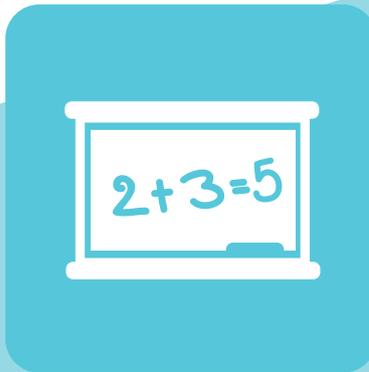


# INSPIRING GROWTH

CBI/PEARSON EDUCATION AND SKILLS SURVEY 2015



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## Foreword by **Katja Hall, CBI**



**Katja Hall**

Deputy director-general, CBI

A handwritten signature in black ink that reads "Katja Hall". The signature is written in a cursive, flowing style.

The record growth in jobs is a real UK success story. Employment has reached an all-time high, and real wages have begun to rise. Yet if we want jobs and prosperity to keep on growing, we cannot afford to let the shortcomings of our education and skills systems drag us down. The danger is very real: as this survey shows, over half of all businesses fear that there will not be enough people available with the skills needed to fill their high-skilled jobs – particularly in the key sectors which underpin growth, such as manufacturing and construction.

The skills gaps in science, technology, engineering and maths (STEM) are especially disquieting – with over half of employers suffering or expecting soon to suffer a shortage of experienced STEM-skilled staff. Little wonder that STEM-qualified graduates are at a real advantage in the jobs market, with four out of ten employers preferring STEM graduates over other graduates.

Business often has to pick up the pieces – diverting resource from growth-creating activities to make up the skills gaps. In all parts of the UK, 40% or more of businesses provide remedial training in basic skills for at least some adult employees, and more than one in five is organising similar support for graduates.

The apprenticeship reforms under way in England are a step in the right direction. Four out of five employers engaged in the reforms view them positively. And nearly two thirds of the employers who replied to our survey plan to start apprenticeship programmes or expand their existing ones – the highest proportion since these surveys began in 2008. But quality must not be sacrificed for quantity – and we need a laser-like focus on driving up the number of higher apprenticeships, which still only accounted for 2% of total starts in 2014.

Of course, the long-term solution to the skills challenge lies in education, and some of the reforms in recent years have brought improvements. But we still have a system where too many young people are allowed to fall behind and never catch up. The system must change, with more focus on developing the aptitudes and attributes that set young people up for success in both work and life – which matter much more to employers when recruiting than academic results alone.

The system also needs to better prepare young people for the world of work. It should offer greater choice, and real parity of esteem between academic and vocational routes – including the creation of new vocational A-levels, with the rigour and respect of the A-level brand, something called for by nearly half of the businesses we surveyed.

We also need to provide much better careers advice for young people: three quarters of employers believe this is currently just not good enough – which is why businesses are increasingly providing schools with help and support in a variety of forms.

More and more businesses are playing their part – engaging with schools, colleges and universities and investing in workforce training – though there is a need for more. But government at all levels also needs to raise its game in helping young people to develop the higher skills and workplace readiness that are increasingly necessary to ensure a prosperous future for them and for the UK as a whole.

## Foreword by **Rod Bristow, Pearson**



**Rod Bristow**

President, UK and Core, Pearson

Young people and their parents are passionate about learning the skills they need for success in life and in their future careers.

Employers are passionate about what they would like to see in new employees – young people with a great attitude, great workplace skills and ideally some useful qualifications under their belt.

Against this backdrop the CBI/Pearson Education and Skills Survey provides a mine of evidence on what employers seek from the young people who are leaving education and setting out in their careers. And we discover a vivid picture of employers seeking young people with much more than a list of qualifications – they look for communications skills, teamworking skills, a strong work ethic.

You might shrug and say, “Well, they would say that wouldn’t they?” Of course employers want those things.

But they are not alone. We recently undertook some internal research at Pearson to look at the aspirations and priorities of teachers, parents and learners. We found that – both in the UK and globally – increasing career skills is seen as parents’ and learners’ top priority for advancing education, over things like putting more money into education, reducing class sizes or a different approach to exams. It scored very highly among teachers too.

And to be clear: this message from employers, parents and learners does not mean that we discard our natural human curiosity for knowledge, our love of learning, literature, or the arts. It is about creating an environment where communication, teamworking, grit, and leadership skills are nurtured throughout our education system.

Getting this blend of skills matters to me – as a dad, as an employer, as someone who is passionate about education. One of my favourite things about my role at Pearson is meeting students who are studying our BTEC qualifications. There is something about the blend of academic and practical skills that gives them something extra. Students like Mohammed.\* School never really ignited his passions until he took a BTEC in sports science at his local FE college. In his own words the qualification was about “doing something you’re incredibly passionate about... and being the best person you can be”. Thanks to his own dedication and brilliant teachers Mohammed prospered at college, and went on to university, graduating in sports science. He is now a coach at Chelsea Football Club.

And Mohammed is not unusual. Every year around a quarter of those students who go to university do so with a BTEC under their belts, and within a few years it is likely to be one in three. And from higher education we know they progress into good jobs, armed with those skills employers need.

This survey, and our other work with employers, has helped Pearson to improve our qualifications – so we enrich that academic/practical blend still more, and we put employability, and indeed employers themselves, at the heart of our work.

By better aligning the aspirations of learners and employers we can live in a country where more and more people have the chance to be ‘the best person they can be’.

\*<http://qualifications.pearson.com/en/about-us/qualification-brands/btec/progress-with-btec/case-studies.html>

# Executive summary

## CHAPTER 1

### The education and skills landscape in 2015

- With economic growth becoming more securely based and employment on a rising trend, the UK must strengthen its education and skills systems to meet future demand and avoid being outpaced by international competitors
- Young people need to build their workplace skills on solid educational foundations, but many are still leaving school with poor literacy and numeracy skills: in 2014, 38.3% did not achieve a grade C or better in GCSE English and 37.6% did not reach this standard in maths
- Careers guidance and support must be improved to aid young people in their transitions from school into work and to minimise the risk of their falling into unemployment: more than 940,000 of those aged 16-24 are currently not in education, employment or training
- Most jobs created in the decade to 2022 will be high-skilled ones – filling these and improving the UK's productivity track record will mean many people already at work will need to add to their skills
- The government's plans to move towards a demand-led skills system are key, but big challenges lie ahead in ensuring that the reforms, including funding reform, are delivered in a way which ensures employers remain firmly in the driving seat.

## CHAPTER 2

### The eighth education and skills survey

- The survey was conducted in spring 2015, with responses received from more than 300 organisations, collectively employing more than 1.2 million people
- Participants ranged in size from firms with fewer than 50 employees to those with more than 5,000, and SMEs accounted for more than a third of respondents (36%)
- There were responses from all parts of the UK, with nearly half of respondents (46%) having at least some employees in Northern Ireland, Scotland or Wales.

## CHAPTER 3

### Skills are an increasingly urgent priority

- The positive balance of firms expecting to need more employees with higher skills stands at +65% in 2015 and has been close to or above +60% each year since 2010
- Demand for more people with higher-level skills is expected to be particularly strong in sectors central to growth such as construction (+73%), manufacturing (+69%) and engineering, science and hi-tech (+52%)
- Over half of businesses (55%) are not confident there will be enough people available in the future with the necessary skills to fill their high-skilled jobs
- There are widespread difficulties in recruiting people with STEM skills at every level, from new entrants to train as apprentices (20%) to people with more than five years' experience of STEM-related work (32%)
- Adding those expecting difficulties in three years' time to those currently experiencing problems, over half of businesses (52%) see a shortfall in experienced STEM-skilled staff
- While most businesses view the overall skill levels of their present workforces as satisfactory or good, half of businesses report they are aware of problems among at least some of their employees in basic literacy (50%), numeracy (50%) and IT skills (46%)
- In all parts of the UK, 40% or more of businesses in the past year have provided remedial training in basic skills for at least some adult employees
- Close to a third of businesses (31%) have organised remedial training for at least some young people joining them from school or college while more than one in five businesses (22%) reports having provided remedial support for graduates in the past year.

## CHAPTER 4

### Business is responding to the skills challenge, but apprenticeship reform is critical

- Around two thirds (66%) of the businesses responding to this survey are involved in apprenticeships. Amongst this cohort, prospects for further expansion are strong, with close to two thirds (62%) either intending to expand their current apprenticeship programmes or to start providing apprenticeship places in the next three years
- Provision of apprenticeships has spread beyond traditional sectors such as manufacturing (76% of respondents involved) to new sectors such professional services (where 42% of respondents now have at least some apprentices)
- Recent reforms to apprenticeships in England are viewed as very or largely positive (by 81% of those offering an opinion), but there are concerns over bureaucracy and red tape (29% of all respondents), delays in funding reform (25%), the slow pace of reform (23%) and over the inability of BIS to relinquish control (23%)
- Actions that would help to engage more employers in apprenticeships include making qualification programmes more relevant to business needs (38%) and putting more purchasing power in the hands of firms by routing the apprenticeship grant directly to employers (34%)
- In addition to apprenticeships, firms also operate a variety of policies for developing talent in their workforces: two thirds (66%) offer support for employees studying part-time, a dedicated training and development budget is almost equally common (63%) and well over half (60%) have an explicit learning and development strategy. More than four in five businesses (85%) plan to maintain or increase their investment in training and development in the year ahead
- Three quarters of businesses (75%) rely on external training partners to at least some extent, with nearly half (44%) of their training on average delivered by external providers
- Business satisfaction with external training providers has declined since last year, with costs the most widespread concern
- Private sector training providers outperform FE colleges and universities on every satisfaction measure, repeating the pattern of previous years.

## CHAPTER 5

### Building world-class schools and qualifications systems is the best long-term solution for skills and growth

- By far the most important factors employers weigh up when recruiting school and college leavers are attitudes (85%) and aptitudes (58%). These rank well ahead of formal qualifications
- A majority of businesses remain concerned about the preparation of school leavers in important areas including business and customer awareness (66%), self-management (61%) and foreign language skills (60%)
- Many also report room for improvement in essential capabilities such as teamwork (31%), literacy and use of English (37%), basic numeracy (38%), and communication skills (49%)
- Businesses want to see primary schools concentrating on developing pupils' literacy and numeracy (73%) and communication skills (46%)
- In the 11-14 phase of schooling, literacy and numeracy (45%), self-management (42%) and developing awareness of the world of work (39%) head the list of business priorities
- For the 14-18 age group, employers believe a top priority for schools and colleges should be developing awareness of working life with support from businesses (50%)
- Close to half of businesses (45%) recognise foreign language skills among their employees as beneficial, particularly in helping build relations with clients, customers and suppliers (36%)
- The majority of businesses either prefer recruits to hold a mix of both academic and vocational qualifications (37%), or value academic and vocational qualifications equally (37%)
- Close to half of businesses (45%) call for the respected, well-understood A-level brand to be used for rigorous, high quality level 3 vocational qualifications – with the same proportion saying that simplifying the vocational qualification landscape would help in building employer trust and confidence (45%)
- Businesses also see a strong case for ensuring vocational qualifications are rigorous (32%) and for increased employer engagement in their design (31%).

## CHAPTER 6

### Preparing young people for the world of work requires greater business engagement

- Across respondents as a whole, three quarters (73%) have at least some links with schools or colleges, with connections most widespread between businesses and secondary schools (55%) and FE colleges (53%)
- Over half of employers (51%) already linked to education report they have increased their engagement over the past year, while just 9% have cut back, giving a positive balance of +42%
- The biggest obstacles to extending and deepening business involvement are uncertainty over how to make work experience worthwhile (28%), lack of interest among schools or pupils (25%) and problems in fitting involvement with the school timetable (23%)
- Among employers with links to schools and colleges, the two most common forms of support are offering work experience placements (74%) and providing careers advice and talks (71%)
- The overwhelming majority of employers believe the quality of careers advice for young people is not good enough (by a balance of -70%)
- The scale of dissatisfaction ranges from seven in ten firms in England and Scotland (a negative balance of -71%) to nearly eight in ten firms in Wales (a negative balance of -78%)
- Nearly two thirds of businesses (60%) report that they are willing to play a greater role in supporting careers provision in schools and colleges.

## CHAPTER 7

### Making sure graduates are skilled for success must be a priority

- Many more businesses have increased their graduate recruitment in the past year than have cut back, with a positive balance of +13% taking on more graduate recruits, extending the expansion in job opportunities seen in recent years
- The biggest growth in graduate opportunities in the past year has been in engineering, science and hi-tech (+20% balance) and manufacturing (+16% balance)
- Businesses look first and foremost for graduates with the right attitudes and aptitudes to enable them to be effective in the workplace – nearly nine in ten employers (89%) value these above factors such as degree subject (62%)
- A degree in a STEM subject gives graduates a clear advantage in the jobs market, with two in five employers (40%) reporting that they prefer STEM-qualified graduates, and businesses want to see a boost to both the number of STEM graduates (38%) and their quality (29%)
- Many businesses report worrying weaknesses in graduates' basic skills and general readiness for employment, ranging from 17% reporting shortcoming in graduate applicants' use of English to nearly half (46%) voicing concerns over graduates' levels of business and customer awareness
- Businesses want to see higher education institutions doing more to improve the business relevance of undergraduate courses (50%) and to help students become job-ready (42%).



## CHAPTER 8

### Deeper collaboration between business and universities will deliver more routes to higher skills

- Business recognises the value of strong links with higher education: more than two thirds (68%) of businesses have developed links of some type with universities and more than a third (35%) are looking to grow their ties with universities in the future
- Business links to HE are widespread in all parts of the UK, ranging from 68% in England to 82% in Northern Ireland
- Over half (56%) of businesses engaging with universities report involvement in relation to graduate recruitment, while provision of internships and sandwich-year and other placements also rank high (offered by 41% and 34% respectively)
- A third of businesses (32%) are involved in providing 'real-life' projects and resources to help students understand the practical relevance of their courses and one in four employers (25%) is involved directly in developing HE course offerings
- The technical knowledge and capacity for research excellence within HE institutions are among the great strengths of the UK and businesses are keen to draw on them, with a third of respondents (30%) this year partnering with universities for research and innovation
- When selecting partner institutions, by far the most important factor for businesses is a university's field of expertise/specialism (81%), followed by its flexibility and responsiveness (62%) and its location (49%).

## The education and skills landscape in 2015

*The eighth CBI education and skills survey, run in partnership with Pearson, was conducted against the backdrop of strengthening economic growth and rising employment. The new government now needs to accelerate reforms across our education and skills systems to ensure every young person develops their full potential and that the growing demand for skills, particularly higher-level skills, can be met. Without prompt action, there is a real risk that skills shortages will act as a brake on productivity and economic growth.*

### KEY POINTS

- With economic growth becoming more securely based and employment on a rising trend, the UK must strengthen its education and skills systems to meet future demand and avoid being outpaced by international competitors
- Young people need to build their workplace skills on solid educational foundations, but many are still leaving school with poor literacy and numeracy skills: in 2014, 38.3% did not achieve a grade C or better in GCSE English and 37.6% did not reach this standard in maths
- Careers guidance and support must be improved to aid young people in their transitions from school into work and to minimise the risk of their falling into unemployment: more than 940,000 of those aged 16-24 are currently not in education, employment or training
- Most jobs created in the decade to 2022 will be high-skilled ones – filling these and improving the UK's productivity track record will mean many people already at work will need to add to their skills
- The government's plans to move towards a demand-led skills system are key, but big challenges lie ahead in ensuring that the reforms, including funding reform, are delivered in a way which ensures employers remain firmly in the driving seat.

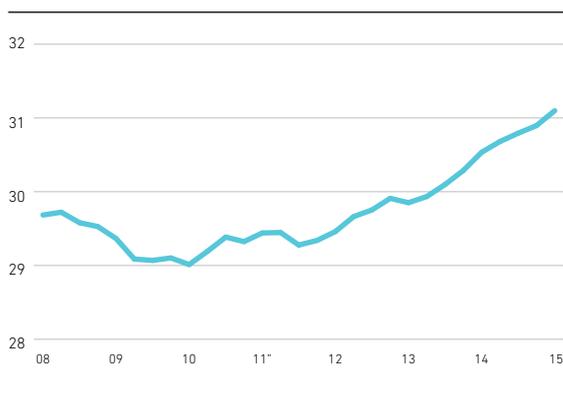
### Economic and employment prospects are encouraging...

Economic growth of 0.3% in the first quarter of 2015 represented the ninth successive consecutive quarter of positive GDP growth.<sup>1</sup> It took GDP to a level 10.7% above its trough during the economic downturn in Q2 2009 and 4% higher than the pre-downturn level of output in Q1 2008. And solid economic growth is expected to continue through 2015 and beyond.<sup>2</sup>

Employment too has been on a rising trend. In the three months to March 2015 employment reached a record high of 31.1 million, more than 560,000 higher than a year earlier (**Exhibit 1**).<sup>3</sup> Since 2012 the growth has mainly been due to people finding full-time work with an employer rather than working for themselves. In all, 73.5% of people aged from 16 to 64 were in work for the three months ending March 2015, the highest employment rate since comparable records began in 1971. And the signs are that businesses expect to grow their workforces further.<sup>4</sup>

The unemployment rate has continued to fall, hitting a new post-recession low of 5.5% in the three months to March 2015.<sup>5</sup> Young people have also benefited from the increasingly healthy labour market, though at a slightly slower pace. There were 943,000 people aged 16 to 24 who were not in education, employment or training in the three months to the end of March 2015, down from over 1.1 million in the same period in 2011.<sup>6</sup>

Exhibit 1 Employment 2008-15 (millions)



Source: ONS

**...but education and skills underpin future success**

The UK's recent healthier economic performance should not lull us into complacency. Employers know there is no more important issue than getting our education and skills system right – and driving up standards further in the future.

Across the world current and emerging competitor nations are looking to grow talent through their education and training systems and strengthen the skills that contribute to competitiveness, innovation and growth. They are seeking to put policies in place that will facilitate these goals. While the UK performs relatively well at present on measures such as INSEAD's global talent competitiveness index (**Exhibit 2**),<sup>7</sup> there are other countries that already do better. And many more are striving to push their rankings ahead of the UK.

Exhibit 2 The INSEAD global talent competitiveness index

INSEAD, the international business school, compiles an index designed to take account of a wide range of factors ranging from the quality of education at all levels and apprenticeships to the extent to which the regulatory framework facilitates talent development. The UK ranks seventh in the world on the basis of measures used in the 2014 ranking, behind countries such as Singapore, the USA and Canada but just ahead of many of our European competitors.

COUNTRY	RANK
Switzerland	1
Singapore	2
Luxembourg	3
USA	4
Canada	5
Sweden	6
UK	7
Denmark	8
Australia	9
Ireland	10

**Tackling the long tail of underperformance at school must be the top priority**

In today's world, education has become a continuous, lifelong process through which skills are regularly upgraded to adapt to fast-changing environments. But the foundations for advanced skills need to be laid at an early age – writing, reading, maths and science are the core subjects on which learning should be built, combined with the development of those behaviours essential for success in work and life, like resilience, enthusiasm, curiosity and creativity.

Despite a focus on improving standards in education, too many young people in Britain are still leaving school without the basic literacy and numeracy skills needed to be successful in work and the rest of life (Chapter 5). Looking at the traditional benchmark of at least a grade C at GCSE level in 2014,<sup>8</sup> more than a third of students did not achieve this level in English (38.3%). A similar proportion (37.6%) fell short of this grade in maths. School systems across the UK have for too long tolerated a long tail of low achievement – especially failing young people from low income backgrounds despite a trend of rising average performance, highlighting the need for the wide reaching reforms (**Exhibit 3**).

### Exhibit 3 Achieving a step change in school performance across the UK

Schools in all nations across the UK need to develop a clear vision of the outcomes they are seeking to deliver for young people and take coordinated action to achieve them. Ensuring that every young person is well prepared for life beyond the school gates, whatever path they choose, has to underpin school reforms.

