employing 5,000 people or more, a positive balance of +9% report that they have increased levels of graduate recruitment during the past year, rising to a positive balance of +25% among those employing 50 to 249 employees. All too often, graduates tend to assume that job prospects are greatest among large employers, but the reality is there are good opportunities among businesses of every size.

Exhibit 64 Changes in levels of graduate recruitment 2014(%)

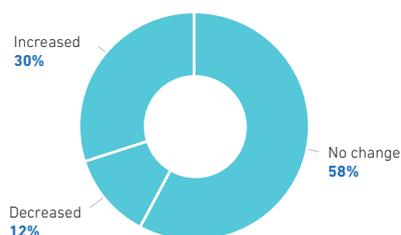


Exhibit 65 Changes in levels of graduate recruitment 2013(%)

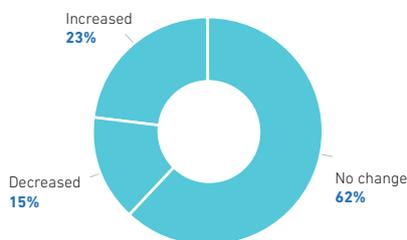
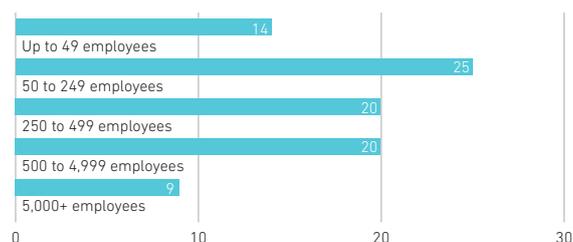


Exhibit 66 Balance of businesses by workforce size increasing graduate recruitment*



* Firms reporting increased recruitment minus those reporting decreased recruitment

Graduates' attitudes matter most of all in job hunting...

When recruiting graduates, businesses are looking first and foremost for the attitudes and aptitudes that will enable them to be effective in the workplace (**Exhibit 67**). Repeating the pattern of previous years, this is the top-rated factor among graduate recruiters, with nearly nine in ten employers (89%) citing it as among their three most important considerations. Over half (54%) rank it as the single most important factor.

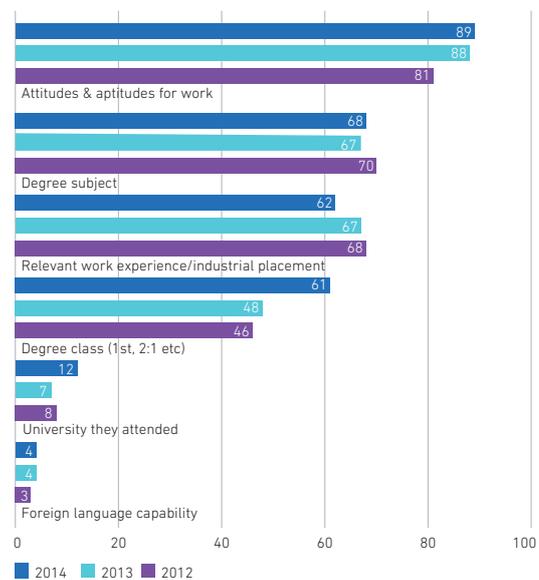
Despite the growing demand among businesses, there will always be tough competition among candidates for prime graduate jobs, so those aiming to move smoothly into the world of work need to take seriously the development of the right skills and attitudes during their time in higher education.⁵⁴

...with business-relevant qualifications and experience also giving an edge

Employers are also on the lookout for graduates in certain subject disciplines. For around two thirds of businesses, the degree subject studied is among the main considerations (cited by 68%) but almost equally important (cited by 62%) is having relevant work experience – gained for example through a business placement or internship. Work experience can play an invaluable part in strengthening the generic employability skills of graduates, as well as providing them with the opportunity to learn about a particular sector or type of work.

Among the least important considerations is the particular university attended (a top-three consideration for only 12%). Businesses are instead primarily focused on what individual graduates can bring to the workplace.

