Employer involvement in schools: a rapid review of UK and international evidence

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From Education to Employment

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Introducing The NFER Research Programme

From Education to Employment

NFER has a worldwide reputation for excellence in research in education and children's services, built up over 65 years of working with a wide range of partners to produce independent evidence to inform change.

As a charity, the Foundation exists to improve the education and life chances of learners through the provision of independent evidence aimed at influencing policy, informing practice in the learning environment and directly impacting learners. To help achieve this, The NFER Research Programme was set up in 2011. Funded by NFER, it is developing partnerships with organisations and individuals who share our commitment to solving unanswered challenges young people face in education. The Programme targets key areas of education, highlighting gaps in existing evidence and conducting new research to provide the evidence to fill the gaps. Current areas of focus are *From Education to Employment*, *Developing the Education Workforce* and *Innovation in Education*.

From Education to Employment examines approaches that could help the over one million young people not in education, employment or training (NEET) carve a route to meaningful and sustainable employment. It builds on NFER research carried out in 2009 which highlighted discrete groups within the NEET population likely to benefit from different forms of intervention.

The initial phase is a suite of four reviews that identify strategies that can assist young people with the potential to disengage from education, employment or training to 'stay on track'. It comprises:

- effective approaches to supporting young NEET people
- careers professionals' involvement with schools
- employer involvement in schools
- curriculum and qualification needs of young people who are open to learning, or
- undecided about their futures.

These reviews offer a unique perspective on the research and evidence-based practice of the last five years in this area and identify the gaps for future research. A series of easy-to-use guides for practitioners, school leaders and local authorities based on the findings will also be available.

Sarah Maughan
Research Director, NFER

Executive summary

The NFER Research Programme currently consists of three major thematic areas: *From Education to Employment, Developing the Education Workforce* and *Innovation in Education.* This review forms one of a suite of four literature reviews that have been completed under the *From Education to Employment* theme. These reviews collectively identify strategies to assist young people at risk of becoming NEET (not in education, employment or training) to make effective transitions into learning or employment post 16.[1] In 2011 one in five (22.3 per cent) young people aged 16–24 were unemployed (a total of 1.04 million) (Rhodes, 2011). A slightly lower, but still large proportion (19.2 per cent) of young people aged 16–24 were NEET (DfE, 2011). All four reviews build upon a large body of research on the reasons for young people are NEET, and on recent NFER research (Spielhofer *et al.*, 2009), which presented a 'segmentation' analysis identifying three discrete sub-categories of NEET young people aged 16–17.

- **'Open to learning' NEETs** – young people most likely to re-engage in education or training in the short term and with higher levels of attainment and better attitudes towards school than other NEET young people.

- **'Sustained' NEETs** – young people characterised by their negative experience of school, higher levels of truancy and exclusion and lower academic attainment than other NEET young people. They are most likely to remain NEET in the medium term.

- **'Undecided' NEETs** – young people similar in some respects, such as their attainment levels, to those who are 'open to learning' NEET, but dissatisfied with available opportunities and their inability to access what they want to do.

This report explores what the best available recent research tells us about the ways in which employers engage with schools, the features and principles of successful employer involvement and the impact of employers' involvement on young people's progression. The *From Education to Employment* theme within the NFER Research Programme has a particular interest in young people who are 'open to learning' or 'undecided' NEET, as there is the potential to make a substantial difference to these groups if they can be effectively identified and supported.

Key findings

Fifty-four items of literature were assessed for this review. The items reviewed show that employers engage with schools in a variety of different ways, not only working with students directly but also in less direct ways through curriculum development/support and through leadership and governance of schools. The literature highlights the potential key features of successful employer engagement. The involvement of employers with schools is considered

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[1] This review focuses upon all NEET young people in the 16-24 age range. However, NFER's *From Education to Employment Theme* going forward will focus specifically on the 16-19 year old age group.

to be beneficial to all stakeholders. However there is a lack of evidence on the impact of employer involvement on young people's achievement and progression. The majority of the research evidence focuses on perceptions of soft outcomes such as enjoyment and engagement. These findings are presented within the context of economic recession, high youth unemployment, and a sustained reduction in public funding, all of which compound to make the task of supporting young people to make effective transitions post-16 highly challenging. The key findings are set out below.

Types of engagement

- The most frequently mentioned ways in which employers work directly with students is through work experience, school/workplace visits, apprenticeships/ training and mentoring.

- Employers/businesses use their skills and experience to support the leadership and governance of schools. This may involve sitting on the board of governors of a school or providing professional development for teachers. In some cases it may also involve providing financial support to schools.

- Employers may also be involved in supporting the curriculum. The literature shows that this includes advising on and developing relevant curricula as well as developing curriculum-related and lesson resources.

- Employers also work directly with students to develop skills and awareness. The evidence suggests that this involvement raises student aspirations as well as helping them to develop skills that are important to employers.

Features of successful employer involvement

The literature suggests that there are ten key features to successful employer involvement with schools. According to the findings, conclusions and recommendations from several of the sources reviewed, a successful school-business partnership should involve:

- a clear vision of what all parties want to achieve
- good communication among partners
- partnership
- commitment, cooperation and leadership across all stakeholders
- time to build relationships and for professional development
- flexibility
- focus on curriculum
- well-structured programme design
- consideration of regional economic and development priorities
- early intervention.

Impact of employer involvement

- There is some evidence that employers' involvement with schools affects young people's progression to education, employment and training after compulsory education. However, most of the literature reviewed did not explore progression outcomes of students following their involvement with employers.

- The majority of the items reviewed present evidence of the *perceived* impact of employer involvement.

- The evidence suggests that employer involvement has a positive impact on: students' vocational skills, knowledge and understanding; academic and learning outcomes; health and well-being; enjoyment and engagement; employment, earnings and family life.

- The research evidence also highlights the potential benefits of employer involvement for employers themselves.

- There is little evidence of the impact of employer involvement on harder outcomes such as student achievement and the majority of items reviewed did not explore the impact of employer involvement in terms of student attainment.

- There is little evidence in the literature on the impact of employer involvement on specific groups of young people who might be at risk of becoming NEET.

Summary and next steps

- This review presents a summary of the ways in which employers/businesses engage with schools. It concludes that whilst key features of successful employer engagement can be identified in the literature, these features have not been empirically tested. In addition, there is research evidence that suggests there is sometimes a lack of clarity about the main objectives of employer-school interactions which may impact on the success of such programmes.

- The review also highlights a lack of robust evidence on the impact of employer involvement on harder outcomes such as achievement and post-16 destinations. However, there is evidence of the perceived benefit of employer involvement on a number of student outcomes, in particular: vocational skills, knowledge and understanding; academic and learning outcomes; health and well-being and enjoyment and engagement.

- Although there is some international evidence of employer-school programmes for students considered to be 'at risk', the characteristics of this group are not explored so it is difficult to know whether these findings are relevant to different groups of NEET young people in the UK. There is no evidence in this literature that links employer engagement to 'open to learning' or 'undecided' NEETs.

This suggests that there is currently a gap in the research evidence on how employer involvement with schools can enable young people who are susceptible to becoming 'open to learning', or 'undecided' NEETs to continue to progress in education, employment and

training. This gap will be the focus of the *From Education to Employment* theme within the NFER Research Programme. Key features will be:

- the development and implementation of indicators that can assist in the identification of young people who are 'open to learning' or 'undecided' NEET

- the trialling and evaluation of specific strategies that aim to support these groups

- the validation and dissemination of good practice.

Through this programme of research, we hope to go some way towards reducing the gap in what is known about effective NEET prevention strategies, and to make a difference to the lives of learners.

1. Introduction

This report presents the findings of a literature review conducted as part of the NFER Research Programme. The programme currently consists of three major thematic areas: *From Education to Employment, Developing the Education Workforce* and *Innovation in Education.*

This review forms one of a suite of four reviews that have been completed under the *From Education to Employment* theme. These reviews collectively identify strategies to assist young people at risk of becoming NEET (not in education, employment or training) to make effective transitions into learning or employment post 16. The other three reviews in the series focus on: strategies to support NEETs, the role of careers professionals within schools and the role of curriculum and qualifications in supporting NEET young people.

The focus of this review is to establish what is known about employers' involvement in schools in the UK and internationally, in particular with regard to specific involvement with young people at risk of becoming NEET, and more specifically, those viewed as 'open to learning' or 'undecided' NEETs.

While the end of compulsory schooling is at the age of 16, young people aged 16–19 have the potential to be engaged in *either* learning *or* employment. However, this demographic will change as the Raising the Participation Age legislation comes into force. From 2013, all young people aged up to 17 will be required to be in education, training or work-based learning (including work with part-time study), with only those aged 18–19 potentially in full-time employment. From 2015, all young people up to the age of 18–19 will be required to be in education, training or work-based learning. A focus on 'prevention' of disconnection (as opposed to reintegration into learning among the 16–19 age group) will therefore become all the more relevant among the 17–19 element of the NEET population over the coming years.

