

Effective employer mentoring

Lessons from the evidence



The Careers & Enterprise Company's initiative seeks to use mentoring to address disengagement among young people. As will be seen, there is good evidence that mentoring can make a difference to many of the attitudes and behaviours that comprise disengagement. This new initiative seeks to significantly expand the existing marketplace of employer/young person mentoring providers. These include a wide range of local and national providers and programmes.

Publication information

This paper is published by the Careers & Enterprise Company.

Views contained within it are solely those of the author and should not be viewed as the policy of the Careers & Enterprise Company.

The publication should be cited as follows.

Hooley, T. (2016). *Effective employer mentoring: lessons from the evidence*. London: Careers & Enterprise Company.

Acknowledgements

Thank you to Anthony Mann (Education Employers Taskforce), Jane Artess (University of Derby), Jonathan Freeman (Mosaic), Pooja Kumari (The Diana Award), Rachel Barker (Department for Education), Susie Perrett (Business in the Community), Anne Spackman and Jenny Barber (Career Ready) for helpful comments on an earlier draft of this paper.

Contents

| | |
|---|-------------|
| About the Careers & Enterprise Company | IV |
| About this paper | V |
| Foreword | VI |
| In brief | VII |
| Executive summary | VIII |
| Lessons for programmes | IX |
| 1. Introduction | 1 |
| 2. What is employer mentoring? | 3 |
| 3. What impact does mentoring have? | 5 |
| 4. Challenges | 11 |
| 5. What lessons does the evidence offer? | 13 |
| Conclusions | 18 |
| References | 20 |

About The Careers & Enterprise Company

The Careers & Enterprise Company is an employer-led organisation that has been set up to inspire and prepare young people for the fast-changing world of work. Our role is to act as a catalyst in the fragmented landscape of careers and enterprise, supporting programmes that work, filling gaps in provision and ensuring coverage across the country. We follow four principles to do this:



For further information on The Careers & Enterprise Company:
www.careersandenterprise.co.uk



About this paper

This paper provides the underpinning evidence which is informing the Company's thinking on the new mentoring campaign. It is hoped that organisations seeking to run these mentoring opportunities will use this evidence to inform the programmes they are developing.

The paper draws together academic and 'grey' literature (such as policy papers, speeches and programme evaluation reports), with the aim of, first, clarifying the impacts that might be anticipated from employer mentoring and, second, exploring what knowledge exists about effective practice. It makes use of an unpublished review undertaken by the Department for Education¹⁶ as well as a number of other literature reviews and meta-analyses, which we will discuss in detail later. We have not sought to write a fully comprehensive literature review, though we hope that this will be a useful foundation document should such a review be undertaken in the future.

16. Department for Education. (2016). A Review of Evidence on Business Mentoring. Unpublished.

Foreword

At The Careers & Enterprise Company we have a passion for helping young people to make the most of their potential.

Too many young people are disengaging from school at an early age. This can have negative effects on their success at school and their ability to build a career after they leave school.

Because of this, we are launching a new campaign around employer mentoring to support young people to stay engaged at school and make an effective transition to their careers.

All The Careers & Enterprise Company's activities are based on the best evidence available. That is why we asked Professor Hooley to undertake this literature review for us. In it, he finds that employer mentoring is an effective strategy that can support young people's engagement with school, their attainment and their transition to work. Critically, he has also identified a wide range of evidence-based features that support effective mentoring programmes.

Our role is to join the dots between schools, employers and mentoring organisations to amplify and support best practice. I hope this review can help to inform our collective understanding of what is needed to support mentoring provision across the country.

Together we can create a long-term culture of change, one that builds better futures for all of our young people.

Claudia Harris

In brief



There is a substantial evidence base supporting the role of employer mentoring in schools.

We can describe the strength of this evidence as **moderate to good** as it includes high-quality studies and a number of statistical meta-analyses.



The evidence suggests that mentoring can have a significant and observable impact on behaviour, attainment and progression. The effect sizes are typically **small**, but mentoring is a **moderate-to low-cost intervention**.



The evidence suggests that mentoring has to be **high quality** in order to deliver any impacts and that badly organised mentoring can do more harm than good.

Executive summary

The idea of an adult supporting a young person to develop has been with us for most of human history. There are various forms of mentoring, but this paper will focus on the mentoring of young people by employers and working people (employer mentoring).

Employer mentoring is a sustained relationship between an employer, an employee or a self-employed person and a young person, focusing on personal or career development. Employer mentors can help to engage young people in the school, inspire and motivate them, and provide them with meaningful encounters with the world of work.

The positive outcomes for young people associated with employer mentoring include improvements in behaviour, engagement, attainment and progression. The strongest evidence supports the impacts on behaviour and engagement.

The Government recently announced new funding for The Careers & Enterprise Company (the Company) to lead a national campaign of employer mentoring for dis-engaged young people in England. To make the most of this investment it is critical that the mentoring programmes involved in the campaign are underpinned by the best evidence available. This paper sets out the findings of a rapid review of the current evidence on such employer mentoring.

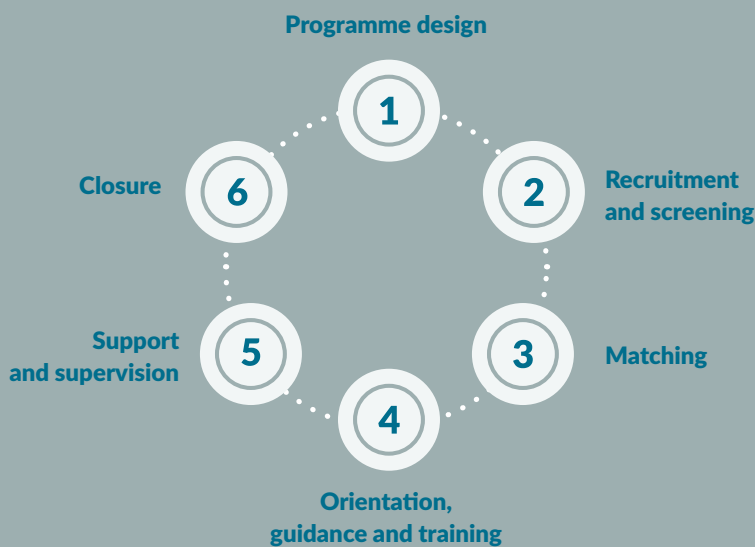
There is a wide range of evidence on employer mentoring which supports the conclusion that employer mentoring can have a significant and observable impact on young people, as well as on mentors and their employers. The most comprehensive recent meta-analysis suggests that school-based employer mentoring has a small but significant effect.

The evidence base also suggests a number of challenges that need to be managed when implementing effective mentoring relationships, including the difficulty of finding training and retaining sufficient mentors, given the demands that mentoring makes on busy working people.

Another challenge relates to the environment in which schools offer mentoring programmes. School-based mentoring can be slow to start and mentors may find that their activities are disrupted by various events and other priorities in the school year. Finally, it can be difficult to sustain mentoring relationships over an extended period of time as the circumstances of both the mentor and mentee can change.

Lessons for programmes

The evidence base identifies five key areas which a successful mentoring programme should focus on. The following areas should be viewed as a description of proven practice. This does not mean that other approaches do not work. Rather, the evidence base should be used as a stimulus for further innovation.



1. Programme design

Mentoring has to be a carefully designed, programmatic intervention that provides participants with structure. Key aspects of this design include the need for piloting, development and evaluation. It is also important to have a professional mentoring organisation involved, to set up relationships between the school and employers, and ensure that the mentoring is well managed and coordinated. It is also essential to get the timing, length and intensity of relationships right. On balance, the evidence suggests that the strongest model is for mentors to meet regularly with their mentee for a year. Meeting expectations is important, with some evidence of negative impacts where they are not met.

