

Profound employer engagement in education: What it is and options for scaling it up

A report for the Board of Trustees of the Edge Foundation by Dr Anthony Mann and Baljinder Virk, Education and Employers Taskforce

Trustees of the Edge Foundation are committed to ensuring that the charity is responsible for lasting change to British education. They aim to see all young people have access to high quality technical and practical education during their schooling within an educational system which has become more responsive to strategic skills demand.

Edge has observed the strength of employer engagement in University Technical Colleges (UTCs) and Studio Schools and wishes to explore ways of replicating this on a larger scale across both a potential new wave of non-specialist Career Colleges and more broadly across English secondary schools and colleges. Distinctive to the UTC mode of operation is that employers are involved across the breadth of the school experience, including curriculum design, the delivery of teaching and learning, careers support, professional development and governance. This is done in a spirit of genuine partnership with teaching staff.

Edge's trustees are consequently interested in how such profound engagements might be most efficiently and effectively extended to the broader English educational experience.

This report aims to provide a critical review of research and public policy literature concerned with the characteristics of engagement between employers and schools, focusing on school provision for the age group

11-18: it does not examine provision in Further Education Colleges or Apprenticeships.

Most of the literature reviewed for this report concerns employer engagement in activities which support pupil progression (eg careers information and preparation for work). These activities are more common than employer engagement in teaching and learning or institutional operation. They also tend to be 'superficial': episodic, non-iterative and limited to narrow aims and purposes. The review finds evidence that such activities can confer benefits. The impact of deeper forms of engagement is less well researched, but the early experience of UTCs and Studio Schools suggests that 'profound' engagement may have significant benefits in terms of student motivation, achievement and progression. There is also important evidence from Career Academies in the USA which points to improved labour market outcomes for participants.

The paper begins by exploring in detail what 'profound' engagement looks like, what it can be expected to provide to young people and their institutions, and barriers to scaling up comparable levels of engagement across other parts of the English education system. The paper includes descriptions of a number of current approaches to employer engagement and ends with a brief overview of options for achieving profound engagement in schools other than UTCs and Studio Schools.

Section 1: 'Profound' employer engagement in education

'Profound' employer engagement: University Technical Colleges

University Technical Colleges (UTCs) represent a new and distinctive institutional form of educational delivery aimed at young people aged 14 to 18. That said, their approaches to institutional governance and administration, teaching and learning, and support for young people's progression draw on elements of practice already established in the UK and overseas. Central to the UTC approach is a strong focus on work-related learning and employer engagement across school life.

The typical range of activities found in UTCs can be clustered across three broad but coherent areas of school life: teaching and learning, pupil progression and institutional operation (see the table, right: adapted from Sheffield UTC).

The pattern of employer engagement found in UTCs is –

- broad – stretching across a wide range of activities and involving both staff and pupils
- deep – engaging individual employers in multiple activities relevant to young people through their school careers
- embedded – an accepted part of the UTC culture, regularly encountered by students and staff alike.

In the context of English education, this can be described as 'profound' engagement. It stands in contrast to the relatively 'superficial' levels of employer engagement encountered in most English secondary schools.

Profound engagement is further identifiable through three distinguishing characteristics:

- high volume. Staff and pupils within a typical UTC would be expected to engage with employers on *many more occasions* than peers across wider secondary education.
- varied in character: Staff and pupils within a typical UTC would be expected to engage with employer across a

Teaching and learning	Employers are involved in supporting learning across all key stages and a wide range of subject areas, through: <ul style="list-style-type: none"> • Curriculum design and review • Project design and delivery • Work-related learning resources • Classroom presentations by employees • Business mentoring
Pupil progression	Employers are actively supporting provision across all key stages enabling effective career exploration, employability skill development and access to experience of value to post-school progression: <ul style="list-style-type: none"> • Work experience/Job shadowing/managed PT employment • Workplace visits • Careers activities • Enterprise activities
Institutional operation	Employers support school operation through active participation in: <ul style="list-style-type: none"> • Governance • Staff development

much wider range of activities than peers across wider secondary education.

- strategically integrated: Employer engagement within a UTC would be expected to sit firmly within coherent approaches to teaching and learning and pupil progression. It is part of the *culture* of the organisation.

Note: throughout this report, the word 'employer' is taken to include anyone who runs or works for a private sector enterprise, public sector organisation, charity or any other organisation that employs people.

Profound engagement can be seen as a *process*: through a structured arrangement, an individual employer or small number of employers provide pupils and staff with access to multiple contacts relevant to specific objectives. However, it is also an end in itself; it is itself an *outcome* of the school's culture.

The first UTC – the JCB Academy in Staffordshire – opened in 2010; the second, the Black Country UTC, opened a year later. So far, therefore, these are the only two to report examination results. Early results suggest that students achieve well in their chosen specialist subjects and are able to progress to further learning, Apprenticeships or work. There are indications, too, that at least some UTC students achieve better results in core subjects – particularly English and maths – than predicted by their previous schools.

In addition, the first report of a longitudinal study (Malpass and Limmer, 2013) suggests that UTC students welcome their strong and frequent links with employers:

Students felt that their experience of studying engineering was greatly enhanced by the involvement of industrial sponsors. Students valued the involvement of employers and were impressed by the authenticity of industrial engagement:

"What I like ... is that the school's involved with like loads of companies and it's not like pretend, it's real. Like at other schools, it's just like pretend you're going to do some work for a company but this is real like you're speaking to the manager from a company and it's real life, it's not pretend anymore."

'Superficial' employer engagement

Looked at from an institutional perspective, the historic engagement of English schools with employers in general can be seen as *superficial* – not uncommon, but low volume and largely focused on 'pupil progression' – that is, introducing pupils to the world of work. Only a minority of schools have routinely engaged employers in supporting teaching directly or through providing teaching materials or support to senior managers (Mann & Percy 2013; Edcoms 2007).

Over the last decade, almost all English secondary schools engaged employers to support work experience. Other common activities include workplace visits and enterprise competitions – activities which can be described as episodic, short duration and rarely integrated into curriculum delivery.

This is reflected in a 2011 YouGov survey of young adults aged 19 to 24 for the Education and Employers Taskforce, which showed, for example, that just 15% had engaged with employers on three or more occasions through such activities as work experience, workplace visits, career events, enterprise education or business mentoring whilst they were at school (Mann & Percy 2013).

By extension, teaching staff (including senior leaders) rarely encounter employers and do not see them as natural partners in either teaching and learning or institutional operation. Employers do not sit alongside teachers as they design the curriculum; they are not regularly involved in delivering curriculum projects; and they are not automatically included on governing bodies.

Compared with profound engagement, therefore, superficial engagement is typically:

- episodic
- non-iterative
- limited to narrow aims and purposes
- 'bolted on' rather than 'embedded': it is not part of the school's culture

Since the 2010 general election, schools have been experiencing a period of dynamic change. Department for Education requirements regarding careers provision and work-related learning have changed significantly: requirements at key stage 4 have reduced while and 16+ expectations (key stage 5) have increased. National funding enabling low cost access to employers has also changed radically. In such a period of flux, it is difficult to establish full data on current practice. However, considerable information is available on recent and historic practice in schools and it is possible to draw conclusions and inferences relevant to future practice.

Initial conclusion: UTCs are unusual

Taking account of schools' engagement across a breadth of activities and volumes of employer contacts, the UTC experience can be seen as exceptional. Relatively few other institutions approach the same level of engagement with employers. Those which do include former specialist Business and Enterprise schools, Studio Schools and high performing independent schools (Huddleston et al 2012).

Looked at more closely, UTCs reflect notably intense engagement in two areas: teaching and learning, and institutional operation. The case of teaching and learning is especially striking with UTCs demonstrating outlying practice in their systematic approaches to engaging employers in bringing classroom learning to life through presentations, workplace visits and use of learning resources tied to curriculum delivery. This is seen, in particular, in project design and delivery, where employers set projects or 'challenges' based on real-life examples, support students as they find ways to tackle the challenges, and take part in assessing outcomes.