The findings of this and the other three reviews will support the *From Education to Employment* theme within the NFER Research Programme by providing a solid evidence base for ongoing and future primary research into NEET prevention. They will also be of interest to national- and local-level policy makers focusing on NEET identification, prevention or mitigation. The timeliness of this research is apparent in recent statistics: in 2011 one in five (22.3 per cent) young people aged 16–24 were reportedly unemployed (a total of 1.04 million) (Rhodes, 2011). A slightly lower, but still large proportion (19.2 per cent) of young people aged 16–24 were NEET (DfE, 2011).. A recent government conference paper outlines concerns about the rising numbers of young people who are NEET, and the personal and social implications that this can have:

> *The on-going consequences [of unemployment] impact not only on the individual but also on the state: young people who are NEET are more likely to suffer health problems and are five times more likely to enter the criminal justice system, with the life-time cost to the state of each young person who is NEET standing at £97,000 (see http://www.insidegovernment.co.uk/children/neet-employment/)*

1.1 Background to the review

In order to provide evidence of the most timely and current approaches to supporting young people who are NEET, this review focuses upon literature published since 2007 (see section 1.2 for details of the review's parameters).

This review's focus upon employer involvement with schools builds on recent research conducted by NFER (Spielhofer *et al.*, 2009) that examined in detail the underlying causes of NEET status in the UK. This research explored a complex interplay between structural, cultural, educational, and familial factors that can culminate in lost opportunity or hope for large numbers of young people. In recognition of the fact that young people classified as NEET are a heterogeneous 'group', the research undertook a 'segmentation' analysis, with the aim of identifying discrete sub-categories of young people within the overarching NEET umbrella. The research identified three 'types' of NEET young people.

- **'Open to learning' NEETs** – the largest sub group (around 41 per cent of the NEET group). These young people were the most likely to re-engage in education or training in the short term and generally had higher levels of attainment and better attitudes towards school than most other NEET young people.

- **'Sustained' NEETs** – around 38 per cent of the NEET group. These young people were characterised by their negative experience of school, higher levels of truancy and exclusion and lower academic attainment than other NEET young people, and the fact that they were most likely to remain NEET in the medium term.

- **'Undecided' NEETs** – around 22 per cent of the NEET group. These young people were similar in some respects, such as their attainment levels, to those who were 'open to learning' NEETs, but they were dissatisfied with available opportunities and their ability to access what they wanted to do.

This and the other reviews within the *From Education to Employment* theme have a particular interest in young people who are, or are at risk of becoming, 'open to learning' or 'undecided' NEETs. Most studies, and indeed strategic approaches, focus upon the sustained NEET group. This is because this group is often the easiest to identify and presents with the most acute needs. However, it is a resource intensive and challenging group of young people to support and it only represents a minority (under two-fifths) of all NEET young people.

It is crucially important that 'sustained' NEET young people continue to receive bespoke and intensive support. Additionally, we argue that through an effective identification of young people who are 'open to learning' or 'undecided' NEETs, and through tailored support to meet their specific needs, it may be possible to make a difference to the post-16 trajectories of large numbers of young people. This ambition necessarily needs to be set within the context of economic recession, public sector budgetary reductions and a constricted labour market. Part of the story is about effective preparedness and aspirations, but the other element is about availability and opportunity of employment and work-based learning for young people. It is important not to present a deficit model that 'blames' NEET young people

for their situation. Indeed, the context within which they are trying to progress and the structural obstacles that many young people are currently facing are of crucial importance in determining 'success'.

The government recently commissioned Professor Alison Wolf to conduct a review of vocational education in England. Her report, published in 2011, put forward a number of recommendations for the reform of vocational education. The government have pledged to take action on all of these recommendations. Of particular interest to this review is the removal of the statutory duty for schools to provide every young person in key stage 4 with work-related learning. It is suggested that this reform will enable schools to support work experience for students aged 16–19, and schools will be free to decide if and how they provide work-related learning to students aged 14–16. Only time will tell what the impact of this reform will be on young people's access to, and experience of, work-related learning.

In addition the government recently pledged £60m to help young people into work through apprenticeships, vocational education, and by tackling some of the persistent structural barriers that stop young people from working and starting careers (HM Government, 2011). Moreover, the government has committed itself to funding 100,000 work placements over the next two years and an additional 250,000 apprenticeships over the next four years (British Prime Minister's Office, 2011). These initiatives hold promise for many young people, although the impact of such schemes is not yet known.

Employer involvement with schools is an important area to research – we hypothesise that this involvement plays a part in ensuring that 'open to learning' or 'undecided' NEETs are engaged in education. Employers are able to link classroom learning to the 'real world' and in doing so give a greater sense of purpose to what these students are studying. In addition, employers are able to give students a realistic insight into the world of work and give clear guidance about the opportunities that are available. These factors are likely to result in students being more engaged in education and able to make informed decisions about their future destinations.

This review aimed to address the following research questions:

- In what ways do employers engage with primary and secondary schools in the UK and abroad?
- What are the key features and principles of successful employer involvement?
- What is the impact of employers' involvement with schools on young people progressing to education, employment or training after compulsory education?
- What gaps are there in the evidence base?
- What are the implications of this review's findings for policy and practice in England/the UK?

There is research evidence from the UK and abroad pointing to the ways in which employers engage with schools. This literature highlights some of the key features and principles of

successful employer involvement, as well as the impact of such relationships. However, few of the authors cited in this review comment on the ways in which employers are involved with students at risk of becoming NEET and there is no evidence with regard to 'open to learning' or 'undecided' NEETs. This strengthens the rationale for the *From Education to Employment* theme within the NFER Research Programme as it develops and attempts to identify and address how employers could help such young people.

1.2 Strength and nature of the evidence base

Systematic searching of key databases identified 242 sources for the review, while systematic searching of websites identified 53 additional potential sources. The literature we sourced dates from 2007 to 2011. These date parameters ensure that the review focused on the most timely and up-to-date approaches. The search terms included employers, employee skills, work-related learning, business education, work experience, enterprise and schools. We did not search for employer involvement in specific subjects (such as STEM) and did not include apprenticeships and diplomas in the search terms. The reason for this is that we were particularly interested in focusing on the types of employer engagement to which the majority of young people in the UK and other countries are exposed. However, we have drawn out evidence about diplomas and apprenticeships where relevant.

The UK literature was screened in July and August 2011 and 20 documents were identified as relevant to the review's research questions. Fourteen of these were found to be highly or mostly relevant, and six were found to be not relevant to the research questions or they fell outside the review parameters. Assessment and analysis of identified items took place in August 2011.

The international literature was screened in October 2011 and 55 documents were identified as relevant to the research questions. This was a large number of documents and therefore a second stage of screening was undertaken and 43 documents were fully appraised. Assessment and analysis of identified items took place between November 2011 and January 2012. The quality of the international evidence is moderate to high: seven documents have a strong evidence base and 11 a moderate evidence base. Two further documents, though impressionistic, were included in the review as they are guides to employer involvement in particular types of schools in the US (see the Appendix section for our definitions of strong evidence, modersate evidence and impressionistic evidence).

The documents appraised for this review comprise research reports, literature reviews, case studies and guides to school and employer partnerships. Most of the evidence reviewed is based on qualitative rather than quantitative analysis.

The chapters that follow examine the ways in which employers are involved with schools, the perceived success and impact of such approaches, and a discussion of these findings and the implication for the *From Education to Employment* theme within the NFER Research Programme.

2. Types of engagement

Employers engage with schools in several ways. We have grouped these types of engagement into three themes: leadership and governance; curriculum support; and skills and awareness. These themes reflect a number of the priority areas for business engagement in primary and secondary schools, as identified in the national framework for business engagement created by the National Council for Educational Excellence (DCSFamilies and Department for Innovation, Universities and Skills, 2008). This section explores each theme by considering the findings of research studies and other key papers. We focus only on the occurrence of each theme rather than their frequency, as the research evidence did not provide detail about this. Figure 2.1 summarises the types of employer engagement in each of these themes.

Figure 2.1   Summary of types of employer engagement
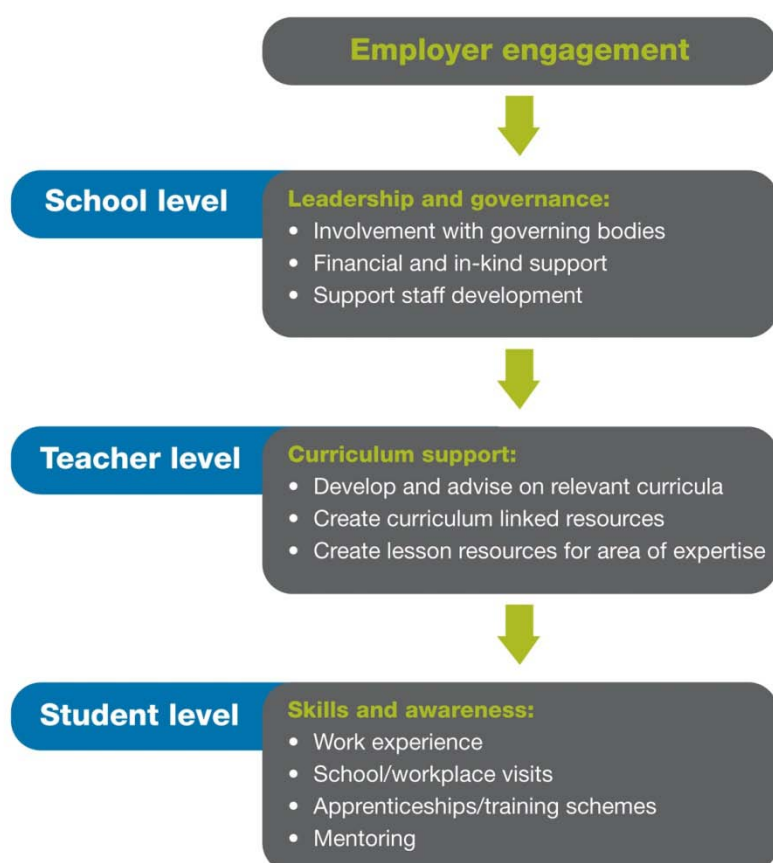
2.1 Leadership and governance