Exhibit 67 Most important factors considered when recruiting graduates (%)

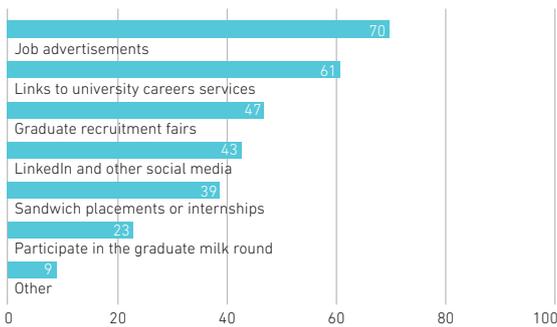


There are varied avenues into work...

In seeking graduate recruits, businesses use a range of traditional channels such as job advertisements (70%), links with university careers services (61%) and graduate recruitment fairs (47%) (**Exhibit 68**). But technology has opened up additional means for businesses and graduates to connect, and close to half of employers (43%) report using social media as an element in their graduate recruitment strategies.

Sandwich placements or internships are also an important means for businesses to identify graduate talent and for students to demonstrate to potential employers the contribution they can make. More than a third of businesses (39%) report recruiting through this avenue.

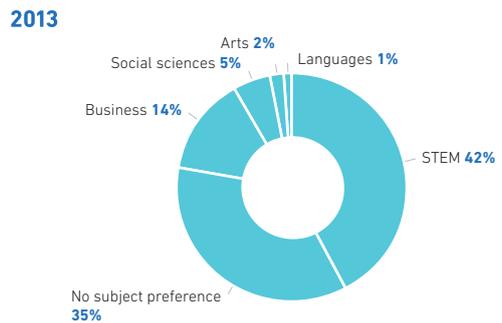
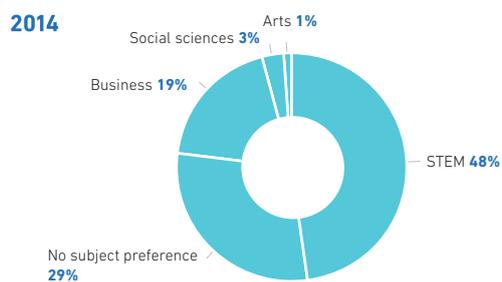
Exhibit 68 Channels used for graduate recruitment (%)



...but STEM subjects give graduates an advantage

Studying STEM subjects gives students a competitive advantage in the labour market (**Exhibit 69**). When asked whether they prefer any particular degree subject when recruiting graduates, nearly half of employers (48%) say they prefer those with STEM degrees (up from 42% in 2013). The mathematical abilities and analytical skills associated with STEM study are in high demand among businesses and the degree courses are often seen as more testing than some other subjects. Business (at 19%) is the only other area of study attracting employer preference above a marginal level, while more than one in four graduate recruiters (29%) has no preference for a particular subject. Instead they are focused on the broader skills and attitudes that make graduate employees effective in the workplace.

Exhibit 69 Priority degree subject for employers (%)



The employability skills of graduates are too uneven

While employers are satisfied with the work-relevant skills of graduate applicants in many respects, there are also some worrying areas of weakness that are particularly important for those aspiring to future leadership and management roles (**Exhibit 70**).

Almost all businesses (98%) are satisfied with graduates' IT skills and more than nine in ten (91%) with their technical skills. When it comes to numeracy, powers of analysis and use of English, however, levels of satisfaction start to fall. Around one in seven employers reports being dissatisfied (14%, 15% and 17% respectively). These are surprisingly high figures and businesses should be able to expect a reasonable level of competence in all these areas among those completing higher education.

Nearly a quarter (23%) of firms are also not satisfied with graduates' problem-solving skills, which should be a prime output of higher education. Equally concerning is the one in four employers (26%) citing dissatisfaction with graduates' communication skills. Effective communication is central to almost all high-skill activities and essential for those looking to take on management and leadership functions in the future (**Exhibit 71**).