If UTC practice is to influence other institutions, therefore, the area which demands the greatest attention is integrating employers into classroom teaching.

Section 2: Does employer engagement make a difference to young people?

Employer engagement in education has been actively promoted for many decades, both in England and elsewhere. As a subject, however, it is surprisingly poorly researched.

In 2008, the then Department for Children, Schools and Families commissioned and published a review of UK and US literature into evidence of impacts on young people, most specifically in terms of academic attainment. The review, conducted by research consultancy AIR UK, highlighted the paucity of reliable studies:

There is no shortage of literature on employers and/or business involvement in education. Much of this literature, however, was excluded from the scope of this review, mainly because it is largely anecdotal ..., or not evaluated to even modest scientific standards. There is a particular shortage of studies of employers' links with education that have used robust research designs ... that can provide robust evidence of an impact. Many studies are descriptive and/or are based on single group before and after designs without a true comparator.... Another weakness of the studies in this area is that they have small sample sizes with low statistical power. This can lead to either inconclusive findings or to erroneous conclusions. (AIR UK, 2008)

The review finally identified 15 UK and US different studies linked to 10 different programmes which provided sufficient evidence for judgements to be made on the effectiveness of employer engagement approaches in creating measurable and meaningful positive benefits for young people. All these studies were found to include evidence of benefits to young people in terms of either attainment or employment-related outcomes, but to a generally unquantified extent.

Since 2008, a number of important studies using reliable methodologies have demonstrated impacts relating to labour

market outcomes, attainment and attitudinal change (Kemple 2008; Mann & Percy 2013; Percy & Mann, forthcoming; Miller 2011; Athayde 2012).

While the subject remains poorly understood, a small pool of resources does now exist, allowing reasonable judgements to be made about the characteristics, impacts and delivery of employer engagement in education. In addition, a small number of serious research studies have looked at the impact of employer engagement in supporting institutional operation (governors and staff development). A critical mass of evidence is still lacking however. For a summary of literature in the area see Mann with Stanley and Lopez (2010).

Employer engagement in education: the benefits

Over recent years, many governments and influential commentators have moved towards a consensus that contact with the working world should be an essential, core element of secondary education provision. Internationally, the approach has been championed by the Organisation for Economic Co-operation and Development and an influential team at Harvard University (OECD 2010; Symonds et al 2011). In England, from September 2013, it became a requirement of 16-18 provision (particularly vocational and vocationally-related programmes of study) that pupils undertake a period of work experience. The Labour Opposition seems to be moving towards a similar policy, albeit starting at 14-16 (Skills Taskforce 2013).

Such policy developments have drawn upon a growing body of research which has pointed to wide ranging benefits accruing to young people. Research has focused around two important outcome areas: enhancing pupil transitions from full-time education into sustained employment; and improving academic attainment. While we must accept limitations on the availability and reliability of data, this body of research permits us to ask

whether employer engagements which can be described as profound – high volume, varied in character, strategically integrated – make a meaningful difference to the outcomes observed.

Enhancing pupil transitions from full-time education into sustained employment

There is strong evidence that on average, teenagers who have direct experiences of the labour market, whether through their social networks and/or directly through part-time employment, go on to achieve better employment outcomes as young adults. Analysis commissioned by the Department for Education, drawing on evidence from longitudinal databases, shows, for example, that young people who combine full-time education with part-time work at the age of 16/17 are more likely to be in some kind of work at the age of 18/19 than those who just studied full-time (Crawford et al, 2011). The former group, moreover, have a lower probability of becoming NEET up to five years later, compared to those who just study full-time.

These findings are in line with evidence from the US which found that those working part time in combination with full-time study in senior grade (aged 17/18) go on to better future earnings and occupational success than comparable peers (Ruhm, 1997). Such analysis has led the OECD (2012) and the UK Commission for Employment and Skills (UKCES 2012) to endorse the value of teenage part-time employment as a means of supporting better school to work transitions for young people.

While teenage part-time employment is linked with better ultimate outcomes, it cannot be relied on to fully prepare young people for their working lives, especially as access to work varies considerably by geography and strength of individual social networks. As UKCES (2012) made clear in its description of the ‘death of the Saturday job’, teenage access to part-time employment has declined rapidly in recent years. While a

generation ago, half or more of teenagers combined part-time working with their schooling, the proportion has more recently fallen to a quarter (Hodgson & Spours 2001; Dustman & van Soest 2007; Hobbs & McKechnie 1998). The decline prompts heightened interest in whether schools and colleges are able to provide alternative means to secure experiences of comparable, or even greater, value to teenagers within the education system.

Intuitively, the later employment benefits derived from teenage part-time work may be explained in terms of accumulation of technical or employability skills through direct labour market experience. However, evidence also suggests that young people commonly gain access to valuable information about the jobs market and their potential participation within it through meeting working people. Jokisaari’s 2007 study of the early employment experiences of young Finnish workers found that those who included employees with supervisory responsibilities within their informal advice networks in the last years of schooling did better in their first years in work than comparable peers.

Considered from a US perspective, MacDonald et al (2007) found that teenagers with wide social networks to adults outside of school and family, including employers, were significantly more likely to do well in work as young adults than their comparable peers. In both cases, the researchers argue that what young people gain from their contacts in the working world is not simply work experience or skill development, but access to new or additional (and reliable) sources of information about the world of work, the opportunities it has to offer and their potential places within it. [In sociological terms, employer networks are seen by researchers as extending the social capital of young people.]

This suggests that school-mediated employer engagement might enable teenage exposure to the labour market on a more systematic

basis, challenging individual, geographic and social inequality in access to local labour markets. The 2008 review by AIR UK (mentioned earlier) found that where evaluated programmes did not contribute to increases in attainment, enhancements were found “in terms of preparedness for work, developing job and work skills, improving work-based competencies, attitudes and behaviours, enhanced employability and higher initial wage rates” (AIR UK 2008: 6). Recent research by Mann and Percy (2013) has looked for the first time for evidence of labour market benefits being linked to employer contacts facilitated by schools. Young adults aged 19 and 24 were asked about their current positions in the job market. Current employment status and earnings were then matched to participants’ experiences of school-mediated employer engagement. The researchers were able to control for the potentially distorting effects of age, gender, social background and highest level of attainment. The analysis showed that young adults with higher levels of school-age employer contacts were, on average, up to 20% less likely to be NEET at the time of the survey and, if in full-time employment, to be earning 18% more than comparable peers who had less exposure while at school (Mann & Percy, 2013; Percy & Mann, 2014). The study suggests very strongly that a higher level of employer contacts, as is characteristic of profound engagement, does – on average – give young people advantages in early adulthood.

One influential explanation is that young people use first-hand employer contacts to gain trustworthy, additional information about the labour market and how it might relate to their own aspirations (OECD 2010). In comparison to advice from family and friends (which can be seen as narrow in scope, but reliable in content) or advice from the media or internet (broad in scope, unreliable in content), first-hand employer contacts can offer access to information that is broad as well as reliable (see Mann and Caplin 2012; Deloitte 2010). Consequently, schools are

very well placed to help young people access a broader range of reliable insights across the breadth of the labour market, compensating for social inequalities and enabling access at points of strategic importance to young people.

A number of recent longitudinal studies have explored the impact of teenage confusion about the actual educational requirements for entry into preferred jobs. Findings suggest that the very many young people (and particularly those from disadvantaged backgrounds) whose career ambitions are misaligned with educational expectations are significantly more likely to experience periods of later unemployment and go on to earn less in adulthood (Staff et al 2010; Yates et al 2011; Sabates et al 2011). While further research is required to confirm the link, it would be a logical and intuitive step to hypothesise that young people gain access to valuable information from their employer contacts allowing more informed decision-making, and so making better progress, through the long journey from education into sustained employment.