2. Recruitment and screening

It is important that both parties are motivated to participate and both have sufficient time to devote to the programme.

3. Matching

It is important to match mentors and mentees on the basis of shared interests and background, to help ensure the mentor is a role model the young person can relate to. If mentoring relationships fail it is possible to re-match, but the evidence suggests that re-matching can have negative consequences so this should be viewed as a last resort.

4. Orientation, guidance and training

It is important to induct mentors and mentees so that they both clearly understand the nature, purpose and boundaries of their respective roles in the relationship. Clearly defining the roles of the different parties and supporting this through relevant documentation and guidance is important, as is providing appropriate training for mentors.

5. Support and supervision

There is a need to support and supervise mentoring relationships to ensure that they are working optimally. Ongoing coordination and the involvement of the school are critical to this.

6. Closure

The end of mentoring programmes needs to be carefully managed.

1. Introduction

The idea of an adult supporting a young person to develop has been with us for most of human history.¹ But, the idea of formally organised programmes of mentoring probably began in the late-19th and early-20th centuries.²

The Big Brothers/Big Sisters programme, founded in the USA in this period, is a good example of this. Its founder, the social reformer Earnest K Coulter, said:

There is only one possible way to save that youngster, and that is to have some earnest, true man volunteer to be his big brother, to look after him, help him do right, make the little chap feel that there is at least one human being in this great city who takes a personal interest in him; who cares whether he lives or dies. (p4)²

This quote still encapsulates the core rationale that is advanced in support of mentoring. Advocates often point to the benefits associated with social capital and which are often more readily available informally to young people from families with higher socio-economic status. Introducing formal mentoring programmes can therefore help to 'level the playing field', 'close the gap' and support social mobility.^{3,4}

Freedman attributes the ongoing popularity of mentoring as a policy approach to social problems as follows.⁵

Mentoring is:

- simple
- direct
- cheap
- sympathetic (well regarded by others)
- legitimate (an appropriate way for adults to engage with young people)
- flexible

It is not only policy makers who are enthusiastic about employer mentoring.

A definition of employer mentoring

Employer mentoring is a sustained relationship between an employer, an employee or a self-employed person and a young person, focusing on personal or career development. Employer mentors can help to engage young people in the school, inspire and motivate them, and provide them with meaningful encounters with the world of work.

1. Hall, J.C. (2003). *Mentoring and Young People: A Literature Review*. Glasgow: The SCRE Centre, University of Glasgow.

2. Miller, A. (2002). *Mentoring Students and Young People: A Handbook of Effective Practice*. London: Kogan Page.

3. Reach Group. (2007). *An Independent Report to Government on Raising the Aspirations and Attainment of Black boys and Young Black Men*. London: Department for Communities and Local Government.

4. Teach First, Brightside and Nesta (n.d.). *One-to-One Support: A Collaborative Quality Framework*. Teach First, Brightside and Nesta.

5. Freedman, M. (1991). *The Kindness of Strangers: Reflections on the Mentoring Movement*. Philadelphia: Public/Private Ventures.

Mann and Dawkins found that teachers reported that employer mentoring could be effective in secondary schools in supporting low and borderline achievers and disengaged learners, increasing attainment and helping young people to broaden their aspirations and get on to a course.⁶

Teachers reported that mentoring between the ages of 16 and 19 could be an effective way to help learners to understand the world of work, and a means of positively supporting borderline achievers and learners with SEN.

Current policy and practice

There is a well-developed history of employers mentoring young people in England and a considerable, if patchy, level of current practice. The available evidence on current provision of mentoring in English schools is limited. However, there are several surveys suggesting that employer mentoring currently operates in between a fifth and a quarter of English schools.^{7 8 9}

In early 2016, the Government announced £14m of new funding for a new national employer mentoring campaign headed by The Careers & Enterprise Company (the Company), which will substantially extend

access to mentoring.^{10 11} The new mentoring campaign has two main features. First, it will involve the mentoring of young people by employers and working people. Second, it will be focused on young people in years 8, 9 and 10 (ages 12 to 15) who are at risk of disengaging from school.

Disengagement from school describes a range of negative behaviours and emotional and cognitive responses to school.¹² It is associated with a range of bad outcomes including absenteeism, low attainment and poor progression in learning and work, and more extreme outcomes such as criminality and anti-social behaviour, dropping out of school/exclusions, and drug abuse.^{13 14 15}

The Careers & Enterprise Company's initiative seeks to use mentoring to address disengagement. As will be seen, there is good evidence that mentoring can make a difference to many of the attitudes and behaviours that comprise disengagement. This new initiative seeks to significantly expand the existing marketplace of employer/young person mentoring providers. These include a wide range of local and national providers and programmes.

6. Mann, A. and Dawkins, J. (2014a). *Employer Engagement in Education*. Reading: CfBT Education Trust.
7. Mann, A. and Dawkins, J. (2014b). *Employer Engagement in Education – A Literature Review*. Reading: CfBT Education Trust.
8. Mann, A. and Kashefpakdel, E. (2014). The views of young Britons (aged 19–24) on their teenage experiences of school-mediated employer engagement. In Mann, A., Stanley, J. and Archer, L. (2014) *Understanding Employer Engagement in Education: Theories and Evidence*. London: Routledge, pp.143–162.
9. YouGov. (2010). *Edge Annual Programme of Stakeholder Research: Business in Schools*. Available from http://www.edge.co.uk/media/17102/yougov_report_on_work_experience_and_employer_engagement_in_education.pdf [Accessed 11th June 2016].
10. Prime Minister's Office, Cameron, D. and the Department for Education. (2016). Prime minister to announce new generation of mentors to help struggling teens. Available from <https://www.gov.uk/government/news/prime-minister-to-announce-new-generation-of-mentors-to-help-struggling-teens> [Accessed 7th March 2016].
11. Prime Minister's Office, 10 Downing Street, HM Treasury, Cameron, D., Morgan, N. Osborne, G. and Department for Education (2016). PM announces new support to improve the life chances of millions. Available from <https://www.gov.uk/government/news/pm-announces-new-support-to-improve-the-life-chances-of-millions> [Accessed 11th April 2016].
12. Fredricks, J. A., Filsecker, M. and Lawson, M. A. (2016). Student engagement, context, and adjustment: Addressing definitional, measurement, and methodological issues. *Learning and Instruction*, 43, 1–4.
13. Magnuson, K., Duncan, G. J., Lee, K. T., and Metzger, M. W. (2016). Early School Adjustment and Educational Attainment. *American Educational Research Journal*, Online first.
14. Henry, K. L., Knight, K. E. and Thornberry, T. P. (2012). School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. *Journal of Youth and Adolescence*, 41(2), 156–166.
15. Wang, M. T. and Fredricks, J. A. (2014). The reciprocal links between school engagement, youth problem behaviors, and school dropout during adolescence. *Child development*, 85(2), 722–737.

2. What is employer mentoring?



Mentoring is a form of social support. It can be variously defined and can overlap with congruent activities such as coaching, tutoring, teaching, counselling, guidance and advocacy.

Teach First, Brightside and Nesta have sought to clarify some of these terms, defining mentoring as a sustained relationship between a more experienced person and a less experienced person, focusing on personal or career development.⁴

Different types of mentoring

Mentoring relationships can emerge organically or be created purposefully through the development of mentoring programmes. Mentoring can be found in a number of different contexts including as a part of human resource management within businesses (corporate mentoring²). However, in the context of the Prime Minister's announcement, this paper will focus on the mentoring of young people.

