Changing the pace
CBI/Pearson education and skills survey 2013
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Foreword by
John Cridland, CBI

There is no more important issue facing this country than education. That may seem a surprising claim at a time when the UK is still battling to return to the path of sustained economic growth and to bring public finances into balance again. But for the UK to get back on course we need to rebalance towards investment and exports, reshaping the economy around high-value, high-skill activities that will enable us to pay our way in an intensely competitive global economy. Higher standards and better levels of attainment in education are the essential underpin in the rebalancing process and in building the prosperous society we all want to see.

How do we achieve those improved standards in education? As we set out in our First steps report last autumn, our country’s schools must equip every young person with the attitudes and competencies they need to lead fulfilling and productive lives. Our survey results show just how important it is to develop young people who are rounded and grounded, with respondents rating attitudes towards work among school and college leavers as more important than formal qualifications. Exam results matter, and their real-world value is bound up with the positive attitudes and competencies young people need for working life.

In the past, the UK has been very good at educating parts of our population but other groups have been allowed to fall behind. We cannot accept this pattern any longer. Our future depends on enabling every young person to reach a good standard of core knowledge and skills, a standard that will give them the capacities to cope with the fast-changing world of the future.

Good education also lays the foundation for success in training and professional development, opening the way to fulfilling careers. The jobs of the future will need more skills and at higher levels. As our survey results show, many businesses – particularly those in the high-growth sectors that should be leading our economic recovery – are not confident their future demand for high-skilled employees will be met. There are encouraging indicators: the number of people in apprenticeships is continuing to rise and numbers of university applications are holding up best for courses that command strong employment outcomes and earnings returns. But we need to drive further and faster on employer-led skill development if we are to achieve enduring success as an economy based on innovation and high-value products and services.

A critical area of weakness remains careers advice, which should lubricate transitions between education and work. The services available to young people – and to adults seeking a change of direction – have been far too haphazard. Businesses are already widely involved in helping schools and colleges, but we all have to up our game. We all need to see careers as the priority it is, not an afterthought to the curriculum. An effective service that guides young people effectively through the increasingly complex world of work is a prize we should all covet.

John Cridland
CBI director-general
I'm optimistic we can do this, but this survey shows the need for policymakers to continue to make education a national priority. Shortages of STEM-qualified technicians remain stubbornly high and this shortage will worsen as economic recovery gathers pace. Equally, businesses also tell us too many STEM-qualified applicants don’t arrive rounded, grounded and ready for work.

The workforce of tomorrow and today needs to be knowledgeable and skilled, but also needs the confidence and attitude to innovate and so make a contribution to their employer’s competitiveness. In the new starter survey conducted alongside the main survey for the first time this year, nearly a third of respondents felt they did not have these attributes when they started their first full-time job. Getting our young people confident, motivated and ready to add value is absolutely critical. This is another reason for much greater engagement between employers and educators.

While some might question whether this is our Sputnik moment, there is certainly much we must do to make education better, more effective, and truly world class. This survey is confirmation that the best and brightest business leaders are willing to invest in education. It is up to us all – educators, employers and policymakers – to capitalise on that.

Rod Bristow
Pearson UK president
Executive summary

The education and skills landscape in 2013

- Economic growth is starting to return and private sector job creation should continue, but improved education and skills are needed to underpin this
- Better education could add £8trn to the UK’s GDP over the lifetime of a child born today – the equivalent of 1% to GDP each year
- Too many young people fall behind during the early and primary years and they never catch up: last year, 36% of pupils in England did not achieve a grade A*-C in English and 42% missed the benchmark in maths
- With almost one million young people currently unemployed, we need to build structures that better support the transition from school to work and training
- The skills landscape is changing with demand for higher level skills increasing: by 2020 almost half (46%) of jobs will be for managerial, professional or associate professional roles
- Higher education looks to be adapting, with UCAS application numbers holding up best in courses that command strong employment outcomes and earnings returns, while the number of higher apprenticeships is rising fast from a low base.

The sixth education and skills survey

- The CBI/Pearson education and skills survey was conducted in February and March 2013
- Responses were received from 294 employers, collectively employing some 1.24 million people. Participant organisations are drawn from all sectors of the economy and all parts of the UK.

Meeting demand for STEM skills

- STEM skills are in widespread demand and nearly two in five firms (39%) that need employees with STEM skills and knowledge currently have difficulties recruiting staff. A similar proportion (41%) expect those difficulties to persist in the next three years
- There are early indications that the proportion of businesses reporting problems in recruiting STEM-skilled graduates may be falling (from 17% to 12%) but an economic upturn will test this trend. Change is not happening fast enough and we need to step up our efforts to tackle STEM shortages
- Shortages of STEM-qualified technicians (29%) and graduates (26%) are widespread among firms in the engineering, hi-tech/IT and science areas and are expected to intensify as economic recovery gathers pace, emphasising the need to focus on technicians as well as graduates, who are vital and greater in number
- Businesses report too many STEM-qualified applicants don’t arrive rounded, grounded and ready for work (45%) and lack general workplace experience (39%)
- Businesses recognise that they have a key role in encouraging more young people to study STEM subjects, enthusing young people about STEM (55%) and working with universities to ensure the business-relevance of courses (50%)
- For government, business’ top priorities are safeguarding funding for STEM in higher education (52%) and improving the supply of specialist teachers in schools (50%).

Raising ambition for all in schools

- The most important factors employers weigh up when recruiting school and college leavers are their attitudes to work (78%), their general aptitudes (57%) and literacy and numeracy (50%). These rank well ahead of academic results alone (37%)
- We still have a long tail of under-achievement on attainment in basic literacy and numeracy among school leavers (32% and 31% respectively of employers report dissatisfaction)
- Employers also report that not enough young people leave school with work experience (55% unsatisfied), or having developed personal qualities like self-management (54%) and attitude to work (35%)
• Businesses want to see primary schools concentrating above all on outcomes in literacy and numeracy (69%), with these also as the most commonly cited priority (by 39%) in the 11-14 phase of schooling

• For the 14-19 age group, employers believe schools and colleges should be developing work awareness and relevant skills, with more opportunities to acquire work experience identified as the main priority (23%)

• Seven in ten (70%) businesses value foreign language skills among their employees, particularly in helping build relations with clients, customers and suppliers (38%)

• French (49%) and German (65%) are the leading languages in demand, but those geared to business in China feature increasingly prominently (of those valuing staff with foreign language skills, 28% value Mandarin and 16% Cantonese).

Businesses supporting schools to deliver more

• More than eight out of ten businesses (85%) now have links of some type with one or more school or college

• There are extensive links between businesses and schools/colleges in all parts of the UK

• Over the past year, the balance of firms increasing their links with schools and colleges over those reducing them has climbed to +40%, indicating a major change

• The proportion of employers with links to schools and colleges offering work experience placements has risen to 81% in 2013, while nearly two thirds (64%) are involved in providing careers advice and talks

• Other widespread forms of business support include involvement in schemes to promote study of particular subjects (32%), employees acting as governors (32%) and employees becoming student mentors (26%)

• Business involvement should be expanded further, but barriers include uncertainty over how to make work experience worthwhile (29%), lack of interest among schools or pupils (27%) and insufficient interest among employees in working with schools or colleges (25%).

Smoothing the path from school into work

• The great majority of employers believe the quality of careers advice for young people is not good enough (by a balance of -67%)

• There is an appetite among employers to play a greater role in delivering careers advice – two thirds (61%) are willing to do more

• Among those firms considering stepping up their engagement in delivering careers advice, half of firms (50%) intend to do so by engaging with local schools and colleges

• There is strong support for programmes along the lines of the government’s planned traineeship model to equip young people with the skills needed for employment. Almost all employers (99%) see these as important

• And two thirds of businesses (67%) are willing to be involved

• Nearly a third of young people (31%) starting their working lives are not confident they have the appropriate skills, with work experience felt to be the leading weakness (71%).

Investing in skills for future growth

• Most employers consider skill levels among their employees to be satisfactory for their current functions, with more than two thirds (72%) rating their high-skilled employees as good

• But more than half of employers are aware of weaknesses in the core skills of at least some of their employees in literacy (55%) and numeracy (51%) and close to two thirds in IT skills (62%)

• To tackle the problem, nearly half of employers (48%) say they have organised training in at least one basic skill area in the past year for adult employees and a third (35%) have organised remedial training for at least some young people joining them from school or college

• Over the next three to five years, far more businesses expect to increase the number of jobs requiring leadership and management skills and higher skills than expect to reduce them (positive balances of +63% and +59% respectively)
• More employers expect to decrease the number of low-skilled employees in the next few years than to increase the number (a negative balance of -4%), continuing the pattern of recent years.

• Most employers are confident there will be enough people available to fill their low-skilled vacancies (a positive balance of +65%), but employers are evenly split over whether they will be able to meet their needs for high-skilled employees.

• A positive balance of +70% of firms intend to maintain or increase their investment in employee training and development during the coming year.

• Employers will also be seeking to target training more effectively (70%) and to deliver it more cost-effectively.

Building a demand-led skills system

• More than nine out of ten employers (93%) back the view that ultimately, employers should have greater ownership of the skills agenda, but two thirds of SMEs (66%) believe different approaches are needed to support smaller employers.

• The top priority in this new approach is qualification design and outcomes being based around employers’ needs and industry standards (80%).

• Businesses are also keen to see steps to raise awareness of what employer ownership of the skills agenda means and how it will work in practice (62%).

• Most businesses use external training providers to at least some extent, with 41% of training on average delivered by external bodies.

• On almost every measure, employers are becoming more satisfied with the training delivered by external providers. Private providers lead on every satisfaction measure except cost, but there have been big improvements in the relevance of FE college courses (with satisfaction among businesses up from 53% in 2012 to 61% in 2013).

Putting business at the heart of apprenticeships

• The proportion of employers involved in apprenticeships has risen to more than two thirds (69%), and over half (55%) plan to extend their programmes further or to start taking on apprentices in the next few years.

• Business is clear about priorities for action to encourage them to become more involved in apprenticeship programmes: more relevant qualification programmes (41%), giving firms greater purchasing power by routing the apprenticeship grant directly to employers (39%) and reducing bureaucracy (32%).

• Government pledges to cut back on the bureaucracy around apprenticeships have yet to be felt in practice by employers, with more than nine in ten (93%) reporting no change as yet.

• SMEs remain an under-tapped market for apprenticeships: despite recent increases, only a quarter (23%) of SMEs take on apprentices compared to nine in ten (88%) in firms with over 5,000 employees.

• Despite recommendations in the Holt report last year aimed to make offering apprenticeships easier for smaller firms, more than nine in ten SMEs (94%) say they have not experienced improvement in the system.

Routes to higher-level skills

• Nearly one in three jobs (30%) require degree level skills and the proportion is likely to rise in the years ahead.

• More employers have increased their graduate recruitment in the past year than have cut back, giving a positive balance of +8% taking on more graduate recruits.

• Employers continue to expect the new university tuition fees regime to impact the way they hire, with a third (30%) expecting to receive fewer graduate applications in the future and considering alternative entry routes for school leavers (28%).
• Having the right attitudes and aptitudes is by far the most important consideration when businesses are recruiting graduates – nearly nine in ten employers (88%) value these above other factors such as degree subject (67%) and degree class (48%)

• While traditional graduate recruitment channels such as advertisements (used by 78%) and recruitment fairs (37%) are widely used, a third (33%) of businesses now use sandwich placements or internships to help them identify graduate talent

• Two in five employers (42%) prefer graduates qualified in STEM subjects, which are viewed as rigorous and effective in developing analytical skills

• While many graduates leave university with the skills needed for success in work and life, businesses still find too many do not: 20% report shortcoming in graduate applicants’ literacy/use of English, 27% in problem-solving and 32% in self-management

• Businesses want to see higher education institutions doing more to help students develop work-relevant skills (49%) and improving the business relevance of undergraduate courses (49%).

**Businesses and universities: forging the links**

• More than three quarters (77%) of employers have developed links with universities

• Partnership activities range from businesses providing sandwich-year and other placements (43%) to putting up ‘real-life’ projects and resources to help students understand the practical relevance of their courses (39%) and partnering with universities for research and innovation (39%)

• When selecting partner institutions, the most important factors for businesses are a university’s area of expertise/specialism (78%) and its location (71%)

• Nearly two thirds of businesses (62%) now offer internship opportunities of some type for graduates, including over half (52%) of the smallest firms employing under 50 people.
The sixth CBI education and skills survey, run in partnership with Pearson, is published at a time when the UK is focused on restoring sustained growth, while at the same time balancing the books and retaining fiscal rigour. This makes for a challenging environment. But it is also one in which it is critically important for government, employers and individuals to invest in education and skills. In the short and medium term this means widespread schools reform, routeing public funding for skills directly to where it can have the biggest impact and meeting businesses’ demand for higher level skills. If we can get this right, improved schools and skills provision can have a massive impact on growth in the longer term.

