



# What works? Career-related learning in primary schools

By Dr. Elnaz Kashefpakdel, Jordan Rehill (Education and Employers) and Dr. Deirdre Hughes OBE (DMH Associates)

## Contents

About this paper	I
Foreword	
Executive Summary	IV
Lessons learned for practice	V
1. Introduction	1
2. What does career-related learning in primary schools look like?	8
3. What impact does career-related learning have in primary schools?	12
4. Challenges	19
5. Lessons for practice	22
6. Developing the evidence base	27
7. Conclusion	28
8. References	30

#### Acknowledgements

Education and Employers would like to thank the schools and teachers that agreed to be interviewed for this report. We would also like to thank Liz Reece, Anthony Barnes, Barbara McGowan, Susan Scurlock, Dr Julie Young, Andrew Moffatt, Luke Richardson, Steve Iredale, Michelle Hogan and Gracia Molaso for their invaluable contributions which shaped the report and helped define what 'success' should look like for primary schools providing career-related learning.

We would also like to thank Max Haskins for his contribution to this project. His work on data collection and analysis was a huge support to the completion of this study.

#### About this paper

This paper provides evidence of the benefits of career-related learning (CRL) for children in primary school. The term 'careerrelated learning' includes early childhood activities in primary schools designed to give children from an early age a wide range of experiences of, and exposure to, education, transitions and the world of work. The research compiles evidence on the career-related learning of primary aged children's decisions, aspirations and attitudes. In doing so this paper maps key actions being taken by primary schools to support children's transitions to secondary school and beyond. It considers how primary schools approach career-related learning and offers guidancon evidence-based practice.

The paper draws evidence from academic and 'grey' literature (such as programme evaluation reports and policy papers), and interviews with primary teachers and leading experts. It aims to clarify the impact that can be expected for children taking part in career-related learning activities. The paper highlights lessons that can be drawn from the existing evidence so that children and schools can be effectively supported when embarking on a programme of career-related learning.

While the literature firmly places childhood at the centre of career development, early childhood career-related learning is relatively under-researched. By synthesising current literature, alongside new and emerging evidence from teachers and other leading experts, this paper sets out to critically assess careerrelated learning in primary schools in order to better understand and support evidence-based practice.

It is hoped the findings will help to inform policy, research and practice, outlining how primary schools and their partners can further strengthen career-related learning both within and outside of the classroom.

## Foreword

## "

We were delighted to have been commissioned by the Careers & Enterprise Company to write 'What Works? Career-related learning in primary' which builds on the research we and the National Association of Head Teachers (NAHT) have done over the last 5 years. It is great now to see the level of interest and enthusiasm for career-related learning at primary by a range of organisations and policy makers. As you see in this report, the evidence is clear - that exposing children to the world of work has a significant impact on their aspirations, motivation and confidence. It helps broaden their horizons, challenge stereotypes and gives them the opportunity to connect their learning with their future.

Nick Chambers, CEO, Education and Employers

## "

The importance of appropriate exposure to the world of work at primary level cannot be understated. Children form stereotypical views of the world from an early age. Biased assumptions lead to a narrowing of career aspirations and an inability to relate learning to a world beyond school. I am delighted that a real interest in providing support to younger children is developing. But that support must be sensitive to the needs of children as young as 5. 'What Works? Career-related learning in primary' further develops the work of the NAHT and the charity Education and Employers, showing that an early and fully inclusive start, supported by good leadership with the involvement of external organisations, works. Embedding your activity within the curriculum will support learning outcomes too.

Paul Whiteman, General Secretary, NAHT

## "

Ignoring the process of career development occurring in childhood is similar to a gardener disregarding the quality of the soil in which a garden will be planted.<sup>1</sup>

1. Niles, S. G., and Harris-Bowlsbey, J. (2017). Career Development Interventions. (5th ed.). Toronto: Pearson.

## **Executive Summary**

Career-related learning in primary schools is about helping "children to understand who they could become and helping them to develop a healthy sense of self that will enable them to reach their full potential".<sup>1</sup> Early interventions can bring a lasting impact on children's development and perceptions of different occupations, and of the subjects enabling access to them.

Starting career education early is important. As longitudinal studies have shown, holding biased assumptions and having narrow aspirations can influence the academic effort children exert in certain lessons, the subjects they choose to study, and the jobs they end up pursuing. Research has also shown that the jobs children aspire to may be ones that their parents do, or those of their parents' friends, or that they see on the TV and/or social media. Low expectations are often shaped by biases or commonly accepted stereotypes, such as 'science isn't for girls' or 'university isn't for the working classes'. These societal expectations act to restrict children's futures by limiting what they believe they can do.

In this report we refer to 'career-related learning' (CRL) which includes early childhood activities in primary schools designed to give children from an early age a wide range of experiences of and exposure to education, transitions and the world of work.

Career-related learning encompasses activities that involve: employers' raising aspirations and broadening childrens' horizons (through careers insights and 'what's my job' events etc) and careers in the curriculum (through topic-based activities, discrete lessons and/ or themed weeks) designed to motivate children, to give them self-belief and to connect learning to life. Also, this includes children learning to improve their non-academic skills (i.e. activities often based in the curriculum but geared more towards improving enterprise and life skills, financial awareness, socioemotional skills and behaviours). There are a small number of robust evaluations that use a variety of controls to measure the association between primary activities and certain outcomes; however, most evidence in this sphere is based on qualitative evidence or small-scale evaluations. Additionally, it must be noted that the literature is particularly weak on the comparative value of different career-related learning activities for different key stages. More large-scale evaluations are needed to draw out career-related learning activities and programmes that have an observable, consistent and replicable impact on children.

Since its inception, The Careers & Enterprise Company has focused on the effectiveness of different careers and enterprise activities and, in doing so, helped schools, employers, careers and enterprise providers to use evidence to shape their work in preparing and inspiring young people for the world of work. To date, the overwhelming focus of the 'What Works' series has been on secondary and further education. This review assesses the evidence base for careerrelated learning activities and programmes in the primary school phase, in the hope of providing reliable insights for practitioners.

## Lessons learned for practice

The evidence included in this review helps provide a range of key insights for practice, as discussed below.

#### Successful leadership

Evidence shows that positive impacts from careerrelated learning are greater when a consistent and whole school strategy is in place.