Employers are using their skills and experience to support the leadership and governance of schools, according to the research evidence. This method of engagement involves students indirectly rather than directly, as our review sought to identify, nonetheless it forms part of the relationship-building process between employers and schools. Mann *et al.* (2010), writing for the Education and Employers Taskforce, note that employers in the UK are playing an 'increasingly important role' as school governors and are contributing 'positively' to the leadership of schools via their commercial skills. The Confederation of British Industry (CBI) 2011 survey of employers found that 28% of respondents had employees that acted as governors, this was the third most common way for employers to be involved with schools (CBI, 2011). Punter *et al.* (2007), in their report *Adding Value to Governance*, assess and evaluate the impact of The School Governors' One-Stop-Shop (SGOSS) describing the value added by volunteers working as governors. The SGOSS, launched in 2000, recruits volunteers from business, industry and the public sector to work on the governing bodies of inner-city schools facing the greatest challenges. The report shows that headteachers found that decision-making, effective communication, listening and team-working were among the most valuable key skills that the SGOSS- recruited governors brought to the role. Research from the US and Australia also refers to positive aspects of employers' involvement with school governing bodies (Queensland Government, Department of Education and Training, 2008; Detgen and Alfeld, 2011).

The evidence indicates that in the US and Australia, local chambers of commerce, unions, workforce investment boards and economic development organisations advise schools, partly to provide the right mix of skills to support local industry growth (Kemple with Willner, 2008; Hoachlander *et al.,* 2008; Maryland State Department of Education 2009; Queensland Government, Department of Education and Training and the Arts, n.d; De Cos and Chan, 2009). Kemple with Willner (2008), reporting on the long-term impacts of Career Academies in the US, point to employers having concrete, structured opportunities to engage in the educational mission of high schools through 'employer partnerships' run by Career Academies.

The evidence also indicates that employers support staff development. In some cases this is directly related to the leadership and governance of the school, for example providing leadership guidance to teachers and the wider leadership of the school (Mann *et al.*, 2010; Business-School Connections Roundtable, 2011). In Australia, two-thirds of the schools surveyed by the Business-School Connections Roundtable had involved business in the professional development of staff. Moreover, in their review for the Education and Employers Taskforce, Mann *et al.* (2010) refer to teacher-employer relations. The authors draw on Higham's (2004) review of work-related programmes in Canada. His report emphasises the value of good relationships between teachers and employers, as teacher recommendations can lead to student work opportunities. Section 2.2 explores how employers can also be involved in developing teachers' expertise in particular curriculum areas through the provision of advice and curriculum-related resources.

2.2 Curriculum support

The research evidence showed that employers are supporting school curricula in several ways. The 2010 Ofsted report on the second year of Diplomas delivery found that: 'Employers enhanced the principal learning through contributing to curriculum planning and providing specific learning activities' (Ofsted, 2010a). The authors indicated that this **joint curriculum planning** extended the range of learning experiences for students. Our review of UK literature found that some organisations create lesson resources related to their area of work – this is particularly common for third sector and media organisations. Curriculum-linked resources are an example of direct curriculum support, but it is likely that employer involvement in other aspects of school life, such as developing students' employability skills, also offers indirect curriculum support (Milburn, 2009).

Research exploring practice in Australia and the US also discusses curriculum support (Hay and Kapitzke, 2009; Maryland State Department of Education, 2009; Mann *et al.*, 2010; Business-School Connections Roundtable, 2011; Detgen and Alfeld, 2011). In particular, a baseline study of Australian schools by the Business-School Connections Roundtable found that 55 per cent had received 'life skill development' input from employers, 47 per cent had received help with literacy and numeracy programmes and 42 per cent had received help with industry awareness programmes.

Detgen and Alfeld (2011) discuss the replication of a Career Academy model in Georgia, USA. They refer to 'needs assessment' whereby businesses work with schools to develop relevant curricula to improve the quality of graduates and meet employer demands. Such assessments can help schools develop relevant curricula with input from local businesses. The authors note, in particular, that Charter Schools are '…looking more to business to improve the quality of graduates and meet employer demands' (p.6). Interviewees (site leaders at Career Academies) fed back the following information about needs assessment.

- They had asked businesses to identify their current economic needs and the skill sets/certificates (qualifications) needed by employees.

- They had collaborated with their local education agency and chamber of commerce (as well as other parties) in applying for charter status.

- Governing bodies or boards at the Academies included key stakeholders from local chambers of commerce (periodic meetings followed).

- Joint reviewing of curricula served to operationalise school-employer partnerships.

Similarly, Maryland State Department of Education (2009) reports that it works with industry advisory groups to identify ten 'career clusters' that represent core business functions across broad industry throughout the state. Clusters allow students to: '…explore a wide range of career options and to apply academic and technical skills in a career area' (p.1). The authors refer to career pathways as 'road maps of learning', enabling students to plan for and pursue further education and careers (p.1). The programmes of study align closely with regional economic and workforce development priorities (that is, local needs and opportunities).

Our searches included only generic curriculum support rather than subject specific involvement. We did include business studies in our UK-only search because of its links to enterprise and the relevance of employers to the subject. Perhaps surprisingly, we found few reports detailing employer involvement in business education. That said, the evidence showed that when such involvement became embedded, it correlated with excellent teaching (Ofsted, 2011). It was also found to positively affect achievement and engagement with the subject, although this reported impact does not arise from any hard measures.

2.3 Skills and awareness

Employers are reported to be involved in developing the qualities and competences of young people to meet the needs of employers, as well as raising students' aspirations and careers awareness, according to research evidence from the UK (Freshminds Research, 2007; Eddy Adams Consultations Ltd with Smart Consultancy (Scotland) Ltd and Training and Employment Research Unit, 2008; Rolfe and Crowley, 2008; Ipsos Mori, 2009; Milburn, 2009; UK Commission for Employment and Skills, 2009; Deloitte, 2010; Ofsted, 2010a and b; 2011; Mann *et al.*, 2010; CBI, 2010 and 2011). However, it is important to recognise that activities used to develop students' employability skills are likely to be different from the activities undertaken to raise their aspirations and careers awareness. It is also possible that these activities may be more important at different stages of education. For example in an area of high unemployment, schools may be keen to involve employers in primary schools in order to provide a strong role model from outside school and to increase careers awareness and aspirations at an early stage (Deloitte 2010).

Of particular importance to the UK, is the Leitch Review of Skills (2006), commissioned by the government in 2004. This publication refers to the need for basic skills among students (for example, literacy and numeracy), but also emphasises the need for generic skills (such as teamwork and good communication). The CBI's education and skills survey highlights the importance of these employability skills to employers and the report recognises that more needs to be done to improve these skills in school leavers and graduates (CBI, 2010 and 2011). Rolfe and Crowley (2008) and UK Commission for Employment and Skills (2009), refer to the Leitch Review when they highlight the need for employers to become involved with schools so that students can further develop their employability skills and successfully progress into the world of work. In their 2010 report 'Learning for Jobs', the OECD (2010) highlights the importance of links between schools and employers as a means of introducing students to the world of work. The report suggests that this form of careers guidance also needs to be strengthened by visits to workplaces and work experience (p. 85).

Building employability skills and raising awareness of careers appeared in research from Australia (Standing Committee on Education and Training, 2009; Business-School Connections Roundtable, 2011; Lonsdale *et al.*, 2011; Queensland Government, Department of Education, Training and the Arts, n.d.). It also featured in research from the US (Hoachlander *et al.*, 2008; Kemple with Willner, 2008; De Cos and Chan, 2009; Maryland State Department of Education, 2009; Detgen and Alfeld, 2011). Building employability skills is highlighted by Fischer (2008) as an important outcome of employer involvement with students. Fischer describes how the partnership between HSBC and a Career and Technical

Education (CTE) school has helped students to develop a range of skills that are important in the world of business. HSBC are reported to invite students to their headquarters and offer instruction on business etiquette 'on everything from demeanour at business meals to how to make conversation with new contacts' (p. 26).

The most frequently mentioned ways of developing skills and raising awareness, from the UK and international literature, was through work experience, school/workplace visits, apprenticeships/training schemes and mentoring. We discuss these below. It is important to recognise that some employer involvement programmes may incorporate a number of methods of employer engagement. For example, 'Time to Read' in Northern Ireland (Arlow, 2009) is a mentoring programme primarily aimed at developing children's reading skills, however the children also have an opportunity to visit their mentor's place of work: 'These visits provide opportunities for both the children and their teachers to experience workplace situations outside the classroom' (p.18). Other methods mentioned less frequently were specialist lessons, vocational student prizes, promotion of indigenous role models, career profiles, trade training centres and school-based enterprise.