Key points

- Economic growth is starting to return and private sector job creation should continue, but improved education and skills are needed to underpin this
- Better education could add £8trn to the UK’s GDP over the lifetime of a child born today – the equivalent of 1% to GDP each year
- Too many young people fall behind during the early and primary years and they never catch up: last year, 36% of pupils in England did not achieve a grade A*-C in English and 42% missed the benchmark in maths
- With almost one million young people currently unemployed, we need to build structures that better support the transition from school to work and training
- The skills landscape is changing with demand for higher level skills increasing: by 2020 almost half (46%) of jobs will be for managerial, professional or associate professional roles
- Higher education looks to be adapting, with UCAS application numbers holding up best in courses that command strong employment outcomes and earnings returns, while the number of higher apprenticeships is rising fast from a low base.

£8trn
Potential amount added to GDP by raising attainment in schools
Economic growth is returning in 2013...

The first quarter growth in the UK economy is expected to be sustained during the rest of 2013, with the pace picking up in 2014. Encouragingly, the jobs market has performed well in recent years, with 29.7 million people in employment in the period December 2012 to February 2013, up by nearly half a million on the levels a year earlier (Exhibit 1). In the final quarter of 2012, the private sector created 151,000 jobs – over seven times as many jobs as were lost in the public sector. Unemployment levels are expected to remain more or less unchanged in the coming months, at around 8.1%. As the pace of growth picks up, private sector job creation will continue to offset reductions in public sector employment and in due course may start to make inroads into the unemployment figures.

...but improved education and skills are key to securing long-term growth

Employers recognise the crucial importance of investing in workforce skills. Over the course of the recession, businesses and employees worked together to safeguard jobs where possible and protect the skills base in preparation for the eventual upturn. Employers know from experience the costs and difficulties involved in rebuilding a skilled, motivated workforce.

A flat economy cannot sustain growing employment. For that – and for a more prosperous society – we need a return to sustained economic growth. In the short term, steps including backing for medium-sized firms to grow and investment in infrastructure projects will be key to boosting growth and employment. But over the longer term, the UK’s strength in the international competition for business has to be in having a flexible, highly-skilled and motivated labour force.

This is no small challenge – it means making the most of all our nation’s talent, raising attainment across the education system, and getting the right mix of skills across the workforce to boost productivity and growing industries. As Exhibit 2 illustrates, better education could add £8trn to the UK’s GDP over the lifetime of a child born today – the equivalent of 1% to GDP each year. That is a substantial prize for an economy that has been relatively flat over the past year and more. By helping businesses to grow and individuals to thrive at work, enhanced skill levels will support UK growth and help deliver prosperity for consumers and communities. There is no measure more important to long-term growth than getting education and skills right.

Nursery and schools reform is the first step

Although the UK has made progress in recent years on improving literacy and numeracy, too many students still fail to meet the benchmark of grade C or above. Last year, 36% of pupils in England did not achieve a grade A*-C in English and 42% missed the benchmark in maths. Evidence suggests that the UK system allows too many young people to fall behind during the early and primary education stages, in part because of funding pressures and the increasing emphasis on short-term results rather than long-term development.
years and they never catch up. For example, 81% of children on free school meals reach the required level in maths at age seven (key stage 1), yet by age 11 (key stage 2) it is only 67%. A smaller but similar decline is observable in English. Primary school widens the gap, with a quarter of children in England – predominantly those from disadvantaged backgrounds already behind at age five – failing to progress and reach the standards expected in reading, writing and maths at age 11.

As a nation the UK is failing to close the gap with its international competitors, despite 35 years of school reform. The latest OECD programme for international student assessment (PISA) survey, based on tests taken by 15 year-olds, shows the UK has not made headway in international rankings. In 2009 UK pupils ranked 16th in science, 25th in reading and 28th in maths (Exhibit 3). Even taking into account rising numbers of countries taking part, the PISA results indicate little progress in the UK’s international performance over time.

The problem of lower performance is exacerbated by narrow definitions of achievement that help sections of the cohort succeed. What we need is an education system where achievement is an expectation for every young person. This is the aim in countries such as Singapore, where education is a key part of the growth strategy.

While English and maths ability are the essential starting point, businesses value attitude and aptitude as well as formal skills and knowledge (Chapter 4). In practice, we need a broader definition of the goals of schools and better measures of success, making sure we take into account the wider package of attributes and competencies that young people need. The wider community – including businesses – have a responsibility to step up and help schools raise ambitions and attainment (Chapter 5).

The school-to-work transition is too haphazard

To succeed in the global marketplace of the future, we need to make the most of the UK’s talent at all levels. This starts with helping young people make more effective transitions to the labour market. A recent report found very little correlation between young people’s aspirations and projected labour market demand.

Despite its importance, careers advice in England in particular has never been as good as it needs to be. In the past, the UK economy was simple enough for the majority of people to muddle their way through to finding work. But that’s no longer the case: for too many, advice remains irrelevant, disconnected from the jobs market and inaccurate (Chapter 6). With almost one million young people currently unemployed (Exhibit 4), it’s clear that we need to build structures that better support the transition from school to work and training. Effective careers advice and information form the cornerstone, inspiring, raising ambitions and effectively signposting labour market opportunities.

<table>
<thead>
<tr>
<th>Exhibit 3</th>
<th>The UK’s ranking in international tests for 15-year-olds in science, maths and reading 2000-09</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td><strong>2000</strong></td>
</tr>
<tr>
<td>Science</td>
<td>4</td>
</tr>
<tr>
<td>Maths</td>
<td>8</td>
</tr>
<tr>
<td>Reading</td>
<td>7</td>
</tr>
</tbody>
</table>

*Source: PISA*
In England, evidence shows that around a fifth of young people not in education, employment or training (NEET) at age 16-17 aspire to move into an apprenticeship and another two fifths into other full-time employment. But of the 520,600 apprenticeship starts in the 2011/12 academic year, 44% of starters were aged 25 or over, with those under 19 making up just a quarter (25%). Young people are often struggling to compete with more experienced job seekers and we must go further to help prepare young people for employment. It’s encouraging the government has brought forward plans to launch a new traineeship offer for young people to bridge this gap, and as our results show, businesses are willing to step up and support these programmes (Chapter 6).

There are serious skills mismatches...

Employers recognise the value of skills and invest heavily in training their staff. UKCES estimates that the majority of workplaces (59%) provide training for their staff – in England alone in 2011 this amounted to some £49bn including staff costs. In reality the true figure is probably even higher, taking into account the amount of informal training and learning that takes place in the workplace – particularly in smaller firms (Chapter 9).

The government is facing questions about how to best support employer spending on skills with public spending (Chapter 8). Evidence suggests that public funding for training does not always flow to the training that industry needs. For example, a recent CESI report on skills mismatches highlighted a concerning mismatch between FE and skills ‘achievements’ (qualifications) linked to a sector lead body and actual labour market vacancies (Exhibit 5). For example, in the automotive industry, there were only 36,800 FE and skills achievements compared to more than 89,000 vacancies. In the short to medium term, the majority of employers report skills shortages have a direct impact on business performance and over the longer term, on business growth.

...pointing to the need for a demand-led system

STEM skills are vital to the UK’s ability to sustain and develop high value-added industries – underpinning innovation and UK industrial strategy. Businesses continue to attach particular value to STEM skills and they remain in high demand (Chapter 3). The Royal Academy of Engineering estimates that around 820,000 science, engineering and technology professionals will be required by 2020. Over 80,000 engineers and technicians are needed just to deal with retirements over the next four years.
In this context, it’s clear that we need a more demand-led skills system. Momentum is building up behind the idea of routing funding directly to employers to ensure skills provision is more closely aligned with business needs. To achieve sustained growth, we will also need to support employer-led strategies that run across sectors, local areas and supply chains. By seed-funding clusters of skills provision, the £340m employer ownership of skills pilots have the potential to do this.

Job creation is a high-skill phenomenon...

The skills landscape is changing. In particular, demand for higher level skills is increasing. By 2020 almost half (46%) of jobs will be for managerial, professional or associate professional roles (Exhibit 6). This continues the pattern of the past decade and more, during which almost all employment growth has been in jobs for people with higher skill levels. As our economy rebalances in this way, the majority (51%) of businesses are not confident about meeting future demand for high level skills (Chapter 10).

Exhibit 6 Change in employment 2010-20 (%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Change 2010-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers, directors and senior officials</td>
<td>10%</td>
</tr>
<tr>
<td>Professionals</td>
<td>10%</td>
</tr>
<tr>
<td>Associate professional and technical</td>
<td>14%</td>
</tr>
<tr>
<td>Caring, leisure and other</td>
<td>7%</td>
</tr>
<tr>
<td>Process, plant and machine operatives</td>
<td>-13%</td>
</tr>
<tr>
<td>Administrative and secretarial</td>
<td>-9%</td>
</tr>
<tr>
<td>Skilled trades</td>
<td>-18%</td>
</tr>
<tr>
<td>Total</td>
<td>-15%</td>
</tr>
</tbody>
</table>

Source: UKCES

Exhibit 7 Starters on government funded apprenticeship programmes by level (000s)

<table>
<thead>
<tr>
<th>Level 2 Programmes</th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>190.5</td>
<td>301.1</td>
<td>329</td>
</tr>
<tr>
<td>Level 3 Programmes</td>
<td>87.7</td>
<td>153.9</td>
<td>187.9</td>
</tr>
<tr>
<td>Level 4 Programmes</td>
<td>1.5</td>
<td>2.2</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Source: BIS

...recognised in the HE and apprenticeship systems

We’re starting to see some clear impacts of the new university tuition fees regime. First of all, students are starting to think about their higher education choices in a more career-focused way. UCAS application numbers held up best in courses that command strong employment outcomes and earnings returns, for example physical sciences applications fell by only -0.6% and engineering by only -1.3%. This compares to a -14.1% drop across arts, humanities and social sciences. In combination with business concern about future talent pipelines (Chapter 10), this creates a strong driver for developing new collaborative models of higher-skills delivery geared to clear job outcomes.

Change is already in the offing, with 2011/12 seeing a 147% increase in the number of higher apprenticeships since 2009/10 (rising from a low base of 1,500 to 3,700). There is much more to do – higher apprenticeships still make up less than 1% of the 520,600 total apprenticeship starts last year (Exhibit 7). There is also little evidence that higher education study in further education institutions has expanded overall, despite growth in some individual colleges.

On the broader measure of total apprentice starts, the numbers continue to climb (Exhibit 8). This is a welcome indicator and marks real progress in tackling the much wider upskilling of the UK workforce on which our future depends.

Exhibit 8 Starters on government-funded apprenticeship programmes by level (000s)
The sixth CBI education and skills survey, run in partnership with Pearson, provides an authoritative snapshot of trends and business opinion on education and skills issues. Since 2008, successive surveys have mapped how education and training have evolved against the backdrop of exceptionally challenging economic conditions and intensifying global competition. Never has it been more important for the UK to maximise the skills and talents of the present and future workforce on which our society depends.

The survey was conducted in February and March 2013, with usable responses received from 294 employers, collectively employing some 1.24 million people, equivalent to 4.9% of all employees in the UK. Participant organisations are drawn from all sectors of the economy – spanning the public and private sectors – and are of all sizes, from very small firms to organisations with workforces of more than 5,000 people.

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

The results have been weighted by sector on the basis of data from the Office for National Statistics (ONS) so they reflect practices across the economy.

**Sectoral analysis**

Responses were received from across all sectors of the economy (Exhibit 9). Public sector organisations make up one in eight respondents (12%). Among private sector participants, manufacturing firms account for just under a fifth (18%) while those in construction and professional services each make up close to a tenth of the sample (9% and 11% respectively).
Respondents by company size

Companies of all sizes participated in the survey – with around one in eight (12%) employing under 50 staff while at the other end of the scale a slightly larger proportion (15%) employ more than 5,000 people (Exhibit 10).

Official data suggests that, as with most business surveys, larger firms are over-represented, as the majority of UK businesses employ fewer than 50 people. Using the official definition of small and medium enterprises (SMEs) as being those organisations employing fewer than 250 people, SMEs make up nearly a third (32%) of respondents. As larger enterprises employ over two fifths (41%) of the UK workforce, the survey broadly reflects overall employment patterns and practices.

Respondents by location

The majority of respondents had employees based in several or most regions of the UK (Exhibit 11). Respondents most commonly had at least some employees in London (42%) and the south east (40%). Across other regions, the range was from more than a third (37%) with at least part of their workforces based in the north west to 17% with employees in Northern Ireland.
Meeting demand for STEM skills

Returning the UK economy to sustainable growth and improving its long-term performance depend on deploying science, technology, engineering and maths (STEM) skills effectively. These underpin innovation and our ability to compete successfully in the high-value, high-growth sectors of the global economy. Demand for these skills is strong and is set to grow in the coming years – nearly two in five (39%) of businesses that recruit staff with STEM skills report current difficulties. A similar proportion (41%) do not expect the difficulties to ease in the near future, but there are signs the supply of STEM graduates is improving.