Even within the mentoring of young people the term can be used in a variety of ways. Types of mentoring include:

- peer mentoring, in which a young person supports another young person;
 - professional mentoring, in which the young person is supported by someone who is paid to work primarily as a mentor and helper (such as a learning mentor in a school or a youth worker);
 - mentoring by a related professional, in which professionals who work with young people take on an additional mentoring role, often with the support of additional training;
 - student mentoring, in which current university students and people in other forms of post-secondary learning mentor school students;¹⁷ and
 - voluntary, community or employer mentoring, where the mentor is an adult volunteer who is usually drawn from the world of work.¹⁸ Such mentors are volunteers who it is assumed will bring considerable capital and life experience to their role as a mentor, but are not expected to be, or to become, educational professionals.
- informal mentoring, in which an adult (perhaps a family member or family friend) provides informal support for a young person;

17. Patel, S.I, Rodriguez, P. and Gonzales, R.J. (2015). The implementation of an innovative high school mentoring program designed to enhance diversity and provide a pathway for future careers in healthcare related fields. *Journal of Racial and Ethnic Health Disparities*. Online first

18. Mann, A. and Dawkins, J. (2014b). *Employer Engagement in Education – A Literature Review*. Reading: CfBT Education Trust.

Employer mentoring

The current initiative by the Government refers to employer mentoring. The term 'employer mentoring' is used rather than possible alternatives such as 'business mentoring' in order to be inclusive of the private, public and third sectors. The term 'employer' is used here to refer to employers, employees and the self-employed.

Many of the researchers who have investigated employer mentoring are keen to stress the way in which mentoring fits into a range of other forms of social support. For example, it is important not to position employer mentoring as an alternative to professional forms of educational, social, career and therapeutic support.^{19 20 21} Measurements of the impact of mentoring typically assume that the young people involved will also have access to a range of

other professional support (e.g. teachers, careers professionals or counsellors and psychologists). Consequently, it is important to view the impacts that mentoring can make as supplemental rather than substitutional. For this reason, Schwartz, Rhodes and Herrera caution against scheduling mentoring activity during class time, because any positive effect associated with the mentoring is likely to be outweighed by the negative impact of missed classes.²²

Employer mentoring can take a variety of forms. Face-to-face and one-to-one mentoring remains as the most common and best evidenced approach. There is also growing evidence for group mentoring and e-mentoring, which will be discussed. Section 5 sets out the best-evidenced elements of effective mentoring programmes.

19. DuBois, D.L., Portillo, N., Rhodes, J.E., Silverthorn, N. and Valentine, J.C. (2011). How Effective Are Mentoring Programs for Youth? A Systematic Assessment of the Evidence. *Psychological Science in the Public Interest*, 12(2), 57-91.

20. Chan, C. S., Rhodes, J. E., Howard, W. J., Lowe, S. R., Schwartz, S. E., and Herrera, C. (2013). Pathways of influence in school-based mentoring: The mediating role of parent and teacher relationships. *Journal of School Psychology*, 51(1), 129-142.

21. Zand, D. H., Thomson, N. R., Cervantes, R., Espiritu, R., Klagholz, D., LaBlance, L. and Taylor, A. (2009). The mentor-youth alliance: The role of mentoring relationships in promoting youth competence. *Journal of Adolescence*, 32, 1-17.

22. Schwartz, S. E., Rhodes, J. E. and Herrera, C. (2012). The influence of meeting time on academic outcomes in school-based mentoring. *Children and Youth Services Review*, 34(12), 2319-2326.

3. What impact does mentoring have?

The evidence base for mentoring is relatively strong. There are lots of studies that have examined mentoring, many of which have used some kind of control.



There are also a number of pre-existing literature reviews and statistical meta-analyses which have sought to draw together all the existing evidence and summarise it.

The body of literature on mentoring strongly suggests that well-organised and executed mentoring makes a difference to young people. However, it also gives us an idea of the scale of the impact that mentoring is likely to have, which is often small. This means we can be confident that mentoring can make a difference, but we should be cautious about overstating the size of the difference it can make. However, it is also important to recognise that mentoring is an efficient intervention which does not require large amounts of public money. As with most interventions in education, mentoring is part of the solution, but it is not a magic bullet.

The strength of the evidence base doesn't mean we know everything about how mentoring works. We need more large-scale evaluations; greater use of randomisation in the establishment of control groups; more information about the relative effects of different models of mentoring; more studies focused on e-mentoring and group mentoring; and more interventions and evaluations that are designed in ways that support their replication in different contexts.¹⁹

What is a control?

A 'control' is a group that can be used for comparison. In the context of this paper it will usually mean that one group of young people received some mentoring (sometimes called the experimental or treatment group) while another group did not (the control group). If the group that received the mentoring out-perform the group that did not (e.g. in attainment or attendance) then we can conclude that it might be the mentoring that is causing the improvement. Ideally the two groups are as similar to each other as possible. One of the best ways to achieve this is to randomly allocate people to each of the groups. This is known as a randomised control trial (RCT).

From the point of view of implementing a new mentoring scheme in England it is also worth noting that the existing evidence base is strongest in the USA, with relatively few UK studies.¹¹

Many of the limitations in the evidence base around mentoring are shared with most other careers and enterprise activities. However, in a forthcoming study by

Deloitte for the Company, mentoring was identified as one of the two most promising activities in terms of impact, from a list of 20.²³ Mentoring is also generally well understood and experienced positively by teachers, young people and employers.^{6 24}

To deliver any positive impacts it is important to ensure that mentoring is of a high quality.^{25 26} Section 5 summarises what is known about quality mentoring. However, it is important to recognise that mentoring can encompass a wide variety of interventions and that the impacts are likely to decline if high-quality models of employer mentoring are watered down. Therefore, it is suggested that attempts to move away from high-quality mentoring approaches (as defined in section 6) are undertaken with caution and are well evaluated.

This section discusses a wide variety of literature which suggests that employer mentoring has a significant and observable impact on young people. However, this is not always the case, and there are a small number of studies showing inconclusive or negative effects.²⁷

Measuring the impact of any kind of educational intervention is always challenging due to the difficulty of defining the intervention, determining what impacts are desired or anticipated, and separating any observed changes from wider contextual factors. In this review we have taken a broad interpretation of impact and made use of research employing a range of research methods.

What is a meta-analysis?

The best summaries of the strength of the evidence base are shown by meta-analyses, which combine the findings of a number of studies. Meta-analyses use statistical techniques to combine studies and look at the average size of the impact that they show. They then usually report these effects by describing the 'effect size' as small, medium or large. The number that corresponds to each effect size varies across different meta-analysis techniques. Such studies are useful because they typically weight data by the relative size of the samples which helps to clarify what the evidence looks like as a whole, and smooth out any outlier results that might be explained by small sample sizes.

Four meta-analyses of employer mentoring have been identified. First, in an analysis of 55 studies, DuBois and colleagues²⁸ found that mentoring has a small but statistically significant impact. Second, in an analysis of 116 mentoring interventions (not just employer/youth interventions), Eby and colleagues found a range of positive effects, but argued for caution around the significance of these findings.²⁹

24. Bruce, M. and Bridgeland, J. (2014). *The Mentoring Effect: Young People's Perspectives on the Outcomes and Availability of Mentoring*. Washington: MENTOR.

25. Karcher, M.J. (2008). The study of mentoring in the learning environment (SMILE): A randomized evaluation of the effectiveness of school-based mentoring. *Prevention Science*, 9, 99–113.

26. Linnehan, F. (2003). A longitudinal study of work-based, adult-youth mentoring. *Journal of Vocational Behaviour*, 63, 40–54.

27. Bernstein, L., Dun Rappaport, C., Olsho, L., Hunt, D. and Levin, M. (2009). *Impact Evaluation of the U.S. Department of Education's Student Mentoring Program*. Washington: USA Department of Education; Hickman, G.P. and Garvey, I.J. (2006). An analysis of academic achievement and school behavior problems as indices of program effectiveness among adolescents enrolled in a youth-based mentoring program. *Journal of At-Risk Issues*, 12(1), 1–10.