A series of US studies provide validating evidence and help explore two further characteristics of profound employer engagement: variation in activities undertaken and strategic integration into teaching and learning. Most striking is the 2008 review of the US Career Academies programme (Kemple 2008).

Career Academies* are a form of “school within a school”, supporting high school students aged 15-18. They offer a project-based style of learning rich in work-related learning and employer engagement. Like Studio Schools and UTCs in England, the American Career Academies model is essentially a mainstream academic programme delivered in the context of areas of vocational interest (eg engineering or IT), rather than a training programme focused on technical skill development. The Career Academy programme is also reminiscent of an Advanced Diploma.

**Note: Career Academies UK is a charity which provides work-related learning and internship opportunities for young people. It is not the direct equivalent of Career Academies in the USA.*

A 2007 study compared the experiences of Career Academy students and peers who stayed on mainstream high school programmes, and used statistical analysis to identify distinguishing characteristics. The study found that Career Academy students were significantly more likely to engage with employers across a wide range of activities than their peers and that this was the principal distinguishing feature of their (atypical) learning programmes (Orr et al 2007)*.

The study is important because it provides a means to understand the findings of what is the single most compelling study into the long term employment outcomes associated with such profound employer engagement in education. Published in 2008, the study followed a sample of 1400 young people from school into early adulthood. In the last years of high school, all young people in the sample had applied to join Career Academies; half were admitted by a process of random assignment, while the other half followed mainstream high school programmes, providing an ideal control group. The two groups left school with comparable levels of academic attainment, but by age 26, former Career Academy pupils earned, on average, 11% more than their control group peers (Kemple 2008).

This is not an isolated example. Three other American studies also tracked young people into the early labour market and compared employment outcomes for Career Academy alumni to control groups. Each identified wage premiums averaging 6.5% to 25% among Career Academy students (Jobs for the Future 1998; Applied Research Unit of Montgomery County Public Schools 2001; MacAullum et al. 2001).

US studies provide limited *qualitative* detail to explain why such programmes should be

associated with these compelling employment outcomes. Studies of some recent English learning programmes do, however, offer useful insights and some consistent messages (McCoshan & Williams 2002; O'Donnell et al 2006; Ofsted 2009; Ofsted 2010; Lynch et al 2010).

These studies suggest that young people use their school-age contacts with employers to gain better insight into the labour market and develop understanding, skills and networks relevant to future employment prospects. Employer engagement supports more informed career exploration and provides resources of value to ultimate occupational entry, a process which can be seen to underpin a better matching between the demands of employers and supply of young recruits. Where matching – by interest, expertise, attitude – is strong, it can be hypothesised that employers gain benefits including improved staff retention and productivity; such gains are acknowledged in pay premiums.

In a labour market which is widely agreed to have become significantly more complex over the last two generations, access to such resources would allow more informed navigation of the myriad choices open to young people as they move through education and into the early labour market (OECD 2010; Symonds et al 2010).

Finally, although most studies have looked at transition to employment, there is emerging evidence that work experience plays a part in supporting admission to higher education (Jones 2012) – which implies that it may be as beneficial to high-achieving pupils as to those planning to enter the world of work soon after leaving school or college.

**Note: Orr et al reported statistical analysis which found that the most significant differences between the school experiences of Career Academy students and their peers were in the much greater participation of the former in: school-based business or enterprise; community service; job shadowing; work-site visits; employer talks at school; work-readiness classes; talked with teachers about careers; practice interviews (191-192).*

Case study: Young Apprenticeships

Young Apprenticeships were introduced by the Labour Government. They were taught at key stage 4 over 1-2 days a week with 50 days' workplace experience built into delivery. Academic subjects such as English, maths and science, were studied alongside the chosen vocational subject. Young Apprenticeships were aimed at middle and higher ability learners.

Extract from the 2007 Ofsted review of Young Apprenticeship provision

Employers saw the programme in a positive light. They considered that it benefited students because they:

- saw relevance in their school studies to the world of work
- sampled various aspects of the industry before committing themselves to full-time employment in it
- understood the progression routes post-16 leading to a career in the vocational area
- gained experience and training in real working environments
- developed an understanding of how the industry works
- gained a detailed insight into the high levels of technical skills required in some vocational areas
- developed skills and attributes which made them more employable, including a willingness to learn, interpersonal skills through working with adults in the work place, communication skills, teamworking, good timekeeping and attendance.

Employers also identified benefits in the programme for their own organisations. In young apprentices they saw young people who were developing the skills and aptitude to progress in their industry. The young apprentices would join the labour market with desirable skills and an understanding of different aspects of the vocational area. These would enable them to make a fuller contribution to an organisation when they entered full-time employment. Employers in some vocational areas saw the programme as a means of introducing more able students to vocational areas which they might not otherwise have considered. The programme opens up a progression route into further education, training and employment for able students whose strengths lie in their aptitude for high level practical work or who have strong interpersonal skills. Some employers also used the programme for assessing and recruiting potential employees. Young apprentices have gained employment as a result of successful work placements.

(Ofsted 2007, 12-13)

Improving motivation and attainment

Less is known about the relationship between employer engagement in education and pupil attainment. Studies are fewer and results less consistent. However, it is reasonable to expect that employer engagement improves attainment for many pupils to a meaningful, if small, extent.

To start on what may seem to be a negative note, none of the reports considered by AIR UK provided evidence of attainment actually *declining*. This is an important consideration given that time involved in undertaking employer-linked activities could be used for traditional teaching – the hours associated with two weeks' full-time work experience, for example, are broadly equivalent to the time allocated to teaching for one year of a GCSE subject.

More positively, eight of the reports reviewed by AIR UK provided evidence of attainment improving, but to generally an unclear extent. The most tangible evidence can be found in the work of Andrew Miller (1998), looking at the effect of business mentoring on the GCSE attainment of randomly assigned borderline pupils: this study found an average increase in attainment of 4%.

A review of literature suggests that pupils respond in differing ways to engagements with employers. Teacher focus groups and surveys undertaken by the Education and Employers Taskforce (Mann 2012) indicate that pupils best placed to benefit from boosts in attainment following employer engagement activities tend commonly to be previously lower and especially borderline achievers. Teacher focus groups tend strongly to the view that attainment benefits relate primarily to improved motivation: engagement activities, notably work experience and business mentoring, serve as 'wake up calls' for a significant proportion of pupils who return from employer interactions with a stronger sense of the connection between classroom activities and occupational ambitions.

The case of work experience is illustrative. In a 2012 NFER survey of 700 teachers with first-hand experience of pupils going on placements at either key stage 4 or 5, 68% of respondents believed pupils returned to the classroom more motivated; just 6% believed them to be less motivated. Asked whether increased motivation might have an impact on the likelihood of borderline pupils gaining 5 GCSEs at grades A*-C, half believed it would (Mann 2012).

Other surveys of teaching staff have revealed similar results (eg Mann & Dawkins 2014). And pupils agree: 90% of 15,025 key stage 4 pupils polled in 2008 agreed that as a result of their work experience they understood better why it was important to do well in school and 89% agreed that they were prepared to work harder in lessons and on coursework following their placement (NEBPN survey, 2008). In response to both questions, half of pupil respondents strongly agreed with the statements. This begs the question of whether some of the positive benefits of work experience have been lost, given that traditionally placements have taken place right at the end of Year10 – just as students are about to start their long holiday.

Returning once more to the AIR UK review, a clutch of reports examined outcomes related to the Increased Flexibility Pilots (IFP) for 14-16 year olds – a precursor of the Diploma and Young Apprenticeship programmes, rich in work-related learning (Golden et al 2004, 2005, 2006; O'Donnell et al 2006). According to AIR UK, "having employers as visiting speakers, and having them on the steering group of the IFP partnerships, contributed to students gaining higher qualifications" (AIR UK 2008, 3).