Key findings

- STEM skills are in widespread demand and nearly two in five firms (39%) that need employees with STEM skills and knowledge currently have difficulties recruiting staff. A similar proportion (41%) expect those difficulties to persist in the next three years.
- There are early indications that the proportion of businesses reporting problems in recruiting STEM-skilled graduates may be falling (from 17% to 12%) but an economic upturn will test this trend. Change is not happening fast enough and we need to step up our efforts to tackle STEM shortages.
- Shortages of STEM-qualified technicians (29%) and graduates (26%) are widespread among firms in the engineering, hi-tech/IT and science areas and are expected to intensify as economic recovery gathers pace, emphasising the need to focus on technicians as well as graduates, who are greater in number.
- Businesses report too many STEM-qualified applicants don’t arrive rounded, grounded and ready for work (45%) and lack general workplace experience (39%).
- Businesses recognise that they have a key role in encouraging more young people to study STEM subjects, enthusing young people about STEM (55%) and working with universities to ensure the business relevance of courses (50%).
- For government, the top priorities are safeguarding funding for STEM in higher education (52%) and improving the supply of specialist teachers in schools (50%).

People with STEM skills are in widespread demand...

Science, technology, engineering and maths (STEM) skills are vital to the UK’s ability to sustain and develop high-value-added industries – they underpin the industrial strategy. Demand for graduate engineers and others with STEM skills exceeds the domestic supply and that demand is pervasive across the economy. There is also widespread demand among employers for those with STEM skills below graduate level.
Among those that recruit employees with STEM skills and knowledge, nearly two in five (39%) report current difficulties recruiting such staff at some level (Exhibit 12). Although this figure has improved since 2008 (59%), improvement is not happening fast enough. Despite STEM shortages being high on the agenda for both business and government, the supply of these skills is still inadequate.

More than one in five employers (22%) currently faces difficulties in meeting their need for experienced staff with STEM expertise. The problem in finding suitable graduate recruits, however, has eased, with one in eight (12%) reporting current difficulties in 2013 compared with 17% in 2012. This year’s figure is similar to the proportion of employers reporting difficulties in finding people with STEM skills to train as apprentices (12%). Given the central role of STEM skills in the UK’s growth strategy, there is an urgent need for action. That’s why the CBI is planning new work later in the year, exploring and promoting the contribution of STEM skills to growth and investment performance.

Overall, employers needing STEM-skilled staff are not optimistic about a rapid improvement in the situation in the years ahead as the economic recovery starts to gather more momentum. Two in five (41%) anticipate difficulties over the next three years (Exhibit 13). Technicians and experienced STEM staff are most commonly expected to be hard to recruit (20% and 17% respectively).

But there are some important areas of improvement anticipated. In particular, further progress is expected on the supply of STEM graduates, with the proportion of employers anticipating problems in the next three years dropping to 10% from 18% last year. This is an encouraging finding. It may be an early indication that the long-standing shortage of STEM-skilled graduates is gradually easing, but how sustainable this will be given demographic trends – particularly the retirement of skilled engineers – in the face of economic upturn is questionable.
Shortage of STEM skills is impacting engineering hardest

The extent of difficulties in recruiting STEM-skilled people currently and in the future varies markedly by sector (Exhibit 14). Troublingly, difficulties seem most intense in sectors that should be key drivers of economic recovery.

In manufacturing, nearly one in four firms (24%) reports current difficulties in recruiting technicians, with a similar proportion (26%) expecting these to continue. While the construction sector reports relatively few current problems in recruiting technicians (8%), more than a third (35%) of construction firms anticipate problems over the next three years as the sector begins sustained recovery.

Responses from firms in the engineering, hi-tech/IT and science areas show the highest proportion of current and future problems in recruiting STEM-skilled employees. More than one in four report current challenges in recruiting technicians (29%) and STEM graduates (26%). And these problems are expected to intensify in the coming three years (climbing to 39% for technicians and 32% for graduates). More difficulties are also expected in recruiting suitable people to train as apprentices in the coming years as the economy strengthens, with nearly a third (30%) of firms in these sectors foreseeing problems.

Businesses seek STEM candidates who are rounded, grounded and ready for work

STEM shortages are not just an issue of under supply. When asked about the barriers they have encountered in filling jobs that require STEM-linked skills and qualifications, employers point to a range of concerns (Exhibit 15). The two biggest barriers are weaknesses in the attitudes and aptitudes for working life among candidates (45%) and a lack of general workplace experience among applicants (39%). These findings highlight the need for all young people to build up their understanding and gain some experience of the day-to-day demands of the workplace, preferably in the sector where they aim to work longer term.

Exhibit 14 Difficulty recruiting individuals with STEM skills and knowledge by sector (%)

<table>
<thead>
<tr>
<th>Sector</th>
<th>People to train as apprentices</th>
<th>Technician</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>currently</td>
<td>17</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>next three years</td>
<td>13</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>currently</td>
<td>19</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>next three years</td>
<td>15</td>
<td>35</td>
<td>4</td>
</tr>
<tr>
<td><strong>Engineering, hi-tech/IT &amp; science</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>currently</td>
<td>15</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>next three years</td>
<td>30</td>
<td>39</td>
<td>32</td>
</tr>
</tbody>
</table>

Exhibit 15 Barriers to recruiting STEM-skilled staff

- Lack of appropriate attitude and aptitudes for working life: 35
- Lack of general workplace experience: 26
- Quality of STEM graduates: 30
- Shortage of STEM graduates: 30
- Content of qualification(s) not relevant to business needs: 28
- Lack of applications: 27
- Lack of practical experience/lab skills: 4
- Other: 4

---

Exhibit 14 Difficulty recruiting individuals with STEM skills and knowledge by sector (%)

<table>
<thead>
<tr>
<th>Sector</th>
<th>People to train as apprentices</th>
<th>Technician</th>
<th>Graduate</th>
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<tbody>
<tr>
<td><strong>Manufacturing</strong></td>
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</tr>
<tr>
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<td>15</td>
</tr>
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<td><strong>Construction</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>currently</td>
<td>19</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>next three years</td>
<td>15</td>
<td>35</td>
<td>4</td>
</tr>
<tr>
<td><strong>Engineering, hi-tech/IT &amp; science</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>currently</td>
<td>15</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>next three years</td>
<td>30</td>
<td>39</td>
<td>32</td>
</tr>
</tbody>
</table>
There are also worries that the content of qualifications held by applicants for STEM roles is too often insufficiently relevant to business needs. Nearly a third (30%) of those businesses facing STEM recruitment difficulties reported this as a concern. The finding highlights the need for firms to work together with education and training providers to ensure programmes of study reflect workplace developments and technological advances in manufacturing and science-based industries.

Around a third of employers reporting difficulties in filling STEM-related vacancies cite shortcomings in the quality of STEM graduate applicants (35%) and a shortage in numbers of graduates (30%).

STEM progress needs urgency from government and business

When asked to identify the most important areas for action to promote the study of STEM subjects – and so the supply of STEM-skilled employees for the future – respondents see essential roles for both businesses and government (Exhibit 16).

Heading the list of priorities is the need for businesses to engage with schools to enthuse pupils about STEM study (55%). The ‘real world’ perspective employers can inject, opening young people’s eyes to the practical value and exciting creative scope of STEM subjects, can make an invaluable contribution. There are many great examples of existing schemes, like the STEM Ambassadors programme, but the level of business engagement across the country must be scaled up to meet the current challenge.

On the part of government, businesses see it as essential for STEM funding in higher education to be protected (52%) and for the drive to recruit and retain more specialist STEM teachers in schools to continue (50%). Success in promoting science and maths to young people depends on high-quality teaching delivered by subject specialists. The government has recognised the importance of focusing funding on meeting this need in England. The 2012/13 figures on initial teacher training suggest it is at or close to achieving the targets for new specialist subject teachers, but the challenge will be to maintain an inflow of high-calibre entrants in the years ahead. We have to tackle a hangover of too few specialist STEM teachers in schools and colleges: nearly a quarter of those in secondary schools in England teaching maths (23%) and chemistry (24%) and a third teaching physics (34%) have no qualification in the subject beyond A-level. Partly as a consequence, hundreds of institutions fail to enter any pupils for A-level sciences.

Action is particularly important if uptake of triple science GCSE – the best preparation for A-level and beyond – is to improve. Only around half (56%) of secondary schools offered the combination of biology, chemistry and physics at GCSE level in 2011. Although this represents a modest improvement on 46% in 2009, there is clearly still much improvement needed.

Half the survey respondents (50%) point to the need to tackle the low business relevance of some STEM qualifications. This requires employers and universities to work together more closely to develop STEM courses with built-in business relevance, with businesses for example participating in degree programme advisory boards or the creation of entirely new degree courses.

Apprenticeships in STEM sectors are an important means of tackling the shortages of technicians. But engineering apprenticeships accounted for only 2% of apprenticeship growth since 2006/07, suggesting much more could be done to maximise this route to STEM skills. Nearly half of employers (45%) cite more STEM apprenticeships as a priority area for action. Progress on this will rely partly on addressing the quality of vocational education through new rigorous vocational A-levels.

Exhibit 16 Priority action to promote STEM study

<table>
<thead>
<tr>
<th>Priority Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Businesses should engage with schools to enthuse pupils about STEM study</td>
<td>55</td>
</tr>
<tr>
<td>Government should protect funding for STEM in higher education</td>
<td>52</td>
</tr>
<tr>
<td>Government should recruit and retain more specialist teachers</td>
<td>50</td>
</tr>
<tr>
<td>Closer working between businesses/universities to develop business-relevant STEM courses</td>
<td>50</td>
</tr>
<tr>
<td>More STEM apprenticeships</td>
<td>39</td>
</tr>
<tr>
<td>Businesses should provide more high-quality work placements</td>
<td>27</td>
</tr>
<tr>
<td>Employees should be encouraged to become STEM ambassadors</td>
<td>13</td>
</tr>
<tr>
<td>Businesses should provide financial incentives</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
</tbody>
</table>

21 Changing the pace – CBI/Pearson education and skills survey 2013
There is no more important contributor to long-term growth than education, making the quality of education of central importance to employers. Businesses want young people who are rigorous, rounded and grounded. This requires progress on both the core and enabling skills and knowledge, and the development of behaviours and attitudes essential to success in work and life. Stretching academic standards are necessary, but not sufficient to an excellent system – businesses are clear these are the priority areas for improvement.

Key findings

- The most important factors employers weigh up when recruiting school and college leavers are their attitudes to work (78%), their general aptitudes (57%) and literacy and numeracy (50%). These rank well ahead of academic results alone (37%)
- We still have a long tail of under-achievement on attainment in basic literacy and numeracy among school leavers (32% and 31% respectively of employers reporting dissatisfaction)
- Employers also report that not enough young people leave school with work experience (55% unsatisfied), or having developed personal qualities like self-management (54%) and attitude to work (35%)
- Businesses want to see primary schools concentrating above all on outcomes in literacy and numeracy (69%), with these also as the most commonly cited priority (by 39%) in the 11-14 phase of schooling
- For the 14-19 age group, employers believe schools and colleges should be developing work awareness and relevant skills, with more opportunities to acquire work experience identified as the main priority (23%)
- Seven in ten (70%) businesses value foreign language skills among their employees, particularly in helping build relations with clients, customers and suppliers (38%)
- French (49%) and German (45%) are the leading languages in demand, but those geared to business in China feature increasingly prominently (of those valuing staff with foreign language skills, 28% value Mandarin and 16% Cantonese).

Employers are looking for young people who are rounded and grounded...

As emphasised in the CBI’s First steps report (Exhibit 17), better education could add up to £8tn to GDP over the lifetime of a child born today, boosting economic growth and enhancing social inclusion. With our international competitors raising achievement every year, raising ambition for all in schools 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 in life, study and work and training.
Exhibit 17 First steps – a new approach for our schools

Last year the CBI set out to determine how far our education system is delivering for the economy and society. A major piece of fresh thinking for the CBI, the work took a step back from our traditional area of focus – the school-to-work transition – to review the schools system overall. We worked with teachers, headteachers and business to draw important conclusions about the impact of school performance and set out a path of reform in the First steps report.

While the CBI supports the government’s goal of rigour, this alone is not enough. Young people need to leave school with the behaviours and skills that businesses want, as well as academic rigour (illustrated below). The research found that schools which have more freedom do better and often achieve really inspirational teaching. As part of the wider community, businesses have a crucial role to play in supporting schools to do more, providing role models, advice and guidance. Following the success of the report, the CBI has been taking the campaign forward, working with government and other education stakeholders to build consensus around the need for change.