Building on the core principles set out in the *First steps* report,<sup>9</sup> the CBI has put forward a series of recommendations for reform of school systems in each of the devolved nations. These include:

- In Scotland, the Curriculum for Excellence approach needs to be applied effectively and an independent education inspectorate re-established<sup>10</sup>
- In Wales, the Estyn framework should be reformed and the government should collate and publish meaningful destination data as a key outcome measure for schools and colleges<sup>11</sup>
- In Northern Ireland, the study of maths and English should be made mandatory up to age 18 and computing taught as a core subject for all children.<sup>12</sup>

The challenge faced by school systems throughout the UK is brought into focus by results from the OECD programme for international student assessment (PISA), based on tests taken by 15-year-olds.

(**Exhibit 4**).<sup>13</sup> Even taking into account the fact that an increased number of countries are participating in these tests, the UK's performance has stagnated around the average – a real worry as the standards of education of our international competitors continue to rise.

### Exhibit 4 The UK's ranking in international tests for 15-year-olds in science, maths and reading 2006-12

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

Source: PISA

### Every young person also needs support in the transition to work

Equipping young people with the key skills and right attitudes is an essential first step. But as their time in school or college comes to an end, young people must be supported in their transitions into employment (or continued education). Far too many currently slip through the net into unemployment.

The number of 16-24 year-olds not in education, employment or training (NEET) has fallen to 943,000 in the three months to March 2015 (**Exhibit 5**). This means it is now a little below pre-recession levels. But the damaging impact of unemployment at this critical stage in life is well-established.<sup>14</sup> We need to build structures that will ensure strong support for transitions from education and training to employment, and better signposting to the different career options available.

Careers guidance – across the UK – has never been good enough. It remains to be seen whether changes now being introduced (see Chapter 6) will have a positive impact. We know from research that the career aspirations of young people are not well linked to the reality of labour market demand. This needs to be tackled to ensure that we can fill the skills gaps of the future.<sup>15</sup> Effective careers guidance that involves employers and inspires young people is an essential part of the solution.

**Exhibit 5 Not in education, employment or training (age 16-24) (000s) 2008-2015**



Source: ONS

**The demand for skills is on a rising trend...**

Equipping young people with the skills and attitudes to make a smooth transition into the workplace and to continue learning in the years ahead is an essential response to the changing pattern of demand for skills. Data from the UK Commission for Employment and Skills (UKCES) highlights the continuing long-term shift in the shape of the labour market (**Exhibit 6**).

Most jobs created in the decade 2012 to 2022 are expected to be high-skilled ones.<sup>16</sup> Almost half of all employment is set to be in managerial, professional or associate professional roles by 2022. And the growth in caring and personal service jobs calls for different and better levels of skills – such as communications skills – from those required by many traditional jobs.

As well as the implications for young people, the pace of change means people already in work need to be encouraged and supported in adding to their skills and looking at new openings. Future prosperity for the UK’s population and businesses depends on developing a skilled, flexible workforce that can drive up productivity and respond rapidly to shifts in global market opportunities. As the CBI has emphasised, we need to make growth work for everyone (**Exhibit 7**).

Skills – and their effective application – are central to improving the UK’s productivity record. Our labour productivity as measured by output per hour is still slightly lower than in 2007, prior to the economic downturn.<sup>17</sup> Driving up our performance is essential for future economic success and higher living standards.

**Exhibit 6 Change in occupational structure 1992-2022 (% share)**

Occupation	1992	2002	2012	2017	2022	% change in number of jobs 2012-22*
Managers and senior officials	8	9	10	11	12	+18
Professional occupations	15	17	20	21	22	+19
Associate professional and technical	11	12	13	14	14	+14
Administrative and secretarial	16	14	12	11	10	-13
Skilled trades occupations	15	13	11	10	10	-9
Caring, leisure and personal services	6	8	9	10	10	+22
Sales and customer service occupations	8	9	8	8	8	-2
Machine and transport operatives	9	7	6	6	5	-11
Elementary occupations	13	12	11	10	10	-2

Source: UKCES

\*Data reflects changes in numbers employed

**Exhibit 7 A better off Britain: making growth work for everyone**

The CBI report, *A better off Britain*, outlines a package of measures designed to raise pay sustainably.<sup>18</sup> They include:

- A business-focus on raising productivity to boost pay
- Clearer routes into higher-skilled, better-paid work
- Measures to ensure young people don’t fall behind in school.

In the longer term, pay can rise only in step with productivity. Between 1998 and 2007, increases in labour productivity accounted for almost three quarters of the UK’s economic growth. Since then, productivity has stagnated. If it had continued to grow at the previous rate, it would now be more than 16% higher. While productivity is complex, skills – and their effective application in the workplace – have a central role in achieving higher productivity.

Skills are also central to enabling people to earn more by progressing up the skills ladder. More must be done to open up more avenues for people stuck in low-paid roles to build the skills needed to access middle-skilled, middle-paid jobs.

### ...and a demand-led skills system will help deliver the right types of skills

Businesses are well aware of the value in providing training for their staff and investing in the skills of the workforce. Two thirds of employers fund or arrange training for their staff at a cost to UK businesses of more than £40bn a year.<sup>19</sup> A quarter of establishments (26%) offer training that is designed to lead to recognised vocational qualifications,<sup>20</sup> though businesses value competence over qualification, so training which meets business needs is often delivered outside formal qualification systems. A great deal of hard-to-quantify training and development takes place on the job and through programmes of mentoring and shadowing.

The government supports investment in skills with public spending, but there have been serious questions over whether all that spending is well targeted. Successive reviews (see Chapter 4) have recognised the key role apprenticeships play in delivering the trained people wanted by businesses. They have also pointed to the importance of the system becoming more responsive and relevant to businesses rather than government if it is to deliver value for businesses and the taxpayer and provide routes into work for individuals.

The government's plans<sup>21</sup> to reform funding are a key element of the wider apprenticeship reform programme and will give employers real purchasing power. As the survey results make clear, businesses see this as an integral part of the reforms needed to encourage more employers to step up and engage with the apprenticeship programme. If the new government is to fulfil its pledge of three million new apprenticeships,<sup>22</sup> it is essential that more businesses are attracted to offering them and that they are of high quality. This will only happen if employers believe that they are really in control, and they are genuinely about paths to higher skills.

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.<sup>23</sup> The emphasis on encouraging higher apprenticeships is reflected in levels of take-up, with the number of new starters increasing from just 2000 in 2009/10 to over 9,000 in 2013/14 (**Exhibit 8**). While higher apprenticeships still represent a small proportion of total starts, their continued rapid growth should play an important part in aiding the UK's transition to a higher-skilled economy.

**Exhibit 8 UK Apprenticeship starts (000s) 2008-2014**

	2009-10	2010-11	2011-2012	2012-13	2013-14	% rise over the period
Intermediate	191	301	329	293	287	50
Advanced	88	154	188	208	145	65
Higher	2	2	4	10	9	513

Source: House of Commons library note

### There need to be more routes to higher skills

The changing occupational structure outlined above (**Exhibit 6, page 13**) means that by 2022 half of all jobs will require workers to have completed some form of higher education (level 4 and higher) – whether that is a degree, a higher apprenticeship, a Higher National Certificate (HNC), or a Higher National Diploma (HND) in college or university. The government's backing for the expansion of higher apprenticeships is part of the solution. But there is more to do to ensure levels 4 and 5 vocational skills are developed on the scale needed by business and in flexible form to open up progression ladders for individuals. The delivery of levels 4 and 5 qualifications in our skills system is currently confusing and, perhaps as a result, there is insufficient emphasis on delivery of these types of qualifications despite their being at the heart of the new labour market.<sup>24</sup> Remedying this should be a priority for the new government.

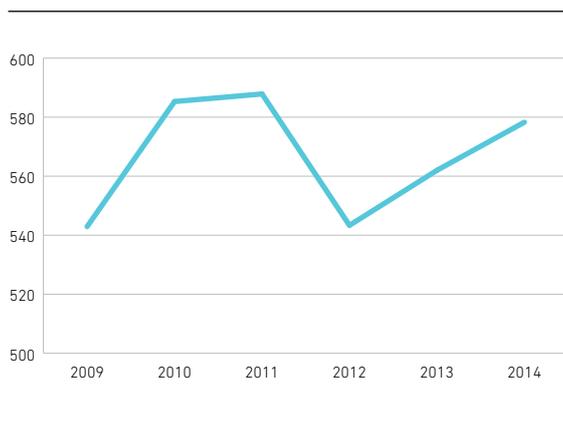
### Universities and colleges are also adapting to the changing landscape

Increases in tuition fees have not deterred applicants to higher education (**Exhibit 9**).<sup>25</sup> This reflects widespread recognition that a university education typically boosts the career prospects of individuals (see Chapter 7). But aspiring undergraduates are responding by opting in increasing numbers for subjects that have strong employment prospects and good potential earnings returns.

Compared with 2012 levels, UK applications so far for undergraduate courses starting in 2015/16 are up 7% overall.<sup>26</sup> They are up, however, by 28% for engineering, 23% for biological sciences and 11% for physical sciences. Over the same period, computer sciences applications are up by 33%.

The government announced in the March 2015 budget that it is planning a package of measures to boost support for postgraduate researchers at masters and PhD level, including loans. These are welcome changes and should help reinforce the scope for partnership between business and universities (Chapter 8).

**Exhibit 9 UK applicants to higher education (000s) 2009-2014**



## The eighth education and skills survey

*The survey provides an authoritative guide to trends in business opinion and practice across a wide range of education and skills issues. Since 2008, successive surveys have charted the changing pattern of education and training against a backdrop of economic turbulence and subsequent recovery. With the UK seemingly on a path of sustained economic growth, it is now essential to make the most of skills across the current workforce to raise levels of productivity and prosperity. And we must equip young people with the skills to succeed when they enter the workplace in the years ahead.*

### KEY POINTS

- The survey was conducted in spring 2015, with responses received from more than 300 organisations, collectively employing more than 1.2 million people
- Participants ranged in size from firms with fewer than 50 employees to those with more than 5,000, and SMEs accounted for more than a third of respondents (36%)
- There were responses from all parts of the UK, with nearly half of respondents (46%) having at least some employees in Northern Ireland, Scotland or Wales.

### Conduct of the survey

The survey was conducted online in the spring of 2015. Useable responses were received from 310 employers, collectively employing more than 1.2 million people, equivalent to 4.6% of all employees in the UK.<sup>27</sup> Participant organisations are drawn from all sectors of the economy and range from very small firms to organisations with workforces in excess of 5,000 people.

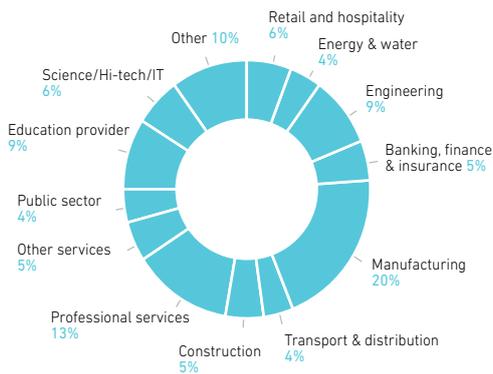
The survey was completed by a senior executive in each organisation. In small and medium-sized companies, this tended to be the managing director, chief executive or chairman. In larger firms, it was the human resources director or equivalent.

### Respondents by sector

Responses were received from organisations in all sectors of the economy (**Exhibit 10**). Private sector respondents predominate, making up well over nine in ten participants (96%). Manufacturing firms form the single largest grouping of respondents, accounting for a fifth (20%), while engineering firms are also well represented (9%). Professional services businesses make up around one in eight of the sample (13%).

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

Exhibit 10 Respondents by economic sector (%)

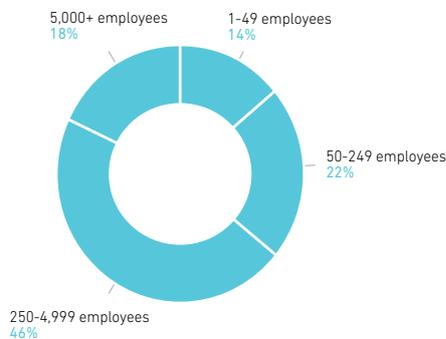


### Respondents by company size

Companies of all sizes participated in the survey. Just under one in seven (14%) employ under 50 staff while at the other end of the scale a slightly larger proportion (18%) employ more than 5,000 people (Exhibit 11).

Using the official definition of small and medium enterprises (SMEs) as organisations employing fewer than 250 people, SMEs make up over a third (36%) of respondents to the survey.

Exhibit 11 Respondents by company size (%)

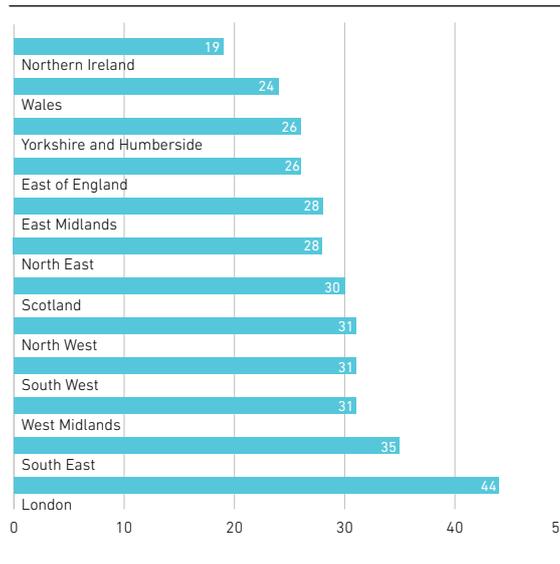


### Respondents by location

The majority of respondents have employees based in several or most regions and nations of the UK (Exhibit 12). In line with previous years, respondents most commonly have at least some employees in London (44%) and the South East (35%). Across other localities, the range is from just under a third of respondents (31%) with at least part of their workforces based in the West Midlands, North West and South West to nearly a fifth (19%) with employees in Northern Ireland.

Close to half of respondents (46%) have employees based in Northern Ireland, Scotland or Wales.

Exhibit 12 Respondents by region (%)



Note: Many respondents have employees in more than one region or nation

46%

Respondents with employees in Northern Ireland, Scotland or Wales

## Skills are an increasingly urgent priority

*The skills needs of tomorrow will be different to those of today – but the drive towards a more productive, high-value economy means the UK will require more and higher-level skills. Businesses, however, are already reporting major skills shortages, including in sectors critical to the rebalancing of the economy – and when it comes to filling skilled roles in the future, businesses are not confident they will be able to find sufficient recruits.*

### KEY FINDINGS

- The positive balance of firms expecting to need more employees with higher skills stands at +65% in 2015 and has been close to or above +60% each year since 2010
- Demand for more people with higher-level skills is expected to be particularly strong in sectors central to growth such as construction (+73%), manufacturing (+69%) and engineering, science and hi-tech (+52%)
- Over half of businesses (55%) are not confident there will be enough people available in the future with the necessary skills to fill their high-skilled jobs
- There are widespread difficulties in recruiting people with STEM skills at every level, from new entrants to train as apprentices (20%) to people with more than five years' experience of STEM-related work (32%)
- Adding those expecting difficulties in three years' time to those currently experiencing problems, over half of businesses (52%) see a shortfall in experienced STEM-skilled staff
- While most businesses view the overall skill levels of their present workforces as satisfactory or good, half of businesses report they are aware of problems among at least some of their employees in basic literacy (50%), numeracy (50%) and IT skills (46%)
- In all parts of the UK, 40% or more of businesses in the past year have provided remedial training in basic skills for at least some adult employees
- Close to a third of businesses (31%) have organised remedial training for at least some young people joining them from school or college while more than one in five businesses (22%) reports having provided remedial support for graduates in the past year.

### Changing technologies and markets demand rising levels of skills

As technologies, products, services and markets evolve, UK businesses will need more people able to fill skilled jobs in the years ahead. Levels of skills that were adequate in the past will not suffice in future. The results of our survey show the strength of the drive towards a higher-skill, higher-value economy and the anticipated impact in terms of changing future skill mixes (**Exhibit 13**).

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 (70% expect to need more, just 2% to need fewer and 28% expect no change, producing a positive balance of +68%). The balance of businesses expecting to require more people with leadership and management skills has been above +60% every year since 2010 as the economic recovery has gained traction.

# 68%

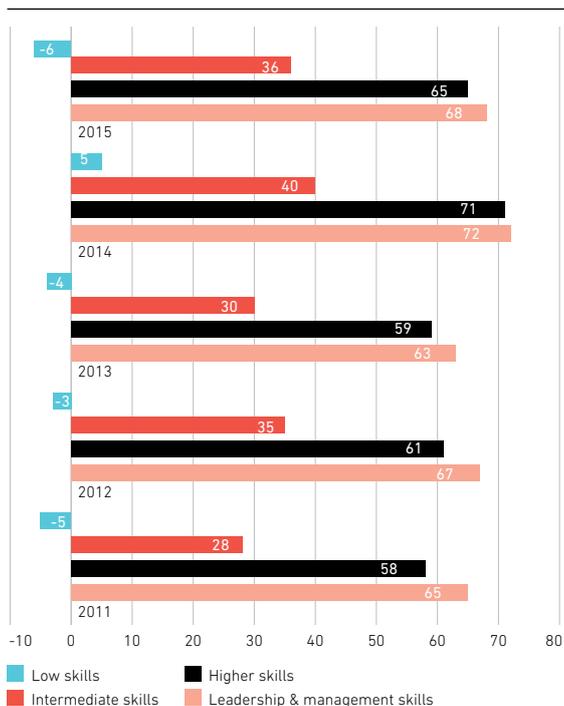
Employers expecting to need more staff with higher skills in the years ahead

These results should come as no surprise given the central importance of leadership and management to business performance – and that the UK has been lagging behind some of our key competitor nations in terms of capability.<sup>28</sup>

The positive balance of firms expecting to need more employees with other higher skills has also been close to or above +60% each year since 2010. The balance stands at +65% in 2015, with more than two thirds of respondents (68%) expecting to grow the number of higher-skilled employees over the next three to five years and only 3% anticipating reductions in their number.

As economic growth continues, 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 stands at +36% in 2015.

**Exhibit 13 Business demand for different skills levels over next 3-5 years (%)\***

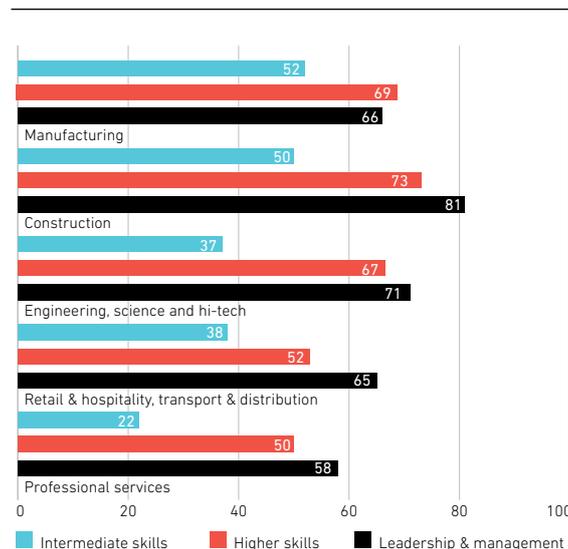


### Demand for skills will be strongest in sectors essential for rebalancing...

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 14**).