While IFP was designed to be of particular benefit to lower achievers, comparable pedagogic approaches have been found to have been of benefit to the full range of learners. The National Foundation for Educational Research/University of Exeter 2010 review of Diploma provision, for

example, found high teacher and employer regard for a style of learning highly comparable to that experienced in UTCs:

The employers interviewed commented on the positive manner in which Diploma students had responded to their involvement with work related learning, in some cases contrasting this with the less than enthusiastic response of students whom they had encountered in non-Diploma related work experience weeks. This was only a small sample of employers and they possibly had responded because their experience had been positive, but it may also have been that for the Diploma learners, there was a greater sense of the relevance of their engagement with employers to the course they were taking. For the employers the realisation that their involvement had been both useful and enjoyable for the students helped to make the whole experience worthwhile, and perhaps the message about the positive effects on both sides of this targeted intervention could be spread more widely to encourage greater employer involvement with Diploma delivery. It was also the case that the employers nearly all referred to the twin benefits to their own organisations of this engagement: building a relationship with the young people who might be their future work force, and providing a valuable service to their local

community which provided good public relations (Lynch et al 2010, 67).

Given the high likelihood of employers, teachers and pupils self-selecting to participate in this style of teaching and learning, perspectives such as this should be treated with a degree of caution.

Nevertheless, pupil polling consistently reveals very high levels of desire for heavier employer engagement in education within a context of learning more closely related to vocational realities (Osler 2010; Lord & Jones 2006; YouGov 2010; Ipsos MORI 2009; City & Guilds 2012; Hopkins 2008).

Research suggests that young people who experience a wider range of employer engagement activities are likely to secure a wider range of outcomes than peers with narrower experiences. This is because different activities are understood by teachers to offer pupils different experiences of value. A 2012 Taskforce/Pearson survey of 390 secondary school teachers who had witnessed different forms of work-related learning and employer engagements interrogated teachers' perceptions of the outcomes. The study found a clear perspective that different combinations of activities served to support different objectives. Enterprise competitions, for example, were seen as most likely to enhance problem solving and team working skills; pupil volunteering in the community and workplace visits were held to provide the best opportunities to develop self-management; and work experience enabled understanding of the world of work (Mann & Dawkins 2014).

Section 3: Barriers to large scale employer engagement in education

Over the last generation, employer engagement in education at some scale has become commonplace within English education. In 2009/10, some 400,000 workplaces offered work experience placements to more than half a million young people. Historically, pupils in fewer than 10% of English state secondary schools have not been expected to go out on such placements. It should be noted, moreover, that independent schools and Further Education Colleges have also chosen to engage with employers to support pupils (YouGov 2010; Huddleston et al 2012).

In principle, therefore, employer engagement in education has become part of the fabric of the English educational experience. However, the apparently high volume of activity is still largely 'superficial': engagements with employers are infrequent and largely disconnected from the core teaching and learning experience of most pupils and their teachers. As noted earlier, just 15% of young adults recall more than two employer contacts of any type while at school.

That should not detract from a legacy of considerable willingness on both sides to collaborate, should circumstances encourage and allow it. Polling data tells consistently strong messages that employers, schools and learners see collaboration as beneficial and want to see more of it (YouGov 2010; CBI 2013; Edge 2007; CIPD 2012).

From the employer perspective, surveys show a widespread appreciation of the importance of working with schools and a belief that such collaboration will help young people to leave education better prepared for the workplace (CIPD 2012). On the other hand, most employers have historically engaged with schools to only a limited extent, which suggests that there are barriers to more profound levels of engagement.

Levels of engagement vary considerably by employer size (the largest employers engage the most, and micro-businesses the least),

sector (public sector employers engage at much higher levels than the private sector) and economic area (with lower levels of engagement found in manufacturing, construction, IT and creative and media industries) (Mann 2012; YouGov 2010; Edge 2007).

Barriers to greater levels of engagement: employers

Survey data commissioned by the CBI, UKCES, the Edge Foundation and Department for Children, Schools and Families, highlight three primary barriers preventing more employers from engaging with schools.

1. It's (probably) too difficult

Surveys of employers reveal that in spite of an instinctive willingness to help local schools, many feel unsure of what they can or should do, and how to go about it. While some employers have complained about excessive bureaucracy in working with schools, notably in terms of health and safety requirements linked to work experience placements, many also call for greater guidance and clarity in understanding what their role should be.

Of course, employers could simply contact their local schools directly. However, they are unlikely to know who to ask for, what to say or how they could best support the schools' own priorities.

For thirty years from the early 1980s, successive governments funded a national infrastructure of local Education Business Partnerships (EBP). These varied in size, reach and structure: some were based within their local authority while others were stand-alone charities or unincorporated partnerships. Again, employers – especially those operating across many local authority areas – often found it difficult to work out who to contact. More recently, central funding for EBPs has been withdrawn, leading to a patchwork quilt of provision – while some areas still have EBPs, others do not.

Perceptions may also be affected by employers' experience of work placements. Work experience placements represent by far the most common employer engagement with schools, and are also considered the most demanding call on employers' time and energy (a point explored further, below).

Proposals to engage employers, at scale, in curriculum design and delivery need to address such anxieties by breaking down engagement into understandable and achievable inputs. In engaging with schools, employers incur costs, mainly in staff time; this has a bearing on the level of support offered by small firms, which are least able to absorb this level of commitment, compared with large employers and the public sector where economies of scale and broader conceptions of public duty help to drive behaviour.

There is evidence, however, that many employers over-estimate the demands of employer engagement. Strikingly, employers which already work with schools consider the process to be much easier than employers which have never done so (YouGov 2010 74; DCSF 2010). Where employers work with a broker to engage with schools, moreover, evidence shows that they take part in a wider range of activities than when working directly with schools, suggesting that active support from a broker makes it easier to extend participation across school life (Edge 2007). Bringing employers into initial contact with schools through small, relatively undemanding activities can consequently provide foundations for more profound engagements later.

2. No one asked me

Comparatively few employers are likely to proactively seek out opportunities to work with schools. Engagement with education is not, as yet, integrated into the core of business life. The employers most likely to reach out proactively are those which rely heavily on recruiting school leavers, have a vested

interest in working with education – or a well-developed policy on corporate social responsibility – and have dedicated in-house staff to support partnership working.

That is not to say that a majority of employers are reluctant to get involved; rather, they need to be asked. While surveys confirm the widespread willingness of employers to do more to support schools, they also highlight that very many have simply never been approached (UKCES 2013; YouGov 2010; CBI 2013). There is clearly an untapped resource of employer goodwill waiting to be accessed, and direct approaches are required to open up this latent interest.

Significant resource has been expended historically in identifying willing and able employers and linking them into individual schools. The fact that over 400,000 employers provided work experience placements in 2009-10 proves that direct approaches do work. Yet the fundamental challenge remains: how best to reach employers and engage them in more than a few, largely disconnected, activities?

3. I don't really get the business case

A third barrier emerging from survey evidence is that employers have a relatively shallow understanding of the potential benefits of working with schools. Clearly many employers feel that it is a 'good thing' to work with schools, and this may be enough for many. There is also evidence that employee volunteering with schools brings significant staff development and recruitment benefits. However, schools engagement has not traditionally sat at the heart of HR policy: this is something that the Chartered Institute for Personnel and Development is working hard to change.

For employers then, information deficits do exist – they can be better informed about the reality of working with schools and the evidenced benefits accruing to themselves and to young people.

Barriers to greater engagement: schools

English schools work within a dynamic policy environment. Government policy has changed significantly with regard to employer engagement, as has support for driving effective practice and access to volunteers and workplaces. The complexity and pace of change inevitably limits our understanding of schools' behaviour.

Available evidence does, however, suggest that the volume of employer engagement at Key Stage 4 has declined (though it may have increased at Key Stage 5) and that four primary, related barriers are encountered by secondary schools as they decide on levels of provision.