#### Make this open to all

Career-related learning in this phase should not be targeted at a particular group or groups (for example; girls, disengaged learners or high achievers) – instead it should be offered universally to all pupils in primary schools.

## Embed career-related learning in the curriculum

Schools and senior leaders should make the relationship between career-related learning and the aims and ethos of the school explicit, thereby ensuring buy-in from curriculum staff, subject leaders and the senior leadership team.

#### Involve external organisations and employers

It is important that the person imparting knowledge about jobs and careers brings real-life, authentic experience of the workplace. When employers engage with children, they are perceived as having real authority and authenticity. Local schools should also focus on sharing best practice and signposting other schools in their network to organisations and programmes that can support the delivery of a consistent career-related programme. The evidence suggests that being able to draw on online and offline brokerage services can help to formalise connections to employers and give teachers the ability to invite volunteers from a wide range of backgrounds.

#### **Start early**

The literature has shown that perceptions about the suitability of different sectors and career paths are embedded in the minds of children from an early age. It is therefore important that career-related learning starts as early as age 5.

#### Ensure activities are age dependant

There is evidence to suggest that primary careerrelated activities are most effective when they are planned, delivered and adapted depending on the age group.

# **Introduction**

## Why is career-related learning in primary schools important?

The concept of careers and careerrelated learning in the primary school phase typically provokes a cautious reaction. Terms such as 'careers learning', 'careers education' or 'careers lessons' are often conflated with careers guidance which is often understood to be focused on careers choice. Many parents and teachers have concerns about directing children towards a particular career or job at a time when their aspirations should, rightly, be tentative.<sup>2</sup> In a recent article published by Education and Employers, a review of research in the past 5 years has highlighted the importance of career-related learning in primary and why it is crucial to intervene in primary but with the aim of raising aspirations and broadening horizons.<sup>3</sup> Practitioners are often fearful of making children 'grow up too fast' at such a young age. Yet, many education and career development theorists highlight the formative years of childhood as integral to the overall understanding of the self ('who am I?') and opportunity awareness ('what does the world of work look like?'). It appears that children begin to understand the world, and their roles within it, from a younger age than previously thought.<sup>456</sup> Gottfredson highlights that a child's career thoughts and decisions during this period involve elimination; by certain ages children begin eliminating potential careers, jobs and interests based on who they perceive themselves to be.<sup>7</sup> As a result, children may limit their educational and occupational choices at a time when their views are too narrow and experiences too limited to make a sound judgement.

The work of education, psychology, sociology and career development theorists converges around a view that career-related learning at a primary school phase should emphasise career exploration over making concrete decisions.<sup>89</sup> It should not be designed in a way that allows children to make premature choices over future careers; rather it should be a process that encourages "children to broadly consider a multitude of options that are available, and to not restrict or limit possibilities for their future aspirations".<sup>67 10</sup>

<sup>2.</sup> Chambers, N. (2018). Primary career education should be broaden children's horizons. Available from: <a href="https://www.tes.com/news/primary-career-education-should-broaden-childrens-horizons">https://www.tes.com/news/primary-career-education-should-broaden-childrens-horizons</a> [accessed 30/11/201

<sup>3.</sup> Education and Employers. (2018). Starting early - the importance of career-related learning in primary school. Available from <a href="https://www.educationandemployers.org/career-related-primary/">https://www.educationandemployers.org/career-related-primary/</a> [accessed 30/11/20

<sup>4.</sup> For example, Super, D.E. (1990). A life-span, life-space approach to career development. In Brown, D., and Brooks, L. (Eds.) Career Choice and Development. San Francisco, CA: Jossey-Bass, pp.22

Cutaran L and Alexandra D (2000). Determinante ef Assiratione Landau Castra for Descardo en the Milder Descette effects

<sup>7</sup> Cottfradeon L S (2002) Cottfradeon's theory of circumscription compromise and self creation. In Brown D, and Brooks L. (Eds.) Career Choice and Development San Francisco. CA: losses/Plass or

<sup>2</sup> Sultana D.C. (2014) Dourson to chains: Stabling for groater social justice through amancinatory sprace midance. Journal of the National Justice to Correct Education, and Councelling. 22(4): 15-22

<sup>9.</sup> McMahon, M., & Watson, M. (2017). Telling stories of childhood career development. In McMahon, M., & Watson, M. (eds.) Career Exploration and Development in Childhood: Perspectives from Theory, Practice and Researc

Routledge, pp.1-8.

<sup>10.</sup> Herr, E. L., Cramer, S. H., and Niles, S. G. (2004). Career Guidance and Counseling Through the Lifespan: Systematic Approaches (6th ed.). Boston, MA: Allyn & Bacon

Robust longitudinal studies have shown that having narrow occupational expectations and aspirations can, and do, go on to influence the academic effort children exert in certain lessons,<sup>11</sup> the subjects they choose to study,  $^{\rm 12\,13}$  and the jobs they end up pursuing.<sup>14 15</sup> Research has also shown that the jobs children aspire to may be ones that their parents do, their parents' friends do or that they see on the TV and/or social media.<sup>16</sup> Career-related learning in primary schools is about helping children understand who they could become and helping them develop a healthy sense of self that will enable them to reach their full potential. Early interventions can bring a lasting impact on children's development and perceptions of different occupations, and of the subjects enabling access to them.

The concept of identity capital, first conceptualised by Cote, is a useful theoretical framework to understand how career-related learning in primary schooling works.<sup>17</sup> It refers to various resources and personality traits and/or strengths needed to understand and negotiate personal obstacles and opportunities for children as they grow up. Identity capital includes having an expansive social network, financial support, self-efficacy, motivation, adaptability and resilience. Career-related learning can be seen as a mechanism that informs and supports a child to develop their sense of self and a way of developing a positive and meaningful identity. Childhood experiences are grounded in the construction of identity; observations of attitudes towards work within families, cultural stereotypes, and examples in the media may influence children's understanding of work and the range of pathways to the future and, in turn, their occupational identities.<sup>18</sup>

#### Gottfredson (2001)

**Age 6-8:** Children grasp the concept of a set of behaviours belonging to each sex and therefore begin seeing jobs and future pathways as intrinsically gendered.