Among firms in manufacturing and construction, positive balances of +50% and above anticipate needing more people with skills from intermediate levels upwards in the years ahead. A majority of businesses in engineering, science and hi-tech also expect to grow the numbers of people they employ in higher-skilled roles and jobs needing leadership and management skills (+67% and +71% respectively). 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 14 Increased demand for skills over next 3-5 years by sector (%)\***



\* Firms reporting increased demand minus those reporting decreased demand

\* Firms reporting increased demand minus those reporting decreased demand

**...although businesses are concerned that the demand for skills cannot be met**

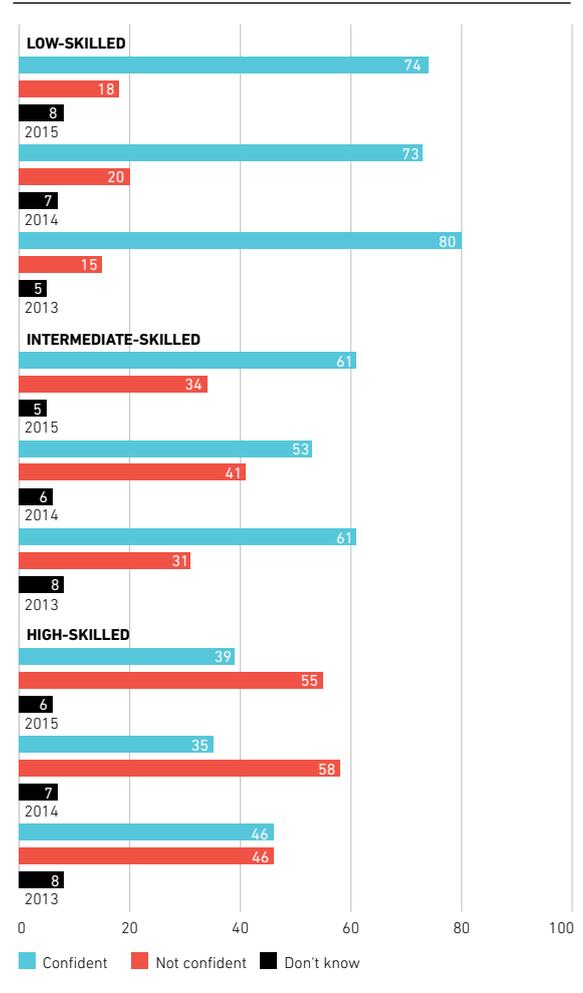
Many firms are concerned that there will not be sufficient people available to fill skilled roles in the future (**Exhibit 15**). While the majority of firms are confident in their ability to recruit to low skilled and intermediate skilled roles – at +57% and +27% respectively – this is not the case across all sectors. For example, in the construction sector, a negative balance of 34% of businesses are not confident about the supply of those with the intermediate skills they need.

When it comes to filling high-skilled jobs in future, there are widespread concerns. Last year more than half of employers were not confident they would be able to recruit enough high-skill employees (58%), while only a third were confident (35%), giving a negative confidence balance of -23%. This year has seen little improvement, with the majority of businesses still not confident they will be able to meet their need for high-skilled people in the years to come (with a balance of -16%).

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

Levels of confidence about being able to access sufficient high-skill employees in future remain negative across all parts of the UK (**Exhibit 16**). The biggest shortfall in confidence is among those businesses with employees in Wales (a heavily negative -29%, higher than in 2014). Confidence about future recruitment of those with high skills is greatest among businesses in England, though even here it is substantially negative (at -13%).

**Exhibit 15 Employer confidence about accessing employees in the future (%)**



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

	2015	2014	2013
Wales	-29	-24	-14
Northern Ireland	-27	-27	+29
Scotland	-20	-24	+1
England	-13	-24	-1
All UK	-16	-23	0

\* 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, almost twice as many firms believe that in the coming years they may not be able to recruit sufficient employees with the high skills they will need as are confident of doing so (giving a negative confidence balance of -28%). Among the largest businesses with 5,000 or more employees, the negative balance climbs to -39%

Within manufacturing (**Exhibit 17**), there has been a further fall in confidence about being able to recruit sufficient highly skilled staff in future (from a balance of -31% last year to -47% in 2015). Professional services firms have dropped from a positive confidence balance of +33% in 2013 to just +3% by 2015. Construction businesses have moved in a slightly less negative direction, but the confidence balance of -18% this year is a serious cause for concern.

These findings highlight the urgent need for more action to boost skills if economic growth is not to be held back.

**Exhibit 17 Employer confidence in accessing high-skilled employees in the future by sector (%)\***

	2015	2014	2013
Manufacturing	-47	-31	-24
Construction	-18	-48	-4
Professional services	3	0	+33

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

55%

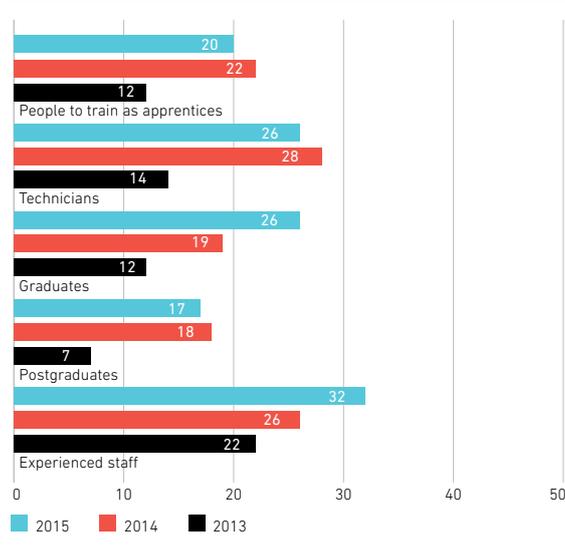
Employers not confident of being able to recruit sufficient high-skilled employees in the future

**People with STEM skills are becoming particularly hard to recruit...**

Businesses report widespread difficulties in recruiting people with STEM skills (**Exhibit 18**). The problems are encountered at every level, from new entrants taken on to train as apprentices (20%) to people with more than five years' experience of STEM-related work (32%).

These are troubling results. And they are not a new development. As our results from earlier years show, with the gathering pace of the economic recovery, the difficulties experienced in filling posts needing people with graduate skills and experience of STEM-related work have intensified. The proportion of businesses reporting problems in recruiting STEM graduates has more than doubled since 2013 (from 12% to 26%). The shortfalls in experienced staff with STEM expertise have been consistently high and rising. Close to a third of firms (32%) this year report difficulties in meeting their need for such staff (up from 22% in 2013).

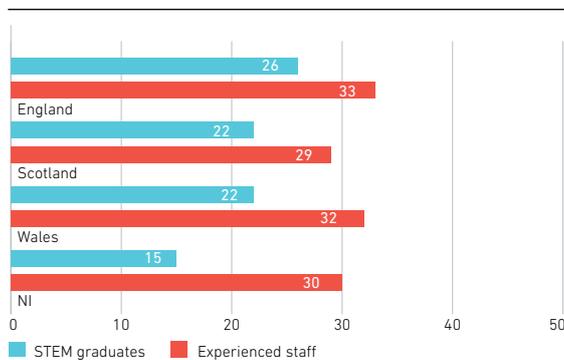
**Exhibit 18 Current difficulties in recruiting people with STEM skills and knowledge (%)**



Recruiting people with STEM-related skills is a challenge in every part of the UK (**Exhibit 19**) and across many sectors (**Exhibit 20**).

Difficulties in recruiting STEM graduates are reported by 15% of businesses with employees in Northern Ireland, rising to more than a quarter (26%) in England. The picture for experienced STEM-skilled staff is more uniform across the UK, with close to a third of firms reporting current difficulties (ranging from 29% in Scotland to 33% in England).

**Exhibit 19 Current difficulties in recruiting STEM skills by nation (%)**



In manufacturing, a third or more of firms report difficulties in recruiting at every level, from people to train through STEM-related apprenticeships (33%) to experienced STEM staff (38%). Among construction firms, close to half (47%) report current problems in recruiting technicians, a group highlighted as in increasingly short supply in our 2014 survey.<sup>29</sup> Across engineering, science and hi-tech firms, nearly half (44%) report difficulties in finding experienced recruits with the right STEM skills.

Crucial manufacturing supply chains are particularly hard hit by these growing shortages, as noted in the CBI report on industrial strategy, *Pulling together*.<sup>30</sup> While all businesses must contend with the challenge, it is often lower-profile and smaller ones, upstream in the supply chains of larger manufacturers, that must struggle hardest to compete for the limited resource or set up their own training programmes (**Exhibit 21**).

**Exhibit 20 Current difficulties recruiting people with STEM skills and knowledge by sector (%)**

Sector	People to train as apprentices	Technicians	Graduates	Experienced staff
Manufacturing	33	37	36	38
Construction	20	47	27	20
Engineering, science and hi-tech	13	11	26	44

**Exhibit 21 Pulling together: strengthening the UK's supply chains**

The industrial strategy has made substantial progress in supporting growth in key sectors, with the development of a consistent policy framework and stronger partnership between businesses and government. But in order to realise a true resurgence in manufacturing that filters down to firms of all sizes and touches all regions of the UK we need to ensure the foundations of the UK's industrial base are up to the challenge. Manufacturing supply chains have been hollowed out in recent decades, but there are reasons to believe this can be reversed to a significant extent and competitiveness boosted by a strategy which focuses on innovation, service and quality.

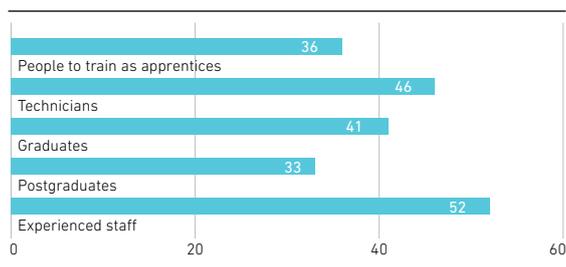
To achieve this a number of hurdles must be overcome – the shortage of STEM-skilled staff being a major one. The crisis is felt most keenly by mid-sized and smaller supply-chain businesses which lack the profile that can attract recruits. Many of the sectors that rely on these skills also face demographic challenges in their workforce, so skills shortages are likely to be compounded further, aggravating the effects already being felt by businesses on their ability to grow and innovate.

### ...and businesses expect these difficulties to intensify

Looking ahead three years, businesses believe the recruitment market for STEM-skilled staff will become even more difficult (**Exhibit 22**).

Adding those expecting difficulties in three years' time to those currently experiencing problems, over half of businesses (52%) see a shortfall in experienced STEM-skilled staff. The picture is not much more optimistic for other categories of STEM-related staff. Combining current and anticipated difficulties, a third of businesses (33%) view recruitment of postgraduates with STEM capability as a problem area, rising to close to half for technicians (46%). There is plainly an urgent need for action to address these intensifying STEM skill shortfalls.

**Exhibit 22 Current and/or expected difficulties in next three years recruiting people with STEM skills and knowledge (%)**



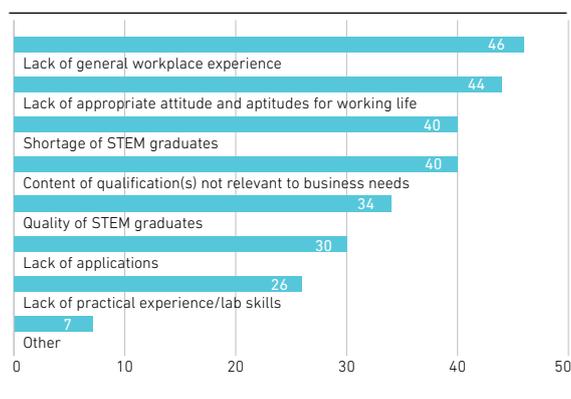
### The STEM crisis can only be addressed by business and education working together...

We asked respondents who reported difficulties in recruiting STEM-skilled staff what particular problems they encounter. The answers point to a range of concerns (**Exhibit 23**).

A lack of general workplace experience among applicants (46%) and weaknesses in the attitudes and aptitudes for working life among candidates (44%) are identified as the most widespread problems.

Ranking almost as high are a shortage of STEM graduates (at 40%) and concerns that the content of qualifications at all levels is too often not relevant to business needs (40%). More than a third (34%) also report the quality of STEM graduates as not good enough. These findings highlight the need for firms and providers of education and training to work together to ensure programmes of study properly reflect workplace developments and technological advances in manufacturing and science-based industries.

**Exhibit 23 Barriers to recruiting STEM-skilled staff (%)**



### ...but government also has an important role to play

There is a clear need for action by all concerned to promote the study of STEM subjects and so increase the future supply of potential STEM-skilled employees (**Exhibit 24, page 24**).

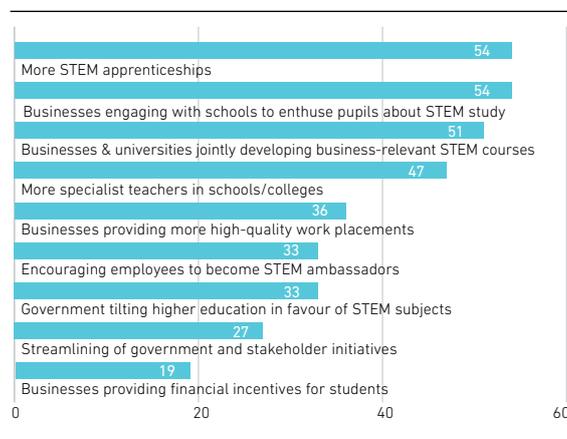
Three priorities for action are identified by more than half of respondents to our survey. First, businesses need to create more STEM-related apprenticeships (54%). If young people are confident the career openings are there, they will be more encouraged to prepare via STEM study. It is equally important for employers to engage with schools to enthuse pupils about STEM study (54%). They can inject an invaluable 'real world' perspective, opening young people's eyes to the practical value and exciting creative scope of STEM subjects. And as set out in the recent CBI report *Tomorrow's world*,<sup>31</sup> this should be happening from primary school onwards (**Exhibit 25, page 24**).

A majority of respondents (54%) also point to the need to tackle the low business relevance of some STEM qualifications in higher education. This requires employers and universities to work together more closely to develop STEM courses with built-in business relevance – for example by employers participating in degree programme advisory boards or sponsoring new degree courses (see Chapter 8).

Almost half of businesses (47%) point to the need for more specialist science and maths teachers in schools and colleges, reflecting the worries discussed above. In addition, firing young people's interest in STEM careers through providing high-quality work placements (36%) and schemes such as the STEM ambassadors' programme<sup>32</sup> (33%) are widely recognised as important.

The Coalition government weighted higher education funding support towards STEM as high-cost subjects.<sup>33</sup> Continued support of this type is essential, with a third of businesses (33%) pointing to the importance of the government tilting higher education in favour of STEM subjects. There is also a case for better streamlining of the varied initiatives to promote STEM study (seen as a priority by 27% 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 24 Priority actions to promote STEM study (%)**



**Exhibit 25 Tomorrow's world: inspiring primary scientists**

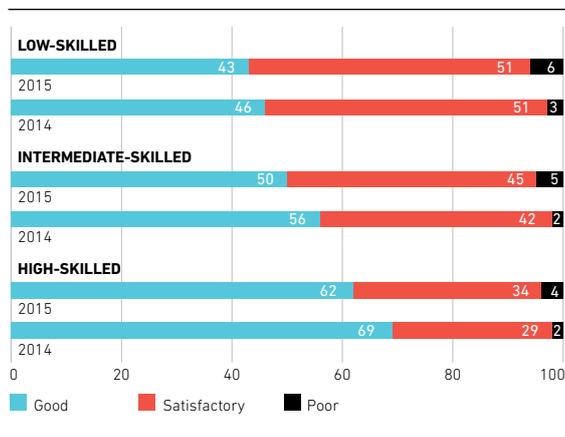
By the time that young people reach secondary school, many have already 'switched-off' from science – deciding that it is not something that they want to pursue. If we are to tackle the growing shortages of science-based skills in our economy, we need to ensure that children are engaged in and enthused by science from the beginning of their education.

There are a number of challenges around primary science education – such as the level of prioritisation assigned to the subject, finding time within the wider curriculum and issues around teacher confidence – and increased engagement by employers and universities can be of real benefit. In a survey of primary school teachers conducted for this report, three quarters of respondents wanted to see more involvement by businesses and universities in science education – including through support for teacher development, provision of learning materials and lesson plans, and support in delivery of lessons or providing opportunities to visit facilities.

### Most businesses view their employees as adequately skilled at present...

More than nine in ten businesses rate overall levels of skill among their employees as adequate for their current jobs (**Exhibit 26**). Some 96% of employers consider the skills of their employees in high-skilled roles as satisfactory or better, while 94% view the skills of those holding low-skilled posts as at least satisfactory. But across all skill levels the proportion of businesses rating employees' skills as poor has edged up over the past year from a low base. And current levels of skills are no guide to those that will be needed in the future. The bar is constantly being raised by international competition, technical change and customer demand.

Exhibit 26 Ratings of employee skill levels (%)



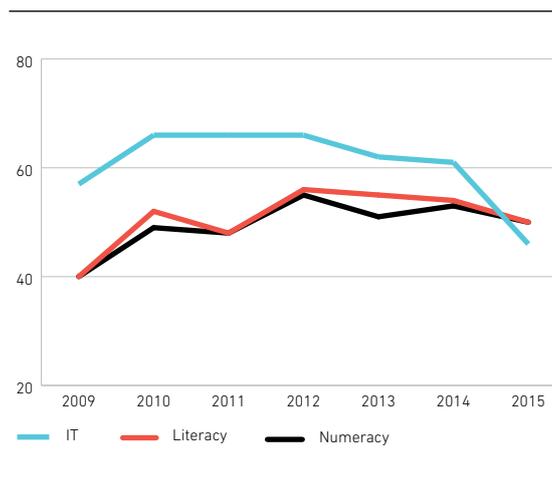
... but there are widespread weaknesses in core competencies...

While employers consider their workforces' overall levels of skills have been sufficient to cope with their jobs at present, most businesses report that there are IT, literacy/use of English and numeracy shortfalls to at least some extent within their current workforce (Exhibit 27).

As competitive pressures intensify and product mixes become more sophisticated, these shortcomings in basic skills pose a challenge for businesses and individuals. Back in 2009 around two in five business (40%) reported weaknesses among some employees in literacy/use of English and numeracy. The proportions have climbed in recent years, standing at 50% in 2015. Weaknesses in IT skills among current employees have been edging down, but close to half of businesses (46%) are aware of problems to at least some extent in their current workforce. These findings are in line with results from international research, which indicate the literacy and numeracy skills of many adults in the UK, particularly young adults, are relatively weak by comparison with other advanced economies.<sup>34</sup>

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. Any shortcomings in IT skills affect more and more jobs as the use of technology spreads to new activities. Overall, the cost to the UK economy of outcomes associated with low levels of numeracy among adults is put at around £20.2 billion a year, or about 1.3% of GDP.<sup>35</sup>

Exhibit 27 Employers reporting concern about basic skills of current workforce (%)



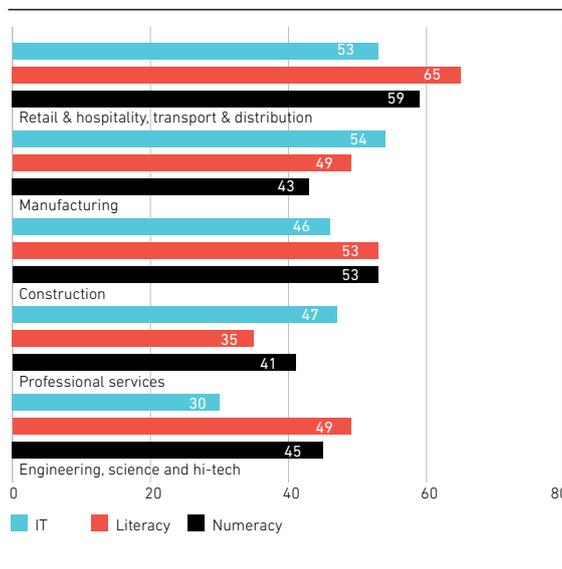
...and no sectors are immune

While shortcomings in basic skills vary from business to business, no major sector is unaffected (Exhibit 28, page 26). Close to half of businesses in sectors ranging from manufacturing (54%) and construction (46%) to professional services (47%) report having IT skills problems in their current workforces to at least some extent. Even among engineering, science and hi-tech firms, close to a third (30%) report being aware of some employees with shortfalls in IT skills.

The extent of reported problems in terms of literacy/use of English range from around a third (35%) of professional services firms to two thirds (65%) among businesses in retail, hospitality, transport and distribution. Awareness of employee weaknesses in numeracy is also widespread. More than two in five firms (41%) in professional services report having at least some employees with numeracy problems, rising to nearly three in five (59%) among businesses in retail, hospitality, transport and distribution. In many enterprises the proportion of employees with numeracy weaknesses is relatively small. But even among professional services businesses and engineering, science and hi-tech firms, close to one in ten report that there are problems to a significant extent in their current workforces (9% and 8% respectively).

The extent of problems in basic skills reflects past weaknesses in our school systems – we must ensure there is no repetition of these shortfalls among future school leavers.