2.3.1 Work experience and work-related learning

Although the government have accepted Wolf's recommendation that there should be no work experience pre-16 in England (Wolf, 2011), there remains the need for effective work experience for 16–19 year olds. In terms of employers' involvement in schools, **work experience** features often in the UK literature. For example, the YouGov/EDGE report on Business in Schools (YouGov, 2010) provides evidence of the type and extent of employer involvement in schools in the UK. In their 2010 survey, secondary teachers and sixth form/further education (FE) lecturers were asked about the activities involving businesses that their school had been involved in during the last two years. The report indicates that most common type of business activity for schools to be involved in was work experience, followed by enterprise projects and workplace visits. Whereas mentoring, workshops and school and teacher support were much less common. This finding is supported by an Ipsos Mori (2009) survey which found that 83 per cent of year 11 pupils had undertaken a work placement for a week or more – this was the most common involvement of employers with schools. Findings from the 2010 and 2011 CBI annual survey of employers mirror these findings. Providing a work experience placement was the most common way for employers to be involved with schools, with 56 per cent in 2010 and 63 per cent in 2011 offering placements (CBI, 2010 and 2011). A study of students' perceptions of work experience by the National Support Group for Work Experience and National Education Business Partnership Network (2008) found that 78 per cent of the 15,025 students that responded to the questionnaire found their work experience *very* or *mostly* enjoyable and 89 per cent were satisfied with their work experience. The 2010 report by YouGov identifies some key features of good work experience placements. They found that in defining what makes a good work experience placement, young people were more likely to focus on the range of work available and the preparation that goes into accommodating them (p. 20). These features are echoed in the findings from teachers who agreed that the work should be

varied, and the findings from employers, who recognise the importance of having a plan and being prepared for the young people.

However, several reports discussed the need for improving work experience placements and recommended how best to do this (Freshminds Research, 2007; Eddy Adams Consultations Ltd with Smart Consultancy (Scotland) Ltd and Training and Employment Research Unit, 2008; Rolfe and Crowley, 2008; UK Commission for Employment and Skills, 2009; Ofsted, 2010a; CBI, 2010 and 2011). The 2010 CBI survey of employers found that the majority of employers felt the quality of the work experience placements they offered could be improved (CBI, 2010). The evidence suggests there is a need for closer supervision of work experience. For example, Eddy Adams Consultations Ltd with Smart Consultancy (Scotland) Ltd and Training and Employment Research Unit (2008) point out that the aims of work experience can be unclear, therefore making it difficult to measure success. They suggest that young people with behavioural problems are most likely to go without work experience placements, yet such youngsters tend to thrive in them. It is not just having a behavioural problem that can lead to inequality in the type of work experience placements made available to students. Hatcher and Le Gallais (2008), in their study of the distribution of work experience placements among secondary school students, found that students in schools with a lower socio-economic status were more likely to get a work experience placement that mirrored the socio-economic status of the school and that '*reproduced patterns of social inequality*'. In order to overcome this inequality, the authors suggest that, for students from schools with low socio-economic status, a school directive approach to finding work experience placement may be preferable to a 'freedom of choice model'. This is because school and careers staff may be better placed to secure placements in professional areas.

There is also discussion of work experience in the international literature. A report by the Canadian Council on Learning (2009) indicated that work experience in Canada can take a variety of forms. According to the authors, work experience in Canada falls into six different types, these are described in Figure 2.2. It is important to recognise that some of these forms differ quite significantly from the one-week work experience placement that most students in the UK have historically experienced.

Two Australian reports describe young people's involvement in work experience. The Standing Committee on Education and Training (2009) refers to a programme known as VETiS (vocational education and training in schools), run by registered training organisations, private providers, community-based providers or schools. Similarly, the Queensland Government, Department of Education and Training and the Arts (n.d.) reports that 45,000 young people in Queensland have participated in school-based apprenticeships and traineeships. These allow high school students to work with an employer as paid employees while continuing with their high school studies.

In the UK, **work-related learning** can involve subject learning, enterprise activities, special events and curriculum-linked resources created by some organisations. Lynch *et al.* (2010), in their evaluation of the first year of the Diploma, highlight the perceived benefits of work-related learning. They found teachers 'welcomed the link between theory and the real world practice of industry, business and the professions' and Diploma learners 'identified the

benefits of the 'real world' context of their programme and its development of their independent learning skills' (p. 44).

Rolfe and Crowley (2008), in their report on work-related learning opportunities, encourage its use, and although Freshminds Research (2007) also feel there should be wider availability of work-related learning, they call for better coordination between employers and schools.

Figure 2.2   Six types of work experience

Work experience: a planned learning opportunity that provides students with brief periods of work experience, usually lasting between one week and four weeks.

Virtual work experience: these programs allow students to explore workplaces, jobs and work tasks via computer-simulated workplaces. By using virtual tours, young people have an opportunity to develop an understanding of what would be expected of them during actual work experience.

Job shadowing: a work experience option where students learn about a particular job by shadowing (that is, observing) a competent worker throughout their work day. Job shadowing provides temporary unpaid exposure to the workplace in an occupational area of interest to the student.

Co-operative education: these programs combine coursework with a work placement. Students are expected to apply and extend their knowledge in the workplace and to demonstrate the achievement of placement expectations that reflect current workplace practices and standards.

Job twinning: this type of work-experience program provides the student with an opportunity to accompany a co-op education student to his or her placement.

Apprenticeships: these programmes are paid, work-based training combined with post-secondary education. Apprentices spend approximately 80 per cent of their time on the job learning skills under the direction of a highly skilled journeyman, with the balance of their time spent learning in a classroom setting. Apprenticeships can last anywhere from three to five years.

Source: Canadian Council on Learning (2009)

From the US, Kemple with Willner (2008) report on a 15-year evaluation of Career Academies. They observe that exposure to a range of career awareness and development activities, in and outside school, was substantially greater for Academy students than non-Academy students – as was exposure to work in jobs connected to schools. Nevertheless, while Academy students were 'more likely' to take career-related courses than those of non-Academies, the academic and career-related courses that they took were 'generally typical of those offered in the regular school environment' (pp. 9–10). Moreover, Academies tended to expose students to applied and work-related learning activities more than non-Academies, but they did 'not truly integrate academic and career-related curricula and instructional practice' as identified in other research (p.10).

Further research from the US by Maryland State Department of Education (2009) reports on its CTE programme. Students receive on-the-job training related to their career choice. Their participation is organised around a work plan that schools and employers develop. Classroom learning links to specific work experience and students gain school-based and work-based learning credits. Fischer (2008), in a report on CTE in New York, commented on the perceived benefits of this type of educational programme: *'CTE instruction makes education relevant and appealing to students accustomed to boredom and alienation in the classroom'* (p. 9). Similarly, Hoachlander *et al.* (2008), reporting on 'Multiple Pathways' in California, advocate for classroom learning to have 'real-world' applications.

2.3.2 School/workplace visits

School/workplace visits can raise awareness of careers. An Ipsos Mori (2009) study of work-related learning found that 46 per cent of the year 11 pupils it surveyed had listened or spoken to a visitor from business. This study also found that 58 per cent of year 11 pupils had visited a workplace. Mann *et al.* (2010) also refer to speeches given by employers to schools. Moreover, a survey of England's 20 highest performing schools by Mann (2012) found that these schools were using their alumni networks to source speakers. Related to this, Mann *et al.* (2010) also refer to role models from the world of business. They draw on the Royal Society's (2010) study of a STEM role model scheme, which reported that role models from the world of work are not viewed by students as disciplinarians, in the way that teachers are, instead they are viewed as working in the 'real world' and as being enthusiastic about their subject (p. 20).

Research from the US and Australia refers to school/workplace visits (Kemple with Willner, 2008; De Cos and Chan, 2009; Maryland State Department of Education, 2009; Business-School Connections Roundtable, 2011; Lonsdale *et al.*, 2011;). Of particular interest is Kemple and Willner's reporting on Career Academies (2008), which found that Academy students were 'much more likely' to be exposed to guest speakers from local businesses than non-Academy students. The same was true for exposure to job searching, CV writing and interview preparation. Academy students also had increased exposure to individual employers as well as to information about the types of career opportunities in a given field.

A related topic emerging from the UK literature was careers guidance – a broad category including formal and informal advice about post-16 choices. Much of the literature discusses the variable quality of careers guidance and asks for its quality to be improved (Milburn, 2009, Deloitte, 2010, Ofsted, 2010a). This issue is explored further in another review in this series and focuses on strategies to support NEETs, as well as careers professionals' involvement in schools and the determinants necessary for the delivery of effective careers education, information, advice and guidance.

2.3.3 Apprenticeships/training schemes

Whilst the review did not look specifically for literature on training such as Diplomas or apprenticeship programmes, it is important to recognise that this is one way in which

employers are involved with schools both in the UK and internationally. A reference to employer involvement in specific qualifications is considered important in order to highlight the broad range of employer involvement in schools.

Diplomas[2] in the UK provided 14–19 year olds with applied and work-related learning across 14 subjects including ten days' work experience. In the first Diploma cohort a total of 3,545 year 11 learners and 969 year 13 learners achieved a Diploma in 2010. Lynch *et al.* (2010), in their evaluation of the first year of pre-16 Diplomas, found that employer involvement included: providing speakers, one-off visits, work placements, involvement in the extended project, curriculum design, mentoring teaching staff, delivery of principal learning and mentoring young people. This shows that even within one study programme there can be great variation, both in the degree and type of involvement. Significantly, employers were involved in the design of the curriculum content for these qualifications.