1. It's too expensive

Until March 2011, secondary schools in England could expect to be offered low cost, often free, access to employers through the network of Education Business Partnership (EBPs) mentioned above. Focused around provision of work experience placements and other forms of work-related learning (including enterprise education), EBPs made it easier for schools to access employers at little direct cost. The data quoted above indicate that work experience became the norm in English secondary education.

Following the 2010 general election, the government repealed the statutory requirement to offer work-related learning as part of the Key Stage 4 curriculum and annulled the ring-fenced budget for EBP activities. Since 2011, therefore, schools which have chosen to maintain programmes (including work experience) have had to meet the necessary costs from their own budgets. And while EBPs continue to operate in some parts of the country, elsewhere they have folded, leaving schools to manage all aspects of employer engagement themselves – which is typically more expensive because of the loss of economies of scale (Mann 2012).

For schools in 2013, the costs associated with engaging employers can be a barrier. This is affected by both the finite budgets available to

schools and the staff time needed to create and maintain links with employers. With increases in real costs come increases in the need for better information to help schools appreciate what young people are likely to get out of their employer contacts and determine whether good value will be achieved from particular activities. In the absence of local support structures, alternative means are required to win the confidence and enthusiasm of classroom teachers.

2. It's too hard to find the right people/opportunities

Schools have long been concerned over the difficulty of accessing the right people and opportunities across the economic community (Edcoms 2007). As they have become more active customers in the marketplace for employer engagement, it could be expected that teaching staff become more discerning about the types of engagement they feel to be of value. This behaviour does appear to be emerging, not least as teachers question whether employer engagement is necessary or appropriate for all students, or just some.

This points to a dual trend. On the one hand, the total volume of activity might actually go down – for example, fewer schools routinely arrange work experience for all pupils in Key Stage 4 than was the case three to five years ago. On the other hand, where teaching and learning is enriched through employer engagement, the demand for volunteer input will grow – as will the demands placed on those volunteers. Paradoxically, it is easier to find employers to deliver large volumes of work experience placements (because work experience is well known and easy to explain) than to find a smaller number of people with exactly the right skills and experience to support particular aspects of curriculum delivery.

Work-related learning programmes piloted in the first decade of this century were commonly overseen and supported by formal partnerships. Typically employers were engaged at a high level in the initial design of

work-related learning as well as in its actual delivery. Such partnerships required – and received – resourcing to ensure their effectiveness. Since 2011, there have been almost no ring-fenced budgets for this kind of activity, the main exception being for activities connected with science, technology, engineering and maths (STEM subjects).

3. Government isn't interested anymore

Many schools have reduced work experience provision since 2011. In surveys, schools say the biggest obstacle is finding the right placement. The second most cited issue is that the government is believed to have dropped the requirement for work experience during Key Stage 4.

In fact, work experience was never a statutory requirement – the law required schools to offer *work-related learning* during Key Stage 4, of which work experience was just one example – albeit the most common by far.

Following publication of the Wolf Report on Vocational Education, the statutory requirement for work-related learning was repealed. At the same time, the government made clear its expectation that post-16 students – especially those following full-time vocational study programmes – should be offered work experience.

Professor Wolf has publicly argued* that employer engagement is very valuable to pupils at pre-16, but in policy terms, no requirements now exist and only very limited public funding outside of school budgets supports and enables access to effective practice and resources. It is now very much for school leaders to decide whether to invest time and resource in employer engagement activities. In short, levers are no longer pulled in Whitehall, but in 3,500+ secondary schools and Further Education colleges. Available evidence is limited, but points in a clear

direction – that in this new environment, the volume of employer engagement at 11-16 is falling (Coiffait 2013; Pearson 2012).

In order to move towards deeper and broader employer engagement across key stages 3 and 4, it is necessary to address the key concerns of school leaders in their new decision-making positions. The requirement for *evidence of impact* becomes much stronger across the board, in terms of both ultimate pupil labour market prospects, but also their engagement with school and academic achievement. For schools, moreover, operating in a new and unfamiliar marketplace with emerging and rebranded providers offering a wide range of potential engagements, it becomes important that they are able to navigate the market, drawing on trusted advice from organisations like the Department for Education, Ofsted and the Association of School and College Leaders.

Ofsted has criticised the provision of impartial careers information, advice and guidance in many schools (Ofsted 2013), and has called for better links between schools and employers. In addition, information is now being published on the destinations of pupils one year after leaving school. These developments may drive greater levels of school engagement with employers, but this can be expected to concentrate more on the needs of post-16 students and those forms of employer engagement historically understood to enhance careers exploration and progression (work experience, careers fairs, workplace visits). Schools are less likely to prioritise activities more closely related to teaching and learning or organisational operation – the things most associated with profound employer engagement. Fresh approaches are consequently needed in order to capture the attention and confidence of classroom teachers.

*See <http://www.educationandemployers.org/research/research-seminars/professor-alison-wolf---19th-september,-2012/watch-professor-alison-wolf-%281%29/>

4. The curriculum is too tight

A further common refrain from schools is that space for employer engagement is being crowded out of a secondary curriculum focused around higher levels of GCSE attainment, particularly in the English Baccalaureate subjects. The tightness of the curriculum also works against the project style of learning typical within UTCs.

That said, many classroom teachers may still be open to using work-related approaches to support classroom learning, if the right case is made. A survey in 2004 showed that across a wide range of subjects (including English, Maths, Science, Design and Technology, ICT, Geography, Art and Design, Citizenship, PSHE, Careers education) majorities of classroom teachers saw the usefulness of such real-world resources. Only in a minority of core subjects (History, Music, Modern Foreign Languages, PE and RE) did majorities of classroom teachers fail to see the usefulness and in each case significant proportions did actually make use of such teaching approaches (QCA 2004, 13).

The barrier, therefore, is to be found in identifying and enabling new means by which

teaching staff can easily and confidently engage employers within learning processes in ways which are readily integrated into demanding teaching programmes.

Not all barriers are the same size

In thinking about barriers preventing more profound levels of engagement between schools and employers it is important to disaggregate the range of different potential activities in which the two sides can collaborate. We must also appreciate that the demands on, and benefits felt by, schools and employers do vary.

The Chartered Institute for Personnel and Development (2012) researched the perceptions of 780 HR professionals about how demanding different employer engagement activities are on employers. The results, set out below, demonstrate a striking range of opinions. It is noticeable that the activity perceived to be most demanding (work experience) is also the one most commonly experienced – suggesting that some employers may have a distorted view of the demands of school engagement.

Activity	How demanding (1 = not at all, 5 = very)
Staff going into schools to talk about their organisations or the jobs they do	2.72
Staff volunteering to be reading or number partners (usually at primary schools)	2.84
Staff volunteering to take part in enterprise competitions	2.88
Staff volunteering to give mock interviews/CV feedback	2.93
Staff volunteering to be governors	3
Job shadowing	3.03
Staff volunteering to be mentors	3.06
Workplace visits	3.08
Organising work experience	3.27

Equally, when looked at from the perspective of young people or employee volunteers, different outcomes are likely to be secured from participation in different types of activity (Mann & Dawkins 2014; Corporate Citizenship 2010). As a significant study undertaken by the City of London Corporation has shown, different volunteering activities serve to develop different professional competencies and skills in different ways. For example, being a school governor is seen as very useful by HR officers in developing individual adaptability, communication, leadership and planning and organisation. Acting as a pupil mentor builds skills more in the areas of problem solving and building relationships (Corporate Citizenship 2010). From a teacher perspective, too, forthcoming research to be published by CfBT highlights the differing values ascribed to different types of employer engagement to support different outcomes for different types of pupil.

Conclusions

There is widespread willingness across both employer and educational communities to work more closely together. However, there are considerable barriers on both sides.

In the current policy and funding climate, barriers will be overcome only if –

- It is easy and free (or very low cost) to establish links between schools and employers
- Business cases (on both sides) are sharp, support wider organisational objectives and are widely understood
- Schools ask for help, rather than waiting for employers to volunteer.