**Exhibit 28 Employers reporting concern about basic skills by sector (%)**



**Too many businesses are having to organise remedial education**

Close to half of UK employers (46%) say that in the past year they have organised training in at least one basic skill area for adult employees. And the figure stands at 40% or more in every part of the UK (Exhibit 29).

IT skills are the most common area in need of attention, with two in five businesses (40%) reporting they have provided remedial IT training for at least some adult employees (Exhibit 30). There has been less activity on literacy/use of English (11%) and numeracy (14%), though even these figures are disturbingly high.

Close to a third of businesses (31%) 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 (18%) and numeracy (17%), but even among young people one in eight firms (13%) has had to provide help for at least some in basic IT skills.

Perhaps most troubling of all is the scale of remedial basic skills training for graduates – and the finding that it seems to have risen. In all, more than one in five businesses (22%) reports having provided remedial support for graduates in the past year, up from 15% in 2014. The most common area for assistance has been numeracy (by 12% of businesses).

The lack of improvement in these figures over the years shows there is still deep-rooted underperformance in parts of our schools systems. The CBI's *First steps* report<sup>36</sup> identified the outcomes we want our schools to achieve and the capabilities we want every school leaver to possess. The priorities of business are also clear from this survey (Chapter 5). As our competitors across the globe drive up their educational standards, we cannot tolerate the long tail of under-achievement suggested by these results.

Exhibit 29 Employers providing remedial training in past year to adult employees by nation (%)

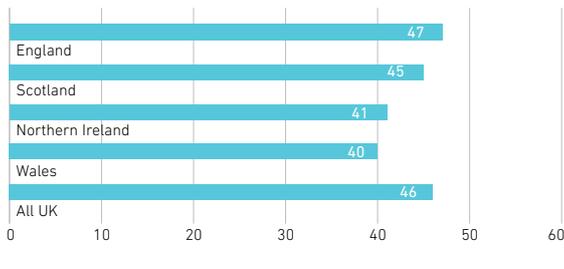


Exhibit 30 Employers providing remedial training in past year (%)

	School/college leavers			Graduates			Adult employees		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
Literacy/ use of English	18	22	15	10	7	5	11	15	16
Numeracy	17	19	14	12	4	6	14	13	13
IT skills	13	13	13	10	8	8	40	39	39

“ The skills needs of tomorrow will be different, and higher-level. But businesses are already facing critical skills shortages – including in sectors which underpin economic rebalancing. ”

## Business is responding to the skills challenge, but apprenticeship reform is critical

*People are fundamental to the success of individual firms and the wider economy – and businesses are keenly aware of the importance of investing in training and development to build skills pipelines. Although ‘earn while you learn’ routes remain under-developed in the UK, many firms have long recognised the value of apprenticeships and, in England, are responding positively to the apprenticeship reform programme. But the reforms, including funding reform, must be completed and the focus must remain on quality and delivering more higher apprenticeships.*

### KEY FINDINGS

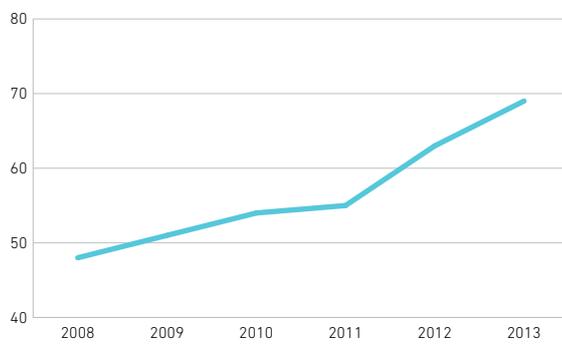
- Around two thirds (66%) of the businesses responding to this survey are involved in apprenticeships. Amongst this cohort, prospects for further expansion are strong, with close to two thirds (62%) either intending to expand their current apprenticeship programmes or to start providing apprenticeship places in the next three years
- Provision of apprenticeships has spread beyond traditional sectors such as manufacturing (76% of respondents involved) to new sectors such as professional services (where 42% of respondents now have at least some apprentices)
- Recent reforms to apprenticeships in England are viewed as very or largely positive (by 81% of those offering an opinion), but there are concerns over bureaucracy and red tape (29% of all respondents), delays in funding reform (25%), the slow pace of reform (23%) and over the inability of BIS to relinquish control (23%)
- Actions that would help to engage more employers in apprenticeships include making qualification programmes more relevant to business needs (38%) and putting more purchasing power in the hands of firms by routing the apprenticeship grant directly to employers (34%)
- In addition to apprenticeships, firms also operate a variety of policies for developing talent in their workforces: two thirds (66%) offer support for employees studying part-time, a dedicated training and development budget is almost equally common (63%) and well over half (60%) have an explicit learning and development strategy. More than four in five businesses (85%) plan to maintain or increase their investment in training and development in the year ahead
- Three quarters of businesses (75%) rely on external training partners to at least some extent, with nearly half (44%) of their training on average delivered by external providers
- Business satisfaction with external training providers has declined since last year, with costs the most widespread concern
- Private sector training providers outperform FE colleges and universities on every satisfaction measure, repeating the pattern of previous years.

### The pace of growth in apprenticeships has slackened...

More than 440,000 people embarked on apprenticeship programmes in 2013/14. Although this figure is down on starts in 2012/13, it is more than 160,000 higher than in 2009/10 and shows the strength of the drive to promote apprenticeships.<sup>37</sup> However, as shown in Chapter 1, the proportion of higher apprenticeships remains very small – only 2% of the total starts in 2014. And numbers are no indicator of quality.

Across our 2014 respondents as a whole, two thirds (66%) are currently involved in providing at least some apprenticeship places (**Exhibit 31**).

**Exhibit 31 Employers involved in apprenticeships 2008-2015 (%)**

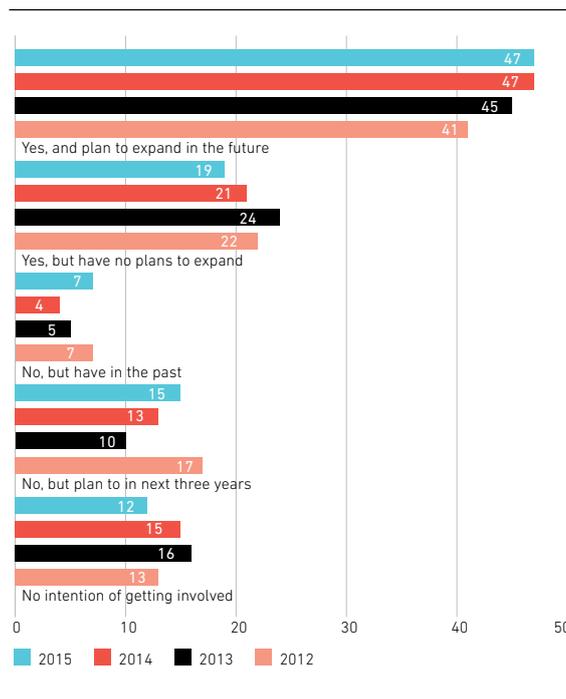


**...but there is no reason to think apprenticeship provision has reached its limit**

Prospects for further expansion of apprenticeships amongst this cohort is strong. Close to two thirds (62%) either intend to expand their current apprenticeship programmes or plan to start providing apprenticeship places in the next three years (**Exhibit 32**).

The proportion of businesses that report they are already involved in providing some apprenticeship places and plan to expand their schemes in future stands at just under half (47%) this year, the same level as in 2014. With more than a further one in six firms (15%) planning to start apprenticeship programmes in the next three years, renewed growth in apprentice numbers looks achievable provided the right framework is in place.

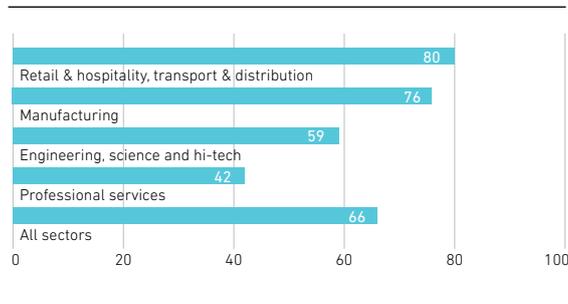
**Exhibit 32 Employer plans for apprenticeship programmes (%)**



**Apprenticeships have spread far beyond traditional sectors**

Involvement in apprenticeships has spread far beyond the sectors with which they are traditionally associated (**Exhibit 33, page 30**). In manufacturing, more than three quarters of respondents (76%) have apprentices. But apprenticeship programmes are even more widespread in the services sector of retail, hospitality, transport and distribution, where four in five respondents (80%) report that they have at least some apprentices. Even in professional services, two in five businesses (42%) are now engaged in apprentice training provision to at least some degree. And among professional services firms a further 23% plan to start participating in apprentice training over the next three years. The challenge now is to grow quality – so that more apprenticeships provide routes to higher level skills.

**Exhibit 33 Employer involvement in apprenticeship programmes by sector (%)**



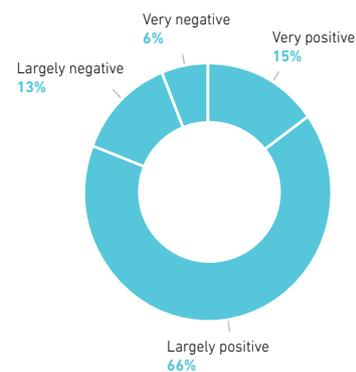
**Responses to apprenticeship reform are broadly positive...**

Recent years have been a period of reform in the apprenticeship system in England. Reviews by Doug Richard,<sup>38</sup> Jason Holt<sup>39</sup> and the BIS Select Committee<sup>40</sup> recognised the vital role of apprenticeships in delivering business-focused training and equipping people with the skills and knowledge to succeed in demanding jobs. The reviews also concluded that the system needs to become more demand-led to produce better value for apprentices, for businesses and for taxpayers.

Following the reviews, a range of changes have been introduced in England. These include new apprenticeship standards, starting in September 2014,<sup>41</sup> with further standards coming into use in the 2015/16 academic year.<sup>42</sup> In line with recommendations from the Richard Review to give employers greater control over spending on training delivery, the government is planning to route apprenticeship funding through employers rather than paying training providers directly. The 2015 Budget announced employers will be given funding control through a digital Apprenticeship Voucher, which will be trialled before full implementation in 2017. Previously consideration had been given to funding for training being routed via employers either through a PAYE system or an apprenticeship credit model. There are also new caps on the government funding contribution depending on the apprenticeship being undertaken.

When asked about their experience to date of the apprenticeship reforms under way in England, most respondents offering a view gave a positive one (**Exhibit 34**). A total of 81% viewed the changes as largely or very positive. Business has called for some time for a simpler apprenticeship system – one that delivers relevant skills, knowledge and behaviours and where the employer is more firmly in control. The reforms underway are intended to achieve this – and, as a result, over 1,000 employers have already engaged in the reform programme via the government’s ‘trailblazer’ initiative.

**Exhibit 34 Experience of apprenticeship reforms in England (%)\***



\* Of those respondents expressing an opinion

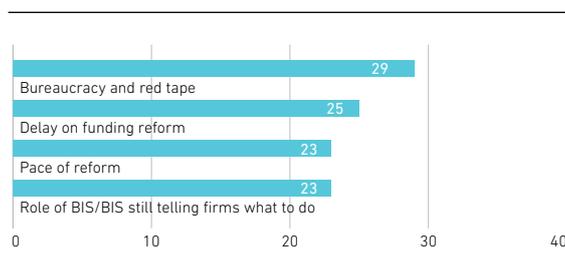
**...but there is scope to do better**

Our findings show up a number of concerns among businesses about the apprenticeship changes in England and highlight areas for improvement (**Exhibit 35**).

Heading the list are worries over the amount of bureaucracy and red tape (cited by 29%). This reflects concerns also expressed by those involved in Employer Ownership Pilots (EOP). Public funding rightly requires effective checks and safeguards, but these need to be proportionate and not so onerous as to deter employers from engaging in apprenticeships. Some employers have already walked away from EOPs due to the degree of regulation and prescription from government. If employers do not believe that they are genuinely in the driving seat on apprenticeships, then there must be a very real risk that they will similarly walk away.

There are also concerns over delays in funding reform (25%) and more general concerns about the pace of reform (23%). Finally, there are worries about an over-interventionist approach by BIS (23%) and concerns about whether government is really prepared to cede control over apprenticeships to employers.

**Exhibit 35 Areas of concern on apprenticeship reforms in England (%)**



**How can renewed growth in apprentice numbers be triggered?**

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 almost two fifths of respondents, is qualification programmes that are more relevant to business needs (38%).

There is also widespread backing for putting more purchasing power in the hands of firms by routing the apprenticeship grant directly to employers (34%) – an approach which seems set for introduction in the near future. Around a third of respondents (33%) also want to see reductions in bureaucracy in the apprenticeship system. The recent reviews have highlighted the case for a clearer and simpler system. Achieving this would be an important step in enabling businesses to exercise greater leadership in apprenticeship provision.

Almost equally important would be an increased supply of suitably qualified and motivated young people applying to take up apprentice places (cited by 32%). This is a particular concern to SMEs, with 39% wanting to see an improved pool of candidates for apprenticeships. Times may be changing, but too often in the past schools and colleges have put undue emphasis on channelling young people in the direction of academic study rather than vocational apprenticeships. This is despite the range and calibre of career opportunities apprenticeships can open up, including progression to senior management.<sup>43</sup>

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



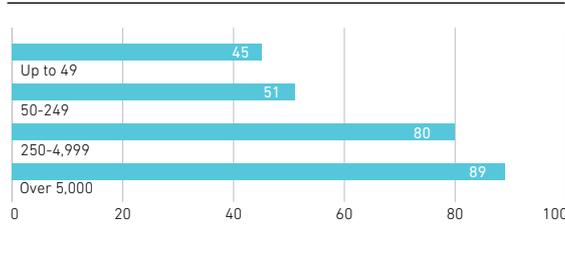
**The uneven pattern of apprenticeships shows the scope for growth**

While close to half (45%) of the smallest firms replying to the survey have some involvement with apprenticeships, that still leaves the majority with no engagement (**Exhibit 37, page 32**). It is also clear that medium-sized businesses remain relatively under-represented, with only half (51%) of those with 50 to 250 employees responding providing apprenticeships. In contrast, four in five enterprises (80%) employing over 250 people who replied to the survey offer apprenticeship places (rising to 89% among those with 5,000 or more staff). This reflects the findings of other surveys and research which highlight the huge potential – and challenge – of getting more SMEs involved in offering apprenticeships.

81%

Employers reporting a positive experience of apprenticeship reform in England

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

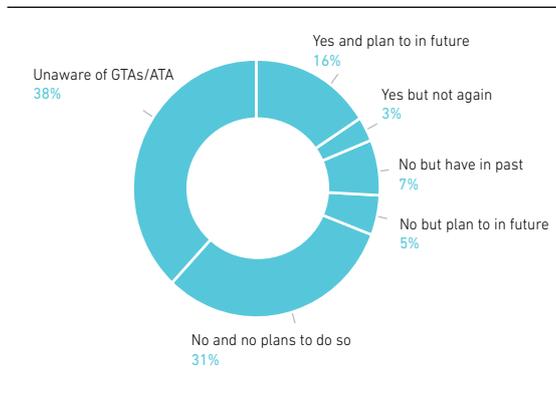


**Most small firms are not aware of GTAs and ATAs**

The imbalance in the scale of involvement in apprenticeship provision by smaller businesses highlights the need for effective support structures. Group Training Associations (GTA)<sup>44</sup> and Apprenticeship Training Agencies (ATA)<sup>45</sup> have the potential to simplify the process for businesses, but levels of awareness are worryingly low (Exhibit 38).

In all, nearly two in five respondents (38%) are unaware of the role of GTAs or ATAs. The figure climbs to 47% among SMEs, exactly the businesses that could benefit most. Only one in six firms (16%) reports that they have ever used a GTA or ATA and that they plan to do so again in the future. There is clearly a major communications hurdle to be cleared if GTAs and ATAs are to deliver on their potential for boosting skill levels via expanded apprenticeship provision.

**Exhibit 38 Employer use of a Group Training Association or Apprenticeship Training Agency (%)**



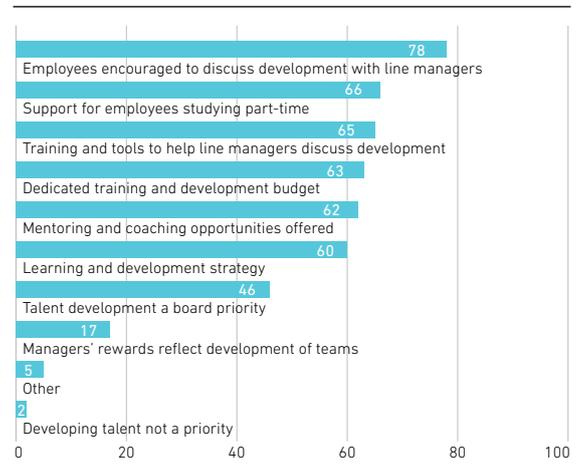
**Firms are also looking to develop talent in-house**

Employee talent and how effectively it is applied lie at the heart of long-term business competitiveness. Developing the talent of employees depends on a partnership involving businesses, line managers and employees themselves (Exhibit 39).

Having the right framework of policies and practices in place within a firm is essential. Two thirds (66%) of respondents to our survey, for example, offer support for employees studying part-time. This can take forms such as assistance with fees for relevant courses and time off for study or exams. A dedicated training and development budget is almost equally common (63%) to ring-fence investment in skills, and well over half of respondents (60%) have a formal learning and development strategy. Commitment from the top is important in sending positive messages about the value of training and shaping a culture in which talent development thrives: in nearly half of organisations (46%) talent development is a priority championed by the board.

It is line managers, however, who bring policies to life and act as the essential interface with individual employees. By far the most widespread approach to talent building is to encourage employees to discuss development with their line managers (78%). To help inform the process, two thirds of respondents (65%) provide training and tools to help line managers in discussing development. Mentoring and coaching opportunities are also widespread to help employees fulfil their potential (62%).

**Exhibit 39 Approaches taken to talent development (%)**

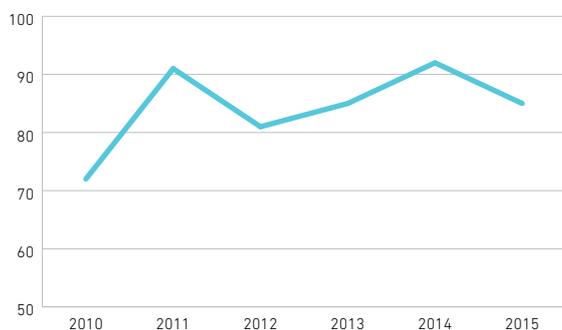


### Skills investment is on the rise...

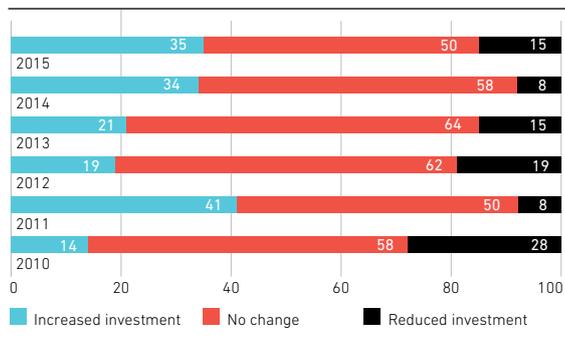
We asked respondents what impact the economic climate is having on their plans to invest in the training and development of staff over the next 12 months. More than four in five businesses (85%) will be maintaining or increasing their investment in the year ahead (**Exhibit 40**). This has been the pattern every year since 2011 and reflects widespread recognition that it is more important than ever for firms to ensure their workforces have the skills to take advantage of the opportunities opened up by economic recovery.

The results show over a third of firms (35%) plan to increase their level of spend, while one in six (15%) plans to cut back, giving a positive balance of +20% intending to increase their training and development investment (**Exhibit 41**).