Apprenticeships offer employees aged 16 and over the opportunity to gain vocational skills and qualifications in the workplace. There are 85,000 employers currently offering over 200 types of apprenticeship in the UK, and 279,700 employees (116,800 under 19) started apprenticeships in 2009/10. Of particular relevance to this review is the Young Apprenticeship programme which was launched in 2004. This scheme enabled students of average or above average ability in key stage 4 to study for nationally recognised vocational qualifications – a key part of the programme was 50 days' work experience for each student. Ofsted (2007) found that a number of features of the programme: '*helped students to develop a good picture of the vocational sector, including:*

- *visits to local companies and public sector organisations*
- *presentations and talks by local employers*
- *research for assignments on the vocational sector*
- *teaching programmes which focused on different aspects of the vocational area*
- *careers information and interviews with the Connexions service*
- *tutors and teachers with recent experience of the vocational sector*
- *work placements.'*

(p. 7)

A key finding of the Ofsted (2007) evaluation is that employers involved in the Young Apprenticeship programme felt that the programme benefitted students and they could also identify benefits for their own organisation. That is, they felt that the young apprentices were developing desirable skills and aptitude to progress into industry.

Research from Australia and the US refers to the occurrence of apprenticeships and training schemes (Hoachlander *et al.*, 2008; De Cos and Chan, 2009; Maryland State Department of Education, 2009; Queensland Government Department of Education and Training and the Arts, n.d.). In particular, the Queensland Government refers to school-based apprenticeships and traineeships that help young people develop new skills and adjust to a work

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[2] The Diploma consisted of many components, for example principal learning, an extended project, additional and specialist learning and extended work experience. Following Professor Wolf's review (2011) of vocational qualifications, principal learning will remain as a standalone qualification.

environment. It provides employers with information on how to engage a school-based apprentice or trainee in their workplace and provides schools with examples of how to integrate the scheme within their school's programme.

2.3.4 Mentoring

The literature indicates that there are various schemes whereby professionals mentor pupils, most often in the fields of medicine and law. CBI education and skills survey (2011) found that approximately one in five employees act as student mentors, the survey includes business in all sectors and of all sizes across the UK. Milburn (2009) notes that these tend to be *ad hoc* and uncoordinated. Such schemes can involve face-to-face discussions or they can be virtual, as in the case of e-mentoring. It appears, from Miller's 1998 study of business mentoring in the UK, that one-to-one mentoring rather than group mentoring is particularly effective, indicating that on average attainment increased by four per cent (cited in Mann *et al.*, 2010). Research literature from Australia and the US also features mentoring (Bennett, 2008; Kemple with Willner, 2008; De Cos and Chan, 2009; Standing Committee on Education and Training, 2009), with one report listing retired professionals and tradespeople as mentors who pass their knowledge and skills to students. Western Interstate Commission for Higher Education (2009), in a survey of the impact of business-education partnerships, found that employers felt that forging a personal connection with students was the most effective way that employers could influence student's decisions about the course they take in the future. Similar positive findings are shown in Bennett's 2008 study of a work-based internship in the US Midwest. This report explored whether the social support received by students as part of the programme had a positive effect on 'occupational engagement'. It found that social support, particularly mentoring, was the part of the programme that contributed most towards students' feelings of engagement towards careers.

2.4 Extent of involvement

Three reports from the UK present evidence to suggest that schools would like to work more with employers (EdComs, 2007; Deloitte, 2010; YouGov, 2010). The YouGov (2010) report indicates that nearly two-thirds of teachers felt that there is too little employer engagement in their school. This view was supported by the students who also wanted more opportunities to engage in activities with business. The report also highlighted that employers were positive about engaging with the education sector, with 64 per cent currently involved in education.

Yet, although there is clearly a desire for employers to be involved in education, there is some evidence to suggest that involvement could be decreasing. In 2009 Ipsos Mori carried out a survey of 11 – 16 year olds experiences of and attitudes to work-related learning. (Ipsos Mori, 2009). This research repeats earlier studies and therefore provides evidence of changes in pupil attitudes and experiences. The report highlights a decline in the number of pupils visiting workplaces and the number of employers visiting schools. This decline is greater for employer visits, which declined by 13 per cent between 2007 and 2009. However, this finding was not replicated in two of the other sources, namely YouGov (2010) report

and the CBI 2011 education and skills survey. It is possible that the differing findings in these sources are related to the fact they focused on different stakeholders. The Ipsos Mori survey surveyed young people, the CBI survey explored employers views and the YouGov survey collected data from four stakeholder groups including young people, parents, employers and teachers. The CBI 2011 survey found that 67 per cent of employers had links with secondary schools, this was an increase of three per cent since the 2010 survey, indicating that employer involvement is increasing rather than decreasing as suggested by the Ipsos Mori report (2009). In addition, CBI asked respondents whether their involvement with schools had increased or decreased during the last year, over a third of respondents (36 per cent) indicated that their involvement had increased over the last year. In contrast, the YouGov (2010) survey found that between 2008 and 2009 there had been no change in the proportion of employers indicating that they were involved in education.

Three reports call for more innovative and varied employer engagement such as increased mentoring or developing a wider range of online resources and information (Rolfe and Crowley, 2008; Milburn, 2009; Deloitte, 2010). The take-up of these would improve information available to young people, and would encourage employers to engage with schools with greater levels of commitment.

Two international reports comment on the extent of employer involvement with schools. The Business-School Connections Roundtable (2011) in Australia found that a third of responding schools were involved in 'significant' school-business relationships, whereas two-thirds had school-business relationships but these were not considered 'significant'. Almost all secondary schools (98 per cent) in their baseline study were involved in school-business relationships, as the focus was reported to be on school-to-work transitions and employability skills. De Cos and Chan's (2009) report found that business partners might '*serve on an advisory committee, participate in career days, or provide class speakers, job shadowing experiences, mentoring, internships, and work experience opportunities*' (p. 32). However, only 42 per cent of principals and 46 per cent of counsellors reported having established these kinds of partnerships at their schools.

As discussed in the background to this review, proposed changes to the requirement on schools to deliver work-related learning for all pupils in key stage 4 may have an impact on the number of 14–16 year olds engaging in activities with employers. It is possible that the result will be that fewer schools will involve employers in key stage 4, however it is likely that work experience for 16–19 years olds will increase following the government's acceptance of all Wolf's (2011) recommendations.

3. Ten features of successful employer involvement

There are ten key features of successful employer involvement with schools that emerge from our review of the research literature from the UK and abroad. We outline these ten features in this section. Our list contains the features that we consider important, based on the findings, conclusions and recommendations of several publications, but it is important to note that these principles are not necessarily empirically tested. The features in Figure 3.1 describe a specific type of intensive business-education partnership. It is important to recognise that it is not necessary for all partnerships to be as intensive and it is possible for employers and schools to embark on a partnership or work on a programme through a broker without these features . However, the success of this engagement may be increased through the inclusion of some of the features outlined below. We also report on the successful features of work experience and best practice terms of employer involvement in careers education, drawing mainly on UK literature.

3.1 Successful employer involvement

We have developed a ten-point diagram to illustrate the key features of successful employer involvement with schools (see Figure 3.1).

Figure 3.1:   Features of successful school-employer relationships

1 **Vision**
Have a clear vision of what your school-employer relationship wants to achieve and how it will improve outcomes for young people.

2 **Communication**
Develop good communication among partners.

3 **Partnerships and connections**
Relationships should be strong, mutually beneficial and well connected to parents, communities, youth services and other educators.
Partners should understand their roles, and goals should be specific and achievable – policies should support their implementation.
Partners should have compatible values and approaches, and should share a sense of ownership of the relationship.
Schools should work with a wide range of industries to ensure training options match students' interests.

4 **Leadership**
School-employer relationships require a high level of commitment, cooperation and leadership across all stakeholder groups.

5 **Time and capacity**
Allow adequate time for relationships to strengthen and for professional development to take place.

6 **Flexibility**
Be flexible so that your school-employer relationship can evolve and you can respond to unanticipated challenges.

7 **Curriculum**
Connect learning in the classroom with 'real world' applications outside of school.
Integrate academic learning with field-based learning.

8 **Programme design**
Work experience should be well structured and widely available – students should 'sign-up' beforehand to show commitment.
Vocational qualifications should be nationally recognised and credible with industry.
Motivate students to learn by answering the question 'Why do I need to learn this?'
Provide opportunities for students to 'learn and earn'.
Listen and respond to students' career interests.
Encourage businesses to offer work experience/internships – these will give students a direct opportunity to experience the work environment first-hand and learn the types of job skills needed in the workplace.

9 **Needs-based**
Consider regional economic and workforce development priorities (that is, local needs and opportunities) when helping young people develop their careers.

10 **Early intervention**
Start building student awareness of careers early.

Sources: Kemple with Willner (2008); Hoachlander *et al.* (2008); Maryland State Department of Education (2009); Standing Committee on Education and Training (2009); Western Interstate Commission for Higher Education (2009); Arlow (2009); Lonsdale *et al.* (2010); Business-School Connections Roundtable (2010); Queensland Government, Department of Education, Training and the Arts (n.d.)