28. DuBois, D.L., Holloway, B.E., Valentine, J.C. and Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytical review. *American Journal of Community Psychology*, 30 (2), 157–197.

29. Eby, L. T., Allen, T. D., Evans, S. C., Ng, T. and DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72(2), 254–267.

Third, Wheeler, Keller and DuBois used meta-analysis to synthesise three randomised control trials and again found small effects.³⁰ Most recently, a meta-analysis of 73 independent studies by DuBois and colleagues also found small but significant effects.¹⁹ A number of other synthesis studies also support the conclusion that mentoring does have a positive impact on young people, but which also typically urge caution about the scale of this impact.^{1 31 32}

The relatively small impact size that is suggested by the literature should not be surprising. The Education Endowment Fund highlights a range of evidence-based interventions such as sports participation, summer schools, extending school time and the provision of teaching assistants, which are judged to have a similar size of impact to mentoring.³² The cost of an intervention in relation to its impact is therefore key to making an assessment of its value. Herrera and colleagues' research on school-based employer mentoring in the USA provides some useful quantification of the costs of employer mentoring.³³ They demonstrate that in general the costs of mentoring are low, particularly when compared with interventions requiring education professionals to work directly with young people.

It is also worth noting that there are likely to be impacts on the mentors and their employers as well as the mentees.³⁴ For example, an evaluation of the impact of employer mentoring in schools suggests that acting as a mentor can support the development of communication, creativity, leadership and cultural awareness.³⁵

Do young people like to participate in mentoring?

Most of the studies find that young people have a positive image of mentoring and report positive experiences of their engagement in mentoring relationships and programmes.^{24 36 37 38} Deutsch and colleagues found that mentees also reported a positive experience in group mentoring and perceived changes in relation to their studies, relationships, self-regulation and self-understanding as a result of it.³⁹

Linnehan found that the level of satisfaction reported by mentees in his study was positively associated with an increase in self-confidence and a positive orientation towards study. Mann and Kashefpakdel also found that young people who had participated in mentoring reported that it was 'some' or 'a lot' of use in getting a job after education, deciding on a career and getting into HE.⁸

30. Wheeler, M.E., Keller, T.E. and Dubois, D.L. (2010). Review of the three recent randomized trials of school-based mentoring. *Social Policy Report*, 24(3), 3-21.

31. Jekielek, S.M., Moore, K.A., Hair, E.C. and Scarupa, H.J. (2002). *Mentoring: A Promising Strategy for Youth Development*. (Child Trends Research Brief.) Washington, DC: Child Trends.

32. Bartlett, J. (2009). *Mentoring Programmes, Aspiration and Attainment: A Literature Review*. London: Demos.

33. Education Endowment Fund. (2016). *Teaching and Learning Toolkit*.

Available from <https://educationendowmentfoundation.org.uk/evidence/teaching-learning-toolkit> [Accessed 14th June 2016].

34. Herrera, C., Baldwin Grossman, J., Kauh, T.J., Feldman, A.F., McMaken, J. and Jucovy, L.Z. (2007). *The Big Brothers Big Sisters School-Based Mentoring Impact Study*. Philadelphia: Public/Private Ventures.

35. Beltman, S. and Schaeben, M. (2012). Institution-wide peer mentoring: Benefits for mentors. *The International Journal of the First Year in Higher Education*, 3(2), 33-44.

36. Richey, M., Gupta, D., O'Mahoney, K.T., Meyers, L.E., Zender, F. and LaVallo Vermeer, D. (2015). *The Business Case for Engineering Skills-based Volunteerism in K-12 Education*. Paper presented to the 122nd ASEE Annual Conference and Exposition, 14-17 June 2015.

37. Ahrens-Bella, J.K. (1998). A Study to Determine the Effect of the Rosemont Middle School Mentor/Mentee Programme of Norfolk Public High Schools on the Scholastic Achievement, Attitudes, and Behavior of Fall 1997 Sixth, Seventh, and Eighth Grade Mentees. Thesis submitted for the degree of Masters of Science in Education, Old Dominion University.

38. Hackney Schools' Mentoring Programme (HMSP). (2010). *Hackney Schools' Mentoring Programme Evaluation*. Available at <http://www.hsmp.org.uk/sites/default/files/dl/business-mentoring-evaluation.pdf>.

39. Tower Hamlets Education Business Partnership (THEBP). (2011). *Business Mentoring Evaluation 2010-11*. Available at <http://www.mandbf.org/wp-content/uploads/2011/10/Business-Mentoring-final-evaluation-2010-11.pdf>.

These self-reported impacts pre-figure many of the other results that have been identified through research. It is possible to group the main impacts as behavioural and engagement, attainment and progression.

Does it have a positive impact on behaviour and school engagement?

There is a body of research that has demonstrated an impact from mentoring on young people's behaviour and the extent to which they are engaged in their education.^{25 41 42}

For example, Ahrens-Bella and Sims reported enhanced confidence and social skills for participants.³⁶ Dolan and colleagues⁴³ and Collier and Kuo⁴⁴ emphasise positive impacts on health and pro-social behaviours. Both Rhodes and colleagues⁴⁵ and Chan and colleagues found that mentoring was positively associated with a range of behavioural impacts including more positive relationships with parents and teachers.²⁰

Karcher argues that it is these behavioural issues and personal attributes (such as self-confidence and self-esteem) that mentoring is best placed to impact upon.²⁵ He finds small but positive impacts on self-esteem, hope, social connectedness and perceived social support from a school-based employer mentoring programme.

Most of the evidence suggests that these behavioural impacts also lead to improved school engagement. Clarke⁴⁶ and Linnehan both found that students who had mentoring reported higher levels of school engagement than those who hadn't. Chan and colleagues²⁰ reported improved relationships with teachers. There is also evidence to suggest that unexplained absences decline among students who have sustained, high-quality mentoring.^{34 33 45 43 47}

Does it have a positive impact on attainment?

As already noted, many students who participate in mentoring report that it has had an academic impact.³³ Mann and Kashefpakdel back up this finding by drawing on a wide range of literature to make the argument that mentoring can have a positive impact on attainment.⁸

A number of studies have provided empirical evidence for these attainment impacts. In the UK, Miller reports that in a study of seven schools using mentoring, the mentored students did significantly better in their GCSEs than the control group in four of the seven schools.⁴⁸ This is supported by numerous studies from the US, which find that sustained, high-quality mentoring is positively associated with improvements in academic attainment.^{34 33 47 45 49 50 51}

40. Deutsch, N. L., Reitz-Krueger, C., Henneberger, A., Futch, V. and Lawrence, E. C. (2016). It gave me ways to solve problems and ways to talk to people!: Outcomes from a combined group and one-on-one mentoring program for early adolescent girls. *Journal of Adolescent Research*, online first.

41. Bartlett (2012) *A Model Role Evaluation of Mosaic Mentoring Programmes*. London: Demos.

42. Mosaic. (2013). *Mosaic: Assessing Our Impact*. London: Mosaic

43. Dolan, P., Brady, B., O'Reagan, C., Canavan, J., Russel, D. and Forkan, C. (2011). *Big Brothers Big Sisters (BBBS) of Ireland: Evaluation Study*. Galway: Child and Family Research Centre, National University of Ireland.

44. Collier, R.J. and Kuo, A.A. (2014). Youth development through mentorship: A Los Angeles school-based mentorship programme among Latino children. *Journal of Community Health*, 39, 316–321.

45. Rhodes, J. E., Grossman, J. B., and Resch, N. L. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. *Child Development*, 71(6), 1662–1671.