**Exhibit 40 Employers planning to maintain or increase training and development investment (%)**



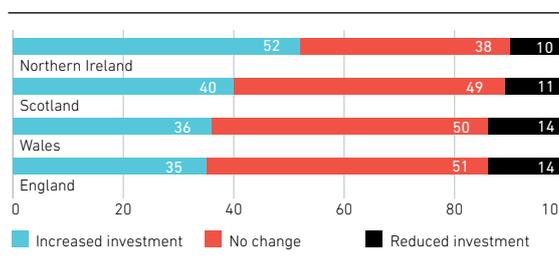
**Exhibit 41 Employers' intentions for training and development of staff (%)**



### ...across all parts of the UK...

Plans to maintain or increase investment in training and development apply among employers right across the UK (**Exhibit 42**). The balances of those planning to increase investment over those planning reductions range from +21% in England to +42% in Northern Ireland.

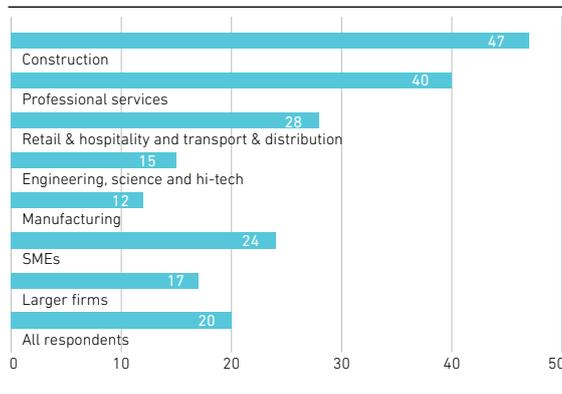
**Exhibit 42 Employers' intentions for training and development of staff by country (%)**



### ...and in all sectors

Repeating the pattern of 2014,<sup>46</sup> construction heads the list of sectors (**Exhibit 43, page 34**) where a positive balance of firms plan to increase investment over those planning reductions (with a balance of +47%). Major areas of services also anticipate greater investment in training and development, with a balance of +40% in professional services and +28% among firms in retail, hospitality, transport and distribution. Following major expansion of training activity over the years since the recession, positive balances of firms in manufacturing (+12%) and engineering, science and hi-tech (+15%) plan further increases in training and development investment over the coming 12 months.

**Exhibit 43 Balance of employers planning to increase training spend by sector (%)\***



\* Net balance of employers planning to increase training spend minus those planning to decrease spend

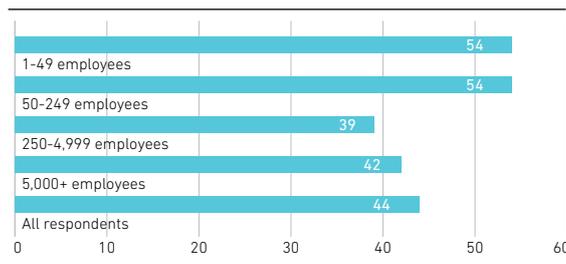
**Businesses rely on a range external partners...**

Most businesses rely on a range of partners to help deliver their training and development programmes. External trainers can often bring expertise not readily available in-house and can help spread new techniques and best practice between organisations.

Among those firms drawing on partners, on average just over half of training (56%) is provided in-house – through a combination of on-the-job and off-the-job development – while the balance of 44% of training is carried out by external providers (Exhibit 44).

With more limited in-house resources, SMEs rely on external partners for more than half their training and development of employees (54% on average). But even among the largest businesses, over 40% of training is delivered by external specialists on average (42% among those with 5,000 or more employees).

**Exhibit 44 Amount of training delivered by external providers by organisation size (mean %)**

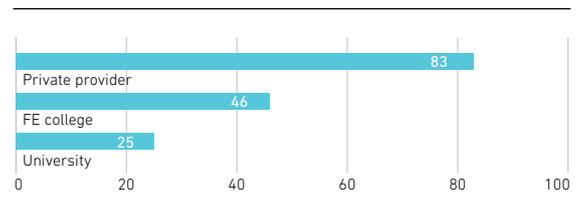


**...with private providers most widely used**

Three quarters of respondents (75%) to our survey make at least some use of external training and development providers. Private providers are by far the most common choice (Exhibit 45). More than four in five (83%) of those firms 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 nearly half of respondents (46%), 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, a quarter (25%) draw on universities for at least some development programmes.

**Exhibit 45 Type of external providers used (%)**



**Rising satisfaction with training providers has ground to a halt**

Businesses over recent years have become steadily more satisfied with the training delivered by external providers.<sup>47</sup> But this year there has been a sudden reversal on almost every measure. It remains to be seen whether this is a short-term blip or an indicator that economic recovery has caused training providers to ease up on their drive for improvement.

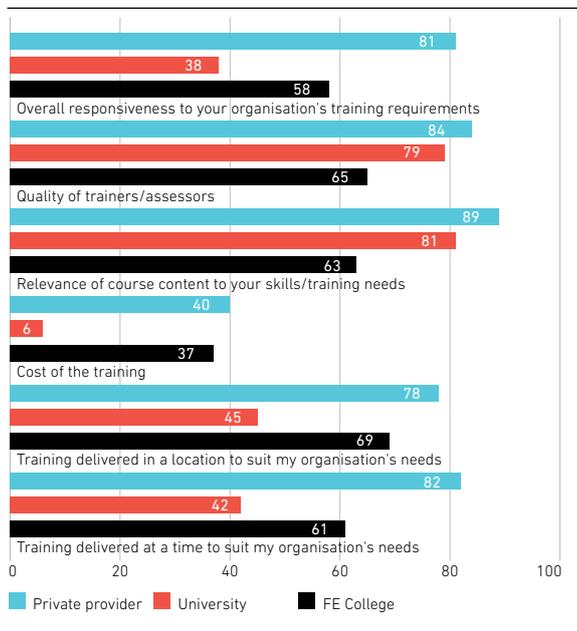
Private providers still achieve the highest employer satisfaction ratings (Exhibit 46). On overall responsiveness to an organisation’s training requirements, for example, the balance of those businesses satisfied with private providers over those dissatisfied stands at +81%, but this is lower than the 2014 figure of +93%. The positive satisfaction balances for universities and FE colleges are markedly lower (at +38% and +58% respectively).

On essential aspects such as quality of trainers and the relevance of course content to skill and business needs, the balances of positive ratings are fairly high, but there is certainly room for improvement. On relevance of content, for example, both private providers and universities achieve above +80% satisfaction balance scores (at +89% and +81% respectively), while FE colleges lag behind (with a positive satisfaction balance of +63%).

**Costs are the most widespread source of dissatisfaction**

The costs of training will always be a concern for a business. The positive balance of satisfaction falls particularly low for this aspect, with a range from just +6% in the case of the cost of university programmes to +40% for private providers. Levels of satisfaction among firms are far lower on this item than on other areas such as conducting training in ways that fit with the day-to-day running of the business in terms of timing and location.

**Exhibit 46 Balance of employer satisfaction with training providers (%)\***



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



# Building world-class schools and qualifications systems is the best long term solution for skills and growth

*What happens in schools is critically important for the future of our economy and society. The attitudes, aptitudes, knowledge and skills individuals develop at school are crucial to the UK's ability to grow. And the outcomes of our education system, are not yet where they need to be. Competitor nations across the world are continually driving up educational performance on academic and personal development measures. It is essential the UK responds effectively, building truly world-class systems, delivered by excellent teaching staff in every part of the country.*

## KEY FINDINGS

- By far the most important factors employers weigh up when recruiting school and college leavers are attitudes (85%) and aptitudes (58%). These rank well ahead of formal qualifications
- A majority of businesses remain concerned about the preparation of school leavers in important areas including business and customer awareness (66%), self-management (61%) and foreign language skills (60%)
- Many also report room for improvement in essential capabilities such as teamwork (31%), literacy and use of English (37%), basic numeracy (38%), and communication skills (49%)
- Businesses want to see primary schools concentrating on developing pupils' literacy and numeracy (73%) and communication skills (46%)
- In the 11-14 phase of schooling, literacy and numeracy (45%), self-management (42%) and developing awareness of the world of work (39%) head the list of business priorities
- For the 14-18 age group, employers believe a top priority for schools and colleges should be developing awareness of working life with support from businesses (50%)
- Close to half of businesses (45%) recognise foreign language skills among their employees as beneficial, particularly in helping build relations with clients, customers and suppliers (36%)
- The majority of businesses either prefer recruits to hold a mix of both academic and vocational qualifications (37%), or value academic and vocational qualifications equally (37%)
- Close to half of businesses (45%) call for the respected, well-understood A-level brand to be used for rigorous, high quality level 3 vocational qualifications – with the same proportion saying that simplifying the vocational qualification landscape would help in building employer trust and confidence (45%)
- Businesses also see a strong case for ensuring vocational qualifications are rigorous (32%) and for increased employer engagement in their design (31%).

### Employers value young people who are rigorous, rounded and grounded

There is no more important contributor to long-term economic prosperity than education. It also underpins the success of individuals at work. Businesses want young people who are rigorous, rounded and grounded. This involves developing essential key skills and knowledge in combination with the attitudes and behaviours needed for success in life and work. Stretching academic standards alone are not sufficient to achieve this. As the CBI emphasised in the *First steps* report, we also need a system that is aligned to the outcomes we are looking to deliver, Ofsted reform to support and incentivise the right behaviour, a focus on outcomes at 18, and a wider focus on what we see as success.<sup>48</sup> A fresh approach of this type would refocus our schools on tackling these important areas.

Our international competitors are constantly pushing up levels of attainment in their schools. The UK must first close the gap with other leading nations and then maintain a position as one of the global leaders in school systems. Raising standards in every school is of fundamental importance to business. Employers look to schools to develop confident, motivated young people with the attitudes, core knowledge and behaviours that will prepare them for success outside the school gates.

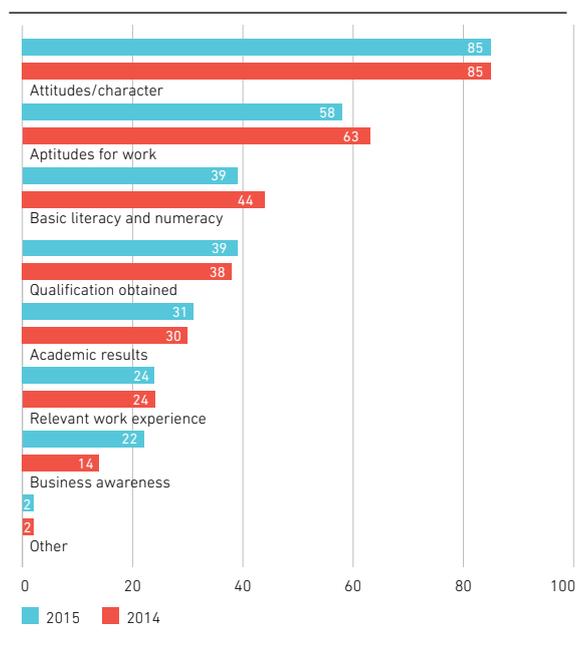
### Developing attitudes matters most

When it comes to recruiting school and college leavers, (**Exhibit 47**) our survey results show the overwhelming importance of young people’s attitudes. More than four out of five employers (85%) rate this as one of their three most important considerations – the same result as in 2014. For close to half of respondents (44%), it rates as the single most important consideration. That it consistently ranks far ahead of every other factor should come as no surprise. The CBI has long pointed to the central importance of resilience and 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 yield results.

Also ranking ahead of formal academic results and qualifications are young people’s aptitudes for work (cited as important by 58%). Core skills such as basic literacy and numeracy (39%) are just as important as formal qualifications (also 39%) – with solid basic skills and the right attitude, a young person has the potential to progress at work. One in five businesses also view relevant work experience and business awareness as among the three top considerations when recruiting young people (24% and 22% respectively).

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 critically important that our school systems help all young people develop as fully as possible in these areas by age 18.

**Exhibit 47 Most important factors in recruiting school/college leavers (%)**



### Too many young people are still being let down by the school system...

All too often, young people are leaving school and college without the attributes they need for working life (**Exhibit 48**). More than a third of employers (39%) report concerns about school and college leavers' attitudes to work. This is the single most important consideration when young people are seeking that critical first job opening, so developing the right attitudes during their schooling is fundamental to their future prospects.

Equally worrying is the finding that well over half (61%) of businesses are not satisfied with the resilience and self-management of young people, while nearly a third (31%) report poor teamworking skills. These are capacities needed in every sector by virtually every job.

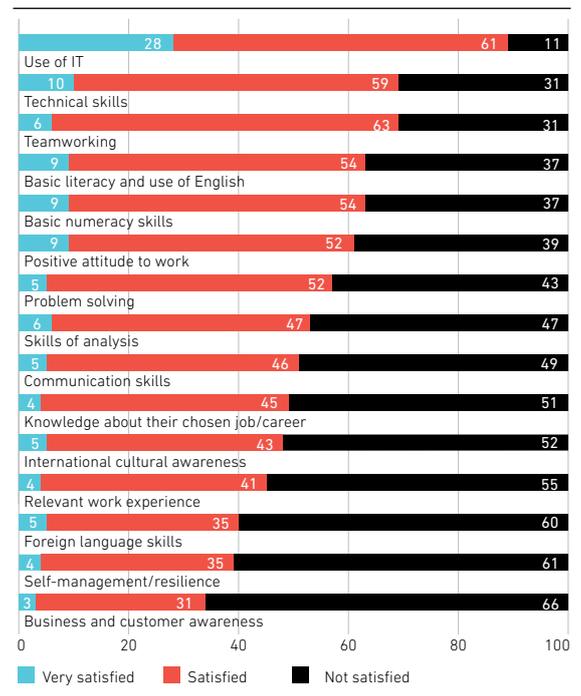
A range of other skills also emerge as cause for concern. Around a third of firms are not satisfied with the technical skills (31%), literacy/use of English (37%), and basic numeracy (37%) of young people entering the world of work. Close to half report concerns with young people's ability to solve problems (43%), their analytical skills (47%) and communication skills (49%). All these are essential skills for effectiveness in the workplace and the rest of life. An excessive emphasis on GCSE grades (or equivalent) and school league tables risks distracting from the need to equip every young person adequately with these core capabilities. We need to incentivise schools to focus on this more holistic development by changing accountability and funding mechanisms, supporting all young people to reach their potential.

### ...providing inadequate experience of the world of work

Year after year, more than half of businesses report concerns about young people's lack of work experience. The proportion this year is the same as in 2014 (55%). This is an obstacle for young people that must be tackled.

The Coalition government made the mistake of ending the statutory duty on schools in England to provide every pupil at Key Stage 4 with work-related learning. While not every placement was of uniformly high quality, the emphasis should have been on improving schemes, not abandoning them. A work experience placement gives young people a critically important taste of workplace life – and the chance to reflect on the lessons of it. With two thirds of employers (66%) not satisfied with levels of business and customer awareness among school and college leavers, work experience placements can help young people gain practical insights and enhance their future employment prospects. This does not, however, mean all students undertaking two-week placements in the summer term of year 10 – we need to widen the definition.

**Exhibit 48 Employer satisfaction with school/college leavers' skills**

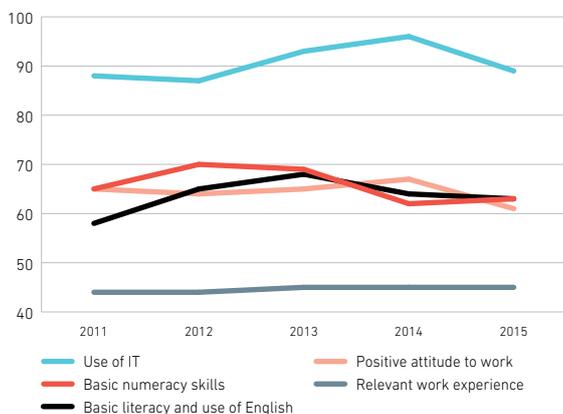


### Core skills need to remain a focus

Viewing employer experience over a five-year perspective (**Exhibit 49**) shows no sign of consistent progress in school leavers' core skills – highlighting the need to ensure that these remain a key focus throughout the education system. Despite previous upwards trends and a comparatively high level of satisfaction, this year's data shows that we still need to support the development of IT skills (with 89% of businesses reporting it as satisfactory or better in 2015 compared with 96% last year). The results also show that the continued emphasis in schools on English is right, with over a third (37%) of employers still wanting to see improvements in 2015.

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

**Exhibit 49 Employer satisfaction with selected skills of school/college leavers 2011-15 (%)**



### Employers want primary schools to focus on literacy, numeracy and skills that open up learning

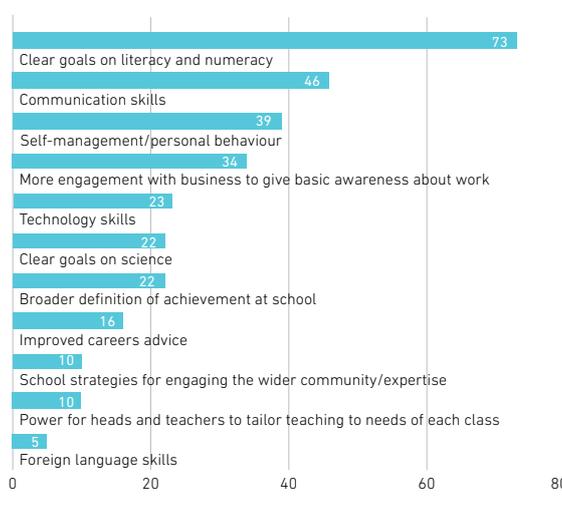
Businesses want to see primary schools focusing on the essential competencies that make further learning possible (**Exhibit 50**). Asked to identify the three priority areas they believe primary education should focus on, the top response by a wide margin is establishing and achieving clearly defined goals in literacy and numeracy (73%). Without sustained progress in these areas during their time in primary

education, evidence shows that young people will find it almost impossible catch up. There is no room for complacency. Although standards have been rising, more than one child in five (21%) in England still leaves primary school without reaching expected standards in reading, writing and maths combined.<sup>49</sup> In over 760 schools in England, fewer than 65% of pupils attain the expected standard.

Businesses also see it as important for primary schools to help children make headway in developing the effective communication skills that are so essential in personal and working life (a priority for 46% of respondents). Enabling young people to develop self-management and appropriate personal behaviour (39%) is another important aim. Qualities such as resilience and the capacity to focus are important both for 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. A broad and balanced curriculum is critical to supporting this kind of development.

Even in primary education, there is a strong case for starting to give children some awareness of the world of work and to spark excitement about their future possibilities. A third of respondents (34%) want to see primary schools engaging more with business. Some primary schools already have links with business, but there is scope for major expansion (see Chapter 6).

**Exhibit 50 Priority areas for action in primary education (%)**

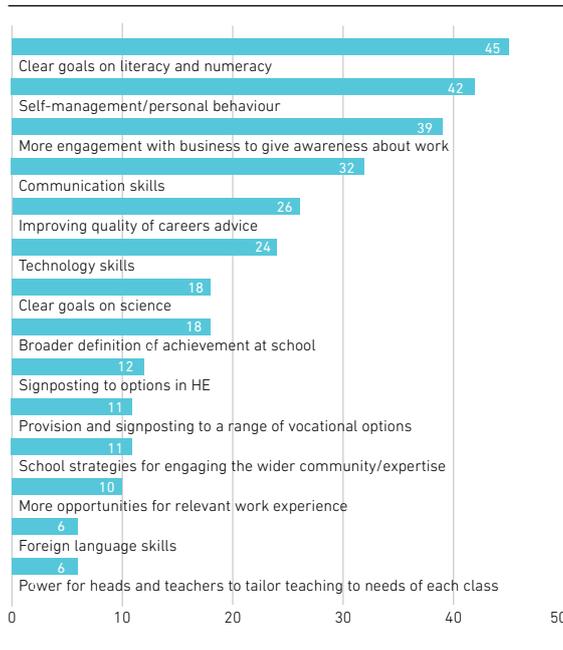


### Secondary schools need to raise awareness of working life

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 51). This remains the top priority (cited by 45%). Self-management and communication skills also continue to rank highly (42% and 32% respectively) when businesses identify their top three priorities – echoing the messages of our *First steps* report. It is essential that the education system helps young people master these enabling skills effectively so they can manage themselves in their working lives.