In this year’s survey we asked businesses to identify the most important factors they consider when recruiting school and college leavers (Exhibit 18, page 24). The results show the overwhelming importance of young people’s attitudes to work. Nearly four out five employers (78%) rate this as one of their most important considerations. This comes as no surprise: the CBI has long pointed to the central importance of a positive attitude, demonstrated for example by a readiness to take part, openness to new ideas and activities, and a desire to achieve.

Also ranking well ahead of formal academic results and qualifications are young people’s aptitudes for work (cited as important by 57%) and core skills such as basic literacy and numeracy (50%). These results show why it is so important to start the debate on the outcomes we want our school system to achieve by age 18.
...but narrow definitions of achievement are causing tolerance of underperformance

The cult of relativism in schools has allowed too many young people to leave without achieving their full potential. Definitions of achievement based on GCSE performance are too narrow. There are lots of brilliant examples in the UK of schools with a clear idea of the outcomes they want their pupils to achieve and which embed that ambition for success in every aspect of school life, but too often this is driven by outstanding school leadership that rebels against the system.

Beyond the narrow measures of success offered in school league tables, our survey results offer insight into how well these wider skills are being developed. Our survey results suggest we need a better balance between core and enabling subjects and a focus on personal attributes and attitudes, developed as part of everything that schools do (Exhibit 18). Over a third of employers (35%) are unhappy with school and college leavers’ attitudes to work. As this is the single most important consideration when young people are seeking that critical first job opening (Exhibit 19), developing a constructive attitude during their education is fundamental to working life. Close to a third of firms are not satisfied with teamworking (30%), basic numeracy (31%) and literacy/use of English skills (32%) of young people entering the world of work.

Exhibit 18 Most important factors in recruiting school and college leavers (%)

Exhibit 19 Employer satisfaction with school/college leavers’ skills (%)

More than half of businesses (55%) are not satisfied with young people’s work experience. The government’s decision to remove with effect from September 2012 the statutory duty on schools in England to provide every pupil at Key Stage 4 with work-related learning is only likely to exacerbate this problem. The CBI recognises that not every placement has been of uniformly high quality and there has been scope to improve in some instances. But for most young people their work experience gives them a first, critically important taste of workplace life and the chance to reflect on its lessons. Nearly two thirds of employers (61%) are also not satisfied with levels of business and customer awareness among school and college leavers. Work experience placements play a potentially important part in tackling this weakness, giving young people the chance for example to gain practical insight into the need to provide customer satisfaction.

The CBI believes we need a broader definition of success that incentivises the progress of all young people and takes into account the wider package of attributes and competencies essential for success in life and work. This will refocus our schools on tackling all of these important areas.
There has been modest improvement over time

Viewing employer experience over a longer period (Exhibit 20), there has been progress on school leavers’ grasp of IT (now seen as satisfactory or better by 93% of employers). It may also be we are seeing some modest improvements generated by the emphasis in schools on English, with more than two thirds (68%) of businesses now considering standards satisfactory compared with 58% in 2011.

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

Employers want a clear focus on core subjects in primary schools...

Businesses want to see primary schools focusing on the essential competencies that make further learning possible (Exhibit 21). When asked to identify the three priority areas they believe need to be addressed in primary education, the top response by a very wide margin is establishing and achieving clearly defined goals on literacy and numeracy (69%). Unless young people make sustained progress in these areas during their time in primary education, evidence suggests they never catch up. It is a cause for concern that at least one child in five in England leaves primary school without reaching expected standards in English and maths combined.

Employers also believe it is important for children to start developing the effective communication skills that are so essential later in personal and working life (a priority for 14% of respondents). And they attached importance to primary schools helping children develop appropriate self-management and personal behaviour (10%). These are important skills underpinning effective future learning and success in a work environment which is increasingly diverse, complex and stretching. A relentless focus in primary schools on these core and enabling skills is essential if children are to thrive later in life.

...and that focus should continue to age 14

Businesses believe the focus on literacy and numeracy at the outset of formal schooling needs to be maintained in the age 11-14 phase of education (Exhibit 22, page 26). This remains the top priority (cited by 39%), with self-management and communication skills the next highest ranked (by 19% and 18% respectively). Schools must be incentivised to drive achievement in all these areas, with the essential skills effectively embedded in every aspect of school life.
Languages remain in demand

If the UK is to achieve an export-oriented economic recovery, we need to break into and succeed in high-growth markets. Effective communication with potential suppliers, customers and those regulating markets is an essential part of achieving that. The UK has the worst foreign language skills in Europe, and there is a strong argument that limited language abilities and cultural awareness are acting in effect as a tax on UK trade.\(^3\)\(^6\)

While English is the international language of business – in itself a real benefit for the UK – there can be great advantages for British businesses if they have employees in key roles with the skills to communicate competently in the local language (Exhibit 24). In all, seven out of ten businesses (70%) value foreign language skills in their employees. Fluency in another language helps in the conduct of business and can assist staff in their careers. Around two in five employers (38%) see foreign language ability as helpful in building relations with overseas suppliers, customers and other contacts, while nearly a quarter (23%) say it assists staff mobility within the organisation, facilitating international working.

14-19 education should be more work-relevant

For young people in the 14-19 age bracket, employers want to see a much greater focus on work awareness and development of work-relevant skills (Exhibit 23). More opportunity for work experience – preferably in fields related to young people’s career interests – heads the list of business priorities (cited by 23%).

Almost as many firms (22%) want to see a step change in the quality of careers advice. Young people need help to gain a better understanding of the varied routes open to them, and – critically – the qualifications needed to pursue these (see Chapter 6).

Of course, it is up to the wider community – including business – to support schools to do more. Making the new system effective will need a programme of continuous engagement with businesses, and one in five respondents (19%) points to a commitment to support schools as a priority action area. Our survey explores this in more detail in Chapter 5.

In parallel with developing work awareness among the 14-19 age group, businesses also highlight the importance of continuing to reinforce the core areas of literacy and numeracy (22%), self-management (21%) and communication skills (20%).

Languages remain in demand

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Language skills are much more important for sectors leading the rebalancing towards a more export-oriented economy. For example, nearly two thirds of firms in manufacturing (62%) see foreign language skills among staff as helpful in building relations with overseas contacts, while just under half (44%) report foreign language skills as assisting staff mobility within their organisation.

**European languages remain in greatest demand**

The major European languages are consistently those most commonly mentioned as being in demand (Exhibit 25), led in 2013 by French (49%) and by German (45%). France and Germany still represent – along with the US – the largest export markets for British goods. Spanish too is in demand, sought by a third (34%) of those employers wanting employees with language skills.

Language skills geared to business in China also feature increasingly prominently (of those valuing staff with foreign language skills, 28% rate Mandarin as useful, 16% value Cantonese), rising in demand from 2012, whereas European language figures are flat or falling. The scale and importance in the UK of the migrant workforce from Poland and other parts of central and eastern Europe is well known, so it is no surprise that many British employers value employees who understand the language and culture to achieve effective working relationships (with 29% rating knowledge of Polish as useful).

---

**Exhibit 24 Need for employees who can speak foreign languages (%)**

<table>
<thead>
<tr>
<th>Need</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficial, but not a requirement when recruiting staff</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Helpful in building relations with overseas contacts</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>No need for foreign language skills</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Assist staff mobility within our organisation</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Needing foreign language skills in the next couple of years</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Essential core competence for our work</td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

**Exhibit 25 Foreign languages rated as useful to the organisation (%)**

<table>
<thead>
<tr>
<th>Language</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>61</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>52</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>49</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Mandarin</td>
<td>45</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td>19</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Cantonese</td>
<td>19</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Russian</td>
<td>19</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Swedish</td>
<td>19</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Portuguese</td>
<td>19</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>19</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Korean</td>
<td>19</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>
Businesses have an important role to play in partnering with schools and colleges to raise ambition and achievement and improve performance. By providing young people with work experience and becoming involved in careers guidance, employers can spell out the value of the skills and knowledge developed at school and open pupils’ eyes to career opportunities. They can bring their own expertise into schools and colleges through roles such as governors and acting as student mentors. Business links with education are widespread and growing, but with the right steps they could be grown still further to help inspire and develop our young people.

Key findings
• More than eight out of ten businesses (85%) now have links of some type with one or more school or college
• There are extensive links between businesses and schools/colleges in all parts of the UK
• Over the past year, the balance of firms increasing their links with schools and colleges over those reducing them has climbed to +40%, indicating a major change
• The proportion of employers with links to schools and colleges offering work experience placements has risen to 81% in 2013, while nearly two thirds (64%) are involved in providing careers advice and talks
• Other widespread forms of business support include involvement in schemes to promote study of particular subjects (32%), employees acting as governors (32%) and employees becoming student mentors (26%)
• Business involvement should be expanded further, but barriers include uncertainty over how to make work experience worthwhile (29%), lack of interest among schools or pupils (27%) and insufficient interest among employees in working with schools or colleges (25%).

Businesses have an important role to play in helping every school to deliver more...
As part of the wider community, business has an obligation to support schools to raise ambition and achievement. The CBI has long championed business partnerships with schools and colleges and has made the case for a more systematic approach to building those links. Many schools and businesses already have active links – more than eight out of ten employers (85%) in our survey now have links of some type with one or more school or college.

Connections are particularly strong between businesses and secondary schools (67%) and have increased in the past year (from 57% in 2012). Nearly two thirds (65%) also report links with further education colleges (up from 56%). While ties with primary schools are less common, they are a big growth area (up from 20% in 2012 to 36% this year). This is crucial given that primary school is a time when attitudes and aptitudes are being shaped.
Levels of engagement are highest among the largest businesses employing more than 5,000 people. In this category more than eight out of ten firms (84%) have links to secondary schools, three quarters (76%) to FE colleges and half to primary schools (49%). Programmes such as Inspiring the Future help support these links.39 The CBI is also doing its bit through a series of regionally-based programmes.

There are extensive links between businesses and schools/colleges in all parts of the UK (Exhibit 26). The scale of connections ranges from eight in ten firms in England (81%) to more than nine in ten in Northern Ireland (93%).

…and the extent of links is increasing fast

Businesses’ commitment to working with schools has continued to gain momentum in recent years. In our 2012 survey, over a third of employers with some education links reported they had increased their engagement with schools in the previous year (39%) while just 7% had reduced it, giving a positive balance of +32%.40 Over the past year, the balance of firms increasing their links with schools and colleges over those reducing them has climbed to +40% (Exhibit 27).

Exhibit 27 Change in scale of links with schools/colleges over past year (%)

For the great majority (77%) of businesses with connections to schools or colleges, those links are made and managed at local level (Exhibit 28). But more than one in five linked employers reports operating with links at regional and/or national level (29% at regional and 21% at national), often complementing ad hoc local tie-ups.

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

The single most widespread way in which businesses support schools and colleges is by providing work experience placements for students (Exhibit 29, page 30). The proportion of employers with links to schools and colleges offering placements has risen to 81% in 2013, up from 70% last year. Readiness among businesses to provide this type of assistance is critically important in view of the widespread concerns about the inadequate extent of school leavers’ workplace experience (see Chapter 4).

Nearly two thirds (64%) of those businesses with links to schools are involved in providing careers advice and talks, again a big increase on the 2012 figures (51%). As the machinery for delivery of careers guidance changes – and given the shortcomings of the past – increased business involvement is essential if young people are to have a sound grasp of their options and opportunities.
but involvement can and does take other forms

This year’s results point to further deepening in business-school links. Schemes in which employers engage with schools to promote study of particular subjects are widespread, with one in three businesses (34%) taking this approach. This kind of engagement is particularly common among engineering, hi-tech/IT and science firms (52%), indicating that businesses are responding to the need to enthuse and inspire young people about studying STEM (Chapter 3).

Schemes like Business Class provide a proven framework for businesses and schools to develop these long-term deep-rooted partnerships.

School governance is another area where business involvement can make a valuable impact. A third of employers (32%) now have members of staff acting as governors, who can draw on their business expertise to help schools and colleges run efficiently and effectively. Enabling employees to act as student mentors can be important, particularly in raising aspirations among young people from deprived backgrounds. A quarter (26%) of firms with education links provide help in this way.

With the right backing, business involvement can grow further

Although the great majority of businesses now have at least some links with schools and colleges, that involvement could be extended and deepened further, to the benefit of young people (Exhibit 30).

When asked about any barriers to building links with schools and colleges, more than one in four employers (29%) say there is insufficient guidance and support on how to make work experience placements worthwhile. This has long been an area of concern to businesses and the government’s decision to end compulsory work experience in England is likely to reinforce doubts.