One of the reasons relevant workplace experience is valued in graduate candidates (**Exhibit 67**) is that it helps to develop general business awareness. With over half of respondents (53%) voicing dissatisfaction with graduates' levels of business and customer awareness, there is a clear advantage for those candidates who can show a good grasp of issues in these areas.

Exhibit 70 Employer satisfaction with graduates' employability skills (%)

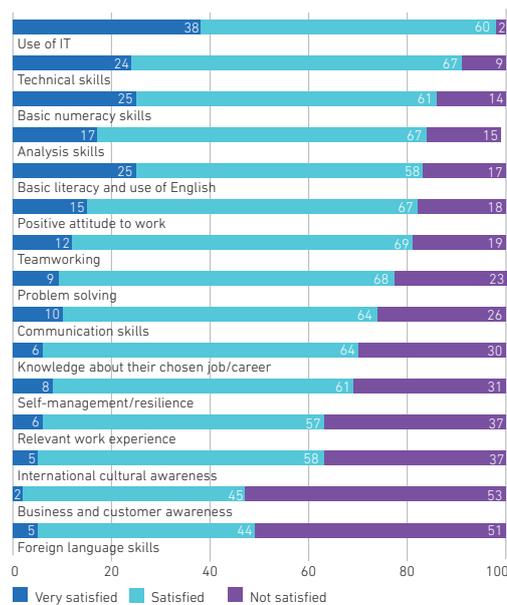


Exhibit 71 The communications challenge

One respondent summed up the problems over communication in these terms:

'Graduates with good degree results can often have very poor written and verbal communication skills, including basic errors of spelling and grammar. 'Text speak' proliferates. We often have a need for basic business writing courses, eg. how to write basic emails and basic customer letters. This can carry through into poorly developed written communication skills as people progress in their careers, which can become an issue when producing formal business reports, customer publications etc.'

“
Effective communication is central to almost all high-skill activities
 ”

Time for a rethink on HE programme design

When asked to identify the priority areas for action in higher education, an emphasis on developing students' work-relevant skills is the leading area in which businesses would like to see change (**Exhibit 72**). Half of firms (49%) want to see steps taken to improve the business relevance of undergraduate courses, while only a slightly smaller proportion (47%) want to see more done to develop students to be job-ready on graduation.

As the economy recovers, there are also concerns as to whether the right people with STEM skills will be available to businesses in the years ahead. More than two in five (42%) see increasing the number of STEM graduates as a priority, while more than a quarter (27%) are looking for their quality to be improved. A similar proportion (28%) also want to see more vocational options for higher study, such as higher apprenticeships, to strengthen the UK's technical skills base. Increasing the supply of capable STEM-skilled people at HE level, however, depends to a large extent on schools and colleges playing their part in improving the pipeline. We will need to expand existing routes – and create new routes – to higher skills if we are to meet this skills challenge, as set out in our *Tomorrow's Growth* report (**Exhibit 73**).

Exhibit 72 Business priorities for higher education (%)

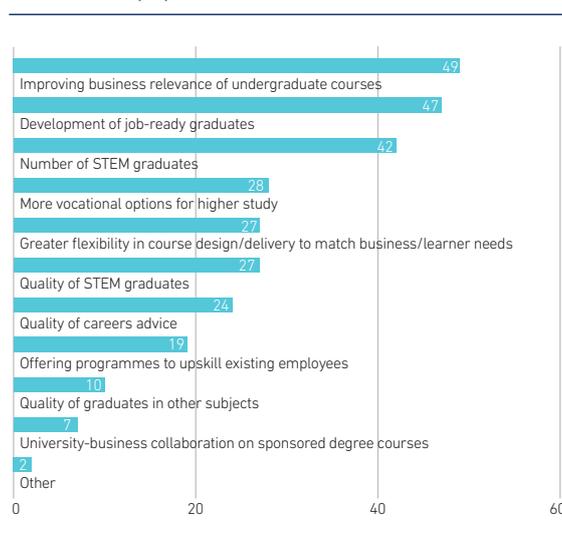


Exhibit 73 Tomorrow's growth: new routes to higher skills

In order to respond to the higher skills challenge, expanding and promoting apprenticeships and 'learn while you earn' courses such as part-time degrees, are needed to equip people with the right skills to deliver tomorrow's growth.