Alongside developing these core capacities, more than a third of employers (39%) believe it should be a priority for schools catering for this age group to engage more with business to raise young people’s awareness of work. More than one in four (26%) want to see better careers advice for this group. At this stage attitudes are being formed about future options and potential pathways. And businesses have an essential part to play from this stage 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 51 Priority areas for action in 11-14 education (%)**



### Priorities for action in 14-18 group

For young people in the 14-18 age bracket, employers want to see a much greater focus on work awareness (Exhibit 52).

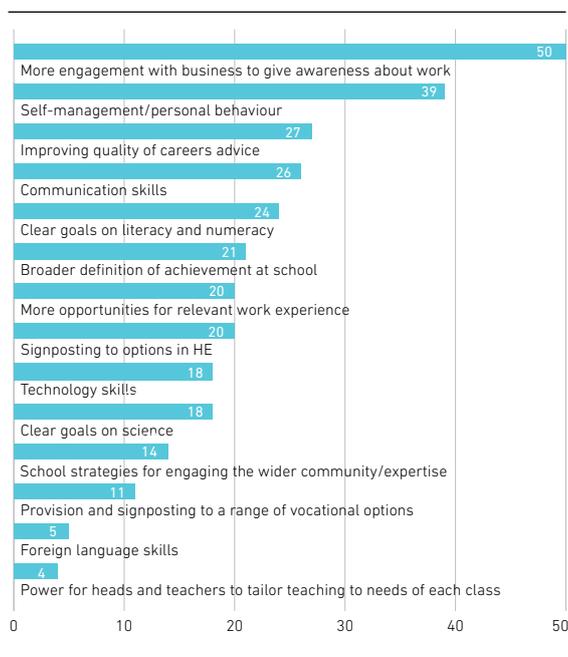
Asked to identify their three top priority areas for action by schools and colleges for this age group, half of respondents (50%) highlight the need for more engagement with businesses. More extensive engagement should improve young people’s understanding of the skills and attitudes required at work and inspire them about their options. Young people themselves want more help in this area: all too often they find it difficult to connect the relevance of school and learning to their future work aims and ambitions.<sup>50</sup> More than one in four respondents (27%) also want to see an improvement in the quality of careers advice running alongside higher levels of business engagement. Young people need better advice and guidance on the varied routes open to them and the qualifications they will require to pursue them (see Chapter 6).

Together with developing greater work awareness among the 14-18 age group, businesses also want schools and colleges to reinforce the core competencies of self-management and personal behaviour (39%), communication skills (26%) and literacy and numeracy (24%). This is the final chance within the compulsory education system to make up any shortfalls before young people launch into their working lives. To help with that launch, one in five businesses (20%) see more opportunities for young people gain work experience as a priority.

85%

of employers rate attitude among the most important factors when recruiting

Exhibit 52 Priority areas for action in 14-18 education (%)



**Language skills are valued by business...**

The proportion of businesses saying they have no need at all for foreign language skills among their employees has dropped sharply (to 23%) (Exhibit 53, page 42). While a focus on foreign language skills is not seen by many businesses as a top priority area for action in education, their practical value is increasingly recognised. The ability to communicate with other people in their own language can play a valuable part in forming relationships, building mutual understanding and trust, and developing the networks on which business opportunities depend. Language study can also indicate that an individual may have an international outlook and, for those who study to a higher level, evidence of the ability to work in diverse teams and with other cultures.

English is the international language of business. That in itself is 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.

The vast majority of businesses (93%) 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 (45%) see foreign language ability as beneficial to the business although not a recruitment requirement. More than a third (36%) recognise language skills among employees as helpful in building relations with overseas suppliers, customers and other contacts. Languages can also help individuals in developing their careers: around one in four (26%) says language skills assist staff mobility within the organisation, facilitating international working.

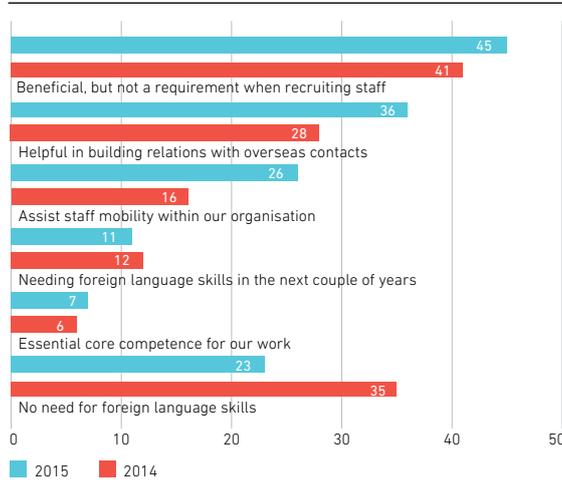
Language skills are more highly valued in those sectors that should lead rebalancing towards a more export-oriented economy. For example, nearly half of manufacturing firms (44%) see foreign language skills among their staff as helpful in building relations with overseas contacts.

**...but this message is not being heard**

Given the dividends language skills can pay for businesses and individuals, it is concerning that foreign language study in schools has been under pressure in recent years. There has been much discussion of the causes and possible remedies.<sup>51</sup>

But there are some encouraging signs of change: the introduction of compulsory language teaching in Key Stage 2 in England has had an immediate impact on the number of primary schools teaching a foreign language. Almost all primary schools (99%) now do so and 12% say they started in the 2014/15 academic year.<sup>52</sup> Over a third (38%) 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, compared with 22% reporting a decline. But there is a clear need to keep making the case for language learning. The jury is still out over whether recent government initiatives to revive it will bring about a much needed resurgence.

**Exhibit 53 Need for employees who can speak foreign languages (%)**

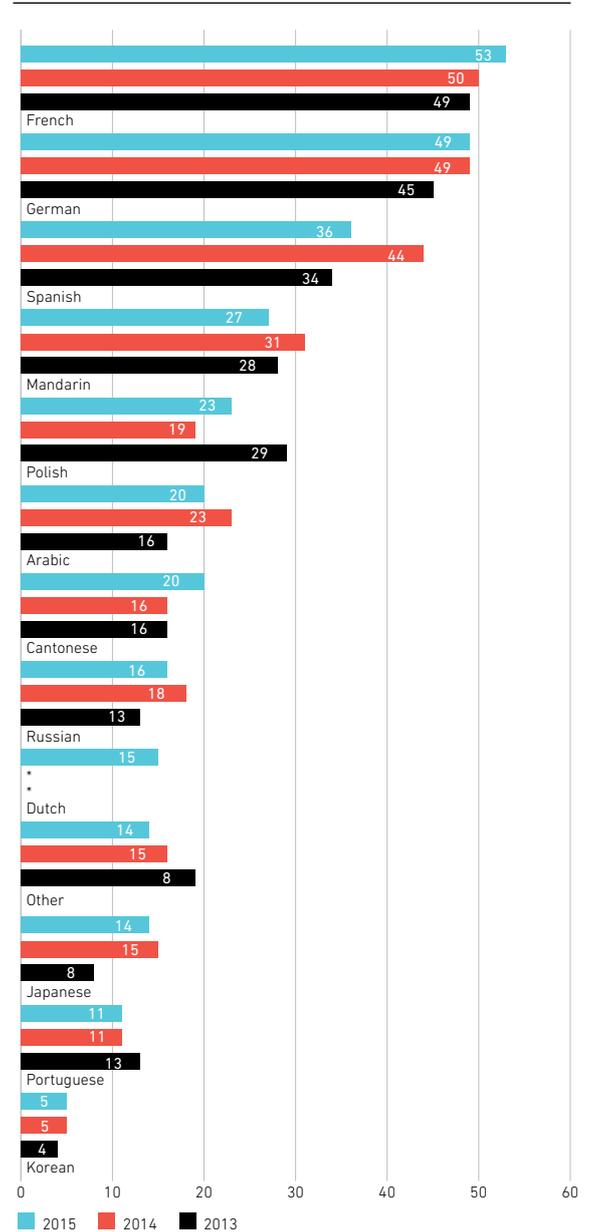


**European languages head the list of those in demand**

The major European languages are those most commonly mentioned as being in demand (**Exhibit 54**), led by French (53%) and German (49%). The major European economies still represent – along with the US – large export markets for British goods. The emphasis on Europe is reflected by schools, with teaching of French far outstripping every other language in primary schools in England.<sup>53</sup>

Over recent years, there has also been demand for languages used in emerging and fast-growing economies. The proportion of businesses rating Mandarin and Cantonese as useful stands at 27% and 20% respectively, reflecting the phenomenal growth of the Chinese economy and the expanding trade and investment links of British firms. Spanish too is cited as useful by more than a third of respondents (36% in 2015). Much of the Spanish-speaking New World has been experiencing solid economic growth, opening trade and investment opportunities for the future where knowledge of the language can help.

**Exhibit 54 Foreign languages rated as useful to the organisation (%)**



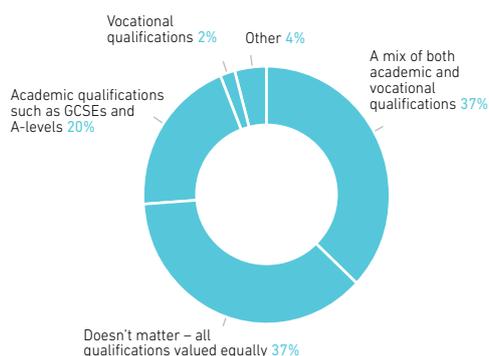
\*Not included in previous years

### Qualifications must have currency in the labour market...

While employers clearly highlight the importance of those wider attributes, those are only a part of the solution – and knowledge and skills, accredited by rigorous qualifications, are the other part. Fewer than half (49%) of those with no qualifications were in employment in 2011 compared with eight in ten (81%) of those with at least one qualification.<sup>54</sup> But over the years the UK has experienced a shifting, often confusing, qualifications landscape.

The key driver of success of qualifications is confidence that they are equipping young people with skills, knowledge and capabilities valued by employers. There is no single best approach to their form. The results of our survey (**Exhibit 55**) show the great majority of businesses either prefer recruits to hold a mix of both academic and vocational qualifications (37%), or value academic and vocational qualifications without a particular preference between them (37%). The University Technical College and Studio School models – which encourage this mix of qualifications – provide a good example of how this can be achieved (**Exhibit 56**). Only one business in five (20%) prefers academic qualifications such as GCSEs and A-levels alone when recruiting.

**Exhibit 55 Qualifications preferred by businesses when recruiting (%)**



### Exhibit 56 Moving to a mixed model for 14-18 education

With the raising of the participation age to 18 and the increasing focus on the 14-18 period of education, we need to ensure that young people are able to undertake a mix of courses that best suits their interests, abilities and chosen pathways.

The growing landscape of UTCs and Studio Schools show a good example of how this can be enacted in practice – allowing and encouraging a mix of academic and vocational qualifications up to age 18. The 'Entitlement Framework' in place in Northern Ireland – which in theory guarantees all young people access to a minimum number of both vocational and academic courses – should be examined to see if this could be implemented across the UK.<sup>55</sup>

### ...and action is needed to boost business confidence in vocational qualifications

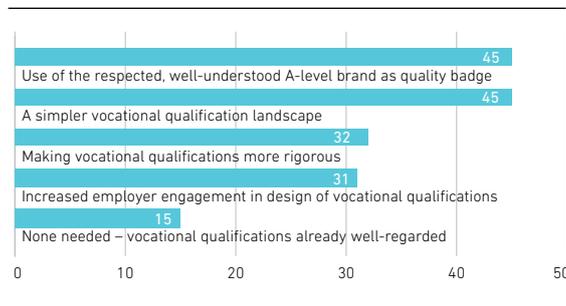
But there are real problems of confidence in some areas of vocational qualifications. A growing number of vocational qualifications and frequent shifts in their form and content have led to a degree of employer uncertainty over whether all those awarded them are fully equipped with the skills and knowledge required.

Although reforms are underway, close to half of businesses (45%) say that using the respected, well-understood A-level brand as a quality badge for high-quality, rigorous vocational programmes would help in building employer trust and confidence (**Exhibit 57, page 44**). Equally effective would be to further simplifying the vocational qualification landscape (cited by 45%). Businesses also see a strong case for making vocational qualifications more rigorous (32%) and for increased employer engagement in their design (31%).

Starting in September 2014, new Tech levels and Applied General qualifications have been introduced in England as part of an attempt to respond to the business call for gold standard vocational qualifications to sit alongside academic A-levels.<sup>56</sup> The new vocational qualifications are designed to be geared to the needs of students wanting to specialise in a technical career (such as engineering or IT) or a range of other recognised occupations.

Introduction of the new vocational qualifications is a potentially important step, but more will have to be done if they are to deliver on their promise. The challenges are both to raise business awareness of the qualifications and to win confidence in their quality and consistency. Our survey results last year showed the great majority of businesses (85%) at that time had little or no awareness of the new qualifications.<sup>57</sup>

**Exhibit 57 Steps to build employer trust and confidence in vocational qualifications (%)**



**There is scope to step up employer engagement with vocational qualifications**

Ensuring the business-relevance of vocational qualifications depends on employers playing a central role in guiding awarding organisations in the design of qualifications. Building business confidence in this way is central to the success and value of qualifications.

Many businesses are already involved in the process (**Exhibit 58**). Among our respondents a third (33%) report that they are currently engaged with awarding organisations in designing vocational qualifications and want to continue that engagement in future. Only 2% are disillusioned and want to end their engagement. Many others (23%) are not currently involved but would like to become engaged with awarding organisations.

Levels of current involvement are even higher among respondents outside England, with around half reporting they are engaged with awarding organisations (46% in Scotland, 48% in Wales and 52% in Northern Ireland). And a further fifth (21%) of businesses across the devolved nations would like to become involved.

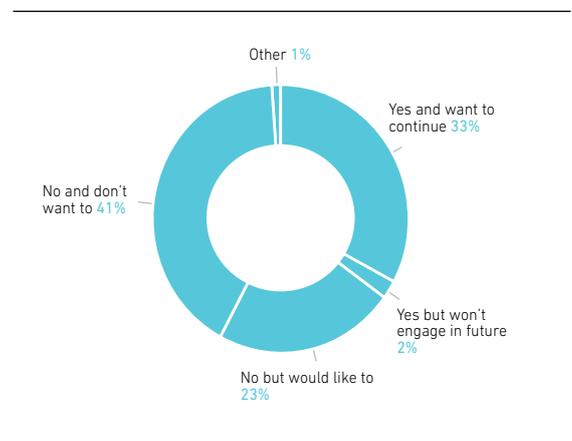
These results highlight both the importance businesses attach to vocational qualifications and their recognition that effective design critically depends on sustained employer engagement. If the nations of the UK are to achieve the respected vocational qualification framework that has long been needed, it will require government, businesses and awarding organisations all to play their part.

**Business needs and standards must be centre stage**

Across the skills system more broadly, in recent years 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. Basing qualification design on employers’ needs and industry standards is at the very heart of employer ownership.

Real progress is now being made. The Aerospace Growth Partnership shows what can be achieved within a major sector, with businesses engaged in designing a range of specific, aerospace-focused programmes to close skills gaps through all stages of people’s careers. The programmes aim to make it easier for employers of all sizes to access new, high-quality apprenticeship programmes, train their employees in specialist technical subjects and address wider business capabilities needed for growth.<sup>58</sup>

**Exhibit 58 Business engagement with awarding organisations in designing vocational qualifications? (%)**





## Preparing young people for the world of work requires greater business engagement

*Preparing young people for the workplace depends on schools, colleges and businesses working together as partners with the shared aim of raising ambition and levels of attainment for all. Businesses can contribute expertise to schools and colleges through roles such as governors and by supporting teachers and school leaders. Employers also have a big role to play in providing work inspiration and experience and giving talks and advice in school – helping to improve the careers guidance system in this country that has failed young people for too long. As the world of work becomes increasingly complex, young people need better information to enable them to understand the options open to them and support in navigating a route into their chosen career area.*

### KEY FINDINGS

- Across respondents as a whole, three quarters (73%) have at least some links with schools or colleges, with connections most widespread between businesses and secondary schools (55%) and FE colleges (53%)
- Over half of employers (51%) already linked to education report they have increased their engagement over the past year, while just 9% have cut back, giving a positive balance of +42%
- The biggest obstacles to extending and deepening business involvement are uncertainty over how to make work experience worthwhile (28%), lack of interest among schools or pupils (25%) and problems in fitting involvement with the school timetable (23%)
- Among employers with links to schools and colleges, the two most common forms of support are offering work experience placements (74%) and providing careers advice and talks (71%).
- The overwhelming majority of employers believe the quality of careers advice for young people is not good enough (by a balance of -70%)

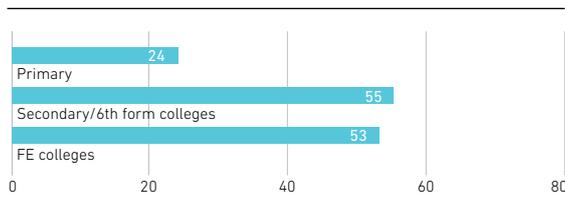
- The scale of dissatisfaction ranges from seven in ten firms in England and Scotland (a negative balance of -71%) to nearly eight in ten firms in Wales (a negative balance of -78%)
- Nearly two thirds of businesses (60%) report that they are willing to play a greater role in supporting careers provision in schools and colleges.

#### Business-school partnerships are widespread...

The CBI has long believed in the importance of business partnerships with schools and colleges. Businesses can contribute in a range of ways to help schools raise ambition and levels of achievement among young people and support learning. Across respondents as a whole in 2015, three quarters (73%) have at least some links with schools or colleges. Connections are most widespread between businesses and secondary schools (55%) and FE colleges (53%) (**Exhibit 59**). This reflects the priority employers attach to achieving a greater focus on work awareness among young people in the 14-18 age group (see Chapter 5).

Links at the level of primary schooling are less common, with a quarter (24%) of businesses reporting links of some type at this level. The CBI believes there is a strong case for strengthening and expanding the scale of links between business and primary schools.<sup>59</sup> It is at primary school that young people's attitudes, aptitudes and basic competencies are being developed, so helping to open pupils' eyes to the world of work and the opportunities open to them can be an important motivator. Particularly at this early stage, pupils can be sparked with inspiration and ambition around particular career pathways and sectors.

**Exhibit 59 Employers linked with schools or colleges 2015 (%)**

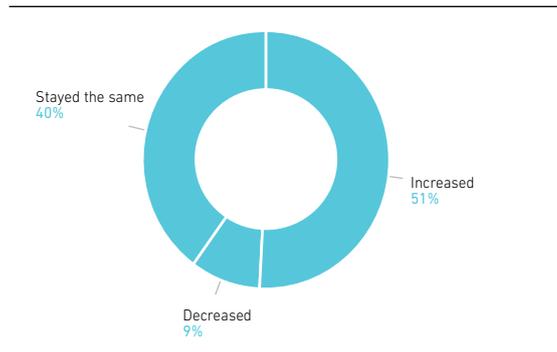


**...and existing links are becoming stronger**

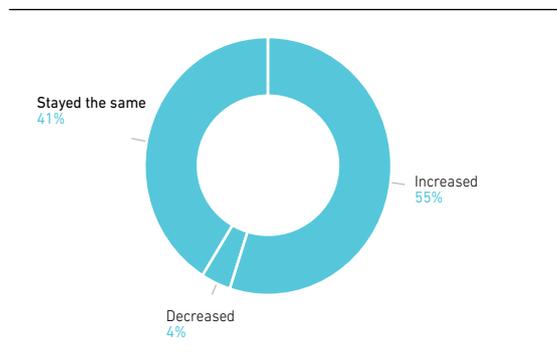
Many schools and businesses already have active links, and these are widening and deepening. **(Exhibit 60).** Over half of employers (51%) with some education links report they have increased their engagement over the past year, while just 9% have cut back. This means the balance of firms increasing their links with schools and colleges over those reducing them stands at +42%.

This further extends the expansion seen in the past **(Exhibit 61).** In 2014 a positive balance of +51% of businesses with links to schools or colleges said they had increased the scale of those links over the previous year.