Lack of interest is seen as a further worrying barrier. A quarter (27%) of respondents report that local schools or colleges, or their pupils, are not interested in ties to business, and a similar proportion (25%) say not enough of their employees are interested in working with schools and colleges. Taking charge of young people on work experience, the responsibilities of governors and the demands of mentoring or giving career presentations are certainly not to be treated lightly, but employers need to get the message across that they are an important part of business activity and an integral element of career development for employees. Other problems include the fit of work experience or other involvement with the school timetable (24%) and the perception that involvement will be unduly onerous (21%).
Exhibit 30 Barriers to building links with schools/colleges (%)

- Too little guidance/support on how to make work experience worthwhile for young people: 24%
- Local schools/colleges or pupils/students not interested: 27%
- Not enough employee interest in working with schools/colleges: 24%
- Difficulty fitting with school timetable: 22%
- Schools/colleges interested but unsure how employers can help: 21%
- Too difficult/health and safety requirements/too onerous: 19%
- Other: 11%
- Not sure how to make contact with schools/colleges: 7%
- Difficulty engaging with the academies programme: 3%

Businesses now have links with schools/colleges

85%
Smoothing the path from school into work

To achieve international competitiveness and sustainable growth, the UK needs to make the most of talent at all levels. This starts with helping our young people make more effective transitions to the labour market – the process of school-to-work transition is currently far too haphazard. The quality of careers advice is a key area for improvement and businesses’ engagement will be essential to achieving this. For those young people in need of extra support, the government’s planned new traineeship offer has the potential to help secure positive employment outcomes for young people. There is an appetite among businesses to be involved in these programmes.

Key findings
• The great majority of employers believe the quality of careers advice for young people is not good enough (by a balance of -67%)
• There is an appetite among employers to play a greater role in delivering careers advice – two thirds (61%) are willing to do more
• Among those firms considering stepping up their engagement in delivering careers advice, half of firms (50%) intend to do so by engaging with local schools and colleges
• There is strong support for programmes along the lines of the government’s planned traineeship model to equip young people with the skills needed for employment. Almost all employers (99%) see these as important
• And two thirds of businesses (67%) are willing to be involved
• Nearly a third of young people (31%) starting their working lives are not confident they have the appropriate skills, with work experience felt to be the leading weakness (71%).

Young people need more help preparing for work...
We need to do much more to help young people prepare for working life. That is both the view of businesses (Chapter 4) and of young people themselves (Exhibit 39, page 35). This year for the first time we extended our research to ask workplace learners less than two years out of full-time education about their skills and experience. The results reinforce the case for a rethink.

Nowhere is the need for improvement more important than in the transition from school to work. In the past in a simpler, slower-changing economy, the majority of people muddled their way through to finding work. If in future we are to make the most of people’s talents and ambitions, we need a radically different approach.

...and improving careers advice is key
Effective careers inspiration, advice and guidance is at the heart of helping young people navigate the difficult transition between education and work. Provision currently is not up to the mark – only one in 20 businesses (5%) across the UK feels careers advice is good enough, while nearly three quarters (72%) think that advice needs to improve (Exhibit 31).
This year’s survey shows no improvement by comparison to 2012, with 72% reporting then that advice was not good enough. The government has made some changes in this area, with the new duty on schools to provide advice and the opening of the National Careers Service, which focuses on older people. But real change will only come with a comprehensive new approach. Careers advice must move from being about information to being about helping people to navigate information in a way that leaves them inspired and sets them on a practical path to achieve their goals. This is particularly important for young people and should be the aim of a fully operational National Careers Service.

There are concerns among businesses about the quality of careers advice in all parts of the UK (Exhibit 32). The scale of dissatisfaction ranges from almost two thirds of firms in England (a negative balance of -61%) to over eight in ten firms in Wales (a negative balance of -83%).

### Exhibit 31 Employer views on the quality of careers advice for young people (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Good enough</th>
<th>Not good enough</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>72</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>2012</td>
<td>72</td>
<td>22</td>
<td>24</td>
</tr>
</tbody>
</table>

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### Exhibit 32 Employer views on the quality of careers advice for young people (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>Good enough</th>
<th>Not good enough</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>72</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>Scotland</td>
<td>78</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Wales</td>
<td>85</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>80</td>
<td>17</td>
<td>13</td>
</tr>
</tbody>
</table>

Businesses stand ready to play their part

Business involvement is the key to ensuring that advice and information is inspiring, relevant, and – importantly – grounded in the labour market. Our results show that businesses of all sizes are ready to step up and help with this improvement. Many employers are already actively involved (see Chapter 5) in supporting the delivery of careers advice in schools and colleges, but over half (61%) would be willing to play a greater role (Exhibit 33).

When we asked businesses about plans for action to step up their engagement, half of firms (50%) say they are looking to work with individual schools and colleges (Exhibit 34). Around a quarter (23%) intend to increase their involvement in national programmes, for example the programmes run by Business in the Community or STEMNET, the BIS-backed campaign aiming to help young people understand the excitement and importance of STEM. Around one in eight (13%) are looking to engage with the relevant national careers service.

### Exhibit 33 Employers willing to play a greater role in delivering careers advice (%)

<table>
<thead>
<tr>
<th>Group</th>
<th>Good enough</th>
<th>Not good enough</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents</td>
<td>61</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>1-49 employees</td>
<td>61</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>50-199 employees</td>
<td>62</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>200-499 employees</td>
<td>65</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>500-4,999 employees</td>
<td>63</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>5,000+ employees</td>
<td>65</td>
<td>22</td>
<td>13</td>
</tr>
</tbody>
</table>

### Exhibit 34 Involvement in supporting improved careers advice (%)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with individual schools/colleges</td>
<td>50</td>
</tr>
<tr>
<td>No specific plans at present</td>
<td>28</td>
</tr>
<tr>
<td>Working through national programmes</td>
<td>23</td>
</tr>
<tr>
<td>Information for existing careers resources</td>
<td>11</td>
</tr>
<tr>
<td>Engaging with the national careers service</td>
<td>13</td>
</tr>
</tbody>
</table>
There is appetite among businesses to help young people who need more support

The CBI has long called for initiatives to smooth the path from school to apprenticeships or employment and government proposals for a new traineeship model are welcome (Exhibit 35).\(^43\)

Our survey results show the importance and potential value attached to these programmes: almost every employer surveyed (99%) believes programmes to equip young people with the skills needed for work are important (Exhibit 36).

When asked whether the right mix of skills is being proposed as part of traineeships, more than nine in ten (92%) businesses agree with the proposed content (Exhibit 37). In order to fulfil their intended aim of ensuring young people progress into employment, programmes will need to have sufficient scope for flexibility to meet the varied needs of learners and the requirements of employers across a multitude of sectors.

Business involvement in the design and delivery of traineeships is essential to ensure relevant training and securing job outcomes.

Exhibit 35 The traineeship model
The government is developing a new traineeship model in England to equip young people (aged 16-24) with the skills and experience they need to secure an apprenticeship or other work. With the first programmes starting in September 2013, traineeships will target young people aged 16-24 who are work-focused but lack the skills to secure a job or an apprenticeship.

A traineeship would include intensive work-preparation training, work placements and basic English and maths. Lasting at least six weeks, the duration and any additional content would remain flexible according to the support needed by the learner. Securing business involvement in the design and delivery of programmes will be essential to their success in delivering relevant training and securing job outcomes.

Exhibit 36 Importance of programmes to equip young people with the skills for work (%)

Exhibit 37 Mix of skills being proposed (%)

Exhibit 38 Readiness to be involved in the traineeship programme (%)
businesses with 5,000 or more employees. Of course, converting this high level of readiness to be involved into practical involvement will require a business case and clear purposes for traineeships, underpinned by incentives and accountabilities linked to employment outcomes.

A third of new starters are not confident of their skills for working life...

When we asked respondents whether they had the appropriate work skills when they started their first full-time role, the results show that almost a third of new starters (31%) feel they did not have the skills they needed to quickly become effective in the workplace (Exhibit 40).

...with lack of relevant work experience the key weakness

When we asked new starters to identify skills that were missing, over two thirds (71%) cite a lack of relevant work experience (Exhibit 41). Improvement in this area is essential given that work experience plays a key part in developing workplace skills and competencies.

New starters also indicate shortfalls in a number of other areas. Nearly half feel they did not have an adequate understanding of the world of work (44%) and a quarter were aware of shortcomings in communication skills (25%) and self-management skills (22%).

Inadequate focus on work-linked skills

Two fifths (40%) of new starters say not enough time and attention was given to acquiring work-related skills while they were in education (Exhibit 42). These results highlight the urgent need to
address the root of underperformance in our schools system and the importance of a consensus on the wider outcomes for adult life we want our school systems to achieve.

Getting learning right first time will benefit employers as well as learners
Employers accept it is their responsibility to train new starters to become competent in a new job role. Over half of respondents (52%) report that they have received technical training in their first 18 months in the job (Exhibit 43).

But the UK can ill afford for businesses to be picking up the costs for shortfalls in the education system. Results from the learner survey show employers are providing a wide range of training on the basic competencies needed for working life. For example, half of new starters state they have received training on communication skills (51%), business and commercial awareness (50%), IT skills (50%) and team working (68%). Over a third report they have received training in self-management (37%) and problem solving (36%).
Investing in skills for future growth

British businesses need to have the right mix of skills among their employees if the UK is to win a larger share of global markets as part of rebalancing the economy. The drive to develop more high-value, export-oriented products and services will require more and higher levels of skills across the workforce. The trend for an increasing proportion of jobs to need higher levels of education and skills will intensify, leaving those with weak skills competing for the dwindling proportion of low-skilled roles.

Key findings

• Most employers consider skill levels among their employees to be satisfactory for their current functions, with more than two thirds (72%) rating their high-skilled employees as good

• But more than half of employers are aware of weaknesses in the core skills of at least some of their employees in literacy (55%) and numeracy (51%) and close to two thirds in IT skills (62%)

• To tackle the problem, nearly half of employers (48%) say they have organised training in at least one basic skill area in the past year for adult employees and a third (35%) have organised remedial training for at least some young people joining them from school or college

• Over the next three to five years, far more businesses expect to increase the number of jobs requiring leadership and management skills and higher skills than expect to reduce them (positive balances of +63% and +59% respectively)

• More employers expect to decrease the number of low-skilled employees in the next few years than to increase the number (a negative balance of -4%), continuing the pattern of recent years

• Most employers are confident there will be enough people available to fill their low-skilled vacancies (a positive balance of +65%), but employers are evenly split over whether they will be able to meet their needs for high-skilled employees

• A positive balance of +70% of firms intend to maintain or increase their investment in employee training and development during the coming year

• Employers will also be seeking to target training more effectively (70%) and to deliver it more cost-effectively.

Most businesses see their employees’ skill levels as adequate for the present...

Employers are broadly satisfied with current levels of skill among employees in their organisations (Exhibit 44). More than nine out of ten businesses rate the skills levels of their current employees as satisfactory or good in low-skilled roles (96%), intermediate-skilled jobs (98%) and high-skilled posts (99%) – results that are even higher than last year. But the bar is constantly being raised by international competition, so no employer can be complacent about the skills of its employees.
As competitive pressures intensify and product mixes become more sophisticated, it seems that rising proportions of employers are becoming aware of the shortfalls in core skills. While in 2008 and 2009, around two in five businesses reported weaknesses among some employees in literacy/use of English and numeracy, by this year the proportions had climbed to more than half (55% for literacy and 51% for numeracy). When it comes to IT skills, close to two thirds (62%) of firms report they are aware of problems among current employees to at least some extent, up from 56% in 2008. As the levels of skills needed at work continue to rise in the future, our education must go further and faster to ensure our young people don’t fall behind.

Skills gaps are unevenly spread across sectors

Employer concerns over numeracy and literacy inevitably vary from business to business and sector to sector (Exhibit 46), but there is broad agreement about how shortcomings in basic skills affect employees’ ability to perform everyday tasks. Such shortcomings can hinder employees’ ability to draw out information effectively from basic texts, compose written communications, or work through basic arithmetic and percentages – such as calculating change, working out a discounted price or estimating materials needed. Shortcomings in IT skills affect more and more jobs as the use of technology spreads to new activities.

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... but employers identify shortfalls in core skills

While employers consider their workforces to have sufficient levels of skills for their current activities, they are also aware of worrying weaknesses. Most businesses report being aware of IT, literacy/use of English and numeracy problems to at least some extent in their current workforce (Exhibit 45).

Exhibit 44 Ratings of employee skill levels (%)
Awareness of skills gaps is particularly widespread among construction firms, where nearly three quarters (74%) report concerns over IT skills and two thirds over literacy/use of English (68%) and numeracy (65%). Skills gaps are also seen as widespread in manufacturing – where the demands made on employees by new technologies and new processes are rising at a particularly rapid rate – and the public sector.

Many employers are putting resources into remedial training

To address skills shortfalls, employers are having to recognise they have a responsibility to invest and are diverting funding and resource from other training activities or investment into remedial training (Exhibit 47).