The UK has a strong track record on higher skills achievement, but we need to quicken our pace if we are to ensure international competitors do not overtake us. More partnership-based provision, with greater levels of business involvement in colleges and universities, and the development of more flexible degree programmes is key to addressing this.

There are already many good examples of collaboration between businesses and HE institutions on courses, particularly since fee reforms were enacted. Analysis suggests that there remain some significant barriers to developing the market, which need to be tackled:

- Financial support for those studying part-time
- Access and visibility of information to learners of all ages
- Alignment of incentives and goals with the desired growth of the market
- Lack of focus on the end goal of sustained employment.

Businesses and universities: partnering for growth

SECTION 11

Effective partnerships between businesses and universities are critically important for the success of both parties and for our economic prosperity. Businesses look to higher education to develop people with the right knowledge and skills to meet their future needs and to access the expertise and innovative capacity for which the UK's universities are rightly famed. Universities on their side need business input to ensure the quality and relevance of their course offerings and to create links through which research successes can be turned into marketable products.

KEY FINDINGS:

- More than two thirds (70%) of businesses have developed links of some type with universities and nearly half of firms (48%) are looking to grow their ties with universities in the future
- The links take many forms, including activities to enhance the business-relevance of HE by providing 'real-life' projects and resources to help students understand the practical relevance of their courses (38%) and taking part in degree programme advisory boards or contributing to course content design (28%)
- More than a third of firms (37%) currently partner with universities for research and innovation, seeking to draw on their wealth of expertise and creativity
- When selecting partner institutions, by far the most important factor for businesses is a university's field of expertise/specialism (79%), followed by its flexibility and responsiveness (62%) and its location (52%).

Business-HE links can enhance growth

Higher education is one of the UK's strongest assets, with a research record second only to the US and institutions recognised as among the best in the world.⁵⁵ The recent government review led by Sir Andrew Witty, CEO of GlaxoSmithKline, into strengthening links between universities and businesses rightly concluded that universities have an extraordinary potential to enhance economic growth. The full diversity of institutions have a role to play from local SME support and supply chain creation to primary technology leadership and breakthrough invention. The report called for incentives to be strengthened to encourage maximum engagement from universities in a third mission alongside research and education.⁵⁶

Reflecting recognition of the potential benefits generated by effective links between businesses and higher education institutions (HEIs), more than two thirds of respondents (70%) report links of some type with one or more universities (**Exhibit 74**). Moreover, more than a third of businesses (36%) plan to expand their links to HEIs in the future while one in eight (12%) plan to start developing links for the first time in the coming years. This means that nearly half of firms (48%) are looking to grow their ties with universities.

Our survey shows the extensive scale of links in all parts of the UK (**Exhibit 75**). There are also business-HEI links among firms of all sizes. It is particularly encouraging that over half of SMEs (51%) report that they have links of some type to one or more university. Moreover, across SMEs as a whole, 27% are looking to expand existing links and 17% intend to establish them for the first time in the next few years.

Exhibit 74 Employer links to universities

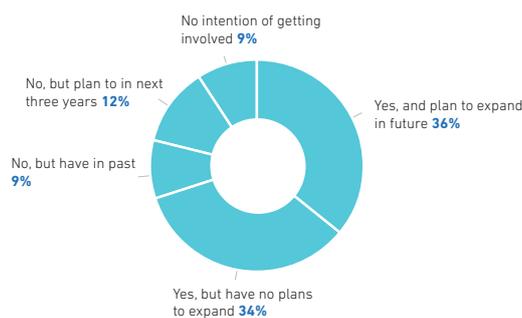
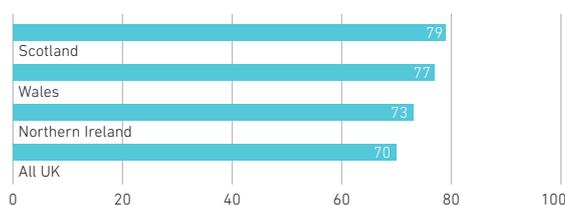


Exhibit 75 Employers with current links to universities (%)



The links take a variety of forms...