Age 9-13: Children begin to see their social value based on perceptions of social class and intelligence. By this age children abandon 'fantasy' careers associated with the very young and start to become more aware of potential constraints on their futures.<sup>6</sup>

17. Côté, J. E. (1997). An empirical test of the identity capital model. Journal of Adolescence 20(5), 577-597.

<sup>11.</sup> Flouri, E. and Pangouria, C. (2012). Do Primary School Children's Career Aspirations Matter? The Relationship Between Family Poverty, Career Aspirations and Emotional and Behavioural Problems. London: Centre for Longitudinal Studies. 12. Kelly, P. (2004). Children's experiences of mathematics. Research in Mathematics Education, 6(1), 37-57.

<sup>13.</sup> Archer, L., Osbourne, J., DeWitt, J., Dillon, J. & Wong, B. (2013). ASPIRES: Young People's Science and Career Aspirations, Age 10-14. London: King's College

<sup>14.</sup> Akerlof, G. A., and Kranton, R. E. (2000). Economics and identity. Quarterly Journal of Economics, 115(3), 715-753.

<sup>15.</sup> Breen, R., and Garcia-Penalosa, C. (2002). Bayesian learning and gender segregation. Journal of Labor Economics, 20(4), 899–922.

<sup>16.</sup> Chambers, N., Rehill, J., Kashefpakdel, E.T., and Percy, C. (2018). Drawing the Future: Exploring the Career Aspirations of Primary School Children from Around the World. London: Education and Employers

<sup>18.</sup> Skorikov, V. B., and Vondracek, F. W. (2011). Occupational identity. In Schwartz, S.J., K. Luyckx, K., and Vignoles, V. (Eds.), Handbook of Identity Theory and Research. New York, NY, US: Springer Science and Business Media, pp.693-714.

3

As a consequence, primary school teachers and leaders play a vital role when it comes to improving social mobility. By challenging stereotypical views about certain jobs and careers via various forms of careerrelated learning, they can broaden the horizons for children and change perceptions about what they can and cannot pursue.<sup>19</sup>

While raising aspirations is an undoubtedly worthy goal of any career-related learning programme, a narrow focus on this, risks distracting from the underlying structural challenges and obstacles children face. Simply asking children to raise their aspirations can be perceived as shifting the burden of overcoming disadvantage onto the children themselves. Children's conceptions<sup>20</sup> of who they are and what they could be are products of their wider socio-economic surroundings: influenced by social capital (who their families and friends are) and cultural capital (what they consider a reasonable and possible future to be).

#### Definitions

Career development is a maturation process that begins very early in life. It refers to the ongoing process of a person managing their life, learning and work. It involves developing skills and knowledge that not only equip children for the next stage of their lives, but also enables them to plan and make informed decisions about education, training and career choices.

The wider literature, evidence from interviews with primary school leaders, and interviews with experts in this field, suggest that career-related learning in primary schools is effective in developing knowledge about work by exploring a number of careers, learning pathways and sectors. Literature also suggests that it can be effective in developing knowledge, skills and attitudes for work and life. Specifically, developing non-academic skills such as enterprise skills, financial awareness and socialemotional skills and behaviours, can benefit individuals' well-being and the well-being of others. The evidence suggests that these activities are also useful in engaging parents and carers.

Many teachers in primary schools are aware of the importance of expanding each child's understanding of the work that adults do and of challenging their attitudes about gendered work roles. We have used the phrase 'career-related learning' as it includes early childhood activities in primary schools designed to give children from an early age a wide range of experiences of, and exposure to education, transitions and the world of work. It also aligns with the terminology used in existing literature and guidelines<sup>21</sup> and was confirmed through interviews with schools involved in this research.

19. Howard, K. A., Kimberly, A. S., Flanagan, S., Castine, E., and Walsh, M. E. (2015). Perceived Influences on the Career Choices of Children and Youth: An exploratory study, International Journal for Educational and Vocational Guidance, 15(2), pp.99-111. 20. Francis, B. (2010). Gender, toys and learning. Oxford Review of Education, 36(3), 325-344.

21. Career Development Institute. (2012). A Framework for Careers and Work-Related Education. London: CDI.

Career-related learning is not about asking eight-year olds what they want to do in the future - children must be allowed their childhood... It is work that builds on children's growing awareness of themselves and the world of work, and weaves what they know into useful learning for now and later (p.13).<sup>22</sup> Historically, policy-makers, schools and awarding bodies have used a number of terms to describe activities or coordinated programmes that work towards similar outcomes as 'career-related learning'. Examples include:

- Work-related learning: 'planned activity that uses the context of work to develop knowledge, skills and understanding useful in work, including learning through the experience of work and working practices and learning the skills for work' (p. 3).<sup>23</sup>
- **Career learning:** 'helps young people develop the knowledge, understanding and skills they need to make successful choices and manage transitions in learning and work. (p.4).<sup>24</sup>

There are other words that feature in the academic literature such as: career adaptability; career awareness; career construction; career dialogue; career education; career exploration; employability; entrepreneurship; occupational interests; work-related learning, career development and so on. It is recognised that there is no consistency in terminology as this is a multidisciplinary subject spanning education, developmental psychology, human resources, sociology and lifecourse approaches. Despite an appetite for using the term 'career education' amongst some academics, this was contested by primary school teachers and senior leaders who participated in the study. Their preference was to focus on career-related learning (CRL) to reflect more accurately on how teachers in the classroom embed careers activities in a wide range of curriculum subject areas.

22. Watts, A.G. (2002). Connexions: Genesis, diagnosis, prognosis. In Collin, A., and Roberts, K. Career Guidance: Constructing the Future. Stourbridge: Institute of Career Guidance, pp.150-172.

23. Crause E., Watson, M., and McMahon, M. (2017). Career development learning in childhood: Theory, research, policy and practice. In McMahon, M., and Watson, M. (Eds.) Career Exploration and Development in Childhood: Perspectives from Theory, Practice and Research. Abingdon: Routledge, pp.186-198.

24. Department for Education. (2017). Careers Strategy: Making the Most of Everyone's Skills and Talents. London: Department for Education.