46. Clarke, L.O. (2009). *Effects of a School-Based Adult Mentoring Intervention on Low Income, Urban High School Freshman Judged to be at Risk For Drop-Out: A Replication and Extension* (Doctoral dissertation). State University of New Jersey: New Brunswick, New Jersey.

47. Grossman, J.B., Chan, C.S., Schwartz, S.E.O. and Rhodes, J.E. (2012). The test of time in school-based mentoring: The role of relationship duration and re-matching on academic outcomes. *American Journal of Community Psychology*, 43, 43–54.

48. Miller, A. (1999). Business mentoring in schools: does it raise attainment? *Education + Training*, 41(1), 73–78.

Does it have a positive impact on educational and career progression?

Finally, it is possible to identify some studies which suggest that mentoring has a positive impact on educational and career progression. However, it was not possible to identify any studies which had tracked young people longitudinally; instead, studies focused on the work-readiness of young people. For example, an evaluation of one mentoring programme found that young people reported that they now had more insights into work and a better capability

to manage their careers.³⁸ Linnehan's research in the USA supports this, suggesting that mentored young people had more positive attitudes about work than their unmentored peers.

47. Bayer, A., Grossman, J. B. and DuBois, D. L. (2015). Using volunteer mentors to improve the academic outcomes of underserved students: the role of relationships. *Journal of Community Psychology*, 43(4), 408–429.

48. Miller, A. (1999). Business mentoring in schools: does it raise attainment? *Education + Training*, 41(1), 73–78.

49. Bayer, A., Grossman, J. B. and DuBois, D. L. (2015). Using volunteer mentors to improve the academic outcomes of underserved students: the role of relationships. *Journal of Community Psychology*, 43(4), 408–429.

50. Linnehan, F. (2001). The relation of a work-based mentoring program to the academic performance and behavior of African American students. *Journal of Vocational Behavior*, 59(3), 310–325.

51. Thompson, L. A. and Kelly-Vance, L. (2001). The impact of mentoring on academic achievement of at-risk youth. *Children and Youth Services Review*, 23(3), 227–242.

The body of literature on mentoring strongly suggests that well-organised and well-executed mentoring makes a difference to young people.

4. Challenges

The evidence suggests that the impacts of mentoring are only realised if it is delivered in a consistent and high-quality way.



As the impacts from mentoring are relatively small, it is easy for them to disappear if programmes are not well organised. Section 5 outlines the key features of quality mentoring programmes, while this section highlights some key challenges. Some of these challenges can be overcome by effective programme design, but others relate more clearly to the environment within which mentoring takes place, and are likely to be perennial issues that all programmes will have to manage.

Employer challenges

In the USA, Bruce and Bridgeland found that the demand for mentoring far outstrips the supply.²⁴ In particular, they note that at-risk (of social exclusion) young people are more likely to want a mentor but less likely to have access to one than their more advantaged peers. This is probably due to the relationship between social capital and access to informal mentoring. Formal mentoring programmes of the kind initiated by the Prime Minister offer one way to counter-balance this. However, there are considerable challenges in recruiting and sustaining such programmes.

Mann and Kashfepakdel highlight employers' reports of mentoring as demanding.⁸ Mentors are required to give up time over a sustained period, undertake the building of

a challenging relationship, follow unfamiliar rules, regulations, institutions and situations and potentially manage wavering commitment from their mentee.^{1,36}

It is common for programmes to struggle to recruit and retain sufficient numbers of appropriate adults to undertake mentoring.^{24, 25, 36} This is particularly the case where programmes are actively looking for diverse mentors to better reflect the backgrounds of the mentees. Kanchewa and colleagues argue that it is often particularly difficult to find a sufficient number of male mentors.⁵² Hall argues that mentors are typically white, female and middle-class.¹ Related to this, Miller has noted that many employer mentoring schemes later broaden their focus due to challenges in recruiting sufficient numbers of mentors from employers.⁷

Schools challenges

Many school-based programmes can be slow to start and find that mentoring is frequently interrupted by key events in the school year e.g. exams or inspections.²⁵ Karcher argues that this can seriously degrade the effectiveness of the mentoring programmes by reducing both the intensity and effective length of the intervention. This tendency for the length of mentoring relationships to be reduced by both the school year and the frequency of

52. Kanchewa, S.S., Rhodes, J.E., Schwartz, S.E.O., Olsho, L.E.W. (2014). An investigation of same- versus cross-gender matching for boys in formal school-based mentoring programmes. *Applied Developmental Science*, 18(1), 31–45.

interruptions is one of the major challenges for school-based mentoring programme.²⁸ Longer relationships lead to more impactful mentoring, but this can be difficult for schools to achieve.^{25 42}

Relationship challenges

Even when mentoring relationships are successfully established there are a number of challenges that they still need to negotiate. Social distance between the mentor and mentee, manipulative and dysfunctional behaviours by either party (for example, attempts to redirect the relationship for

personal gain) and lack of time all have the potential to destroy the relationship between mentor and mentee.¹ Because of this, as well as a range of other logistical reasons, the retention of mentors and mentees, and the sustaining of the mentoring relationship, are substantial challenges for programmes.³⁶ Research suggests that it is possible for poorly run schemes to do more harm than good, leaving participants disaffected through an inappropriate match or unsuccessful mentoring relationship.^{53 54}

53. Education Endowment Foundation (EEF). (2014). Mentoring. Available at <https://educationendowmentfoundation.org.uk/evidence/teaching-learning-toolkit/mentoring/> [Accessed 11 June 2016].

54. MENTOR. (2015). *Elements of Effective Practice for Mentoring*. Boston: MENTOR.

5. What lessons does the evidence offer?

In developing mentoring interventions there are a number of choices to make about how it will be designed.



These include:

- the length of the intervention (one-off, short term or sustained for one year or more);
- the mode (face-to-face, telephone, online or blended). There is some evidence discussing the efficacy of online mentoring.⁵⁵ There is a growing, and often organic, development of the use of social media and other modern communication methods, such as Skype, by mentors and mentees to create blended forms of mentoring.⁵⁶ However, this rapid evidence review has concentrated on face-to-face mentoring as the evidence is much stronger than the more emergent evidence base on e-mentoring;
- whether the intervention is one-to-one or group focused. There is a more research on the former than the latter, though there is evidence that group mentoring does lead to impacts;⁵⁷
- the group that the intervention is to be targeted at, including identification by age, gender, attainment or disadvantage;
- whether the mentoring takes place within the school (school-based mentoring), within the workplace (workplace mentoring) or in a neutral local location (community-based mentoring). Based on research in the USA Grossman and colleagues argue that school-based mentoring approaches are able to attract a more diverse range of mentors and are more focused on academic goals;^{47 45}
- the focus of the intervention and its intended outcome (attainment, confidence, career, wellbeing, behaviour etc). Within career-focused mentoring there is a further distinction between programmes which seek to support career building in general and those which seek to engage participants in careers within particular industries. Miller points out that many mentoring interventions have a range of anticipated outcomes and that the different stakeholders involved (schools, young people and volunteers) may prioritise these outcomes differently;^{48 46} and
- how far the mentoring programme is self-contained or embedded within a wider, long-term and systematic programme of career learning and personal development, either within the school or beyond it.

Based on the review of the literature it is possible to identify a number of features of effective programmes that should influence the design of future interventions. DuBois and colleagues argue that a greater level of

55. Hooley, T., Hutchinson, J. and Neary, S. (2016). Ensuring quality in online career mentoring. *British Journal of Guidance and Counselling*, 44(1), 26–41.

56. Schwartz, S. E., Rhodes, J. E., Chan, C. S. and Herrera, C. (2011). The impact of school-based mentoring on youths with different relational profiles. *Developmental Psychology*, 47(2), 450–462.