In the past year, nearly half of employers (48%) say they have organised training in at least one basic skill area for adult employees. IT skills have been the top area for improvement, with 39% of businesses reporting that they have provided remedial training for at least some adult employees in the past year. There was less widespread activity on literacy/use of English (16%) and numeracy (13%). This figure remains more or less unchanged since we first asked this question in 2009, when half of employers (52%) reported providing basic literacy, numeracy or IT training for staff.44

A third (35%) of employers report they have organised remedial training for at least some young people joining them from school or college, most commonly in literacy (15%). For graduates, a quarter (24%) of employers report providing remedial training in at least one area for some recruits in the past 12 months. The most common area for assistance was IT skills (by 8% of businesses).

Business is clear that it is always far better to prevent an injury than to develop a better sticking plaster. There is an urgent need to address the root of underperformance in our schools system. As emphasised in the CBI First steps report, we need to begin the debate on education reform from the outcomes we want our schools system to achieve. While employers accept it is their responsibility to train people for specific roles, the current economic situation means the UK can ill afford for businesses to pick up the costs for shortfalls in the education system. It’s clear that getting this right first time will benefit employers and learners as well as the public purse.

Exhibit 47 Employers providing remedial training in past year (%)

<table>
<thead>
<tr>
<th></th>
<th>School/college leavers</th>
<th>Graduates</th>
<th>Adult employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy/use of English</td>
<td>15</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>Numeracy</td>
<td>14</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>IT skills</td>
<td>13</td>
<td>23</td>
<td>20</td>
</tr>
</tbody>
</table>

Exhibit 48 Employer demand for different skills levels over next 3-5 years (%)*

* Firms reporting increased demand minus those reporting decreased demand.
There will be growing demand for increased levels of skills in the future...

The majority of job creation between now and 2020 will be for high skilled posts. Over the years ahead, employer demand for people to fill more highly skilled occupations will grow steadily.

Our survey asked about the expected skill needs of organisations in the next few years. The results reflect the strength of the drive towards a higher-skill economy and the resulting changing future shape of skill needs (Exhibit 48).

Over the next three to five years, many more employers expect to need more people with leadership and management skills than expect to need fewer (69% expect to need more, 6% to need fewer and 25% no change, producing a positive balance of +63%). The balance of businesses expecting to require more people with leadership and management skills has been above +60% every year since 2010. The positive balance of firms expecting to need more employees with other higher skills has been only a little lower over the same period (at +59% in 2013).

Survey respondents also expect to need more people with intermediate skills in the next three to five years, as the economic recovery gathers momentum. But the balance of employers anticipating adding jobs over those cutting intermediate roles (at +30%) is not so pronounced. This reflects the fact that changes in technology and advances in productivity have more impact on employee numbers in the intermediate group than among those with higher skills.

Only among roles in the low skills category do employers expect to be cutting numbers in the coming years. While more than half (55%) of employers expect no change in their number of low-skill jobs, among other employers more (24%) expect to reduce the number of low-skilled posts than expect to increase them (20%), producing a negative balance of -4%. There has been a negative balance every year since 2010, showing the increasing vulnerability to unemployment of those with the lowest levels of skills. Moreover, jobs we view as low skilled now, and which will be at the low skill end in future, will require higher absolute level of skills in future.

...and demand will be strongest in high-growth sectors

Employer demand for more people with higher-level skills in the next three to five years is expected to be particularly strong in the sectors that should be leading the return to economic growth, namely construction (a positive balance of +68%), manufacturing (+71%) and engineering, hi-tech/IT and science (+86%) (Exhibit 49). Successful rebalancing of the economy will depend on the capacity not only to meet these skill needs, but to steer young people towards them.

Employers are not confident about meeting their need for more skilled employees

It is worrying that employers are far from universally confident they will be able to attract and retain the right mix of employees. Unsurprisingly, four in five employers (80%) are confident there will be enough people available to them to fill their low-skilled jobs in future (Exhibit 50, page 42), with only 15% not confident, giving a positive confidence balance of +65%.

Businesses’ confidence about being able to fill all their jobs requiring intermediate levels of skill is somewhat lower. While two in three employers (61%) are confident there will be sufficient people available with the right skills, close to a third (31%) are not confident, giving a positive balance of +30%.

---

63%

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

---

Exhibit 49 Increased employer demand for higher skills over next 3-5 years, by sector (%)*
But when it comes to filling high-skilled jobs in the future, the proportion of businesses (46%) not confident of finding sufficient recruits matches those (46%) who believe there will be enough people available to them (producing a 0% confidence balance). Levels of confidence about accessing sufficient high-skill employees in future vary across the UK (Exhibit 51). Businesses are most confident in Northern Ireland (with a positive balance of +29%) and least confident in Wales (-14%).

**Exhibit 50** Employer confidence in accessing employees in the future (%)

**Exhibit 51** Employer confidence in accessing high-skilled employees in the future by country (%)*

* Net balance of firms reporting ‘confident’ minus those reporting ‘not confident’

**Exhibit 52** Employer confidence in accessing high-skilled employees in the future by sector (%)*

* Net balance of firms reporting ‘confident’ minus those reporting ‘not confident’

Concerns about filling future high-skilled openings differ greatly between sectors (Exhibit 52). Among professional services firms, for example, a positive balance of +33% of employers are confident they will be able to fill all their high-skilled jobs in the next few years.

Businesses in other sectors see much tougher conditions ahead. Among engineering, hi-tech/IT and science firms, a large negative balance of -47% is not confident there will be sufficient skilled people available to fill high-skilled jobs, and the results for manufacturing also show many employers not confident of being able to recruit sufficient highly skilled staff in future (a -24% balance). Ensuring continued success in the sectors where the UK has a competitive advantage will be at the heart of a successful industrial strategy for the UK. It’s a real concern that sectors which are a core element of the UK’s growth strategy anticipate problems accessing the skilled staff they need in the future.
Meeting future needs depends on investing in skills

Given this context, even in the current economic climate businesses recognise it’s more important than ever to maintain or increase their levels of investment in training (Exhibit 53). We asked respondents what impact the economic climate is having on their plans to invest in training and development of staff over the next 12 months. The results show two thirds (64%) of firms plan to maintain their current level of spend, while a fifth (21%) intend to increase training and development investment. Only 15% plan to reduce training investment.

The determination to maintain or increase investment in training and development applies to employers right across the UK (Exhibit 54). Positive balances of those planning to maintain or increase investment over those planning reductions range from +70% in England to +86% in Northern Ireland.

Sectoral variations

The results show major variations between sectors over training and development intentions in the coming year (Exhibit 55, page 44). The positive balance of firms planning increased investment over those planning reductions is particularly strong across services such as retail, hospitality, transport and distribution (+34%) and engineering, hi-tech/IT and science (+20%). Last year manufacturing respondents reported strong investment plans (a positive balance of +17% in 2012), but in the face of continued tough trading conditions, this year’s results show a small negative balance of -2% on training investment intentions.

The most widespread reductions in training investment are planned once again in the public sector, with a balance of -17% of respondents there expecting to cut back on their spending.

85%

Employers in England planning to increase or maintain levels of investment in training
Gaining more bang per buck from training spend
Measuring levels of investment in training and development in cash terms is one side of the equation. The other is the effectiveness of that training in equipping employees with relevant skills to add value.

In view of current economic and commercial pressures, it is no surprise that more than two thirds (70%) of employers report that in the coming year they intend to target training more effectively (Exhibit 56). Almost the same proportion of respondents (69%) intends to seek more cost-effective routes for delivering training, and over half (59%) plan to increase the amount of training provided on-the-job or delivered internally.

Accreditation is not a test of the business value of training
Employers recognise the benefit to staff of having recognised, transferable qualifications, but their priority has to be training that develops key competencies needed within the business. Employers choose accredited qualifications only if the programmes deliver the skills they need.

Overall, just under a third (30%) of training for employees leads to recognised qualifications (Exhibit 57). There is little variation by organisation size, suggesting the relatively low take-up of accredited qualifications is not strongly related to costs. It seems more likely employers too often find the content of a qualification is not relevant or are deterred by the verification and assessment procedures associated with many accredited programmes. Proposals to put businesses more in the driving seat of our skills system will help to address this.
The UK faces significant skills challenges – shifting resources towards more productive and profitable activities, addressing skills gaps in growing sectors and an ageing workforce. The urgency of these issues means the policy debate is becoming increasingly focused on aligning skills provision with the needs of growing businesses – building a demand-led skills system. Although training is becoming more relevant, we need to go further and faster to meet the economic challenge we face. Business is clear about its priorities for making this happen – relevant training, promotion of the employer ownership agenda and ensuring public funding on skills is more closely aligned with industry needs, and finding sustainable routes to higher level skills that align with job creation.

Key findings

- More than nine out of ten employers (93%) back the view that ultimately, employers should have greater ownership of the skills agenda, but two thirds of SMEs (66%) believe different approaches are needed to support smaller employers.
- The top priority in this new approach is qualification design and outcomes being based around employers’ needs and industry standards (80%).
- Businesses are also keen to see steps to raise awareness of what employer ownership of the skills agenda means and how it will work in practice (62%).
- Most businesses use external training providers to at least some extent, with 41% of training on average delivered by external bodies.
- On almost every measure, employers are becoming more satisfied with the training delivered by external providers. Private providers lead on every satisfaction measure except cost, but there have been big improvements in the relevance of FE college courses (with satisfaction among businesses up from 53% in 2012 to 61% in 2013).

Ultimately employers must take ownership of the skills agenda...

Ensuring the business-relevance of training depends on employers taking ownership of the agenda (Exhibit 58). There is widespread acceptance that the majority of public funding does not incentivise effective engagement between providers and employers. The most important thing is to ensure funding flows to the parts of skills provision most helpful to employers, but public resources committed to training and development have often been poorly targeted.

More than nine out of ten employers (93%) back the government’s view that employers should take greater ownership of the skills agenda so they have control over the design and delivery of workforce training (Exhibit 59). With such strong support, this should clearly be the foundation on which we build a better, more relevant training system.

But it’s an approach that needs to be fine-tuned to different sizes of employer. Two thirds (63%) of respondents believe different approaches are needed to support smaller employers. Among SMEs themselves, that view is backed by two thirds (66%). This emphasises the need to build local training clusters alongside redirecting funding to enable employers of all sizes to take a leadership role.
With relevance and responsiveness to industry the top priority

We asked respondents to identify the priorities for achieving employer ownership. The results show the importance of qualification design and outcomes being based around employers’ needs and industry standards emerged as the top item, highlighted as a priority by 80% of respondents (Exhibit 60). This is clearly at the heart of employer ownership.

Respondents also see a broader need to raise awareness of what employer ownership of the skills agenda means and how it will work in practice (62%). Only if there is widespread involvement by businesses will employer ownership become a meaningful reality. Nearly half (45%) of firms also see control of skills funding as an important issue, introducing greater scope for them to decide to target available funds on their priority areas. Control of funding also gives businesses greater power over their key priority of qualification design and relevance.

Businesses use a mix of in-house and external training expertise

Businesses draw on a range of sources to equip employees with the skills they need in their current jobs and to develop them for the future. While most training is delivered in-house – through a combination of on-the-job and off-the-job development – on average 41% of training is carried out by external providers (Exhibit 61, page 48). The smallest firms employing under 50 people tend to make less use of external trainers (delivering 35% of their training on average), but the survey results overall show relatively little variation between businesses of different sizes and little change since 2012. This degree of stability indicates the value external providers can bring in terms of teaching resources and expertise.

Exhibit 58 Employer ownership of skills taking shape

Over the past 18 months momentum has built behind the idea that businesses are best placed to understand their own skills and training needs, and that government needs to take steps to make the system more responsive to the needs of its ‘customers’.

The agenda took a big leap forward with the government’s endorsement of the UKCES employer ownership vision. As part of the growth review, the government announced it would be making £250m available to employers over two years to pilot the design and delivery of their own training solutions. The pilot exercise is jointly overseen by UKCES, BIS and DfE, and since the 2012 autumn statement, the fund available has risen to £340m.

The response from business has been positive. CBI members are among those who have successfully bid to run employer-led training strategies that apply across sectors, local areas and supply chains.

Success for the pilots won’t mean successively bigger budgets but will prove the case for business leadership. To foster this, we need to do more to enable businesses to take control – leveraging employer involvement in the design of frameworks, continuing to streamline the system and providing more support for SMEs and supply chains. All this has to be underpinned by a shake-up of funding and incentives to ensure that public funding flows to the types of provision most helpful to employers – whether in certain sectors or at particular levels.

Exhibit 59 Views on employer ownership of skills agenda (%)

Yes – for all employers 30%

No – wrong approach 7%

Yes – but different support for small employers 63%
But our survey shows clear differences between sectors. Among firms in retail, hospitality, transport, distribution and other services for example – where a lot of training is likely to be practical and on-the-job – only 31% of training on average is delivered by outside providers. This contrasts with construction and the public sector, where half of training is delivered by external providers (56% and 50% respectively).