#### **Policy Context**

While the literature firmly places childhood at the centre of career development, early childhood career-related learning is relatively under-researched.<sup>25</sup> Policy has also until very recently focussed overwhelmingly on careers provision in secondary schooling and college, sometimes described as careers education. The establishment of The Careers & Enterprise Company and the government endorsement of the Gatsby Benchmarks have correctly shone a light on establishing a stable programme of guidance, employer engagement and personal guidance in secondary schools and colleges.

Government policy does, however, seem to be shifting towards a greater focus on early careers interventions. The 2017 Careers Strategy: Making the Most of Everyone's Skills and Talents emphasises the importance of early primary years interventions and made a number of recommendations to schools about embedding a career-related programme in their curriculum. It also clearly outlines that more research is needed to find out what works in the primary phase, so schools have access to the tools they need to understand how they can start to build activities with employers into their lessons. The strategy strongly suggests that any programme should aim to raise and broaden aspirations, and challenge stereotypes about different subjects, jobs and careers.<sup>26</sup> In 2018, The Organisation for Economic Co-operation and Development (the OECD) also recognised the need for schools to begin early and highlighted the essential role of exposure to the world of work. The authors note:

To make decisions, students need to have a good picture of work and where they need to put their efforts in studying to be able to realise their dreams. For that, schools should encourage a first-hand understanding of the world of work from the earliest years (p. 12).<sup>27</sup>

That is not to say that career-related learning activities have not been taking place in primary schools, rather that this activity has often been invisible and that there is no clear framework within which it is organised. In 2009–10, the Department for Children, Schools and Families (DCSF) funded a pathfinder research project to discover if planned career interventions for 10 and 11-year-olds in socio-economically deprived areas could help tackle problems such as stereotyped thinking about subject and careers choice, poverty of aspiration and low attainment, disengagement from school, and unsuccessful transitions.<sup>28</sup> The pathfinder project introduced some new interventions.

The most recent picture of employer engagement in England's primary schools was undertaken by the Education and Employers in March 2018. The survey asked 250 primary schools in the UK which activities they had organised for their children in the last year (while this survey cannot be seen to be fully representative of English primary schools, it indicates the ways in which career-related learning activities have previously been embedded in the primary school curriculum). Most of the schools in this sample who do organise these type of activities run them on yearly (43%) or termly (41%) basis. There is a smaller group of schools that run regular activities every month (9%) or every week (7%).<sup>29</sup>

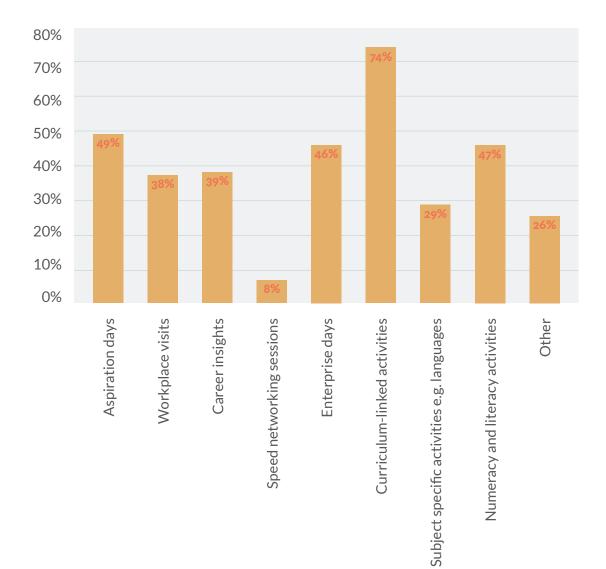
25. Musset, P., and Mytna Kurekova, L. (2018). Working it out: Career Guidance and Employer Engagement. OECD Education Working Papers, 175. Paris: OECD Publishing.

26. Department for Education. (2017). Careers Strategy: Making the Most of Everyone's Skills and Talents. London: Department for Education

Musset, P., and Mytna Kurekova, L. (2018). Working it out: Career Guidance and Employer Engagement. OECD Education Working Papers, 175. Paris: OECD Publishing.
Wade, P., Bergeron, C., White, K., Teeman, D., Sims, D., and Mehta, P. (2011). Key stage 2 Career-Related Learning Pathfinder Evaluation. London: Department for Education 29. Education and Employers.

5

#### Figure 1: Activities organised by schools<sup>29</sup>



#### Methodology

This review sets out evidence from four main sources:

- Academic literature relevant to the design and delivery of career-related programmes in primary education (age 5-11) was reviewed, focusing on research from OECD countries published in the English language since 2000. The review also considered non-academic and grey literature to explore why career-related learning in primary schools is important and the impact of primary interventions on children's attitudes, aspirations and learning outcomes. Studies were excluded if they focussed on career-related learning in secondary education.
- An audit of different primary programmes currently being offered to schools in England to help inform them about the goals, activities and approaches of career-related learning in this phase.

- Testimonies from 10 teachers and school leaders who organised career-related learning activities in their primary school. They were interviewed to provide experienced insights into the effectiveness, impact, design and challenges of implementing a career-related learning programme in primary schools.
- Testimonies from six stakeholders in the area with a specific interest in career-related learning in a primary school context. Results of the interviews were used to challenge and/ or complement the findings of the literature review and case studies with primary schools.

## 2 What does career-related learning in primary schools look like?

Many teachers in primary schools are aware of the importance of expanding children's awareness of the work that adults do and of challenging their attitudes about gendered work roles. As a consequence, many primary teachers engage their students in everyday learning that could be described as career-related learning.<sup>30</sup> However, there is a need for greater clarity about what such work looks like and how it can best be delivered. To understand the current arrangements in primary schools this review includes an audit of career-related activities and programmes. It is worth noting that the majority of these activities tend to be organised by schools themselves and led by teaching staff with external support provided by employers, programmes and other enterprises. These programmes are often used to supplement activities taking place in lessons and through topics. Recent surveys of primary school leaders and teachers repeatedly show that could be described as 'career-related learning'<sup>30</sup>, further studies also highlight the ways in which primary staff often take on clearly defined career-related roles.<sup>31</sup> There are a wide range of resources available for careers work in primary schools.<sup>32</sup>

#### **Employer engagement activities**

Primary schools often provide career-related learning opportunities by inviting employers or business representatives into school. Successive government policies and testimonies from schools emphasise that involving employers, employees and businesses is a critical component of any successful career-related learning activity.<sup>33</sup> Employer engagement programmes refer to activities that connect schools with employers to assist in delivering career-related learning tasks such as career talks, workshops and school trips. While the following programmes differ in some sense in their activities and objectives, most view employer engagement activities as a means of raising pupil aspirations and bridging the gap between school and the world of work.