57. Deutsch, N. L., Reitz-Krueger, C., Henneberger, A., Futch, V. and Lawrence, E. C. (2016). It gave me ways to solve problems and ways to talk to people[®]: Outcomes from a combined group and one-on-one mentoring program for early adolescent girls. *Journal of Adolescent Research*, Online first.

consistency of programme design, drawing on the evidence, will increase the impact of mentoring.¹⁹ However, Ahrens-Bella³⁶ cautions that mentoring programmes must be designed to address local needs and meet local circumstances. Because all programmes are different it is important not to impose a one-size-fits-all approach on their development.

Nonetheless, it is useful to try to distil some features of programme design that have been viewed as successful in the past.

Programme design

Mentoring should be thought of as a purposeful intervention that has to be carefully designed. The evidence provides us with some clear pointers, which should be used in programme design.

Piloting, development and evaluation

There is a need to pilot initiatives and to establish a cycle of evidence-based continuous improvement when developing and implementing mentoring programmes (DuBois *et al*, 2011). This is likely to require the establishment of clear and consistent record-keeping processes and building in formal points for reflection and redesign. The use of internal and external evaluation processes is also valuable.

Professional mentoring organisation

There is a need for a professional mentoring organisation to be involved in the recruitment, vetting and training of mentors.

Coordination

A key role which the organisation will usually play is coordinating and establishing systems to track the engagement of both

mentor and mentee and provide regular feedback on the academic progress, attendance and other outcomes of the young person to all participants.^{48 46}

Structure

There is some evidence suggesting that it is important to provide an agreed structure for the mentoring relationship.¹ This may include the provision of compulsory or optional activities around which the mentoring can be structured.

Timing (school year)

The timing of the intervention is critical. Miller suggests that it is focused on the last two terms of year 10 and first term of year 11 (ages 15 to 16)^{48 46}, though this point is grounded in experience rather than hard evidence. Wider evidence on school disengagement suggests that most children who are going to disengage from school have already done so by year 10 and it may therefore be advisable to focus interventions earlier.⁵⁸

Timing (school day)

The positive effects of mentoring are greater when it takes place after school or in lunch breaks rather than in class time.²²

Length

The length of the intervention is important.²⁴ Few effects can be seen from mentoring relationships that last for less than six months⁵⁷ and some researchers argue that short mentoring relationship can actually be harmful.⁴² There is a widespread consensus that a year-long relationship constitutes a quality mentoring interaction.^{25 42 47 45 48 46} Other researchers have found that the effects of mentoring

58. Ross, A. (2009). *Disengagement from Education Among 14–16 Year Olds*. London: DCFS.

59. Grossman, J. B., and Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring programs. *American Journal of Community Psychology*, 30, 199–206.

on young people become progressively stronger the longer the relationship lasts.^{34 33 5}

Intensity

The intensity of the intervention will make a difference to the impact that can be expected. Miller suggests that meeting every two weeks over the course of a year is optimal.^{48 46}

Parental involvement

Townsel highlights the importance of involving parents/carers in the mentoring programme, who should understand its purpose and, where possible, be encouraged to reinforce its aims.⁶⁰ Rhodes and colleagues found that improved relationships with parents were one of the impacts of mentoring programmes and that some other impacts such as improved attainment were mediated through improved parental relationships.^{45 43}

Recruitment and screening

The evidence suggests that the selection and matching of young people and mentors is critical to the success of mentoring relationships and programmes.

The selection of the young people to participate in the programme is key. There is a range of criteria that might be used to make this selection.

Academic

Miller argues that mentoring can be particularly effective for students with falling motivation who are on the C/D borderline.^{48 46}

Behaviour

DuBois and colleagues argue that young people with problem behaviours can often benefit substantially from mentoring (which can lead to larger effect sizes).¹⁹ While MENTOR supports this conclusion in general, it also notes that mentoring is less effective for young people with serious behavioural issues.^{54 52} DuBois and colleagues give the example of young people with extreme anti-social tendencies as a group it may be difficult to involve in mentoring. It is important, in the example of this group, to stress that mentoring cannot replace more intensive therapeutic or educational approaches to tackling behavioural issues.^{19 20 21}

Disadvantage

Employer mentoring is often used as a way to provide social capital and support to disadvantaged young people who cannot access support through their family. Collier and Kuo argue that the impacts of mentoring can be greater for disadvantaged and vulnerable young people.⁴²

Motivation

It is important to select mentees who are motivated to participate in the relationship, as their level of engagement will influence its success.⁶¹

Relationships

Young people's capacity to trust adults and manage social relationships influences the success of mentoring relationships.^{19 22} However, it is also clear that where young people and their mentors are able to build close relationships, the impact of the mentoring is enhanced.^{49 47}

60. Townsel, K.T. (1997). Mentoring African-American youth. *Preventing School Failure*, 41, 125–7.

61. Mtika, P. and Payne, F. (2014). Student–adult mentoring relationships: experiences from a Scottish school-based programme. *Educational Research*, 56(4), 436–452.

Special educational needs and disabilities

There is evidence to suggest that a range of education/employer initiatives including mentoring can support young people with special educational needs and disabilities to transition effectively to work.^{62 63} Stumbo and colleagues report that it is common for mentors working with this group to also have disabilities, though this is not always the case.⁶⁴

In addition to the selection of mentees it is important to select mentors carefully. Ahrens-Bella suggests that this should be done by interview.^{37 36}

Time and commitment

Mentors should have sufficient time and commitment to devote to the project.³⁶

Experience

More experienced mentors are more effective.^{48 46} Because of the value of experience it is important to retain mentors and encourage repeat mentoring.

Matching

The process of matching mentors and mentees is important,^{36 59} though it is likely that matching is more critical in one-to-one relationships than in group mentoring. Research provides useful insights on the criteria that might be used for matching.

Ethnicity

It is common to assume that matching mentors and mentees on ethnicity is likely to lead to better outcomes.³ However, the evidence base for this is not very clear. In the USA, DuBois and colleagues found that programmes which did not match on ethnicity reported larger effect sizes.¹⁹

Gender

Most mentoring programmes match along gender lines and Karcher notes that it is unusual for female mentees to be matched with male mentors.²⁵ However, the reverse is not always true and Kanchewa and colleagues found no substantial differences in relationship processes and outcomes when male or female mentors were matched with young males.⁵⁰

Interests and background

Ideally, mentors should be matched with mentees on the basis of shared educational and occupational interests and background.^{19 54 52} Sims suggests mentors and mentees should be given a choice in who they are matched with.¹¹

When relationships break down, it is possible to re-match the young person with a new mentor. However, this is a challenging process which, if handled badly, can reinforce young people's narratives around the unreliability of adults.^{47 45} Grossman and colleagues found that re-matched mentees actually experienced worse outcomes than the control group.^{47 45} Given this, it is clear that re-matching should be a last resort.

62. Shandra, C. L. and Hogan, D. P. (2008). School-to-work program participation and the post-high school employment of young adults with disabilities. *Journal of Vocational Rehabilitation*, 29(2), 117–130.

63. Sabbatino, E. D. and Macrine, S. L. (2007). Start on success: A model transition program for high school students with disabilities. *Preventing School Failure: Alternative Education for Children and Youth*, 52(1), 33–39.

64. Stumbo, N. J. (2014). Evidence-based practices in mentoring students with disabilities: Four case studies. *Journal of Science Education for Students with Disabilities*, 14(1), 4.

65. Sims, D. (2002). Mentoring young people: Benefits and considerations. Available from https://www.nfer.ac.uk/nfer/PRE_PDF_Files/02_27_06.pdf [Accessed 29 March 2016].