Change must be driven from the chalkface. Schools are unlikely to suddenly and fundamentally change their teaching styles in the absence of clear government direction, but they can be expected to respond to incremental increases in employer engagement linked to teaching and learning where delivery models are relevant and support wider aspirations and concerns.

Where new practice is encouraged, it needs to be presented to schools and employers in a manner that gets through the blizzard of daily business. It must also be trustworthy; founded on facts, not anecdotes. As we have seen, the benefits of *superficial* engagement are relatively well-known and well-evidenced; the benefits of *profound* engagement need to be equally well-known and well-evidenced.

Section 4: Means and models of delivery employer engagement in education

Government policy for engaging employers in education

There are many reasons why policymakers promote employer engagement in education but the four primary objectives are:

1. improving pupil general preparation for the working world
2. addressing labour market skills shortages
3. enhancing social mobility
4. improving pupil engagement and attainment (Stanley et al, 2014).

Since the 1980s, governments of all political persuasions have publically committed to encouraging, enabling and increasing employer engagement in education. During most of that period, debates have focused not on whether it is desirable, but on the best way to achieve it.

The Labour approach (2001-10)

The Labour approach to employer engagement in education developed rapidly over the first decade of the twenty-first century. In 2004, the government legislated to require the provision of work-related learning during Key Stage 4. This meant learning *about*, *for* or *through* work. This could, and very often did, include work experience. Accountability frameworks for checking school compliance were, however, generally weak.

On top of this general commitment, new learning programmes were developed, most notably Young Apprenticeships and Diplomas, which required systematic employer engagement in curriculum design and teaching. Public funding was put in place to champion what was seen as effective practice and to source employers to work with schools across England across multiple objectives: for example: educational achievement, skills shortage flow, career exploration, enterprise culture and social cohesion. Funding of £25m per annum was channelled to local

authorities, which often provided additional resource, to support a national network of some 150 Education Business Partnerships.

The coalition approach (2010-present)

The Labour approach was largely discontinued after the 2010 election. On the back of the Wolf Report, the statutory requirement for work-related learning in Key Stage 4 was repealed and the great majority of national funding was cut and/or devolved to schools, leaving them to make their own decisions about employer engagement.

Conversely, the government has made it clear that work experience should be provided to post-16 students. However, policy objectives have narrowed with placements largely expected to support transitions into work for those young people not progressing to higher education; work experience is seen as a key element of programmes of study for students following full-time vocational programmes of study. In the case of students on more 'academic' level 2 and level 3 programmes, including A levels, the guidance is more equivocal:

Students on 'standard' level 2 and level 3 programmes, including A level students, may also benefit from periods of work experience. This may be as an integral part of their Study Programme or in addition to their normal study (for example, during school and college holidays).
(Department for Education, 2012)

Schools and colleges are also encouraged to supplement work experience placements with a wide range of related employer engagement activities. Schools and colleges are now 'expected [to] increase their engagement with employers', through such activities as workplace visits, enterprise projects, mentoring, work shadowing and career-focused workshops.

Public funding has continued to support STEM education through DBIS's support for STEMNET. The School Governors' One-Stop

Shop continues to support the recruitment of employee volunteers to act as school governors.

More widely, the 2013 Ofsted report on careers information, advice and guidance (IAG) identifies employer engagement as a key part of effective careers provision: this might be expected to lead to increased focus on employer engagement to support the statutory requirement to provide access to impartial IAG at all levels of secondary education. The publication of destinations data may also help raise school and college interest in the labour market.

Emerging Labour Party policy has called for the reinstatement of work experience in Key Stage 4 (Skills Taskforce 2013). Across the political spectrum, however, the emphasis continues to be on work readiness and career progression, not enriching teaching and learning across the curriculum.

Will current government policy lead to profound engagement across secondary education?

The current trend, as it is best understood on the basis of limited evidence, is for declining levels of employer engagement within secondary schools at 11-16. At 16+, higher levels of engagement can be expected, particularly in subjects and levels of study seen as being of greatest vocational relevance to direct entry to the labour market at 18. Whether educational interest extends beyond the provision of work experience and into broader areas of teaching and learning and organisational operation remains very much to be seen. The above analysis suggests strongly that in the absence of strong, funded government action to drive school practice and facilitate access to employers, progress towards profound engagement will be more limited.

Nevertheless, progress is by no means unlikely. A number of different organisations, new and old, exist to support different levels of engagement and a brief analysis, below, highlights opportunities presented to lever greater levels of collaboration.

Employer engagement in education as a transaction

It may be obvious to state, but in essence, to enable greater levels of employer engagement in education, someone in a school needs to connect with someone in a workplace and agree upon a course of action. Historically, that ostensibly simple process has been undertaken in a number of different ways with different levels of cost involved. The means of connection can be judged in terms of efficiency and effectiveness:

Efficiency: how much does it cost to enable the school and employer to complete an activity of meaning to pupil learning, progression or organisation operation?

Effectiveness: as a quality judgement, how closely does the activity/intervention support the achievement of outcomes for which employer engagement in education is undertaken?

Clearly, management, monitoring and evaluation costs arise in the process of securing high quality provision. In addition to the costs of finding and connecting people in schools and workplaces, there are a small number of fixed costs which someone must pay for – health and safety checks, for example, where required by work experience placements, or CRB/DBS checks for business mentoring. Economies of scale will often reduce such costs.

Models through which schools and employers engage

There are four dominant models currently in use to help the two sides work together.

The brokered model

For those who have worked in this field for some time, the brokered model is a recognisable historic form of practice: local or national intermediary organisations source employers and make them available to schools and colleges to support specific activities and initiatives – work experience placements, enterprise days, STEM clubs etc. Examples of brokers include Education Business Partnerships, STEMNET, Young Enterprise, the School Governors' One Stop Shop, Career Academies UK and Young Chamber. These organisations employ paid staff to identify, recruit and support employee volunteers and schools, giving rise to costs which have to be met either from central funds (STEMNET, SGOSS) or through charges paid by schools and colleges (EBPs, Career Academies UK, etc).

While brokers can be very responsive to the needs of individual schools, much provision involves the delivery of large scale programmes which schools buy in (eg the organisation of work experience placements), or – in the case of STEMNET, which is funded by DBIS – make use of. To put it another way, some brokers offer an extensive *à la carte* menu of options, but they more commonly present schools and colleges with a more limited menu.

The deep brokered relationship

The Business Class model, as funded now largely by the UK Commission for Employment and Skills and operated by Business in the Community, provides a variation on the brokered relationship. Based on initial discussions overseen by local paid staff between a lead local business and a small consortium of schools, a wide range of

potential engagements are explored across the range of school life. Employer resources are sourced to meet the articulated needs and desires of each participating school. To return to the restaurant metaphor, Business Class offers schools a bespoke buffet. Unit costs may be higher than for the standard brokered model, but the effectiveness of provision (meeting the explicit and specific needs of individual schools) might be greater.

The autonomous actor/market approach model

Inspiring the Future offers a new model of connecting employers and schools. Rather than brokering a relationship on behalf of a school, a national gateway (a secure website) recruits employers who provide details of themselves and the types of support they are willing to offer (eg careers talks, reading partners, joining governing bodies). Teaching staff search the database for people in their locality who can offer what they need. The web site enables them to contact employers directly. Given the reduced need for staff to broker specific activities, costs are significantly lower than traditional brokerage, and as teaching staff play a more direct role in choosing volunteers, it can be expected that provision may more closely align with schools' immediate objectives.

The school alone

It is becoming more common for schools and especially colleges to invest in their own staff resource to find and work with local employers. Studies suggest that this is typically a more expensive means of accessing employer engagement than brokered models (Mann 2012). The cost and time commitments are greater than in other models, so while the quality of engagement secured may be high, the net volume of activity may be reduced. It should be noted, too, that schools operate in very wide ranging social geographies and that ease of access to employer contacts will vary; consequently, so will costs.