Across these areas, it makes a very significant difference that the employer/employee volunteer in question is someone bringing real life, authentic experiences of the workplace.<sup>34</sup> Who better to testify how numeracy is used outside of the classroom, than someone who earns a wage to apply it in a workplace? As Education and Employers have shown in their research on employer engagement in secondary education, teenagers engaging in higher volume incidents of employer engagement through their schools, tend to go on to earn more as young adults.<sup>35</sup> For young people, access to new and useful information about the labour market allows them to draw better links between their current and future imagined lives.<sup>36</sup>

35. Mann, A. and Percy, C. (2014). Employer engagement in British secondary education: wage earning outcomes experienced by young adults. Journal of Education and Work, 27(5), 496-52

<sup>30.</sup> Education and Employers. (2018). Introducing Primary Children to the World of Work. London: Education and Employers

<sup>31.</sup> Kashefpadkel, E. T., Rehill, J. and Hughes, D. (n.d.). Career-Related Learning in Primary: The Role of Primary Teachers and Schools in Preparing Children for the Future. London: Teach F

<sup>32.</sup> Reece, L. (2018). The Value of Careers Work with Primary School Pupils: Research and Resources. Available from: <a href="https://www.centralcareershub.co.uk/2018/02/07/the-value-of-careers-work-in-primary-education/">https://www.centralcareershub.co.uk/2018/02/07/the-value-of-careers-work-in-primary-education/</a> [Accessed 28th September 2018]. 33. Confederation of British Industry. (2014). Gateway to Growth: CBI/Pearson Education and Skills Survey 2014. London: Confederation of British Industry.

<sup>34.</sup> Stanley, J., and Mann, A. (2014). A theoretical framework for employer engagement. In Mann A. Stanley J., and Archer L. (Eds.) Understanding Employer Engagement in Education: Theories and Evidence. Routledge: London, pp.36-52

<sup>36.</sup> Raffo, C., and Reeves, M. (2000). Youth transitions and social exclusion: Developments in social capital theory. Journal of Youth Studies 3 (2), 147–166.

Importantly, it is not only a matter of engaging children narrowly with business (the private sector), but with all those who are employers, or who are employed, within the economic community across all sectors (private, public, and third sectors; large companies, small and medium sized enterprises, micro businesses, and selfemployment from all occupational areas).<sup>37</sup>

The focus and desired outcomes of employer engagement differ between the primary and secondary phases. Employer engagement in secondary often focuses on helping young people think about their approaching school to work transitions, helping them develop tangible career ambitions and begin practical measures to achieving them. Moreover, activities are often designed to help students develop employability skills, in the form of mock interviews and CV workshops.<sup>37</sup>

Employer engagement in the primary phase is the beginning of a career exploration journey that starts from an early age. At one level, the employer/employee volunteer is supplementary to teachers: they provide access to extra resources to achieve core teaching objectives (e.g. reading and number skills). Alternatively, employer engagement can be conceived as a resource which enables access to additional objectives: developing enterprise or social and emotional skills, raising or broadening aspirations, and challenging thinking about the point of education.

These activities are often used to contextualise and/ or supplement topic learning; for example, a volunteer from an industry or profession related to the current topic will come in to talk to the children about their role. As one Headteacher from a school in the South West noted: We always try to have a whole school topic each year and [...] last year, we did a focus on the local area. I've encouraged the staff to draw on careers and get people in to talk about careers in class and that is happening.

#### Headteacher, Welton Primary School, South West

Another Deputy Head from Yorkshire highlighted that they also like to supplement topics with talks and activities from volunteers:

Alongside the half terms we have themes we try to fit into careers. For instance, if the children are learning ancient history, we try to fit jobs like archaeology into the classes.

#### Deputy Headteacher, Walton Primary School, Yorkshire and the Humber

Survey data also shows that teachers strongly believe that employers play an important role in bringing authenticity to career-related learning activities. In a survey published by Education and Employers with TES and the National Association of Head Teachers (NAHT), of 250 primary school teachers, 94% of the respondents thought it was important to invite volunteers from the world of work to engage in activities offered to children in primary.<sup>30</sup>

Assemblies with guest speakers [...] parents and even governors are a great way to start bringing career learning into primary schools and engage the wider school community.

Andrew Moffat, Team London

37. Mann, A., Rehill, J. & Kashefpakdel, E. T. (2018). Employer Engagement in Education: Insights from International Evidence for Effective Practice and Future Research. London: Education Endowment Foundation

#### **Tutoring programmes**

Tutoring programmes connect schools, pupils and parents with employers who can help mentor struggling students in curriculum subjects. Tutors help develop a child's understanding of a subject while simultaneously showing the pupil how the subject and school curriculum can relate to the mentor's own career. These activities have the same benefits as employer engagement activities in broadening a child's understanding of careers with the additional bonus of boosting academic attainment. While these programmes are great at supporting the school curriculum, tutoring programmes are more timeconsuming and engage less students than most primary programs. Although these activities can be held in groups, mentoring students is more effective with smaller groups or on a one-to-one basis with children that need the support most.

## Examples of employer engagement activities

'What's my line': One or several employers are invited to a classroom or assembly hall. A group of children are then invited to ask a series of questions to try and guess that person's job, based on a number of clues.

Workplace visits: Workplace visits often involve a group of children visiting an organisation from a couple of hours to a full day. The aim is to provide children with a general overview of the company and wider industry, to familiarise them with its working environment and to provide them with guidance on how they could one day get into the industry. Workplace visits can comprise of a variety of activities such as: group exercises, workshops, networking events, presentations, Q&A sessions, and site tours.

**Career insights:** Employers or business representatives coming in to speak about their job or career path, including the route they may have taken and the challenges they faced. Particular emphasis is placed at this stage, on explaining how certain subjects are relevant to working life.

**Career carousels:** These events involve a range of volunteers coming together to speak with groups of children about their jobs. In a career carousel, a child will speak individually or in small groups to employee volunteers for a short period of time (commonly 5–15 minutes) about their job/career.