Orientation, guidance and training

Employer mentors are not expected to be or become educational professionals. Their value to the young person is drawn from their wider life experience, the capital that they bring and their willingness to give their time. However, the evidence suggests that it is important to support, clarify and train employer mentors so they are best able to make an impact.

The roles of mentors, mentees, mentoring coordinators and other key stakeholders (e.g. parents/carers and teachers) in the programme should be clearly defined and care should be taken to distinguish them from professional roles in education, social support and therapy.^{19 36 59} Roles should be clearly set out in guidance documents and issues of role definition should be covered during training.

Mentors should receive training to clarify their role and provide them with tools, knowledge and resources to successfully discharge it. This should include training in working with young people, goal setting, and an understanding of appropriate rules and regulations.^{36 59}

Support and supervision

Mentoring is a complex and ongoing relationship. Achieving a close connection between mentor and mentee is an essential pre-condition of effective mentoring.^{19 12} There is some evidence that the use of social media and other communication methods, such as Skype, between mentor and mentee can support the positive development and maintenance of this relationship.²² The mentoring coordinator should

attend to the relationship and address any breakdowns in communication.

The evidence suggests that both mentors and mentees benefit from being able to access support. Ongoing support and supervision is required from a mentoring coordinator to ensure that the process works effectively and that any problems can be addressed as they arise.³⁶

The school also has to support and facilitate the mentoring.^{48 46} Mtika and Payne suggest that the school's guidance/careers teacher may be the appropriate person to manage and coordinate this.⁵⁹

Closure

Ending mentoring programmes can be difficult. Young people need to feel that the purpose of the relationship has been achieved and that they have not been abandoned by their mentor. Consequently, it's crucial that the end of the programme is carefully managed.^{54 52}

Conclusions

This review of the evidence has found:



Clear definitions

It is important to develop clear definitions when discussing mentoring. Mentoring covers a wide range of interventions for diverse groups. This paper has taken its lead from the Prime Minister and focused on face-to-face employer mentoring of young people.



Evidence base

There is an evidence base that suggests that employer mentoring is effective and that it can have positive impacts on the behaviour, engagement, attainment and the educational and career progression of young people. However, the effect sizes are often small, though it is also important to note that employer mentoring is a low-cost intervention.



Challenges

There are a number of substantial challenges in making a mentoring programme work effectively. These include the challenges in recruiting and retaining employer mentors and in situating the mentoring intervention in schools. Where mentoring is done badly it can be detrimental to the young people involved.



Insights

The evidence base provides a range of helpful insights about how mentoring programmes should be organised. There does not appear to be a single model which all programmes should adhere to. There is undoubtedly value in a range of different approaches, which may organise mentoring in different ways. However, there are a number of lessons that can be learnt from the evidence with respect to: programme design; recruitment and screening; matching; orientation, guidance and training; support and supervision; and closure.

References

- Ahrens-Bella, J.K. (1998). A Study to Determine the Effect of the Rosemont Middle School Mentor/Mentee Programme of Norfolk Public High Schools on the Scholastic Achievement, Attitudes, and Behavior of Fall 1997 Sixth, Seventh, and Eighth Grade Mentees. Thesis submitted for the degree of Masters of Science in Education, Old Dominion University.
- Bartlett, J. (2009). *Mentoring Programmes, Aspiration and Attainment: A Literature Review*. London: Demos.
- Bartlett, J. (2012). *A Model Role Evaluation of Mosaic Mentoring Programmes*. London: Demos.
- Bayer, A., Grossman, J. B., and DuBois, D. L. (2015). Using volunteer mentors to improve the academic outcomes of underserved students: the role of relationships. *Journal of Community Psychology*, 43(4), 408–429.
- Beltman, S. and Schaeben, M. (2012). Institution-wide peer mentoring: Benefits for mentors. *The International Journal of the First Year in Higher Education*, 3(2), 33–44.
- Bernstein, L., Dun Rappaport, C., Olsho, L., Hunt, D. and Levin, M. (2009). *Impact Evaluation of the U.S. Department of Education's Student Mentoring Program*. Washington: USA Department of Education.
- Bruce, M. and Bridgeland, J. (2014). *The Mentoring Effect: Young People's Perspectives on the Outcomes and Availability of Mentoring*. Washington: MENTOR.
- Chan, C. S., Rhodes, J. E., Howard, W. J., Lowe, S. R., Schwartz, S. E. and Herrera, C. (2013). Pathways of influence in school-based mentoring: The mediating role of parent and teacher relationships. *Journal of School Psychology*, 51(1), 129–142.
- Clarke, L.O. (2009). Effects of a School-Based Adult Mentoring Intervention on Low Income, Urban High School Freshman Judged to be at Risk For Drop-Out: A Replication and Extension (Doctoral dissertation). State University of New Jersey: New Brunswick, New Jersey.
- Collier, R.J. and Kuo, A.A. (2014). Youth development through mentorship: A Los Angeles school-based mentorship programme among Latino children. *Journal of Community Health*, 39, 316–321. Department for Education. (2016). A Review of Evidence on Business Mentoring. Unpublished.
- Deloitte. (2016). *A Framework for 'What Works' in Employer–School Employability Activities*. London: Deloitte.
- Deutsch, N. L., Reitz-Krueger, C., Henneberger, A., Futch, V. and Lawrence, E. C. (2016). "It gave me ways to solve problems and ways to talk to people": Outcomes from a combined group and one-on-one mentoring program for early adolescent girls. *Journal of Adolescent Research*, online first.
- Dolan, P., Brady, B., O'Reagan, C., Canavan, J., Russel, D. and Forkan, C. (2011). *Big Brothers Big Sisters (BBBS) of Ireland: Evaluation Study*. Galway: Child and Family Research Centre, National University of Ireland.
- DuBois, D.L., Holloway, B.E., Valentine, J.C. and Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytical review. *American Journal of Community Psychology*, 30 (2), 157–197.
- DuBois, D.L., Portillo, N., Rhodes, J.E., Silverthorn, N. and Valentine, J.C. (2011). How Effective Are Mentoring Programs for Youth? A Systematic Assessment of the Evidence. *Psychological Science in the Public Interest*, 12(2), 57–91.
- Eby, L. T., Allen, T. D., Evans, S. C., Ng, T. and DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72(2), 254–267.
- Education Endowment Fund. (2016). Teaching and Learning Toolkit. Available from <https://educationendowmentfoundation.org.uk/evidence/teaching-learning-toolkit> [Accessed 14th June 2016].
- Fredricks, J. A., Filsecker, M. and Lawson, M. A. (2016). Student engagement, context, and adjustment: Addressing definitional, measurement, and methodological issues. *Learning and Instruction*, 43, 1–4.
- Freedman, M. (1991). *The Kindness of Strangers: Reflections on the Mentoring Movement*. Philadelphia: Public/Private Ventures.