Business-HEI engagement takes a variety of forms (**Exhibit 76**). Graduate recruitment predictably heads the list (cited by 66%). Reflecting the rising demand for graduate skills, it has become even more important than a year ago (52% in 2013). Provision of sandwich-year and other placements also ranks highly, together with offering internships for graduates (offered by 42% and 39% respectively of those employers with links of some type with an HEI).

...with employers involved in enhancing business-relevance...

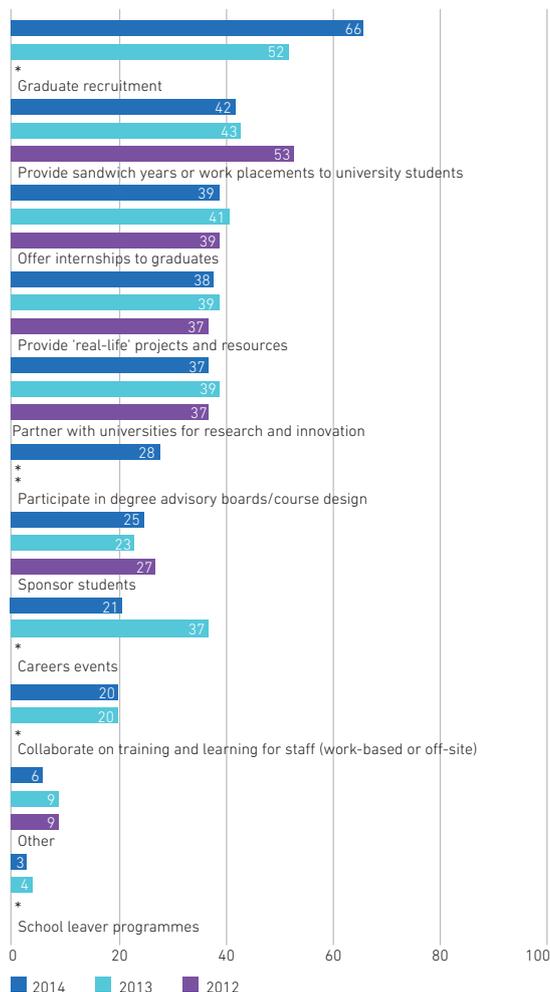
Almost equally widespread is business involvement in providing 'real-life' projects and resources to help students understand the practical relevance of their courses (38%) and in partnering with universities for research and innovation (37%). The technical knowledge and capacity for innovation within our HEIs are among the great strengths of the UK and businesses are keen to draw on them.

More than one in four employers (28%) is also involved directly in developing HEI course offerings by taking part in degree programme advisory boards and participating in course design to help shape the content. These types of involvement can help ensure that qualifications and course content are geared to meeting real business needs while at the same time boosting the employability of students. Although larger employers tend to be most active in this way (30%), nearly a fifth of SMEs (22%) are also involved.

As Chapter 5 showed, business looks to the university sector as an important supplier of training and development services. Among respondents with links to universities, a fifth (20%) report collaborating with HEIs on work-based and/or off-site learning programmes for members of their own staff, drawing on the expertise available within universities.

With higher tuition fees and a university system increasingly driven by student demand, a quarter of employers (25%) look to provide financial support for students studying selected subjects. Support of this kind can be important in encouraging people to acquire the knowledge and skills most needed by businesses and can form part of a recruitment and development strategy. While the greater resources of larger firms means they are more likely to offer some student sponsorship (29%), even among SMEs student sponsorship is practised to some extent (by 14%).