3.2 Successful work experience

As we have reported, work experience was the most common type of employer involvement in the UK literature we reviewed. We have inferred key elements for success from the recommendations of various reports, and from the successful examples of work experience that these identify (Freshminds Research, 2007; Eddy Adams Consultations Ltd with Smart Consultancy (Scotland) Ltd and Training and Employment Research Unit, 2008; Rolfe and Crowley, 2008; UK Commission for Employment and Skills, 2009; Ofsted, 2010a; CBI, 2010; YouGov, 2010). These features of successful work experience are:

- prepare students appropriately

- work should be varied and include different experiences

- give students clear and realistic expectations of their placements

- raise awareness among students about the importance of the skills they are developing

- allow time to reflect and evaluate

- provide tangible outcomes from the work students undertake

- link work placements to students' skills and interests

- provide rewards for good quality of work

- perhaps prioritise students most likely to join the labour market aged 16 when organising work placements.

A report from the Canadian Council on Learning (2009) also highlights the importance of preparing the students and matching students to placements. This piece of literature found that having a dedicated coordinator to oversee the programme, and develop a contract between the employer and the student that set out expectations for both parties, was also likely to be key to the success of the programme. The matching of students to placements was considered particularly important: 'Inappropriate placements or placements for placement's sake, may, in fact hinder this goal. When students are not interested in the career path associated with a particular placement, they may become disengaged' (Canadian Council on Learning, 2009).

3.3 Successful employer involvement in careers education and guidance

The CBI (2011) found that only six per cent of employers felt that careers advice was good enough and over half of employers indicated that the advice young people receive must improve. The survey found that employers are keen to be involved in improving careers advice. In its report on how employers can support careers education, Deloitte (2010)

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[3] From 2013 all young people aged 17 will have to be in education or jobs with training and from 2015 young people aged 18 will also have to be in education or jobs with training.

discusses best practice in careers education. We have inferred from this report the following characteristics of successful employer involvement in careers education.

- Make it easy for employers to contribute. Give employers options for contributing, and ensure communication is clear.

- Build effective relationships. Ensure the investment of all parties to secure long-term partnerships and make sure all parties see the benefit of the relationship.

4. Impact of involvement

Employers' involvement with schools affects young people's progression to education, employment or training after compulsory education in several ways, according to the research evidence (which tends to focus on self-reported perception data). Such involvement also affects teachers, schools and employers themselves in numerous ways, as we discuss in this section. We also point to evidence relating to 'at risk' students, albeit in a limited capacity due to the lack of research in this area. Very few of the sources we reviewed discussed NEET young people. The work of David Neumark is also relevant and references for his work can be found in the Further Reading section.

4.1 Outcomes for students

Overall, the research literature does not robustly measure the impact of employer involvement with schools on young people's progression to education, employment or training after compulsory education[4]. The literature does not commonly discuss pupil outcomes, such as the ways in which pupils develop employability skills and how these are measured. However, the literature does suggest that employer involvement (in its broadest sense) can have a positive impact on young people in the following ways:

- by contributing to raised attainment

- by increasing confidence in terms of career choices

- by expanding young people's understanding of the world of work.

There is some agreement in the UK literature that 'successful' employer engagement is characterised by: long-lasting, mutually acceptable and beneficial relationships between schools and businesses.

The literature pointed to several outcomes for students, arising from employer relationships with schools. We summarise these outcomes in Figure 4.1. However, it is important to note that few studies presented evidence of measurable improvements.

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[4] We did not review subject-specific literature, so are unable to comment on the impact of employer involvement on students of specific subjects (for example business studies).

Figure 4.1   Outcomes for students

Outcome	Details
Vocational skills, knowledge and understanding	• Insight into the world of business • Increased knowledge of certain industries • Awareness of best-suited careers • Enhanced career aspirations • Insider advice from employees • Improved work-readiness • Improved transitions to work or FE
Academic and learning outcomes	• Deeper understanding of particular subjects • Better integration of theory and practice in subjects • Improved dedication • Enhanced skills development • Improved academic results • Increased motivation • Lower drop-out rates and improved attendance • Positive attitudes towards learning
Health and well-being	• Improved social and emotional well-being (e.g. greater self-esteem, higher aspirations, improved goal setting and a more positive outlook on life) • Reductions in behaviour management issues
Enjoyment and engagement	• Greater enjoyment gained from learning • Introduction of new perspectives • Greater relevance created through real-life connections • Improved engagement • Improved attendance • Positive relationships with mentors
Employment and earnings	• Sustained employment and earnings gains (especially among young men)[5] • Access to better opportunities • Creation of personal networks through school-employer networks • Better career decisions
Family life	• Career Academies also showed positive effects on increasing family stability

Sources: AIR UK (2008); Bennett (2008); Fischer (2008); Kemple with Willner (2008); Cowen and Burgess (2009); Mann *et al.*(2010); Business-School Connections Roundtable (2010); Stern *et al.* (2010); Lonsdale *et al.* (2011)

Note: Findings from AIR UK (2008); Lonsdale *et al.* (2011) and Mann *et al.* (2010) derive from multiple studies. Findings from Kemple with Willner (2008) and Stern *et al.* (2010) refer to Career Academies in the US*.*

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[5] Kemple with Willner (2008, p. iii) found that Career Academies 'produced sustained earnings gains that averaged 11 percent (or $2,088) more per year for Academy group members than for individuals in the non-Academy group — a $16,704 boost in total earnings over the eight years of follow-up (in 2006 dollars)'.

4.1.1 Contributing to attainment

The AIR UK (2008) rapid review of the measurable impact of business in education concluded that, while there are positive impacts of employers' involvement in education, very few studies have attempted to quantify the impact of employer involvement on student attainment. The AIR UK (2008) review found 15 robust quantitative studies which met the strict inclusion criteria. Five of the 15 studies showed a positive impact on student attainment. Of these five, the most relevant from a UK perspective is Miller (1998). This study of business mentoring in schools in England found a four per cent increase in attainment.

Similarly, Mann *et al.* (2010) note that no causal link between employer engagement and an increase in actual academic attainment has been systematically explored – possibly because this would be very hard to achieve. The authors discuss this issue. For instance, they refer to KPMG's (2010) finding that three quarters of the 151 primary and secondary headteachers in England participating in the study agreed or strongly agreed that employers' involvement in pupil learning has 'a positive impact on attainment' (p.7). Mann *et al.* (2010) also refer to Erickson *et al's.* (2007) research in the US which found that youths with mentors are '53 per cent more likely to advance to the next level of education' than youths without mentors (p.25). Similarly, they remark on MacAllum *et al.'s.* (2002) evaluation of LAMP in the US (an employer-driven project), which found participants were more likely to go on to higher education than their peers (85 per cent and 78 per cent, respectively).

Lonsdale *et al.* (2011) also recognise that few studies present measurable improvements to young people's academic and learning outcomes. Drawing on the work of KPMG (2010), they note that many schools use student satisfaction surveys, but few schools can measure the impact of school-employer partnerships on student performance. However, Lonsdale *et al.* (2011) emphasise that employer engagement has the *potential* to raise achievement.

More robust evaluations of the impact of employer involvement on young peoples' progression can be found in two longitudinal evaluations of Careers Academies in the US (Kemple with Willner, 2008 and Stern *et al.,* 2010). Careers Academies were originally set up with a focus on dropout prevention and vocational preparation but have evolved to include preparation for college and university. These longitudinal evaluations report varying findings in terms of the impact of Careers Academies on young peoples' progression. Kemple with Willner (2008), report that this scheme had neither a positive nor negative impact on post-secondary education enrolment and attainment rates. They note that, while Career Academies served as *'viable pathways to a range of postsecondary education opportunities'* (p.iii), they did not appear more effective than options available to the non-Academy group. Indeed, in both groups, more than 90 per cent graduated from high school or received a General Educational Development certificate. Furthermore, Academies had *'no impact'* (p. 9) on standardised test scores administered as part of Kemple and Willner's evaluation.

Stern *et al.* (2010) looked at numerous evaluations of the Careers Academy programme, focusing on the effects of Career Academies on student outcomes, including performance,

high school completion, enrolment in post-secondary education and employment after high school. These evaluations of the Careers Academy programme found that the programme had a positive impact on student outcomes. For example, some studies in California found that *'academy students performed better than similar students in the same high schools who were individually matched'* (p. 7). This finding was supported by other studies which found that students in Careers Academies obtained significantly better grades than non-Academy students. Another study reported that the high school dropout rate for Academy students was half the rate in the general student population in California. However, Stern *et al.* (2010) were concerned that these positive effects might be the result of selection, that it is something about the characteristics of students that apply for Career Academies may make them also more likely to succeed. They propose to use an experimental study design to overcome these student effects: *'The only way to eliminate the uncertainty due to unmeasured differences among students or communities is the experimental procedure of random assignment'* (p.17). The results of this robust evaluation found that:

- Academy students earned a larger number of the course credits needed for graduation

- there were no significant differences between the Academy and control groups with regard to high school completion or post-secondary attainment

- there were significant differences in labour market outcomes with academy students having higher earnings.