**Exhibit 60 Change in scale of links with schools or colleges in 2015**



**Exhibit 61 Change in scale of links with schools or colleges in 2014**

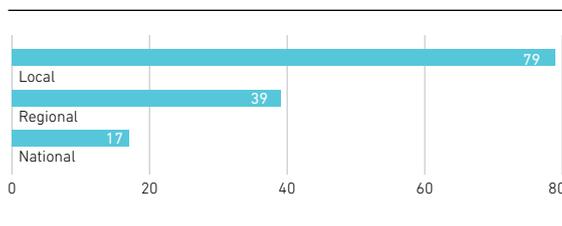


**Most links tend to be local**

For four out of five businesses (79%) with connections to schools or colleges, links are made and managed at local level **(Exhibit 62, page 48)**. More than a third (39%) of linked employers, however, report operating at regional level, often in addition to links with schools in their immediate area. Even among SMEs, four in five (79%) of those with education ties have links to local schools and colleges while a quarter (26%) report regional-level links instead or in addition.

Close to one in five (17%) of those businesses with school and college connections are engaged at a national level, often complementing local tie-ups with individual schools and colleges. This engagement is often in the context of programmes to encourage young people in studying particular subjects, such as science, technology, engineering or maths (STEM).

**Exhibit 62 Level of employer links with schools or colleges (%)**



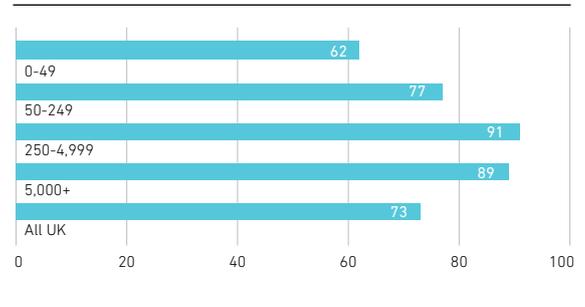
73%

Employers linked with schools or colleges

**There are high levels of education links across firms of all sizes and across the nations**

The extent of business engagement with schools increases with company size (**Exhibit 63**). Even among SMEs, however, well over half (62%) of those with under 50 employees have links of some type to schools or colleges. The proportion rises to nine in ten (91%) among those firms with 250 employees or more. Among these larger businesses, a third (33%) have links to primary schools and two thirds to secondary schools (66%) and FE colleges (65%).

**Exhibit 63 Employers linked with schools or colleges by workforce size (%)**



Links between businesses and schools or colleges are extensive in all parts of the UK (**Exhibit 64**). The scale of connections is above seven in ten firms in all four nations, reaching nearly eight in ten (79%) among respondents with employees in Northern Ireland.

**Exhibit 64 Employers linked with schools or colleges by nation (%)**



There is scope to boost business involvement with schools

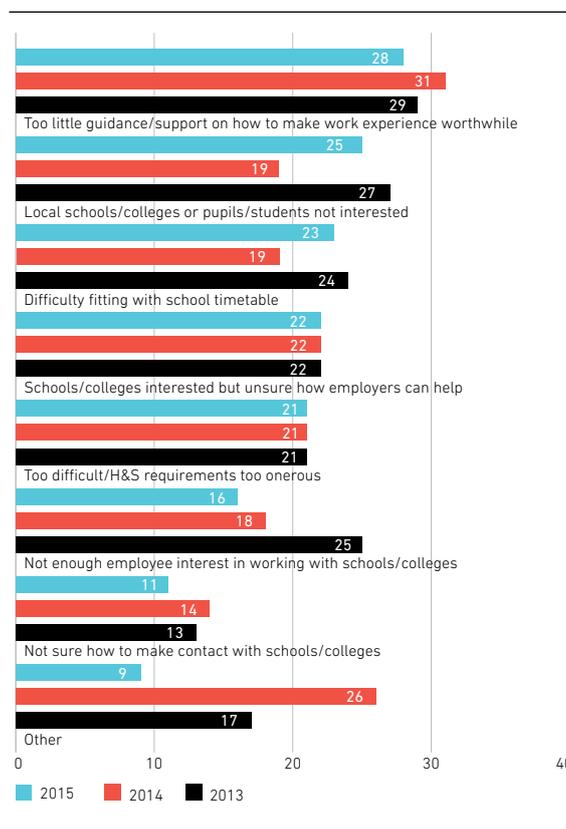
Although most firms have at least some links with schools and colleges, there is scope to extend and deepen business involvement still further. This could be achieved if current barriers were tackled effectively (**Exhibit 65**). Regrettably, our survey findings show few signs of progress in doing so.

Over a quarter of employers (28%) say there is insufficient guidance and support on how to make work experience placements worthwhile. This has long been a concern for many businesses, and ending compulsory work experience in England has reinforced doubts over the perceived value of placements.

Lack of interest is seen as a further worrying barrier. A quarter of respondent businesses (25%) report that local schools or colleges, or their pupils, do not appear to be interested in building relationships with business. Reforming school accountability measures to include a focus on how well they are engaging with the wider community – particularly businesses – would help to encourage and incentivise this kind of behaviour, and ensure that schools are more open to this type of support. There can also be problems over finding enough employees interested in working with schools and colleges who also have the right skills and knowledge (cited by 16% this year). Taking charge of young people on work experience, fulfilling the responsibilities of a governor or of a mentor, and 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 (23%), the perception that involvement will be unduly onerous (21%) and uncertainty over how best to make contact with schools and colleges (11%). There is a strong case for a local brokerage system to help businesses interested in becoming involved with schools and colleges. As such, businesses have warmly welcomed the announcement of the creation of the new careers and enterprise company for schools to help build these links around the provision of careers education and advice for young people and inspire them about the opportunities offered by the world of work.<sup>60</sup>

Exhibit 65 Barriers to building links with schools or colleges



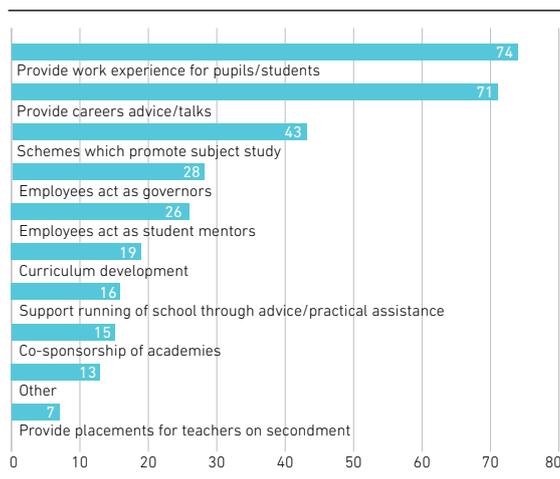
**Businesses are delivering practical support...**

An area of activity that has seen substantial growth in terms of business involvement with schools is engagement to promote study of particular subjects (Exhibit 66, page 50). Links of this kind are now widespread, with more than one in four businesses (43%) working with schools taking this approach. There has been a big expansion in initiatives to enthuse and inspire young people, especially girls and young women, about studying STEM subjects in particular, as part of a drive to tackle future shortfalls in these skills areas (Chapter 3).

School governance is another area where business involvement can have a real impact. Building a world-class education system depends on excellence in school leaders, backed and held to account by confident, supportive and capable governing bodies. More than a quarter of businesses (28%) have members of staff acting as governors, who can draw on their business expertise to help schools and colleges raise standards. 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.<sup>61</sup> 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 (26%) – particularly important in raising aspirations among young people from deprived backgrounds – and assisting development of the curriculum (19%).

**Exhibit 66 Nature of employers' work with schools or colleges (%)**



### ...but the majority of support is focused on work experience and careers advice

The most common way in which businesses support schools and colleges is by providing work experience placements for students. Three quarters of employers (74%) 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 5).

Almost as many businesses with links to schools and colleges are involved in delivering careers advice and talks (71%). Given the long-standing shortcomings in careers provision, business involvement is essential if young people are to have a sound grasp of options and opportunities available, and of the skills and qualities that employers value.

### Young people need the right help to prepare for working life

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, products and services, markets and customer demand open up new, constantly evolving career opportunities. The guidance and support young people receive must match up to this – and reflect the reality of the labour market.

Careers provision across the UK has failed to keep pace. If we are to make the most of people's talents and ambitions, we need a radically different approach. We must do much more to help young people prepare for working life. In England the last government argued that careers education is as much about aspiration as advice and that the best mentoring and motivation comes from people in jobs – leading to the creation of the careers and enterprise company that will help to ensure all young people are experiencing valuable interactions with employers around this.<sup>62</sup>

### Better careers advice is urgently required...

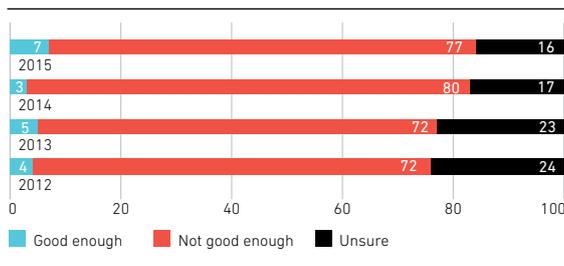
Effective careers guidance and inspiration is at the heart of helping young people navigate the transition between education and work. But businesses have long taken the view that provision is simply not up to the mark (**Exhibit 67**).

Nearly four out of five businesses (77%) 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 7% consider the quality of current careers advice to be adequate, producing a negative balance of -70%.

These are worrying results which continue the pattern of previous years, with the vast majority of respondents to our successive surveys rating the quality of advice about careers to young people as not good enough.

Ensuring that young people have access to the right advice about their options and guiding them towards those that will best enable them to fulfil their potential can make a huge difference. Handing the entire responsibility to schools in England without extra resource or support has not produced a system that effectively supports every young person to progress through education and into employment. Research suggests the low quality of career guidance is reducing social mobility.<sup>63</sup> And analysis from the National Careers Council has also highlighted the need for a radical rethink around careers guidance in schools.<sup>64</sup>

**Exhibit 67 Business views on the quality of advice about careers for young people (%)**



**...and there are encouraging signs of change**

The decision to set up a new careers and enterprise company for schools in England backed by a £5m investment fund to support and generate innovation in careers advice is welcome. The moves to strengthen the statutory guidance for schools on careers are also positive.<sup>65</sup> The CBI particularly welcomes the references in the 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.

There is much to be done to improve careers guidance and advice for young people. A widespread consensus exists about what good careers guidance looks like (**Exhibit 68**). The challenge now is to deliver services to these standards – as the changes underway are not yet having any significant impact at school and college level.

**Exhibit 68 Eight benchmarks for good careers guidance**

Drawing on extensive international research as well as exploration of best practice in the UK, the Gatsby Foundation<sup>66</sup> has identified eight benchmarks for good careers guidance:

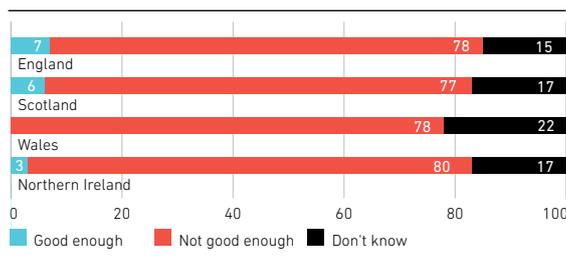
- A stable careers programme: every school and college should have an embedded programme of career education and guidance
- Learning from career and labour market Information: every pupil and their parents should have access to good quality information about future study options and labour market opportunities, supported by an informed adviser
- Addressing the needs of each pupil: pupils have different career guidance needs at different stages. Opportunities for advice and support should be tailored to the needs of each pupil
- Linking curriculum learning to careers: all teachers should link curriculum learning with careers. STEM subject teachers should highlight the relevance of STEM subjects for a wide range of future career paths
- Encounters with employers and employees: every pupil should have multiple opportunities to learn from employers about work, employment and the skills that are valued in the workplace
- Experience of workplaces: every pupil should have first-hand experiences of the workplace through work visits, work shadowing and/or work experience
- Encounters with further and higher education: all pupils should understand the full range of learning opportunities available to them, including both academic and vocational routes
- Personal guidance: every pupil should have opportunities for guidance interviews with a careers adviser whenever significant study or career choices are being made.

### Improvement is needed across all parts of the UK

It is essential that in every part of the UK the careers provision available to young people – and indeed to adults as well – keeps pace with change in the working world. Our findings show it has failed to do so (Exhibit 69).

The scale of dissatisfaction ranges from seven in ten firms in England and Scotland (a negative balance of -71%) to nearly eight in ten firms in Wales (a negative balance of -78%) believing the quality of careers advice is not good enough. The systems for careers guidance and advice require urgent attention from politicians and policy-makers in all parts of the UK.

Exhibit 69 Business views on the quality of careers advice by nation (%)



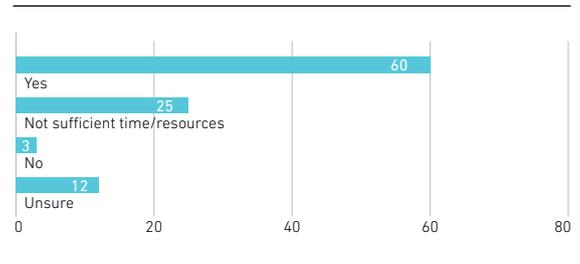
### Businesses are ready to expand their input...

There is now widespread consensus that young people need inspiration as much as advice – and that is most likely to come from real-life contact with the world of work. This means that when it comes to big decisions about careers, they understand better where different choices could take them in the future. Business involvement is essential in providing that real-life component, ensuring advice and information are inspiring and grounded in the realities of the evolving labour market. This is particularly important as young people themselves report the most important influences on their career choice by a large margin are talking to people in an industry and work experience/internships.<sup>67</sup>

Supporting schools and colleges through involvement in careers activities, such as through delivering inspiring talks, is already widespread (see Chapter 6). Our results show that businesses of all sizes are ready to step up their commitment and help further to achieve improvement (Exhibit 70).

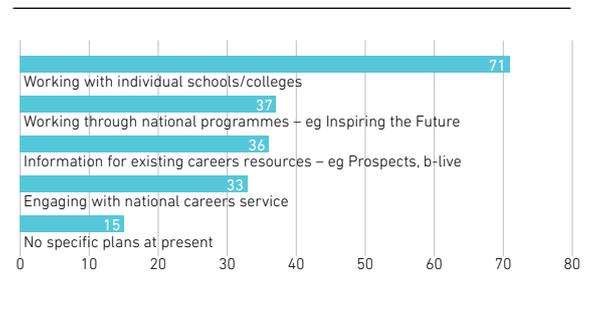
Nearly two thirds of businesses (60%) report that they are willing to play a greater role in the delivery of careers advice in schools and colleges, strengthening existing initiatives. If this readiness to help among employers can be combined with a step change on the calibre of other aspects of careers advice, there would be major benefits for young people and for the economy. The new careers and enterprise company should play a major role in England in supporting schools and businesses in developing these relationships to ensure that all young people are benefitting from this kind of engagement.

Exhibit 70 Employers willing to play a greater role in delivering careers advice (%)



Among those businesses willing to play a greater role, more than two thirds (71%) would aim to work with individual schools and colleges (Exhibit 71). This would reinforce the existing pattern of involvement, but more than a third of firms say they would be ready to become more involved through national programmes such as *Inspiring the future*<sup>68</sup> (37%) and disseminating information through existing careers resources (36%).

Exhibit 71 Types of careers advice involvement employers ready to offer (%)





**... and are offering a taste of work in many forms**

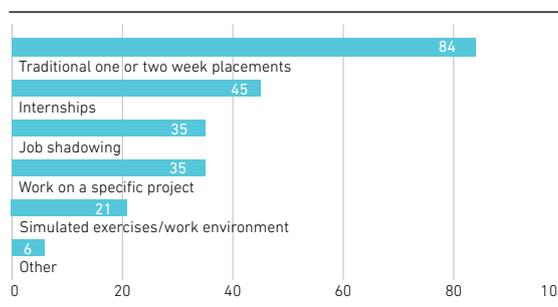
Weaknesses in practical work experience are seen as widespread among many young people, as we noted earlier (in Chapter 5). So it is important for businesses to offer opportunities to gain a taste of work suited to different age groups and at different stages of education (**Exhibit 72**). There is also the need to see more of those opportunities across the country – young people currently face a postcode lottery in terms of access to work inspiration activities.<sup>69</sup>

Traditional work placements for a week or two remain by far the most widespread form of work experience offered by businesses (by 84% of those providing some type of work experience). 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 (45%) also offer 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 (35%), work on a specific project (35%) and simulated exercises or working environments (21%). All of these should be encouraged, as interaction with employers and experience of the workplace can both provide inspiration and help young people build realistic understanding of what working life involves.

**Exhibit 72 Types of work experience offered (%)\***



\*Based on those organisations offering some form of work experience

## Making sure graduates are skilled for success must be a priority

*There will be rising demand for degree-level skills in the years ahead as changes in the shape of the UK economy generate more high-skilled jobs. Our survey reflects the expanding job prospects for graduates, with the number of career openings in the past year increasing right across the UK. For the great majority of businesses, the attitudes and aptitudes of graduates for work are more important than the specific degree studied. Courses need to reflect this: universities can look 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 +13% taking on more graduate recruits, extending the expansion in job opportunities seen in recent years
- The biggest growth in graduate opportunities in the past year has been in engineering, science and hi-tech (+20% balance) and manufacturing (+16% balance)
- Businesses look first and foremost for graduates with the right attitudes and aptitudes to enable them to be effective in the workplace – nearly nine in ten employers (89%) value these above factors such as degree subject (62%)
- A degree in a STEM subject gives graduates a clear advantage in the jobs market, with two in five employers (40%) reporting that they prefer STEM-qualified graduates, and businesses want to see a boost to both the number of STEM graduates (38%) and their quality (29%)
- Many businesses report worrying weaknesses in graduates' basic skills and general readiness for employment, ranging from 17% reporting shortcoming in graduate applicants' use of English to nearly half (46%) voicing concerns over graduates' levels of business and customer awareness
- Businesses want to see higher education institutions doing more to improve the business relevance of undergraduate courses (50%) and to help students become job-ready (42%).

### Business demand for graduate-level skills is rising

Across the economy, businesses will be increasing their demand in the years ahead for people with higher-level skills and leadership and management skills, as already discussed (Chapter 3). These are the type of skills and capabilities that firms particularly look to higher education to develop among students.

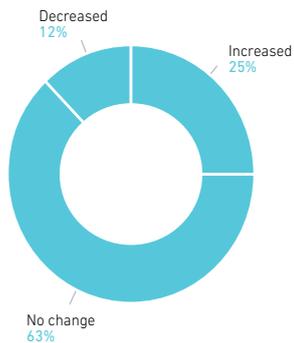
The demand for graduates and the value they bring to firms is reflected in their high employment levels: some 87% of working-age graduates and postgraduates are in employment, compared to 70% of non-graduates. Graduates and postgraduates also enjoy large earnings premiums compared to non-graduates.<sup>70</sup> And the highest earnings are typically achieved by those who studied science, engineering and maths-based subjects.<sup>71</sup>

### Firms across the UK are expanding their graduate recruitment...

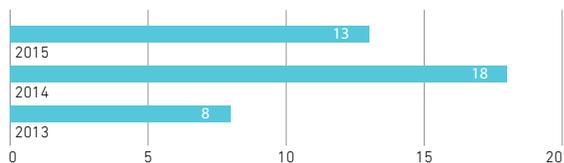
Nearly nine in ten businesses (88%) have maintained or increased their levels of graduate recruitment during the past year (**Exhibit 73**). Just one in eight businesses (12%) have cut back on graduate recruitment while more than twice as many (25%) report increasing their graduate intake, giving a positive balance of +13%.

This represents a further growth in graduate jobs, following positive balances of increased graduate intakes of +8% in 2013 and +18% in 2014 (**Exhibit 74**). The balance of positive hiring of graduates over the past year has been higher among firms employing 250 people or more (+16%) than among SMEs (+10%), but has occurred across all parts of the UK (**Exhibit 75**). The balances of businesses increasing their graduate workforces range from +7% among those with employees in Wales to +17% among businesses with employees in Scotland.