Exhibit 76 Nature of employer links with universities (%)



* Not asked in this form

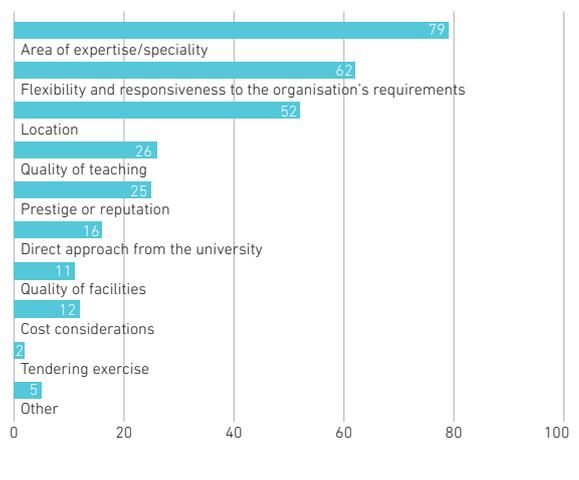
Expertise and responsiveness drive the choice of partner

When it comes to selecting a university partner, by far the most important consideration for businesses is the expertise or specialism of a particular university (**Exhibit 77**). Asked to identify the three most important factors on which businesses base their choices, nearly four out of five firms (79%) that have developed links with HEIs say they aim to connect with the leading experts in a particular field. Indeed, this consideration is the single most important one for three quarters (74%) of businesses.

Flexibility and responsiveness to the firm's needs also play an important part for close to two thirds (62%) of firms. So universities need to have clear points of initial contact, effective signposting and a readiness to respond promptly and positively to the requirements of potential partner businesses.

There are clear benefits in easy access and opportunities for face-to-face contact. Over half of businesses (52%) with HEI links therefore identify the university's location as one of their three main considerations. Given the important role many HEIs play in local economies and communities, employers are also often keen to help support and benefit from their local university.

Exhibit 77 Basis for links with universities (%)