Providers are becoming more responsive to business needs

On almost every measure, employers are becoming more satisfied with the training delivered by external providers (Exhibit 62). The signs are that providers increasingly recognise the need to offer high quality and relevant training but also to conduct that training in ways that fit with the day-to-day running of the business.

Private providers remain by far the most common choice for employers using external training and development provision. More than four in five firms (86%) in our survey use them, often for short, unaccredited courses. But over a third (39%) of employers use further education colleges and more than a quarter (27%) work with universities.

Private providers achieve the highest employer satisfaction ratings on every measure except that of cost. On overall responsiveness to an organisation’s training requirements, for example, satisfaction with private providers has climbed to 77%, while only just over half of employers are satisfied with universities and FE colleges (54% and 51% respectively).

FE colleges have notably upped the relevance of course content, for example, with 61% of employer expressing satisfaction this year compared with only just over half (53%) last year.

Continuing the drive towards greater responsiveness, higher standards, improved relevance and flexibility in delivery will be essential for all providers if the UK is to make further progress in strengthening its skills base. As earlier chapters have shown, there is much to be done at all levels, from remedial training in functional skills to developing more people with the leadership and management skills that will be in growing demand in the years ahead.
<table>
<thead>
<tr>
<th></th>
<th>Private provider</th>
<th>University</th>
<th>FE college</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall responsiveness to organisation’s training requirements</td>
<td>77</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>Quality of trainers/assessors</td>
<td>72</td>
<td>69</td>
<td>65</td>
</tr>
<tr>
<td>Relevance of course content to skills/training needs</td>
<td>78</td>
<td>71</td>
<td>68</td>
</tr>
<tr>
<td>Cost of the training</td>
<td>47</td>
<td>47</td>
<td>45</td>
</tr>
<tr>
<td>Training delivered in a location to suit organisation’s needs</td>
<td>81</td>
<td>71</td>
<td>73</td>
</tr>
<tr>
<td>Training delivered at a time to suit organisation’s needs</td>
<td>79</td>
<td>72</td>
<td>72</td>
</tr>
</tbody>
</table>
Apprenticeships are vital to raising skill levels in our economy and equipping people to pursue fulfilling, well-paid careers. That’s why growing numbers of employers have become committed to offering apprenticeship opportunities. But changes are needed to build a truly demand-led apprenticeship system under business leadership, delivering best value for money and helping boost further expansion. Despite reforms, employers are still feeling burdened by red tape and bureaucracy. Business is clear about the priorities for taking forward the recommendations from the Richard review – more relevant frameworks, a shake-up of funding and a simpler system.

Key findings

- The proportion of employers involved in apprenticeships has risen to more than two thirds (69%), and over half (55%) plan to extend their programmes further or to start taking on apprentices in the next few years.
- Business is clear about priorities for action to encourage them to become more involved in apprenticeship programmes: more relevant qualification programmes (41%), giving firms greater purchasing power by routing the apprenticeship grant directly to employers (39%) and reducing bureaucracy (32%).
- Government pledges to cut back on the bureaucracy around apprenticeships have yet to be felt in practice by employers, with more than nine in ten (93%) reporting no change as yet.
- SMEs remain an under-tapped market for apprenticeships: despite recent increases, only a quarter (23%) of SMEs take on apprentices compared to nine in ten (88%) in firms with over 5,000 employees.
- Despite recommendations in the Holt report last year aimed to make offering apprenticeships easier for smaller firms, more than nine in ten SMEs (94%) say they have not experienced improvement in the system.

The apprenticeship system has seen rapid growth and fresh thinking

The past 12 months have been a period of reflection on the UK apprenticeship system, with Doug Richard (Exhibit 63), Jason Holt and the BIS Select Committee conducting independent reviews of the rapidly expanding system, but we need to deliver more apprenticeships at higher skill levels.

Overwhelmingly, the view emerging from the reviews is that apprenticeships are vital to raising skill levels across our economy. They deliver essential business-focused training, equipping people with the skills and knowledge to carry out demanding roles, boosting productivity and adding value to their organisations. Apprenticeships support people into fulfilling, well-paid jobs, offering the opportunity to “learn while you earn” and opening the way to varied careers in the longer term. But the system needs to become more effectively demand-led to produce better value for businesses and the taxpayer.

The government is delivering on its commitment to increase apprenticeships places. There were over 520,000 apprenticeship starts in 2011/12, an increase of 14% on the previous academic year.

Exhibit 63 The Richard review of apprenticeships

Last year, entrepreneur Doug Richard was commissioned to lead an independent review of the apprenticeship system. The review took a comprehensive look at the system and its future direction. Although finding that “everyone likes apprenticeships”, Richard reported that the meaning of apprenticeships has changed and urgent action is needed to put employers back at the centre of the system. Key recommendations include calls for outcome-focused qualifications based on industry standards, robust final assessments and giving employers greater purchasing power by routing funding directly to employers.

The government has accepted Richard’s recommendations and is working with business and other stakeholders to introduce the first apprenticeships under the new regime from 2014/15.
and a rise of 210% since 2002/03. But still far too few of these were at the higher level, with higher apprenticeships making up less than 1% of starts in 2011/12, despite a 147% increase in higher starts since 2009/10. The numbers of over 25s starting an apprenticeship has also continued to climb, now making up 44% of total starts, compared to 40% in the previous year.

More businesses are committing to offering apprenticeships

This rising investment in apprenticeships is reflected in our survey results. Among respondents, more than two thirds of employers (69%) are currently offering at least some apprenticeship places (Exhibit 64). This represents a continuation of the growth trend seen in previous years, with the proportion of businesses involved in apprenticeships climbing from just under half of respondents (48%) in 2008 to a new high this year (Exhibit 65).

Prospects for further expansion of the programme remain strong. Over half (55%) of employers either intend to expand their current apprenticeship programmes or plan to start providing apprenticeship places in the next three years.

The extent of involvement in apprenticeships varies across the UK, ranging from nearly three quarters of respondents (74%) in Wales to only just over a third (36%) of businesses in Northern Ireland (Exhibit 66).

Maximising the potential requires business to take a leading role

Doug Richard rightly urges that apprenticeships should be about delivering high-quality training to achieve recognised standards of accomplishment, not only about high numbers of participants. There are already many excellent, long-standing apprenticeship schemes, but they are not universal. More needs to be done to encourage the spread of schemes across sectors and job roles that develop and accredit valued and valuable skills.

Business is clear about the priorities for action. Our survey asked employers about the three top measures that would encourage them to become more involved in apprenticeship programmes (Exhibit 67, page 52). The most important issues, cited by close to two fifths of respondents, are for qualification programmes that are more relevant to business needs (41%) and giving firms greater purchasing power by routing the apprenticeship grant directly to employers (39%). A third also wants to see reductions in bureaucracy (32%) – a clearer and simpler system is essential in enabling businesses to exercise greater leadership over the
apprenticeship system. This is not surprising given that more than nine in ten firms (93%) say they have not seen any change since measures to simplify the system were introduced over 18 months ago (Exhibit 68).

Other important areas in need of attention are greater flexibility for employers to be able to design bespoke apprenticeship frameworks (25%) and ensuring that more of the young people who apply for apprentice places are suitably qualified and motivated (23%).

Enabling SMEs in particular to take ownership remains a challenge...

We must make it easier for smaller firms, the high-growth businesses that will include the major employers of the future, to take on apprentices. It’s encouraging that our results indicate a growing number of smaller firms are taking on apprentices, rising from fewer than one in seven (14%) in 2011 to almost a quarter this year (23%). But it’s also clear that small and medium-sized enterprises remain relatively under-represented among providers of apprenticeships, with the proportion of employers involved rising steadily with company size. By comparison, nearly nine in ten organisations (88%) with 5,000 or more staff are providing apprenticeships in 2013 (Exhibit 69).

Exhibit 67 Action required to encourage employers to get more involved in apprenticeships (%)

<table>
<thead>
<tr>
<th>Action</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification programmes that are more relevant to business needs</td>
<td>33%</td>
</tr>
<tr>
<td>The apprenticeship grant from government should be issued directly to employers</td>
<td>31%</td>
</tr>
<tr>
<td>Reductions in bureaucracy</td>
<td>29%</td>
</tr>
<tr>
<td>Greater flexibility for employers to design frameworks</td>
<td>28%</td>
</tr>
<tr>
<td>More suitable qualified and motivated young people applying for apprenticeships</td>
<td>22%</td>
</tr>
<tr>
<td>Government support for firms to train more apprentices than they need</td>
<td>21%</td>
</tr>
<tr>
<td>More higher apprenticeship frameworks</td>
<td>19%</td>
</tr>
<tr>
<td>A clear definition of what an apprenticeship means</td>
<td>18%</td>
</tr>
<tr>
<td>Improving the quality of training provided by external providers</td>
<td>16%</td>
</tr>
<tr>
<td>Less frequent changes to the skills system</td>
<td>15%</td>
</tr>
<tr>
<td>Better information on apprenticeships and how to become involved</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
</tr>
<tr>
<td>Support for ATA/GTAs</td>
<td>6%</td>
</tr>
</tbody>
</table>

Exhibit 68 Employers experiencing reduction in apprenticeship bureaucracy (%)

|change experienced|93%|}

Exhibit 69 Employer involvement in apprenticeship programmes, by size 2011-13 (%)
It's not so much cost but complexity that is so frequently off-putting for smaller firms. Almost a year ago, Jason Holt’s review set out a clear pathway to boosting apprenticeship uptake for SMEs. But when we asked SME employers whether they had experienced any improvement in the system as a result, more than nine in ten (94%) had experienced no change (Exhibit 70). It’s clear that the government must forge ahead with implementation of the recommendations in the Holt report to simplify the system for SMEs, taking care to integrate those recommendations with changes made in response to the Richard review.

Exhibit 70 SME employers experiencing improvement in apprenticeship system (%)

...but brokerage support can help
Brokerage organisations, such as Apprenticeship Training Agencies (ATAs) and Group Training Associations (GTAs), can play an important role in shielding SMEs from the bureaucracy involved in running an apprenticeship. Responding to our survey, nine in ten (92%) of those currently using GTAs/ATAs responded to say they would use them again (Exhibit 71).

It is of some concern, though, that more than two fifths (42%) of respondents are not aware of the role these organisations play. Smaller businesses need a much clearer offer when it comes to brokerage options. Larger firms also have a role to play in supporting their supply chains. One way to do this is through the employer ownership pilots (see Chapter 8) which have supported CBI members and others in establishing business-led, local training strategies that involve SMEs and supply chains for the benefit of the wider economy.

Exhibit 71 Employers using a group training association (GTA) or apprenticeship training agency (ATA) (%)
The majority of future job creation will be for higher skilled posts – nearly one in three jobs (30%) now requires degree-level skills and this is likely to rise. This is combining with expectations about the impact of the new tuition fees regime to mean that some businesses are looking to expand their recruitment of school leavers to provide alternative entry routes. For the majority of employers, the attitudes and aptitudes of graduates for work are more important than the specific degree studied.

Key findings
- Nearly one in three jobs (30%) require degree level skills and the proportion is likely to rise in the years ahead
- More employers have increased their graduate recruitment in the past year than have cut back, giving a positive balance of +8% taking on more graduate recruits
- Employers continue to expect the new university tuition fees regime to impact the way they hire, with a third (30%) expecting to receive fewer graduate applications in the future and considering alternative entry routes for school leavers (28%)
- Having the right attitudes and aptitudes is by far the most important consideration when businesses are recruiting graduates – nearly nine in ten employers (88%) value these above other factors such as degree subject (67%) and degree class (48%)
- While traditional graduate recruitment channels such as advertisements (used by 78%) and recruitment fairs (37%) are widely used, a third (33%) of businesses now use sandwich placements or internships to help them identify graduate talent
- Two in five employers (42%) prefer graduates qualified in STEM subjects, which are viewed as rigorous and effective in developing analytical skills
- While many graduates leave university with the skills needed for success in work and life, businesses still find too many do not: 20% report shortcoming in graduate applicants’ literacy/use of English, 27% in problem-solving and 32% in self-management
- Businesses want to see higher education institutions doing more to help students develop work-relevant skills (49%) and improving the business relevance of undergraduate courses (49%).

Graduate-level skills are in growing demand...
Employees with graduate-level skills bring organisations the advanced-level knowledge, skills and subject-specific expertise needed to drive their future productivity and growth. Across the economy as a whole, nearly one job in three (30%) now requires degree-level skills (Exhibit 72). This proportion will increase in the years ahead, with employers increasing their demand for people with higher-level skills and leadership and management skills (Chapter 7).
In professional services, two thirds (65%) of jobs now require degree-level skills. Other sectors which draw heavily on graduates include education and training provision (50%) and engineering, hi-tech/IT and science (30%). Overall, around a third (38%) of jobs in the public sector require degree-level skills, compared with around a quarter (25%) across the private sector.