- Grossman, J.B., Chan, C.S., Schwartz, S.E.O. and Rhodes, J.E. (2012). The test of time in school-based mentoring: The role of relationship duration and re-matching on academic outcomes. *American Journal of Community Psychology*, 43, 43–54.
- Grossman, J. B., and Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring programs. *American Journal of Community Psychology*, 30, 199–206.
- Hackney Schools' Mentoring Programme (HMSP). (2010). *Hackney Schools' Mentoring Programme Evaluation*. Available at <http://www.hsmp.org.uk/sites/default/files/dl/business-mentoring-evaluation.pdf>.
- Hall, J.C. (2003). *Mentoring and Young People: A Literature Review*. Glasgow: The SCRE Centre, University of Glasgow.
- Henry, K. L., Knight, K. E. and Thornberry, T. P. (2012). School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. *Journal of Youth and Adolescence*, 41(2), 156–166.
- Herrera, C., Baldwin Grossman, J., Kauh, T.J., Feldman, A.F., McMaken, J. and Jucovy, L.Z. (2007). *The Big Brothers Big Sisters School-Based Mentoring Impact Study*. Philadelphia: Public/Private Ventures.
- Hickman, G.P. and Garvey, I.J. (2006). An analysis of academic achievement and school behavior problems as indices of program effectiveness among adolescents enrolled in a youth-based mentoring program. *Journal of At-Risk Issues*, 12(1), 1–10.
- Hooley, T., Hutchinson, J. and Neary, S. (2016). Ensuring quality in online career mentoring. *British Journal of Guidance and Counselling*, 44(1), 26–41.
- Jekielek, S.M., Moore, K.A., Hair, E.C. and Scarupa, H.J. (2002). *Mentoring: A Promising Strategy for Youth Development*. (Child Trends Research Brief.) Washington, DC: Child Trends.
- Kanchewa, S.S., Rhodes, J.E., Schwartz, S.E.O. and Olsho, L.E.W. (2014). An investigation of same- versus cross-gender matching for boys in formal school-based mentoring programmes. *Applied Developmental Science*, 18(1), 31–45.
- Karcher, M.J. (2008). The study of mentoring in the learning environment (SMILE): A randomized evaluation of the effectiveness of school-based mentoring. *Prevention Science*, 9, 99–113.
- Linnehan, F. (2001). The relation of a work-based mentoring program to the academic performance and behavior of African American students. *Journal of Vocational Behavior*, 59(3), 310–325.
- Linnehan, F. (2003). A longitudinal study of work-based, adult-youth mentoring. *Journal of Vocational Behaviour*, 63, 40–54.
- Magnuson, K., Duncan, G. J., Lee, K. T., and Metzger, M. W. (2016). Early School Adjustment and Educational Attainment. *American Educational Research Journal*, online first.
- Mann, A. and Dawkins, J. (2014a). *Employer Engagement in Education*. Reading: CfBT Education Trust.
- Mann, A. and Dawkins, J. (2014b). *Employer Engagement in Education: Literature Review*. Reading: CfBT Education Trust.
- Mann, A. and Kashefpakdel, E. (2014). The views of young Britons (aged 19-24) on their teenage experiences of school-mediated employer engagement. In Mann, A., Stanley, J. and Archer, L. (2014) *Understanding Employer Engagement in Education: Theories and Evidence*. London: Routledge, pp.143-162.
- MENTOR. (2015). *Elements of Effective Practice for Mentoring*. Boston: MENTOR.
- Miller, A. (1999). Business mentoring in schools: does it raise attainment? *Education + Training*, 41(1), 73–78.
- Miller, A. (2002). *Mentoring Students and Young People: A Handbook of Effective Practice*. London: Kogan Page.
- Mosaic. (2013). *Mosaic: Assessing Our Impact*. London: Mosaic.
- Mtika, P. and Payne, F. (2014). Student–adult mentoring relationships: experiences from a Scottish school-based programme. *Educational Research*, 56(4), 436–452.
- Patel, S.I, Rodriguez, P. and Gonzales, R.J. (2015). The implementation of an innovative high school mentoring program designed to enhance diversity and provide a pathway for future careers in healthcare related fields. *Journal of Racial and Ethnic Health Disparities*. Online first

- Prime Minister's Office, Cameron, D. and the Department for Education. (2016). Prime minister to announce new generation of mentors to help struggling teens. Available from <https://www.gov.uk/government/news/prime-minister-to-announce-new-generation-of-mentors-to-help-struggling-teens> [Accessed 7 March 2016].
- Reach Group. (2007). *An Independent Report to Government on Raising the Aspirations and Attainment of Black boys and Young Black Men*. London: Department for Communities and Local Government.
- Rhodes, J. E., Grossman, J. B. and Resch, N. L. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. *Child Development*, 71(6), 1662–1671.
- Rhodes, J. E., Schwartz, S. E., Willis, M. M. and Wu, M. B. (2014). Validating a Mentoring Relationship Quality Scale: Does Match Strength Predict Match Length?. *Youth & Society*, online first.
- Richey, M., Gupta, D., O'Mahoney, K.T., Meyers, L.E., Zender, F. and LaVallo Vermeer, D. (2015). The Business Case for Engineering Skills-based Volunteerism in K-12 Education. Paper presented to the 122nd ASEE Annual Conference and Exposition, 14–17 June 2015.
- Ross, A. (2009). *Disengagement from Education Among 14–16 Year Olds*. London: DCFS.
- Sabbatino, E. D. and Macrine, S. L. (2007). Start on success: A model transition program for high school students with disabilities. *Preventing School Failure: Alternative Education for Children and Youth*, 52(1), 33–39.
- Schwartz, S. E., Rhodes, J. E. and Herrera, C. (2012). The influence of meeting time on academic outcomes in school-based mentoring. *Children and Youth Services Review*, 34(12), 2319–2326.
- Schwartz, S. E., Rhodes, J. E., Liang, B., Sánchez, B., Spencer, R., Kremer, S. and Kanchewa, S. (2014). Mentoring in the digital age: Social media use in adult–youth relationships. *Children and Youth Services Review*, 47, 205–213.
- Schwartz, S. E., Rhodes, J. E., Chan, C. S. and Herrera, C. (2011). The impact of school-based mentoring on youths with different relational profiles. *Developmental Psychology*, 47(2), 450–462.
- Shandra, C. L. and Hogan, D. P. (2008). School-to-work program participation and the post-high school employment of young adults with disabilities. *Journal of Vocational Rehabilitation*, 29(2), 117–130.
- Sims, D. (2002). Mentoring young people: Benefits and considerations. Available from https://www.nfer.ac.uk/nfer/PRE_PDF_Files/O2_27_06.pdf [Accessed 29th March 2016].
- Stumbo, N. J. (2014). Evidence-based practices in mentoring students with disabilities: Four case studies. *Journal of Science Education for Students with Disabilities*, 14(1), 4.
- Teach First, Brightside and Nesta (n.d.). *One-to-One Support: A Collaborative Quality Framework*. Teach First, Brightside and Nesta.w
- Thompson, L. A., and Kelly-Vance, L. (2001). The impact of mentoring on academic achievement of at-risk youth. *Children and Youth Services Review*, 23(3), 227–242.
- Tower Hamlets Education Business Partnership (THEBP). (2011). Business Mentoring Evaluation 2010-11, Available at <http://www.mandbf.org/wp-content/uploads/2011/10/Business-Mentoring-final-evaluation-2010-11.pdf>.
- Townsel, K.T. (1997). Mentoring African-American youth. *Preventing School Failure*, 41, 125–127.
- Wang, M. T. and Fredricks, J. A. (2014). The reciprocal links between school engagement, youth problem behaviors, and school dropout during adolescence. *Child development*, 85(2), 722–737.
- Wheeler, M.E., Keller, T.E. and Dubois, D.L. (2010). Review of the three recent randomized trials of school-based mentoring. *Social Policy Report*, 24(3), 3–21.
- YouGov. (2010). Edge Annual Programme of Stakeholder Research: Business in Schools. Available from http://www.edge.co.uk/media/17102/yougov_report_on_work_experience_and_employer_engagement_in_education.pdf [Accessed 11th June 2016].
- Zand, D. H., Thomson, N. R., Cervantes, R., Espiritu, R., Klagholz, D., LaBlance, L. and Taylor, A. (2009). The mentor-youth alliance: The role of mentoring relationships in promoting youth competence. *Journal of Adolescence*, 32, 1–17.

The Careers & Enterprise Company

First Floor, Parchment House

13 Northburgh Street

London EC1V 0JP

 **@CareerEnt**

www.careersandenterprise.co.uk