**Exhibit 73 Changes in levels of graduate recruitment 2015 (%)**

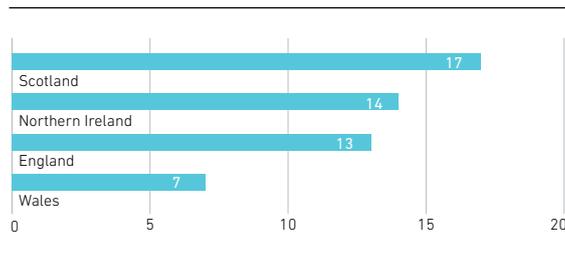


**Exhibit 74 Balance of businesses increasing graduate recruitment\* (%)**



\* Firms reporting increased recruitment minus those reporting decreased recruitment

**Exhibit 75 Balance of businesses increasing graduate recruitment by nation 2015\* (%)**

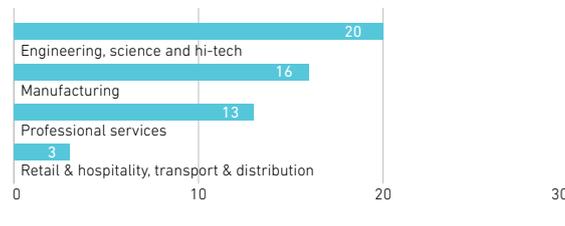


\* Firms reporting increased recruitment minus those reporting decreased recruitment

**...with the biggest rises in the manufacturing and engineering sectors**

The increase in graduate recruitment has been particularly strong in sectors that will underpin the UK's future economic growth (**Exhibit 76**). In engineering, science and hi-tech, a positive balance of +20% of firms have increased the size of their graduate intakes over the past year. This has almost been matched by manufacturing businesses, where the proportion that have raised their graduate recruitment has exceeded by +16% the proportion reducing it.

**Exhibit 76 Balance of businesses increasing graduate recruitment by sector (%)**



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

When selecting graduate recruits, businesses look first and foremost for the attitudes and aptitudes that will enable them to be effective in the workplace (**Exhibit 77**). This is by far the top-rated consideration among graduate recruiters. Nearly nine in ten employers (89%) cite it as among their three most important factors.

Despite the growing demand among businesses for graduate-level skills, there will always be tough competition among candidates for prime graduate jobs. And as our survey shows, developing the right skills and attitudes is critically important for a successful transition from higher education to the world of work. There are plenty of opportunities to develop the necessary attitudes and aptitudes during their time in education, but students need to be alerted to their importance and encouraged to seize them.<sup>72</sup>

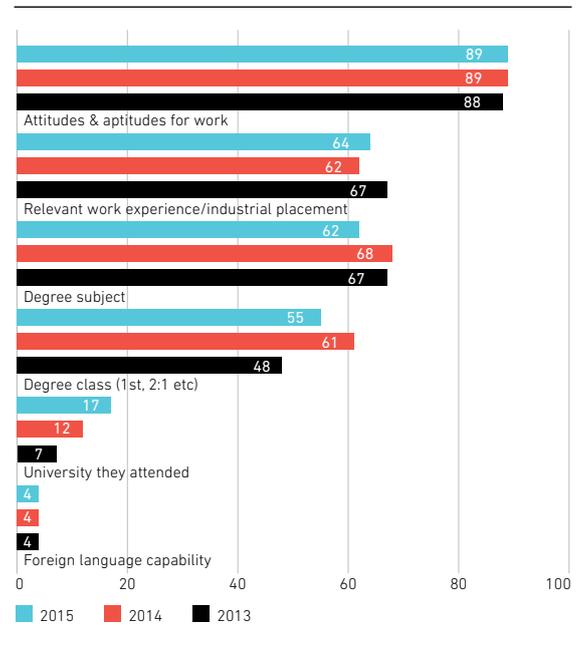
### ...but business-relevant experience and qualifications are important

Nearly two in three employers are also on the lookout for graduates with relevant work experience (64%) and degrees in particular subject disciplines (62%). Work experience gained through business placements and/or internships can play a valuable part in strengthening graduates' preparedness for employment. It also provides them with the opportunity to learn about a particular sector or type of work and see whether it is the right field for them.

For three in five businesses the degree subject studied is among the main considerations (cited by 62%). This is particularly the case in sectors such as manufacturing and among engineering, science and hi-tech firms (with 82% and 80% respectively viewing the degree subject as one of the most important factors when recruiting graduates).

Among the least important considerations is the particular university attended (a top-three consideration for only 17%). Businesses are primarily focused on what individual graduates can bring to the workplace.

**Exhibit 77** Most important factors considered when recruiting graduates (%)



### STEM leads the list of degree subjects in demand

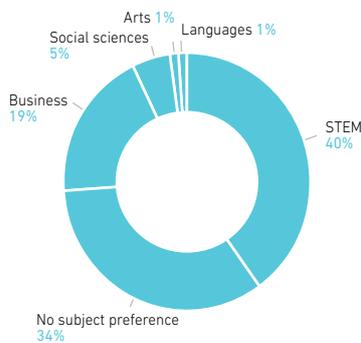
Studying STEM subjects gives students an edge in competing for graduate career openings (**Exhibit 78**).

Asked whether they prefer any particular degree subject when recruiting graduates, two in five businesses (40%) say they prefer those with STEM degrees. The mathematical and analytic skills associated with STEM study are in high demand among businesses. These degree courses are also often seen as more testing than some other subjects.

As the economy continues to grow, there are concerns as to whether the right people with STEM skills will be available to businesses in the years ahead (Chapter 3). Nearly two in five firms (38%) see increasing the number of STEM graduates as a priority, while more than a quarter (29%) are looking for their quality to be improved (**Exhibit 79**).

Business (at 19%) is the only other area of study attracting employer preference above a marginal level. More than a third of graduate recruiters (34%) have no preference for a particular subject. Instead they are focused on looking for graduates with the broader skills and attitudes that are needed in the workplace.

Exhibit 78 Priority degree subject for employers (%)



**There is more to do to build graduates' preparedness for work**

Levels of satisfaction with graduate applicants levels of job-readiness are much higher than with those of school and college leavers (Chapter 5), but many businesses none the less experience worrying shortcomings among graduate applicants and recruits. Some of the major areas of weakness are particularly important for those aspiring to future leadership and management roles (Exhibit 80, page 58).

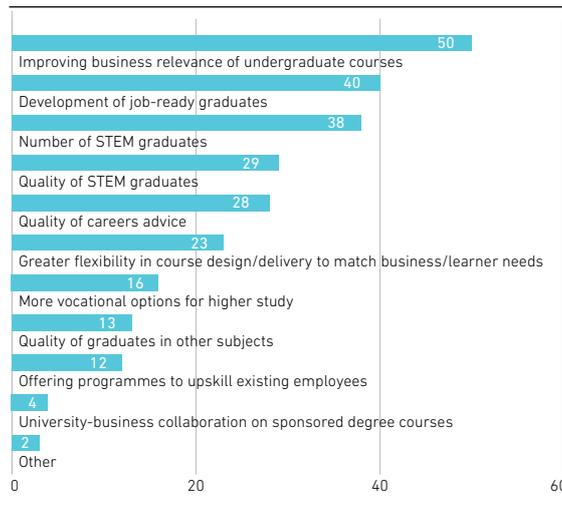
Around one in six businesses reports not being satisfied with the numeracy (14%), use of English (17%) and analytical skills (19%) of graduates. These are worrying figures. Businesses should be able to expect a satisfactory level of competence in all these essential areas among those completing higher education courses.

Nearly one in five firms (21%) is also not satisfied with graduates' problem-solving skills, which should be a prime output of higher education. Even higher proportions are dissatisfied with graduate attitudes to work (25%), teamworking skills (26%) and communication skills (29%). All of these capacities are essential for graduates to be effective and successful in their careers. Effective communication in particular is central to almost all management and leadership functions.

One of the reasons relevant workplace experience is so widely valued in graduate candidates (Exhibit 77) is that it helps build understanding of a chosen field of work and develop general business awareness. A third of businesses (33%) report graduates do not have a satisfactory level of knowledge about their chosen job or career. This is particularly true in manufacturing, where levels of dissatisfaction climb to 43% of respondents. Close to half of respondents (46%) also voice dissatisfaction with graduates' levels of business and customer awareness.

There is clearly more to do to help students understand the importance of gaining relevant experience and to help them absorb the lessons they learn in the process. Those candidates who can show a good grasp are plainly at a significant advantage in the jobs market.

Exhibit 79 Business priorities for higher education (%)

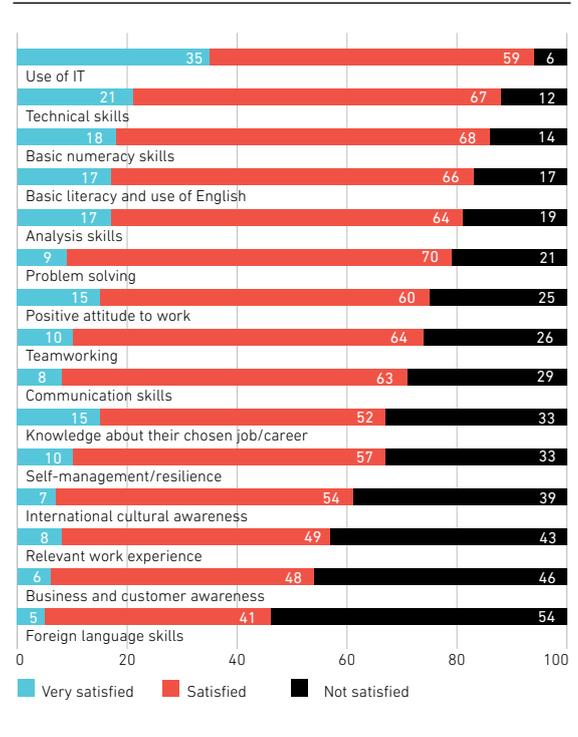


### HE programmes of study need stronger business-relevance

Given the levels of dissatisfaction businesses feel over graduates' preparedness for the workplace, it is no surprise that many want to see changes in higher education. Asked to identify their priority areas for action, an emphasis on developing students' work-relevant skills is the leading area in which businesses would like to see change (**Exhibit 79**). Half of firms (50%) want to see steps taken to improve the business relevance of undergraduate courses, while only a slightly smaller proportion (42%) want to see more done to develop students to be job-ready on graduation.

The quality of careers advice for graduates is also widely seen as needing improvement (identified by 28%). While higher education generally operates far better provision than that available to other young people, the challenge is for careers advice to keep up with the changing shape of careers and the growing diversity of possibilities.

Exhibit 80 Employer satisfaction with graduates' work-relevant skills (%)



“ *Businesses want to see a boost to both the number and the quality of STEM graduates.* ”



## Deeper collaboration between business and universities will deliver more routes to higher skills

*Strengthening links between universities and businesses has great potential to enhance economic growth. Businesses look to higher education to develop people with the right knowledge and skills to meet their future needs. They also value the expertise and excellent research 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 results from blue-sky research can be turned into new products and services.*

### KEY FINDINGS

- Business recognises the value of strong links with higher education: more than two thirds (68%) of businesses have developed links of some type with universities and more than a third (35%) are looking to grow their ties with universities in the future
- Business links to HE are widespread in all parts of the UK, ranging from 68% in England to 82% in Northern Ireland
- Over half (56%) of businesses engaging with universities report involvement in relation to graduate recruitment, while provision of internships and sandwich-year and other placements also rank high (offered by 41% and 34% respectively)
- A third of businesses (32%) are involved in providing 'real-life' projects and resources to help students understand the practical relevance of their courses and one in four employers (25%) is involved directly in developing HE course offerings
- The technical knowledge and capacity for research excellence within HE institutions are among the great strengths of the UK and businesses are keen to draw on them, with a third of respondents (30%) this year partnering with universities for research and innovation
- When selecting partner institutions, by far the most important factor for businesses is a university's field of expertise/specialism (81%), followed by its flexibility and responsiveness (62%) and its location (49%).

### Business-HE links can enhance growth...

Higher education is one of the UK's strongest assets, with three of its universities ranked among the top ten in the world.<sup>73</sup> And the research record of HE institutions in the UK is second only to those in the USA.

A review led by Sir Andrew Witty, CEO of GlaxoSmithKline, into 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 steps to maximise engagement by universities as a third mission alongside research and education.<sup>74</sup>

The recent CBI guide to business-university collaboration for research, innovation and skills, *Best of both worlds*,<sup>75</sup> shows how effective collaboration between the higher education sector and business can contribute to individual firms' competitiveness and to UK economic growth more widely (**Exhibit 81**).

**Exhibit 81 Best of both worlds: guide to business-university collaboration**

This guide draws on work by the CBI's Inter-Company Academic Relations Group (ICARG) and provides advice and information on business engagement with universities for research, innovation and skills purposes. It is addressed to a business audience and sets out some general principles, best practice tips and details of specific schemes and initiatives that businesses may find useful.

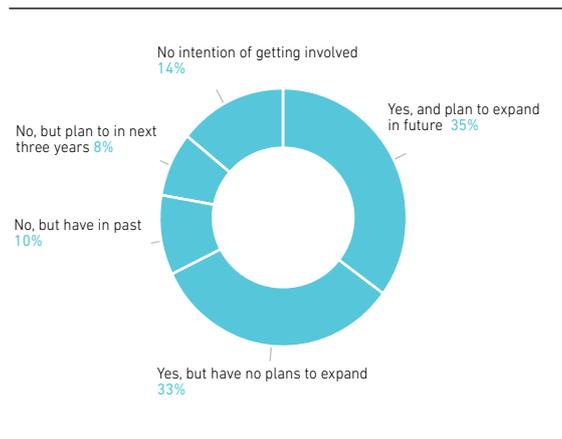
The first part of the guide deals mainly with partnerships for research and innovation, where there are a number of organisations and programmes which can offer financial and other kinds of support. The second part looks at the growing area of business engagement with universities over skills and training, where the landscape is still developing but has great potential to expand further. The guide is illustrated by case studies involving CBI members, including businesses of all sizes.

**..and many businesses have links with HE institutions**

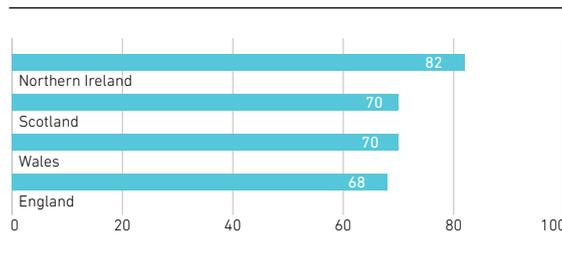
Reflecting recognition of the potential benefits generated by effective links between businesses and higher education institutions (HEIs), two thirds of respondents (68%) report links of some type with one or more universities (**Exhibit 82**). Moreover, more than a third of businesses (35%) plan to expand their links in the future. A significant number of firms (8%) plan to start developing links for the first time in the coming years.

Our survey shows business links to HE are widespread in all parts of the UK, ranging from 68% in England to 82% in Northern Ireland (**Exhibit 83**). There are also business-HEI links among firms of all sizes. It is particularly encouraging that well over half of SMEs (59%) report that they have links of some kind with a university. Moreover, more than a quarter (27%) of SMEs are looking to expand existing HEI links in the next few years.

**Exhibit 82 Employer links to universities**



**Exhibit 83 Employers with current links to universities (%)**



**Recruitment and placements are the most widespread forms of linkage...**

Given the rising volume of graduate recruitment and the important role of work experience in helping students develop their preparedness for work, it is no surprise that these are the most widespread forms of business-HE engagement (**Exhibit 84**).

Over half (56%) of businesses engaging with universities report involvement in relation to graduate recruitment. Close to a third (29%) are also involved in careers events of various types. Provision of internships for students and graduates and sandwich-year and other placements ranks high (offered by 41% and 34% respectively of those employers with links of some type to HE). These opportunities to gain a taste of working life are hugely valuable to the individuals concerned in helping them prepare for their future careers.

**...but employers are also involved in enhancing business-relevance of HE programmes**

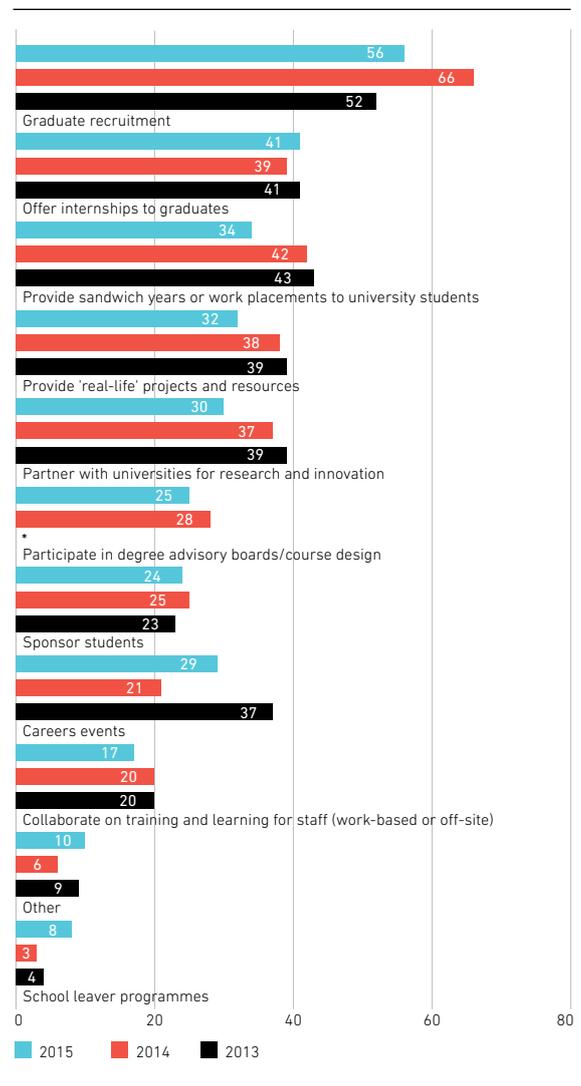
A third of businesses (32%) are involved in providing 'real-life' projects and resources to help students understand the practical relevance of their courses. In addition, one in four employers (25%) is involved directly in developing HE course offerings by taking part in degree programme advisory boards 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 students' preparedness for the workplace.

**Business sees HE as vital for innovation**

The technical knowledge and capacity for research excellence within our HE institutions are among the great strengths of the UK and businesses are keen to draw on them. In the three academic years up to 2013/14, the amount spent by businesses on contract research at UK universities grew at an annual rate of over 5% to more than £460m. Businesses also spent growing amounts on consultancy services, use of facilities and equipment, and training and professional development – a total of over £430m in 2013/14.<sup>76</sup>

The importance of links between business and universities for research and innovation is reflected in the survey results. In all, nearly a third of respondents (30%) this year report partnering with universities for research and innovation, while nearly one in five (17%) collaborate on training and learning for staff.

**Exhibit 84 Nature of employer links with universities (%)**



\* Not asked in this form

### Expertise and responsiveness drive the choice of partner

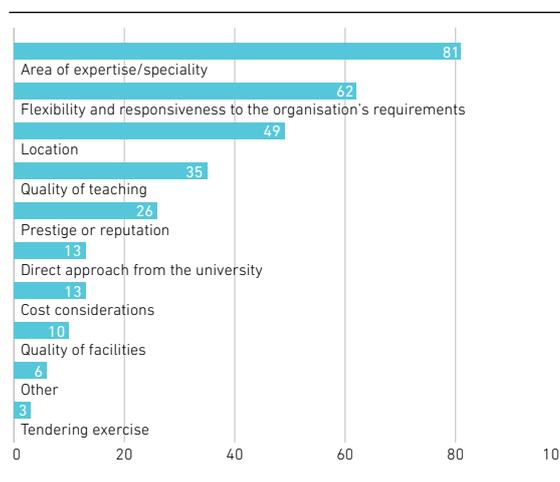
When it comes to selecting a university partner, by far the most important consideration for businesses is the expertise or specialism of a particular university (**Exhibit 85**). Asked to identify the three most important factors on which businesses base their choices, four in five firms (81%) that have developed links with HEIs say they aim to connect with the leading experts in a particular field. This consideration is the top-rated factor for over half (51%).

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. Nearly half of businesses (49%) with HE links 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.

The quality of an institution’s teaching and its reputation are also widely taken into account by businesses when deciding on developing links (factors cited by 35% and 26% respectively).

Exhibit 85 Basis for links with universities (%)



*Universities have an extraordinary potential to enhance economic growth, from local small businesses and supply-chain support to primary technology leadership and breakthrough invention*



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