Conclusions

Optimal conditions under which profound employer engagement might be best secured

To move towards profound employer engagement, levers need to be pulled which enable high volumes of varied activity which is strategically integrated into school provision, enabling close collaboration across teaching and learning, pupil progression and institutional operation.

As set out above, barriers need to be addressed in order to tap into strong latent interest on both sides. The principal needs relate to *ease of engagement* and *access to information* on potential activities and their impacts.

Recent changes to policy and practice in the field of employer engagement seem likely to narrow the focus of employer engagement onto work preparation, including careers IAG and (post-16) work experience.

From Edge's point of view, the biggest gap – but also the area with the biggest potential to transform employer engagement in education – is in the area of teaching and learning. In the absence of clear government requirements and funding, the question can be put quite simply:

What can be done to encourage and facilitate systematic employer engagement in the learning experiences of pupils in secondary schools?

There is no single answer. Possibilities include:

A single gateway point for schools and employers.

Both sides are willing to engage, but won't go out of their way to do so. A single gateway might be a good starting point – provided schools and employers know about it and find it easy and reliable. The marketing advantage of having a single national website to which employers and schools can be signposted is clear. To operate at volume, schools and individual teachers need to have access to a broad array of potential partners and

volunteers to secure inputs of direct relevance to pupil learning.

Direct engagement of classroom teachers.

If the style of learning offered by UTCs is to become commonplace, it must be made easy and relevant to classroom teachers. They need to see its relevance to the subjects they teach. Employer support must be tangible, reliable and available at the exact time it is needed, whether planned a long time in advance or 'just in time'. Pressures need to be recognised, including curriculum time and performance cultures. There must be clear evidence that activities will save time, not waste it; and will boost results, not be a distraction. Opportunities for engagement must be flexible and include one-off workplace visits or classroom talks as well as longer lasting engagements.

Marketed through trusted channels.

An unregulated market is rapidly emerging in the provision of careers information, advice and guidance and employer brokerage. Existing trusted channels of communication, for example the teaching unions and subject associations, may well be more acceptable to schools and teachers than glossy new ventures.

User costs must be zero or minimal.

Money will always be a barrier to connecting the two sides at scale and costs must be minimised if significantly increased levels of engagement are to be achieved.

Evidence.

Arguments for change in school and employer practice still need to be won.

In UTCs – and to some extent, Studio Schools – employers are engaged in organisational operation and teaching and learning to a greater extent than anywhere else in the school sector. While high levels of latent interest exist elsewhere, it cannot be expected that fundamental changes in provision will be undertaken lightly, especially at Key Stage 4: the stakes are too high.

Evidence is always the best starting point for persuading people to change the way they

work. As noted already, there is good evidence that 'superficial' forms of employer engagement bring benefits. Evidence of the benefits of profound engagement also exists, higher volumes of engagement in more common areas of activities are associated with better outcomes, but is more sparse. UTCs and Studio Schools are a test-bed for profound employer engagement and could offer important insights into the impact employers can have on teaching and learning, institutional organisation and student progression. Longitudinal research – such as that being conducted by Malpass and Limmer – should be encouraged, supported and disseminated.

Energy is also required to address the reasonable and predictable concerns of teachers and school leaders. In addressing reluctance to change, significant scope emerges for clearer, well evidenced messages about the benefits strongly associated with profound engagement. Going through existing trusted channels will improve the chances that messages will be heard.

Finally, from the employer perspective it is important to increase understanding of the range of opportunities available for working with schools – and the likely benefits to schools, young people and employers alike.

References

- AIR UK (2008) *The Involvement of Business in Education: A Rapid Evidence Assessment of Measurable Impacts*. London: Department for Children Schools and Families.
- Applied Research Unit (2001) *Post-Secondary Employment and College Enrolment Among Montgomery County Public School Graduates: The Role of Career-Focused Programs*. Rockville, MD: Montgomery County Public Schools.
- Athayde, R. (2012) 'The impact of enterprise education on attitudes to enterprise in young people: an evaluation study.' *Education and Training*, 54, 709-726.
- CBI (2009) *Emerging Stronger: the value of education and skills in turbulent times*. *Education and skills survey*.
- CBI (2010) *Fulfilling Potential: the business role in education*.
- CBI (2013) *Changing the Pace*. *CBI/Pearson education and skills survey 2013*.
- CIPD (2012) *Learning to Work: Survey report*. London: Chartered Institute for Personnel and Development
- City & Guilds (2012) *Ways into work: views of children and young people on education and employment*
- Coiffait, L. (2013) *Careers 2020: Options for future careers work in English schools*. London: Pearson
- Corporate Citizenship (2010) *Volunteering: the business case – the benefits of corporate volunteering programmes in education*. City of London Corporation
- Crawford, C., Duckworth, K., Vignoles, A. & Wyness, G. (2011) *Young people's education and labour market choices aged 16/17 to 18/19*. London: Department for Education
- Deloitte (2010) *Helping young people succeed: how employers can support careers education*. London: Education and Employers Taskforce
- DSCF (2009) *The Work-Related Learning Guide (Second Edition)*. London: Department for Children, Schools and Families
- Department for Education (2012), *Study Programmes for 16- to 19-year-olds: Government response to consultation and plans for implementation*. London: Department for Education
- Dustmann, C., & van Soest, A. (2007) "Part-Time Work, School Success and School Leaving" *Empirical Economics* 32: 277–299
- Edcoms (2007) *Business in schools research findings*. London: Business in the Community.
- Edge Foundation (2007) *Raising the Bar and removing the barriers: what employers can offer education*.
- Golden, S., Nelson, J., O'Donnell, L. & Rudd, P. (2004). *Evaluation of Increased Flexibilities for 14-16 Year Olds: Profile of partnerships and students 2002 and 2003*. London: Department for Education and Skills
- Golden, S., O'Donnell, L. & Rudd, P. (2006) *Evaluation of Increased Flexibility for 14 to 16 year olds Programme: the Second Year*. London: Department for Education and Skills