As we saw in Chapter 3, a third (30%) of employers finding difficulty in recruiting STEM staff cite shortage of graduate applicants as a problem. While some industries have a lower than average proportion of jobs requiring degree-level skills – such as manufacturing (15%) – it is often these sectors that need graduates with specific subject expertise that can be hard to secure.

...with firms increasing their graduate recruitment in the past year

The great majority of businesses have maintained or increased their levels of graduate recruitment during the past year (Exhibit 73). While less than one in seven businesses (15%) have cut back on graduate recruitment, nearly one on four (23%) report increasing their graduate intake, giving a positive balance of +8%. Among SMEs the positive balance is greater still at +14% – and all too often graduates seeking their first opening overlook the opportunities in smaller firms.

Firms expect the new fees regime to impact on hiring leading to new forms of courses

Although initial UCAS figures suggest that application numbers are stabilising, the majority of businesses (53%) still expect the new fees regime to change the shape of the graduate labour market (Exhibit 74).

A third (32%) of employers expect to receive fewer graduate applications in the future, as the new funding arrangements may deter some potential students from taking up places in higher education. With a view to offsetting this risk and maintaining their talent pipeline, a third (28%) of employers expect to expand their recruitment of school leavers and/or apprentices with A-levels to provide an alternative to the graduate recruitment route. This approach is most commonly being considered by the largest employers, with 43% of those employing more than 5,000 people expecting to expand their recruitment of trainees educated to...
A-level. The CBI is preparing a report exploring these new routes, focusing on how we can establish sustainable paths to higher skills for a larger number of people, building a market in ‘learn while you earn’ style provision to cater for interest on both supply side and the demand side.

Last year just one in twelve businesses (8%) envisaged raising salaries to help graduate recruits pay off their student loans. This year the proportion has dropped still further (to just 6%).

Workplace readiness is essential...
When recruiting graduates, businesses are looking first and foremost for the attitudes and aptitudes that will enable them to be effective in the workplace (Exhibit 75). Repeating the pattern of previous years, this factor was rated number one by graduate recruiters, with nearly nine in ten employers (88%) citing it as among their three most important considerations. There is tough competition for prime graduate jobs, and those aiming to move smoothly into the world of work need to take seriously the development of relevant skills during their time in higher education, as outlined in the CBI/NUS guide.50

Employers are often also on the lookout for graduates in certain subject disciplines (67%). But equally important is having relevant work experience – such as an industrial placement or internship. Work experience can play an invaluable part in strengthening the generic employability skills of graduates, as well as giving them the chance to learn about the activities of a specific sector at first hand.

...and links to employers can ease the path into work
Traditional channels such as job advertisements (78%) and graduate recruitment fairs (37%) are widely used by businesses to attract graduate recruits (Exhibit 76). But there are other more direct channels in widespread use. More than half (52%) of respondent firms have links to particular university careers services and a third (33%) use sandwich placements or internships to help them identify graduate talent.

STEM subjects can give graduates an edge
While last year’s survey showed four in five (80%) graduate jobs do not require a specific degree discipline, it is clear that studying STEM subjects gives students a competitive advantage in the labour market (Exhibit 77).51 When asked whether they prefer any particular degree subject when recruiting graduates, two in five employers (42%) say they prefer those with STEM degrees. The mathematical abilities and analytical skills associated with STEM study are in high demand across the economy and the degree...
courses are often seen as more testing than some other subjects. Business (at 14%) is the only other area of study attracting employer preference above a marginal level.

The majority of graduates do have the skills that businesses need

Employers are satisfied with the work-relevant skills of most graduate applicants in most respects (Exhibit 78). But there is certainly no room for complacency. Employers are reporting shortfalls among some graduates – some in core areas of schooling while others are in those skill areas where higher education should help students develop.

While almost all employers (97%) are at least satisfied with graduates’ IT skills, one in seven employers (15%) reports shortcomings in numeracy skills and a higher proportion (20%) is not satisfied with standards of literacy/use of English among graduate candidates and recruits.

Over a quarter (27%) of employers are not satisfied with graduates’ problem-solving skills – creative thinking to develop appropriate solutions should be a prime outcome of higher education. Nearly a fifth also has concerns about the teamwork skills of graduates (19%) and their analytical skills (18%). Again these should be important outcomes from most higher education programmes.

The value of relevant work experience has already been highlighted (Exhibit 75, page 56). Two in five businesses (41%) report this as an area of weakness. Remedying the shortfalls in work experience and business awareness (47%) is best addressed through a partnership approach, involving students, universities and businesses.

Embedding work relevant skills is a priority for universities

When asked to identify the priority areas for action in higher education (Exhibit 79), an emphasis on development of students’ work-relevant skills is one of the two leading areas (identified by 49% of respondents). This priority is perhaps not surprising in view of the concerns about work-linked skills reported by some businesses above.

Employers attach equal weight to improving the business relevance of undergraduate courses (49%). Businesses of course have a key role in stepping up to work with universities to improve the relevance of course content. A third of employers (34%) also want to see moves to greater flexibility in course design and delivery, leading to courses that fit better with the needs of businesses and learners. A readiness to take a flexible approach would allow universities to take a much greater share of the market for training provision, particularly in light of growing demand for higher skills provision for existing employees (a priority for 27% of respondents).
### Exhibit 79 Business priorities for higher education (%)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of work-relevant skills</td>
<td>59%</td>
</tr>
<tr>
<td>Business relevance of undergraduate courses</td>
<td>58%</td>
</tr>
<tr>
<td>Greater flexibility in course design/delivery to match business/learner needs</td>
<td>22%</td>
</tr>
<tr>
<td>Number of STEM graduates</td>
<td>74%</td>
</tr>
<tr>
<td>Offering programmes to upskill existing employees</td>
<td>27%</td>
</tr>
<tr>
<td>Quality of careers advice</td>
<td>26%</td>
</tr>
<tr>
<td>Quality of STEM graduates</td>
<td>16%</td>
</tr>
<tr>
<td>University-business collaboration on sponsored degree courses</td>
<td>7%</td>
</tr>
<tr>
<td>University-business collaboration on research and innovation</td>
<td>6%</td>
</tr>
<tr>
<td>Quality of graduates in other subjects</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
</tbody>
</table>

**28%**

Employers expecting to expand recruitment of school leavers into learn-while-you-earn as a response to rising fees.
Businesses and universities: forging the links

There are many examples of effective partnerships between businesses and universities that are critically important for both sides. Business wants to help higher education in developing people with the right knowledge and skills to meet their future needs and to benefit from the expertise and capacity for innovation institutions can offer. Much more can still be done to scale up the level and depth of collaboration and business is clear about priorities for action.

**Key findings**

- More than three quarters (77%) of employers have developed links with universities
- Partnership activities range from businesses providing sandwich-year and other placements (63%) to putting up ‘real-life’ projects and resources to help students understand the practical relevance of their courses (39%) and partnering with universities for research and innovation (39%)
- When selecting partner institutions, the most important factors for businesses are a university’s area of expertise/specialism (78%) and its location (71%)
- Nearly two thirds of businesses (62%) now offer internship opportunities of some type for graduates, including over half (52%) of the smallest firms employing under 50 people.

**Business-HE links are widespread...**

The UK’s universities are one of our strongest assets, with a research record second only to the US, and contributing to the £15bn export success of our education service sector. A cross-cutting theme in developing a UK industrial strategy, the government is increasingly recognising the important economic role that universities have to play. It has commissioned Sir Andrew Witty, CEO of GlaxoSmithKline, to lead a review into the role universities play in boosting growth, locally and nationally.

Engagement between businesses and higher education institutions (HEIs) generate important benefits for both parties, as well as helping students. The benefits are increasingly widely recognised, with more than three quarters (77%) of respondents this year reporting links of some type with one or more universities (Exhibit 80), up from two thirds (63%) last year and considerably higher than half (53%) in 2008. Moreover, among those businesses with links to HEIs, more than half plan to expand them in the future.
...and take many different forms

Business-HEI engagement takes a variety of forms for employers (Exhibit 81). Graduate recruitment naturally heads the list, with employers extensively involved with university careers services, as Chapter 10 noted. Provision of sandwich-year and other placements also ranks high, together with offering internships for graduates (offered by 43% and 41% respectively of those employers with links of some type with an HEI).

Business involvement goes far beyond seeing universities purely as sources of future graduate talent. Firms are widely involved in providing ‘real-life’ projects and resources to help students understand the practical relevance of their courses (39%) and in partnering with universities for research and innovation (39%). Firms in the engineering, hi-tech/IT and science areas are particularly active in these forms of partnership, with nearly half having these types of links (67% providing ‘real-life’ projects and resources and 47% with ties for research and innovation). The technical knowledge and capacity for innovation within our HEIs are among the great strengths of the UK and businesses are increasingly keen to draw on them as part of their response to global competitive pressures.

Some employers are also involved in direct ways in shaping the content of degree courses by participating in course design (25%) and taking part in degree programme advisory boards (15%). In addition, a fifth of respondents (20%) report collaborating with HEIs on work-based learning programmes for members of their own staff. These types of involvement can help ensure that qualifications and course content are geared to meeting real business needs. The largest employers with more than 5,000 employees tend to be most active in all three areas (31% in course design, 19% in degree programme advisory boards and 27% in staff development programmes).

With higher tuition fees and the university system increasingly driven by student demand, many employers look to provide financial support for students studying selected subjects. Nearly a quarter of businesses (23%) offer some student sponsorship. Specialism and location are key factors in the choice of partner

With more than 160 HEIs in the UK, how do employers set about deciding which should be a potential partner? The expertise or specialism of a particular university heads the list of factors on which businesses base their choices (Exhibit 83, page 62). Nearly four out of five businesses (78%) that have developed links with HEIs target the leading experts in a particular field. This raises the importance of intelligent specialisation of HEIs to support the economy as an issue for the Witty review.
Location, however, also plays an important part for more than two thirds (71%) of firms. There are clear benefits in easy access and opportunities for face-to-face contact. 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 flexibility and responsiveness of institutions in meeting businesses’ requirements also feature prominently, with nearly half of respondents (48%) rating these among the most important considerations.

Internships boost employability skills
As Chapter 10 showed, placements and internships are important routes into work for students and graduates. They help in developing the appropriate attitudes and work-relevant skills that are so important to employers and they give younger people the chance to gain a taste of a particular career so they can better judge whether it is right for them.

### Exhibit 82 Nature of employer links with universities, 2010-2013 (%)

<table>
<thead>
<tr>
<th>Service</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate recruitment</td>
<td>52</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Provide sandwich years or work placements to university students</td>
<td>43</td>
<td>53</td>
<td>46</td>
<td>47</td>
</tr>
<tr>
<td>Offer internships to graduates</td>
<td>41</td>
<td>39</td>
<td>38</td>
<td>30</td>
</tr>
<tr>
<td>Provide ‘real-life’ projects and resources</td>
<td>39</td>
<td>37</td>
<td>36</td>
<td>34</td>
</tr>
<tr>
<td>Partner with universities for research and innovation</td>
<td>39</td>
<td>37</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Careers events</td>
<td>37</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Participate in course design</td>
<td>25</td>
<td>28</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Sponsor students</td>
<td>23</td>
<td>27</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Collaborate on work-based learning programme for existing staff</td>
<td>20</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>University provides off-side workforce training for our organisation</td>
<td>18</td>
<td>19</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>Participate in degree advisory boards</td>
<td>15</td>
<td>15</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>9</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>School leaver programmes</td>
<td>4</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

* Not asked in 2012, data not comparable before 2010

### Exhibit 83 Basis for links with universities (%)

<table>
<thead>
<tr>
<th>Basis for links with universities (%)</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of expertise/speciality</td>
<td>27</td>
<td>20</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Location</td>
<td>24</td>
<td>34</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>Flexibility and responsiveness to your organisation’s requirements</td>
<td>26</td>
<td>19</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Prestige or reputation</td>
<td>25</td>
<td>20</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Quality of teaching</td>
<td>22</td>
<td>19</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Direct approach from the university</td>
<td>20</td>
<td>18</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Quality of facilities</td>
<td>18</td>
<td>16</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Cost considerations</td>
<td>17</td>
<td>16</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Tendering exercise</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>
It is therefore encouraging that nearly two thirds (62%) of firms now offer internship opportunities, up from just under half (47%) in 2012 (Exhibit 84). While internship opportunities are most widespread among the largest employers (offered by 73% of those employing 500 to 4,999 people and 67% of those with 5,000 or more employees), just over half (52%) of firms with under 50 staff are also now providing internship placements. This enables more graduates to gain valuable experience of smaller, high-growth businesses.

Practice on paying interns varies according to the ability of the firm to pay and, in line with the law, whether the intern is doing work for the firm or simply work experience. This is the right approach, as the most important thing is maximising opportunities for young people to gain work experience.
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