As a result of this evaluation, Stern *et al.* (2010) concluded: '*the MDRC evaluation has produced conclusive evidence that careers academies improve students' performance in high school.*' (p.18). However, for the purpose of this review it is important to recognise that these outcomes are not solely the result of employer involvement and that other aspects of the Career Academy programme are likely to have had an impact.

4.1.2 Increasing confidence in career choices

The literature reviewed found more evidence of the *perceived* impact of employer involvement. Generally, pupils and teachers report that involvement positively influences pupils' confidence in terms of career choices, as well as increasing motivation at school (Eddy Adams Consultations Ltd with Smart Consultancy (Scotland) Ltd and Training and Employment Research Unit Ltd, 2008; Ipsos Mori, 2009; Deloitte, 2010). Moreover, Ipsos Mori (2009) found that the more interactions pupils had with employers, the more confident and optimistic they were in their ability to make the right choices. HM Inspectorate of Education (2008) similarly found that 'enterprise education' improved attendance and behaviour, engendered positive attitudes to learning and increased motivation, according to teachers. Cowen and Burgess (2009) found that involving disengaged students in the Key Stage 4 Engagement Programme[6] had 'a positive

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[6] This was a personalised programme for learners most at risk of disengagement. It was developed in response to the 14–19 Education and Skills White Paper (2005) which set out the need a work-focused educational route for learners who would be motivated by a different learning environment.

influence on pupils' aspirations, preparation for a job or further learning and decisions about what they want to do after year 11'.

4.1.3 Expanding knowledge of the world of work

Included in the evidence of perceived impact are findings on the impact of work experience (Eddy Adams Consultations Ltd with Smart Consultancy (Scotland) Ltd and Training and Employment Research Unit, 2008; Ipsos Mori, 2009). A study of students' perceptions of work experience by the National Support Group for Work Experience and National Education Business Partnerships Network (2008) found that work experience had a positive effect on students. Students were asked to indicate whether their skills and knowledge had improved as a result of work experience. A large majority of the 15,025 students who took part in the study either strongly agreed or agreed that work experience had helped them to develop skills, knowledge and an understanding of the world of work. This included: developing skills that employers value; showing a positive attitude to work; understanding how the workplace is organised; developing communication skills; and confidence in handling new situations. A smaller proportion of students felt that their work experience had helped them to be clear about what they wanted to do in their future education or career. Hatcher and Le Gallais (2008) examined the perceived benefits of work experience, they found that work experience can help to boost self confidence, motivation and aspiration, particularly if students experience a range of workplaces. The Canadian Council on Learning (2009), in their summary of international evidence on work experience, found that students who experience any type of work experience programme show improvements in self-esteem, engagement in the workplace and school, and leadership and motivation.

4.3 Outcomes for schools and teachers

Of the literature we reviewed, four publications reported on the outcomes of employer-school involvement for schools and teachers (Punter *et al*., 2007; Business-School Connections Roundtable 2010; Mann *et al.,* 2010; Lonsdale *et al*., 2011). Generally, the literature discusses the outcomes of employer-school involvement for students and employers much more than for schools and teachers. The above authors, drawing on a range of sources, identify the following outcomes.

- Revenue and resources – such as new technology, scientific equipment or improved physical infrastructure.
- Governance – employers are using their skills and experience to support the governance of schools.
- Innovative options for curriculum delivery – designed with greater alignment between practical and theoretical work.
- Improved community profile – partnerships can enhance the profile and reputation of a school.
- Improved skills – in areas such as leadership, management and marketing.

- Professional development opportunities for teachers – such as gaining industry experience and updating subject knowledge.

- Higher staff morale, increased reflexivity, as well as enjoyment and appreciation of employer-school cooperation

4.4   Outcomes for employers

The literature we reviewed identified three main outcomes of employer-school involvement for employers themselves. Mann *et al.* (2010) particularly capture these outcomes in their review for the Education and Employers Taskforce. These authors note that, because people like working for employers who support communities, **engagement with schools positively enhances recruitment and retention**. They refer to work experience as perhaps 'the best possible interview' (p. 9), especially as recruitment costs can be £4000 to £6000 per post.

Moreover, Mann *et al.* (2010) report that, for many employers, working with schools and colleges can help **build awareness and a positive reputation** with a community. The Corporate Citizenship 2010 report '*Volunteering – The Business Case*' (Wilson and Hicks, 2010) indicates that through their involvement in schools, employees can **develop skills and competencies** that are of value to their employer and feature in the organisation's competency framework which is used to monitor and guide staff development. For example, leadership, problem-solving, decision-making and negotiation. In addition the volunteers themselves reported increased self confidence and well-being; a better understanding of others; job satisfaction and motivation. Figure 4.2 details the main outcomes of employer-school involvement for employers.

Figure 4.2   Outcomes for employers

Recruitment opportunities	• Attract and retain employees by demonstrating corporate social responsibility • Gains from larger pool of skilled employees • Raising awareness of the industry • Opportunity to interact with and attract potential employees • An investment in future workforce
Improved skills-base	• Employers can help education sector understand what candidates need to demonstrate • Employers can recruit in areas of skill shortages • Adding value to the growth of local industry
Philanthropic gains	• An awareness of challenges facing schools • Providing input into education • Supporting the development of a literate workforce • Direct opportunity to give back to community by supporting young people
Staff development	• Employees benefit professionally through volunteer activity • Encourages staff to rethink and challenge their existing practices, improving productivity
Staff morale	• Contributing to development of young people improves staff morale, motivation, self-esteem, job satisfaction and commitment to a company • Personal satisfaction as apprentice/trainee learns and transitions to worker
Reputation benefits	• Improved community profile, promotional opportunities and being seen to be socially responsible companies

Sources: Department of Education and Training (2008); Lynch *et al.* (2010); Mann *et al.* (2010); Business-School Connections Roundtable (2010); CBI (2011); Lonsdale *et al.* (2011)Queensland Government, Department of Education, Training and the Arts (n.d.); Queensland Government,.

Note: Findings from Mann *et al.* (2010) and Lonsdale *et al.* (2011) derive from multiple studies*.*

4.5   Effective strategies for NEETs

There is little evidence on effective strategies for NEETs in the literature from the UK and abroad. However, Mann *et al.* (2010) state that employer engagement can be '…*particularly relevant to those people who are disadvantaged in the labour market and who risk becoming NEET'* (p.8)*.* This disadvantage is seen as stemming from poor access to networks and limited parental support. The authors cite evidence from a small number of studies from the UK and US to support this view that there may be specific ways in which employers can be involved with young people who are at risk of becoming NEET (Golden *et al.,* 2005; Kemple with Willner, 2008; Ofsted, 2010b). For example Kemple and Willner's 2008 evaluation of the Careers Academy programme found that the most consistently positive impacts of Career Academies were for students most at risk of dropping out of education. Cowen and Burgess (2009), in their evaluation of the Key Stage 4 Engagement Programme (a personalised programme for key stage 4 learners most at risk of disengagement), found that

most year 11 students on the programme in its first year progressed to positive first destinations.

However, young people who are NEET or are at risk of becoming NEET are not a homogenous group, and therefore these findings may not be relevant for those 'open to learning' and 'undecided' NEET young people. There is no evidence of different strategies that are used with 'open to learning' or 'undecided' NEET young people.

4.6 Facilitating employer involvement

The UK literature we reviewed identifies several barriers to employers' involvement in schools, with some reports recommending ways to address these barriers. A key recommendation is for schools and businesses to **establish effective communication** (Freshminds Research, 2007 and Deloitte, 2010) in order to better understand what each party can offer and to identify a contact person in each organisation (Edcoms, 2007; Freshminds Research, 2007; UK Commission for Employment and Skills, 2009; Deloitte, 2010). The literature suggests that successful employer involvement with schools occurs when **both parties understand each other**, and can take the time to communicate and respond flexibly to the other's needs.

5. Discussion

This review has identified evidence in relation to the review's first three research questions. It has described the main ways in which employers are involved with schools in the UK and internationally. The literature has also provided an insight into the features of successful employer involvement. The review considered the impact of employer involvement on the outcomes for students in terms of progression to education, employment and training post 16. The outcomes for schools, teachers and employers are also considered. This section will discuss the main findings from the review and consider the last two research questions.

- What are the gaps in the evidence base?
- What are the implications of this review for policy and practice in the UK and internationally?

5.1 Conclusions

The evidence suggests that employers engage with schools in several ways. This involvement seems to fall into three broad themes: leadership and governance, curriculum support and contributing to young peoples' skills and awareness (for example work experience and work-related learning).

The leadership and governance theme involves employers and businesses using their skills and experience to support the leadership and governance of schools. This may involve working as governors, helping schools to achieve their mission, providing professional development for teachers and providing financial or in-kind support to schools. Whilst this form of engagement does not involve employers working directly with students, it is a legitimate way in which employers build relationships and partnerships with schools.

The literature indicates that employers support the curricula of schools in a number of ways. This includes advising on and developing relevant curricula, which can extend the range of learning experiences that students have. Some studies from the US suggest that involvement in curricula development can be a way of businesses working directly to improve the quality of graduates and meet employer demands. The involvement of employers in curriculum support also extends to the development of curriculum-linked resources and lesson resources which could be related to the organisation's area of work.

The third way in which employers are engaged with schools – developing skills and awareness – involves employers working directly with students. The evidence from the literature reviewed suggests that this involvement raises student aspirations as well as developing skills that are important to employers. The most frequently mentioned ways of developing skills and awareness were through work experience, school and workplace visits, apprenticeships and training, and mentoring.