## Curriculum linked training, activities and resources

Resource provision programmes provide teachers and schools with a broad range of materials, online activities or services to assist with career-related learning for primary school children. Most resources relate career learning with curricular or extra-curricular subjects and skills, which in many cases can be integrated into classroom activities. Some resources are free while many vary in cost depending on the activity and whether the organisation is a business, social enterprise or charity. Unlike engagement or tutoring activities, career-related resources are less time consuming and once purchased, can be used in class over the course of a year.

The most familiar form of resource provision relates to enterprise education. Enterprise education is at one level about developing aspirations and creating ambition. At a second level it is about attitudinal change – developing a 'can do' attitude, being proactive and being adaptable and flexible.<sup>38</sup>

38. Specialist Schools and Academies Trust. (2010). Enterprise Education in Primary Schools. London: Specialist Schools and Academies Trust.

#### Case study 1

Working with wider programmes, Ladybarn Primary School, South Manchester

Ladybarn Primary School in Manchester takes advantage of a wide range of primary programmes and activities to foster personal development amongst its pupils. The primary school's impetus for implementing career-related learning comes from Deputy Head Ian Caldwell's own personal experiences. He stated that growing up he had lots of interests that no one told him 'could translate into a job' and that pupils' skills and aspirations are often missed from teaching. The school embeds an aspirational strand into its curriculum that exposes children to a wide range of opportunities and careers, giving children knowledge about the world of work and skills for life.

Starting from Early Years, the school hopes to encourage pupils to gain an understanding of themselves, their interests, and their strengths and weaknesses by the time they leave for secondary. Early Years and Key Stage 1 pupils are first introduced to the world of work through school visits from employers, giving pupils an initial understanding of what a job is. Career learning activities become much more skill based and reflective as pupils' progress through to the upper years. Pupils undertake a Myers Briggs test to help celebrate aspects of pupil's lives that don't necessarily get enough credit. Pupils add to their achievement list as they undertake activities such as Young Enterprise's Fiver Challenge, where the school's Year 5s were encouraged to design, market and sell for a profit a product they created. Similarly, Year 6s are also given the opportunity to visit the University of Manchester's campus for a day, and in previous years pupils have taken part in the university's aspirations writing project. Finally, to raise awareness for the wider community, pupils are also involved in fundraising activities for several local charities.

11

## 3 What impact does careerrelated learning have in primary schools?

Existing literature provides helpful, but limited, insights into the impact of career-related learning activities on primary school children. Several studies demonstrate that careers events have successfully supported children's aspirations or skill development outcomes. A number of high-quality studies exist demonstrating a number of positive outcomes for children who participate in career-related learning activities.

#### **Educational outcomes**

The evidence highlights that career-related learning activities undertaken as part of a development process, supplemented by volunteers can have positive impacts on academic or educational outcomes for the children that take part. Childhood proficiency in the skills of resilience, conscientiousness, self-awareness and motivation have also been found to be closely associated with educational attainment.<sup>39,40</sup>

Most of the available published research in this area focuses mainly on the impact of reading and number partner schemes. These are characterised by the use of largely untrained volunteers brought into primary schools to hear children read or help them with problem solving on a regular basis. While, of course, programmes could be undertaken using parents or university students, employee volunteer schemes are very common and have been popular with schools for reasons of logistical simplicity, with the ambition of influencing the career awareness and aspirations of children. Using randomised control trials (RCTs) to assess the value of similar programmes, Miller and Connolly found a positive association between participation in a reading partner programme and improved reading and comprehension outcomes.<sup>41</sup> Despite the relatively strong evidence on the impact of employer and volunteer led reading and number programmes, primary school teachers in our sample made no mention of such activities when asked about their existing provision.

Kautz, I., Heckman, J. J., Diris, R., Weel, B., and Borghans, L. (2014). Fostering and Measuring Skills: Improving Cognitive and Non-Cognitive Skills to Promote Lifetime Success. Germany: National Bureau of Economic Research.
Goodman, A., Joshi, H., Nasim, B., and Tyler, C. (2015). Social and Emotional Skills in Childhood and their Long-Term Effects on Adult Life. London: Early Intervention Foundation.

41. Miller, S., and Connolly, P. (2013). A randomised controlled trial evaluation of a school-based volunteer tutoring programme aimed at increasing reading skills amongst 8–9 year olds. Educational Evaluation and Policy Analysis, 35(1), 23–37.

#### **Contextualising learning**

Through career-related learning and interactions with employers that can bring authentic experiences of the relevance of studied subjects to the working world, schools can challenge incorrect assumptions developed by children; allowing them to draw richer, more informed connections between education and ultimate economic and wider success in adult life.<sup>42</sup> When schools embrace career-related learning and connect their student's educational experiences to the community, children gain 'a sense of what they could do in the future, they experience social engagement, a sense of belonging and they have an increased capacity to network with others, building the belief that they can create a positive future'.<sup>43</sup>

The current focus on STEM industries as the key driver of economic growth in the UK has meant policy makers and academics have begun exploring the reasons why children from particular backgrounds are turned off science from such a young age. Archer and colleagues, working on the ASPIRES project, have shown that those young people low in 'science capital'<sup>44</sup> appear to have narrow and limited understandings of the economic uses of science, and struggle to see its relevance to careers beyond the stereotypes of doctor, science teacher, and scientist.<sup>13</sup> In spite of high levels of personal enjoyment,<sup>12</sup> such children commonly struggle to see themselves in a science related career and therefore fail to stay engaged with the subject. By enriching their learning with real-life experiences, pupils can be encouraged to think again about the meanings and implications of what they are being taught in lessons.

Teachers also seem to agree that contextualising learning is a key outcome when embarking on a career-related learning programme. Among the 250 primary teachers surveyed by Education and Employers in 2018, 96% agreed (with 57% strongly agreeing) that introducing children to the world of work was important, as it helped children link school subjects with the world of work.<sup>30</sup> Teachers interviewed for this report, consistently mentioned that interactions with employers bring about authentic experiences, and explained how subjects can be applied in the world of work.

Children absolutely see the link between what they're learning and the world of work. When we were learning about the circulatory system and we had a doctor in and we had a surgeon at some point and they were talking about surgery and stitching people up, that was a direct link there.