References

- 1 GDP increased by 0.8% in the Q1 2014: Gross Domestic Product, Q1 2014, ONS, 22 May 2014
- 2 CBI/Accenture On the up, employment and trends survey, December 2013
- 3 Labour market statistics, ILO unemployment January to March 2014 data, ONS, March 2014
- 4 Labour market statistics, January to March 2014 data, ONS, March 2014
- 5 Labour market statistics, young people aged 16 to 24 January to March 2014 data, ONS, March 2014
- 6 JCQ, *GCSE and Entry Level Certificate Results Summer 2013*, August 2013
- 7 *First steps: a new approach for our schools*, CBI, November 2012
- 8 A Mann, D Massey, P Glover, E Kashefpadkel and J Dawkins, *Nothing in common: The career aspirations of young Britons mapped against projected labour market demand (2010-2020)*, Education & employers taskforce, March 2013
- 9 *UK Commission's Employer Skills Survey 2013: UK Results*, UKCES, January 2014
- 10 *Hidden talents: skills mismatch*, CESI, June 2012
- 11 *The Richard review of apprenticeships*, BIS, November 2012
- 12 *Making apprenticeships more accessible to small and medium-sized enterprises*, BIS, May 2012
- 13 *Apprenticeships, fifth report of session 2012-13*, House of Commons Business, Innovation and Skills Committee, 2013
- 14 *March Deadline Analysis: Subjects*, UCAS, March 2014
- 15 *Budget 2014*, HM Treasury, March 2014
- 16 BIS/SFA March 2014: All age apprenticeship by level and age participation
- 17 *Apprenticeship statistics*, House of Commons library note SN/EP/6113, 10 February 2014
- 18 Based on 25.63 million employees aged 16 and over in employment in the three months to March 2014, according to ONS
- 19 *Skills outlook 2013: first results from the survey of adult skills*, OECD, 2013
- 20 M Harrison, *Jobs and growth: the importance of engineering skills to the UK economy*, The Royal Academy of Engineering, 2012
- 21 *Engineering our future: stepping up the urgency on STEM*, CBI, March 2014
- 22 *Raising the bar: business priorities for industrial strategy one year on*, CBI, September 2013
- 23 <http://www.stemnet.org.uk/content/ambassadors>
- 24 *Training our next generation of outstanding teachers: implementation plan*, Department for education, November 2011
- 25 *Initial teacher training census for the academic year 2013/14*, Department for education, November 2013
- 26 *School workforce in England: November 2013*, Department for education, April 2014
- 27 <http://www.researchersinschools.org/researchers/maths-and-physics-uplift/>
- 28 *GCSE and equivalent results in England 2012/13 (revised)*, Department for education, January 2014
- 29 Funding for higher education in England for 2014-15: HEFCE grant letter from BIS, February 2014
- 30 *First steps: a new approach for our schools*, CBI, November 2012
- 31 *Changing the pace: CBI/Pearson education and skills survey 2013*, CBI, June 2013
- 32 'First new college in 20 years to support development of High Speed 2 (HS2)', BIS press release, January 2014, <https://www.gov.uk/government/news/first-new-college-in-20-years-to-support-development-of-high-speed-2-hs2>
- 33 *Apprenticeship statistics*, House of Commons library note SN/EP/6113, 10 February 2014
- 34 *The Richard review of apprenticeships*, BIS, November 2012
- 35 *Making apprenticeships more accessible to small and medium-sized enterprises*, BIS, May 2012
- 36 *Apprenticeships, fifth report of session 2012-13*, House of Commons Business, Innovation and Skills Committee, 2013
- 37 <http://www.cbi.org.uk/media-centre/news-articles/2014/05/cbi-response-to-apprenticeship-reform/>
- 38 *First steps: a new approach for our schools*, CBI, November 2012
- 39 See for example the commentary on comparative international performance by Robert Peston, 'UK education: average won't do', <http://www.bbc.co.uk/news/business-25198153>
- 40 Results from PISA 2012: United Kingdom, Country note, OECD, 2013
- 41 <https://www.gov.uk/government/publications/vocational-qualifications-for-14-to-19-year-olds>
- 42 *Changing the pace: CBI/Pearson education and skills survey 2013*, CBI, 2013
- 43 *National curriculum assessments at key stage 2 in England 2013*, Department for education, December 2012
- 44 *My education*, Pearson and Teach First, 2014
- 45 *Careers guidance and inspiration in schools: statutory guidance for governing bodies, school leaders and school staff*, Department for education, April 2014
- 46 *Going in the right direction?*, Ofsted, September 2013
- 47 *My Education*, Pearson and Teach First, November 2013
- 48 *K Board and T Tinsley, Language Trends 2013/14: the state of language learning in primary and secondary schools in England*, CfBT and British Council, 2014
- 49 *The state of school governing in England 2014*, University of Bath & national governors' association, May 2014
- 50 *My Education*, Pearson and Teach First, November 2013
- 51 *An aspirational nation: creating a culture change in careers provision*, National Careers Council, June 2013
- 52 *Careers Guidance and inspiration in schools – statutory guidance for governing bodies, school leaders and school staff*, DfE, April 2014
- 53 *Graduates in the UK labour market 2013*, ONS, November 2013
- 54 CBI/NUS, Working towards your future: making the most of your time in higher education, March 2011
- 55 <http://www.timeshighereducation.co.uk/world-university-rankings/2013-14/world-ranking>
- 56 *Encouraging a British invention revolution: Sir Andrew Witty's review of universities and growth*, BIS, October 2013

For further information on this report,
or for a copy in large text format contact:

Grace Breen
Policy Adviser
Employment and skills
CBI
Cannon Place
78 Cannon Street
London EC4N 6HN
T: +44 (0)20 7395 8047
E: grace.breen@cbi.org.uk



© Copyright CBI 2014
The content may not be copied,
distributed, reported or dealt
with in whole or in part without
prior consent of the CBI.

Printed by Colourscript on
Revive 100 pure white silk, containing
100% recovered fibre certified by the FSC®.
Colourscript is certified to ISO 14001 and
registered to EMAS environmental
management systems NEZ052.

Product code: 10407

www.cbi.org.uk