Literature from the UK (EdComs, 2007; Deloitte, 2010; YouGov, 2010) suggests that although schools would like to work more with employers this involvement may be decreasing. In particular the number of visits employers make to schools is declining. However, the UK evidence on the extent of employer involvement with schools and whether this is increasing or decreasing is not consistent. Two international reports (De Cos and Chan, 2009; Business-School Connections Roundtable, 2011) also commented on the extent of employer involvement with schools. They suggest that a minority of schools have established significant school-business relationships. However, there was no information as to whether this had changed over time.

It is possible that recent recommendations on work-related learning made by Wolf (2011) in her review of vocational education, when implemented by the government, may lead to a decline in employer involvement with schools. Wolf (2011) has recommended that the requirement for schools to provide work experience for 14–16 years olds should cease, as the raising of the participation age may mean there is more benefit in work experience for 16–19 year olds. This means that it will be up to schools to decide whether they offer work-related learning to students. This approach may result in a decline in the number of schools offering work-related learning, meaning that many young people aged 14–16 will miss out on the benefits of employer involvement in education.

In addition to identifying ways in which employers engage with schools, the review examined the key features of successful employer involvement and evidence of approaches which have been shown to have an impact on young people's progression.

Evidence from the items reviewed suggests that there are ten key features of successful employer involvement. These features are based on the findings, conclusions and recommendations from several pieces of literature reviewed. However, it should be noted that these features have not been empirically tested. A successful school-business partnership should involve:

- a clear vision of what both parties want to achieve

- good communication among partners

- partnership and connection

- commitment, cooperation and leadership across all stakeholders

- time to build relationships and for professional development

- flexibility

- focus on curriculum

- well-structured programme design

- consideration of regional economic and development priorities

- early intervention.

There is evidence to suggest that employer involvement (in its broadest sense) can have a positive impact on young people in the following ways: by contributing to raised attainment; by increasing confidence in terms of career choices and by expanding young people's understanding of the world of work. In terms of the evidence of impact on attainment the more robust evidence can be found in the longitudinal research of the Careers Academy programme in the US. However, in the majority of the items reviewed there is only evidence of the perceived impact of employer involvement. The evidence suggests that employer involvement has a positive impact on: students' vocational skills; knowledge and understanding; academic and learning outcomes; health and well-being; enjoyment and engagement; employment and earnings and family life.

The research evidence also highlights the potential benefits of employer-school involvement for employers themselves. The main outcomes identified for employers are: recruitment opportunities; improved skills base; philanthropic gains, staff development, improved staff morale and reputation benefits. There is also some evidence of the outcomes for schools and teachers, although these are less well explored than the outcomes for students and employers.

The items reviewed provide very little evidence of employer involvement targeted at specific groups of young people who might be at risk of becoming NEET. There is some reference in the international evidence to programmes for students considered to be 'at risk'. However, the characteristics of this 'at risk' group are not explored so it is difficult to know whether the findings are relevant to different NEET groups identified in the UK.

5.2 Gaps in the evidence

This review provides evidence of the ways in which employers in the UK and in other countries are involved with schools. The findings, conclusions and recommendations from the items reviewed have been used to identify ten key features of successful employer involvement. However, these features have not been empirically tested and may not be necessary or appropriate for all school-employer relationships. For example some employer engagement happens vicariously through a broker and therefore not all of these features will be present. Although we have identified features of successful employer involvement from the literature, there is evidence that suggests it can be difficult to determine the success of such programmes due to a lack of clarity about the main objectives of these interactions. For example, Eddy Adams Consultants Ltd with Smart Consultancy (Scotland) Ltd; Training and Employment Research Unit (2008) identifies the lack of clear aims and intended outcomes of work experience as an area that needs to be investigated.

The literature reviewed provides some evidence of the impact of employer involvement on student outcomes. The majority of the evidence shows an impact on what might be considered 'soft' outcomes for young people, for example improved attitudes, improved wellbeing and enhanced career aspirations. However, there is little in the way of robust empirical evidence on measurable outcomes such as student achievement. This lack of evidence is noted by HM Inspectorate of Education (2008) and AIR UK (2008), who call for research to evaluate the links between employer engagement and academic achievement. If

employers and schools are to invest the requisite resources to develop successful programmes of employer involvement there is a need for evidence showing that such programmes have an impact on hard outcomes. The introduction of post-16 destination measures, as announced in the 2010 Schools White Paper (DfE, 2010) will provide destination data for all students. This data could be used by schools and employers to provide evidence of the impact of programmes on how students progress into further education, employment or training.

Lastly, there is a lack of evidence as to how employer involvement with schools impacts on young people who are NEET or are identified as at risk of becoming NEET. In particular, this includes a lack of data on the types of employer engagement which are most appropriate and effective in preventing 'open to learning' or 'undecided' and 'sustained' NEET young people from disengaging.

5.3 Implications for The NFER Research Programme

Some of the gaps identified above will be the focus of the NFER Research Programme going forward. Key features of the Research Programme are likely to be: the development and implementation of indicators that can assist in the identification of young people who are 'open to learning' or 'undecided' NEET; the trialling and evaluation of specific strategies (for example employer-school partnership programmes) that aim to support these groups; and the validation and dissemination of good practice. Through this programme of research, we hope to go some way towards reducing the gap in what is known about effective NEET prevention strategies, and to make a difference to the lives of learners.

6. Next Steps

This review shows that employers are involved with schools in a number of different ways. The evidence suggests that this involvement is beneficial for students. However, this evidence is often based on the perceptions of stakeholders as opposed to robust empirical data.

The review finds that there is currently a gap in the research evidence around the impact of employer involvement on measurable outcomes for all young people, for example student attainment and post-16 destinations. The NFER could seek to address this gap with longitudinal research exploring whether different types of employer involvement have an impact on the decisions students make after compulsory education. Such a study could be modelled on longitudinal evaluations of the Careers Academy programme in the US. Alternatively, smaller scale action research could build on the 'anecdotal' evidence from the literature. For example, schools could be paired with local employers in order to validate specific approaches to employer involvement identified in the literature.

Although some of the reviewed literature explores the involvement of employers with students that are 'at risk', these findings are more likely to be relevant to 'sustained' NEETs. There is no evidence in this literature that links employer involvement with schools to 'open to learning' or 'undecided' NEETs, that is, those young people who are likely to benefit significantly from increased awareness of careers, employability skills and aspirations that may come from employer-school partnerships.

These gaps, along with any gaps identified in the other three reports in this suite of reviews (that is, on strategies to support NEETs, the role of curriculum and qualifications in supporting NEET young people and employer involvement in education) will be the focus of the NFER Research Programme going forward.

Through the development of indicators, we aim to better understand the distinctions between 'open to learning' and 'undecided' NEETs. As a result we will be able to develop our understanding (as well as provide evidence) of strategies, for example employer involvement or Careers Education, Information, Advice and Guidance, (CE/IAG) that can have the greatest effect with each group respectively.

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Appendix

This review uses specific terminology to describe the robustness of the evidence appraised for the themes under discussion.

Strong evidence

In order to make statements about there being a 'strong' evidence base on a particular theme, we seek to ensure that a number of studies have been produced that concur in their findings. We expect these studies to be sufficiently large in scale (for example adopting adequate sample sizes to enable robust statistical analysis) or based on sufficiently in-depth case studies to allow a full explanation of findings. Typically, 'strong' evidence will include quantitative and qualitative research:

- **Quantitative research** that 'measures' impact. Such studies usually adopt experimental or quasi-experimental designs (QEDs) involving baseline and follow-up surveys, or treatment and control group designs, as well as statistical analysis.

- **Qualitative research** that provides data on perceptions of impact. The most reliable studies of this type are those that have conducted a number of in-depth case studies, across a number of locations, drawing on the views of a wide range of stakeholders, and 'triangulating' those views in order to assess the degree of agreement, or dissent, among different individuals in varying locations.

Moderate evidence

The same types of evidence as those cited above are included in this category. The distinction between a theme being described as having a 'strong' or a 'moderate' evidence base is related to two points:

- **The weight of evidence** – themes with 'moderate' evidence are likely to have only a small number of studies (typically two to three) that concur in their findings. There may also be some studies that present a contradictory view.

- **The quality of evidence** – themes with 'moderate' evidence may include studies with rather small sample sizes (for example, QED studies based in only one or two schools), or qualitative studies that have drawn on the views of certain, but not a full range of, stakeholders.

Impressionistic evidence

As this title suggests, this category includes evidence that is based on the observation or opinion of practitioners, or upon a case study in one organisation only, for example. Very often, we find impressionistic evidence of one particular benefit within a study that was established to evaluate an entirely different benefit. Such findings cannot be dismissed entirely, but they tend to be anecdotal, subjective or descriptive in nature.

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The NFER Research Programme

From Education to Employment

The NFER Research Programme

This Programme was set up in 2011. Funded by NFER, it is developing partnerships with organisations and individuals who share our commitment to solving unanswered challenges young people face in education. The Programme targets key areas of education, highlighting gaps in existing evidence and conducting new research to provide evidence to fill the gaps. Current areas of focus are: *From Education to Employment*, *Developing the Education Workforce* and *Innovation in Education*.

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