Middle Leader, Aylward Primary School, London

## 96%

agreed (with 57% strongly agreeing) that introducing children to the world of work was important, as it helped children link school subjects with the world of work.

42 Knight, J. L. (2015). Preparing elementary school counselors to promote development: Recommendations for school counselor education programs. Journal of Career Development, 42(2), 75-85

43. NSW Government, Education & Communities. (2014). The Case for Career-Related Learning in Primary Schools: An Invitation to Primary School Principals. Available at <a href="https://www.det.nsw.edu.au/vetinschools/documents/schooltowork/Career-Related Learning">https://www.det.nsw.edu.au/vetinschools/documents/schooltowork/Career-Related Learning in Primary Schools: An Invitation to Primary School Principals. Available at <a href="https://www.det.nsw.edu.au/vetinschools/documents/schooltowork/Career-Related Learning">https://www.det.nsw.edu.au/vetinschools/documents/schooltowork/Career-Related Learning in Primary Schools: An Invitation to Primary School Principals. Available at <a href="https://www.det.nsw.edu.au/vetinschools/documents/schooltowork/Career-Related Learning">https://www.det.nsw.edu.au/vetinschools/documents/schooltowork/Career-Related Learning</a> in Primary Schools: 2014%20.pdf. [accessed 08/08/2018].

44. Science capital refers to science-related qualifications, understanding, knowledge (about science and 'how it works'), interest and social contacts (e.g. knowing someone who works in a science-related job). Extract from: Archer, L., DeWitt, J., Osborne, J., Dillon, J. and Wong, B. (2013). 'Not girly, not gexy, not glamourous': primary school girls' and parents' constructions of science aspirations. *Journal of Pedagogy, Culture and Society*, 21(1), 171–194.

They need to see that they can apply what they're learning. You're not actually learning it just because it's school but there is a reason for being able to do it. You're applying maths to be a designer, for sizes and shapes, for planning things. Being an architect it's a bit of maths and art. It's looking at what we're teaching them and how you apply that in the real world.

#### Deputy Headteacher, St Anthony's Catholic Primary School, North West

Steve Iredale, former president of the NAHT, noted that any career-related learning activity should:

[...] bring learning to life, it should build into the curriculum and make learning relevant. Really helping these kids understand the reasons behind what they are learning

#### Steve Iredale, NAHT.

By enriching their learning with real-life experiences, it seems pupils can be encouraged to think again about the meanings and implications of what they are being taught in lessons.

#### Case study 2

#### Developing non-academic skills from Year 1–6, Crosshall Junior School, East of England

Crosshall Junior School based in Cambridgeshire runs an enterprise and life skills programme named 'Future Me: Recognising the Hidden Curriculum'. The programme recognises that some skills and behaviours do not fit into the everyday curriculum but are essential to a child's development. Future Me strives to develop, nurture and reward these talents, which may at times be hidden. The programme encourages children to attain a bronze, silver or gold award depending on the pledges they complete throughout their school life. These pledges include a number of enterprise skills such as developing a product, team working, as well as a number of social and emotional learning related pledges, including; overcoming a friendship disagreement, working as a peer mediator, and looking after someone that has been left out on numerous occasions. All of these are vital skills and values that help children to know how to act as they leave the school and move on to secondary.

As well as Future Me, the school organises an impressive range of career-related activities and programmes designed to develop children's knowledge about work, and skills for work and life. As well as organising over 25 careers insights throughout the year, the school and faculty have more recently tried to design activities based on what children want to hear. As assistant head Liam Murphy states: 'we like to invite people in based on what the children aspire to do, so they are already interested'.

Crosshall Junior was one of the few schools in our sample which introduced the idea of vocational pathways to children at a young age. They now invite volunteers to the school to speak about apprenticeships to their Key Stage 2 pupils, to 'open their eyes about the different routes available to them and not to close off these routes because of stigma'.

#### Understanding of jobs and careers

A future career seems a long way off for most primaryage children. Making a connection between what they learn in primary school and the jobs they might one day pursue is not easy, particularly for those from challenging backgrounds, where local unemployment is high, and horizons may be set low.

There has been limited evaluation on the ability of activities and programmes to influence aspirations. In their 2014 review of the UK-based Pathfinder programme, Wade and colleagues conducted one of the few robust studies of the impact of aspiration raising activities. The Pathfinder programme was undertaken to introduce career-related learning to Key Stage 2 pupils and test the hypothesis that these activities would widen pupils' education and career aspirations. The authors compared survey responses from Year 5 students in 38 schools that took part in workplace visits, aspiration talks, and trips to universities as part of the programme with 120 schools that did not take part. The evaluation showed that pupils demonstrated increased awareness of career/ work opportunities, an increased understanding of the link between education and work, and a reduction of gender specific ideas about roles and professions.<sup>28</sup> Teachers in our sample frequently mentioned how they noticed attainment going up as a result of aspiration raising activities, though this was anecdotal in all cases.

We did a study last year where we raised the children's aspirations before their SATs and we discovered that it raised their SATs levels last year. So, we try to get them in prior to SATs.

#### Middle Leader, Aylward Primary School, London

All teachers in our sample mentioned broadening aspirations and challenging stereotypes about jobs and careers as a key aim when carrying out career-related learning activities. For example, one headteacher described how inviting volunteers into the school provided children with new role models. She felt that usually the only role models that pupils were exposed to, were their parents (many of whom were perceived to be first or second generation unemployed):

It is important because I think in our particular context we have high social deprivation, so it is important for our children to have those role models that they don't necessarily have.

#### Deputy Headteacher, Red Oak Primary, West Midlands

Teachers also note that exposing pupils to volunteers from a range of careers can help challenge ideas about the suitability of a job, subject or profession based on gender. One classroom teacher from London noted:

We want to challenge misconceptions about gender, teach children that anything is possible if you work hard and if they are interested in something. We want to challenge gender stereotypes in children from an early age. We feel it's important as part of our inclusion and equal opportunities learning.