- Golden, S., O'Donnell, L., Benton, T. & Rudd, P. (2005) *Evaluation of Increased Flexibility for 14 to 16 year olds Programme: Outcomes for the First Cohort*. London: Department for Education and Skills
- Hendry, E. & Sharpe, T (2013) *An evaluation of the Studio Schools Trust and its role in raising the status of practical and vocational learning*
- Hobbs, S., & McKechnie, J (1998) "Children and Work in the UK: The Evidence" in *Children and Work in the UK: Reassessing the Issues*, ed. Pettitt, B. London: Child Poverty Action Group.
- Hodgson, A., & Spours, K (2001) "Part-Time Work and Full-Time Education in the UK: The Emergence of a Curriculum and Policy Issue" *Journal of Education and Work* 14 (3): 378 – 388
- Hopkins, E. A (2008) "Work-related learning: hearing students' voices" *Educational Action Research* 16(2): 209-219
- Huddleston, P. & Laczik, A. (2012) 'Successes and challenges of employer engagement: the new Diploma qualification' *Journal of Education and Work* 25, 403-421
- Huddleston, P., Mann, A., & Dawkins, J (2012), *Employer Engagement in English Independent Schools*. London: Education and Employers Taskforce
- Huddleston, P. & Stanley, J., eds. (2012) *Work-Related Learning: A guide for teachers and practitioners*. London: Routledge
- Ipsos MORI (2009) *Young People Omnibus 2009 – Wave 15. A research study on work-related learning among 11-16 year olds on behalf of the Qualifications and Curriculum Authority (QCA). January – April 2009.*
- Jobs for the Future (1998) *School-to-Career Initiative Demonstrates Significant Impact on Young People*. Boston, MA: Jobs for the Future
- Jokisaari, M. (2007) "From newcomer to insider? Social networks and socialisation into working life" in *Youth and Social Capital* eds., Helve, H, & Bynner, J. London: Tufnell Press
- Jones, S (2012) *The personal statement: a fair way to assess university applicants?* London: Sutton Trust
- Lynch, S., McCrone, T., Wade, P., Featherstone, G., Evans, K. & Golden, S (2010) *National Evaluation of Diplomas: The First Year of Delivery*. London: Department for Children, Schools and Families.
- Kemple, J. with Willner, C. J. (2008) *Career Academies – Long-Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood*. New York: MDRC.
- Lord, P. & Jones, M (2006) *Pupils' experiences and perspectives of the national curriculum and assessment – final report of the research review*. National Foundation for Educational Research.
- MacAullum, K., K. Yoder, K. Scott, & Bozick, R. (2002) *Moving Forward – College and Career Transitions of LAMP Graduates – From the LAMP Longitudinal Study*. Washington, DC: National Institute for Work and Learning.
- McDonald, S., Erickson, L. D., Johnson, M. K. & Elder, G. H (2007) "Informal Mentoring and Young Adult Employment." *Social Science Research* 36: 1328–1347.
- Malpass, D., & Limmer, H (2013). *University technical college students' perceptions and experiences of studying engineering*. Manchester: AQA Centre for Education Research and Policy
- Mann, A. (2012) *Work Experience: impact and delivery – insights from the evidence*. London: Education and Employers Taskforce
- Mann, A. & Caplin, C (2012) *Closing the Gap – how employers can change the way young people see Apprenticeships*. London: PriceWaterhouseCoopers
- Mann, A. & Dawkins, J (2014) *Employer Engagement in Education: A Users' Guide*. A report for CfBT
- Mann, A & Glover, C (2011) "The point of partnership: the case for employer engagement in education", *Strategic HR Review*, 10 (1): 21 – 27
- Mann, A., Lopez, D. & Stanley, J (2010) *What is to be gained through Partnerships? Exploring the Value of Education-Employer Relationships*. Second Edition. London: Education and Employers Taskforce
- Mann, A. & Percy, C (2013) 'Employer engagement in British secondary education: wage earning outcomes experienced by young adults'. *Journal of Education and Work* DOI:10.1080/13639080.2013.769671
- McCoshan, A. & Williams, J (2002) *Student Apprenticeship Evaluation*. London: Department for Education and Skills
- Miller, A (1998) *Business and Community Mentoring in Schools*. London: Department for Education and Employment.
- Miller, S., Connolly, P. & Maguire, L (2011) *A Follow-Up Randomised Controlled Trial Evaluation of the Effects of Business in the Community's Time to Read Mentoring Programme*. Belfast: Centre for Effective Education, University of Belfast.

- NEBPN National Support Group for Work Experience (2008) *Student's Perceptions of Work Experience*. Department for Children, Schools and Families.
- O'Donnell, L., Golden, S., McCrone, T., Rudd, P. & Walker, M (2006) *Evaluation of increased flexibility for 14-16 year olds programme: delivery for cohorts 3 and 4 and the future*. London: Department for Education and Skills
- OECD (2010) *Learning for Jobs*. Paris: Organisation for Economic Co-operation and Development
- OECD (2013) *Better Skills, Better Jobs, Better Lives – A Strategic Approach to Skills Policies*. Paris: Organisation for Economic Co-operation and Development
- Ofsted (2007) *The Young Apprenticeships programme 2004-09: an evaluation*. London: Office for Standards in Education, Children's Services and Skills
- Ofsted (2009) *Implementation of 14-19 reforms, including the introduction of Diplomas*. London: Office for Standards in Education, Children's Services and Skills
- Ofsted (2010) *Diplomas: the second year*. London: Office for Standards in Education, Children's Services and Skills
- Ofsted (2010) *Good Practice in involving Employers in Work-Related Education and Training*. London: Office for Standards in Education, Children's Services and Skills
- Ofsted (2013) *Going in the right direction: careers guidance in schools from September 2012*. London: Office for Standards in Education, Children's Services and Skills
- Orr, M. T., T. Bailey, K. L. Hughes, G. S. Kienzl, & Karp, M. M (2007) "The National Academy Foundation's Career Academies: Shaping Secondary Transitions" in *Improving School-to-Work Transitions*, ed. Neumark, D. New York, NY: Russell Sage Foundation.
- Osler, A (2010) *Students' Perspectives on Schooling*. Maidenhead, UK: Open University Press.
- QCA (2004) *Work-related learning baseline study*. London: Qualifications and Curriculum Authority
- Pearson (2012) *Work Experience: Schools and Colleges Feedback*. Unpublished survey for the Education and Employers Taskforce
- Percy, C. & Mann, A (2014) "School-mediated employer engagement and labour market outcomes for young adults: wage premia, NEET outcomes and career confidence" in Mann, A., Stanley, J. & Archer, L. eds., *Employer Engagement in Education: Theories and Evidence* London: Routledge.
- Plymouth Manufacturing Group (2013) *Survey of PMG Members' Specific Engagement with and Support of the Local Education Sector*.
<http://www.plymouthmanufacturers.co.uk/file/publications/Employer%20engagement%20with%20education%20-%20final%20report%2002%2013.pdf>. Accessed: 10.08.13:16.12.
- Ruhm, C (1997) "Is High School Employment Consumption or Investment" *Journal of Labor Economics*, 15 (4): 735-776.
- Sabates, R., Harris, A. & Staff, J (2011) "Ambition Gone Awry: The Long-Term Socioeconomic Consequences of Misaigned and Uncertain Ambitions in Adolescence" *Social Science Quarterly* 92(4): 959-977
- Skills Taskforce (2013) *Interim Report: Talent Matters – why England needs a new approach to skills*. London: Labour Party
- Staff, J., A. Harris, R. Sabates & Briddell, L (2010) "Uncertainty in Early Occupational Aspirations: Role Exploration or Aimlessness?" *Social Forces* 89 (2): 1–25
- Stanley, J. & Mann, A (2014) "A theoretical framework for employer engagement" in Mann, A., Stanley, J. & Archer, L. eds., *Employer Engagement in Education: Theories and Evidence*. London: Routledge
- Stanley, J., Mann A. & Archer, L (2014) "Introduction" in Mann, A., Stanley, J. & Archer, L. eds., *Employer Engagement in Education: Theories and Evidence*. London: Routledge
- Symonds, W. C., Schwartz, R. B. & Ferguson, R. (2011) *Pathways to Prosperity: Meeting the Challenge of Preparing Americans for the 21st Century*. Cambridge, Massachusetts: Harvard Graduate School of Education
- UKCES (2012) *Youth Employment Challenge*. London: UK Commission for Employment and Skills
- Yates, S., A. Harris, R. Sabates & Staff, J (2011) "Early Occupational Aspirations and Fractured Transitions: A Study of Entry into 'NEET' Status in the UK." *Journal of Social Policy* 40: 513–534.
- YouGov (2010) *Edge Annual Programme of Stakeholder Surveys: Report*. London: Edge Foundation.

About the authors

Dr Anthony Mann is Director of Policy and Research at the Education and Employers Taskforce and the author of numerous works on employer engagement in education. He is an Associate Fellow of the University of Warwick and sits on advisory boards of the National Foundation for Educational Research and Institute of Education. He joined the Taskforce in 2009 from the Department for Children, Schools and Families.

Dr Baljinder Virk is Senior Researcher at the the Taskforce which she joined in February 2013 from the National Audit Office where she was a Senior Analyst. During her tenure at the NAO, she contributed to the production of numerous education and employment related value for money studies delivered to the House of Common's Public Accounts Select Committee and memoranda to the Education Select Committee.

For access to many of the works cited in this report and wide ranging research resources on the subject of employer engagement in education, please visit:

www.educationandemployers.org/research

Published by the Edge Foundation, 4
Millbank, London SW1P 3JA, 020 7960 1555
www.edge.co.uk

The Edge Foundation is a registered charity
and company limited by guarantee.
Registered in England. Charity number:
286621.