#### Deputy Headteacher, Walton Primary School, Yorkshire and the Humber

Anthony Barnes, a former Local Authority schools inspector and leading careers education specialist also emphasised that career-related learning at this phase should focus on helping children understand who they could become by increasing their exposure to as many jobs and careers as possible, emphasising this period as one of exploration:

What we shouldn't be talking about in primary, is 'do you know what you want to be yet?'. Instead we should be content with exploration, development, helping children to aim high and it doesn't matter in primary if they say I want to be a vet. It's about changing the position in the field, recognising the need to build social and cultural capital, and it's about recognising that good career decision making is pragmatically rational.

Anthony Barnes, Independent Careers Education Specialist

#### **Employability Skills**

Research also suggests that career-related learning provides pupils with the opportunity to explore and practice non-academic skills demanded during working life and in the transition to secondary education. Nonacademic skills are distinct from academic knowledge and can include empathy, communication, and resilience.<sup>45</sup> These skills are associated with improved educational, work, health and wellbeing outcomes, such as higher academic attainment, employability and good physical and mental health.<sup>46</sup>

#### Enterprise and entrepreneurial skills

Enterprise education aims to provide the skills and tools that will help children succeed post-school, whatever they do.<sup>47 48</sup> Some believe enterprise education refers to formal teaching and learning of specific content or outcomes, while for others it is more informal and open-ended.<sup>49 50</sup> Young provides a broad definition, suggesting enterprise education is about children developing "a positive outlook, an ability to see the glass as half full rather than half empty.<sup>51</sup>

While most of the existing evidence on developing enterprise skills is based on impact evaluations, one study from the Netherlands again uses a randomised control trial to evaluate whether such enterprise programmes make a measurable difference in developing these skills. The researchers evaluated a lesson-based entrepreneurial programme designed for children in the latter years of Key Stage 2 with the aim of developing non-cognitive skills, such as persistence, creativity and pro-activity. The authors found that the program had the intended effect; pupils in the treatment group developed their non-cognitive entrepreneurial skills significantly stronger than those in the control group. In particular, they increased their self-efficacy, need for achievement, risk taking propensity and analysing skills to a larger extent. Furthermore, they became more persistent, pro-active and creative, even when controlling for a wide variety of individual and school characteristics.<sup>52</sup>

More importantly, we want our kids to leave us knowing themselves. It's about the skills and about knowing what they're good at, knowing their identity and sense of self. Knowing what brings them alive.

Deputy Headteacher, Ladybarn Primary School, North West

<sup>45.</sup> Early Intervention Foundation. (2017). Social & Emotional Learning: Support Children and Young People's Mental Health. EIF Policy Briefing. London: EIF.

<sup>46.</sup> Gensowski, M. Heckman, J. and Savelyev, P. (2011). The Effects of Education, Personality, and IQ on Earnings of High-Ability Men. Chicago: The University of Chicago

<sup>47.</sup> Lackéus, M. (2015). Entrepreneurship Education: What, Why, When, How, Paris: OECD Publishing.

<sup>48.</sup> Enabling Enterprise. (2015). A Complete Approach to Transforming Students' Enterprise Skills, London: Enabling Enterprise

<sup>49.</sup> Edwards, L. J. and Muir, E. J. (2012). Evaluating enterprise education: Why do it? Education and Training, 54(4): 278-290.

<sup>50.</sup> Hytti, U., and O'Gorman, C. (2004). 'What is 'Enterprise Education?' An analysis of the objectives and methods of enterprise education programmes in four European countries. Education and Training, 46(1), 11-23.

<sup>51.</sup> Young, D. (2014). Enterprise for All: The Relevance of Enterprise in Education. London: Department for Business, Innovation and Skills (BIS).

<sup>52.</sup> Huber, L. R., Sloof, R. and Praag, M. V. (2012). The Effect of Early Entrepreneurship Education: Evidence from a Randomized Field Experiment. Bonn, Switzerland: Institute for the Study of Labor

#### **Personal Effectiveness**

#### Social emotional skills and behaviours

Schools have an important role to play in raising healthy children by fostering not only their cognitive development but also their social and emotional development. Yet schools have limited resources to address all of these areas and are experiencing intense pressures to enhance academic performance. While similar to enterprise skills, these refer to traits which individuals use to understand and manage their emotions, communicate with others, and forge and maintain healthy relationships. These include communication, empathy, team-work, self-awareness, confidence, self-belief, leadership, understanding and managing emotions, resilience, and collaboration.44 53 Research has shown that the development of these skills has an association with the retention of pupils at risk of disengagement, attendance, and a reduction in negative behaviour.<sup>40</sup> Analysis carried out by Goodman et al in 2015 on data from the British Cohort Study by UCL found that these social and emotional skills and behaviours are each very important for future outcomes. Compared with cognitive ability they find that social and emotional skills matter similarly for socio-economic and labour market outcomes (such as higher income and wealth and being employed).<sup>40</sup> They can also enhance cross- cultural understanding from an early age.<sup>54</sup>

Their personal and social skills will hopefully develop. There will be a lot of team work during the week working on the activities and listening. We hope that the outcome of the week will be all of the personal, social and relationships will [have] improved.

#### Senior Leader, Ashfield Park School, West Midlands

Robust research assessing the impact of career-related learning on emotional skills and behaviours is somewhat limited. Given the fluidity of the concepts and the difficulty in their measurement, most research in this area is qualitative and anecdotal. Kirkman and colleagues working at the UK based Behavioural Insights Team provide compelling evidence that young people who take part in social action initiatives, such as volunteering, develop some of the most critical skills for employment and adulthood in the process. They evaluated three primary school-based social action initiatives which centred on the participant developing, costing and managing a community campaign or social action idea. Using a number of randomised controlled trials and one pre/post comparison, the researchers compared the outcomes for young people who took part in these funded initiatives against the outcomes of young people who did not. They found that children: 'consistently improved young people's levels of empathy, and their sense of community involvement. Some programmes were also impressive in increasing students' cooperation and levels of grit'.55

53. Cullinane, C., and Montecute, R. (2017). Life Lessons: Improving Essential Skills for Young People. London: The Sutton Trust.

54. Watson, M., McMahon, M., and Liu, J. (2015). Parental influence on mainland Chinese children's career aspirations: child and parental perspectives. International Journal for Educational and Vocational Guidance, 15(2), 131-143. 55. Kirkman, E., Sanders, M., Emanuel, N. and Larkin, C. (2016). Does Participating in Social Action Boost the Skills Young People Need to Succeed in Adult Life? Evaluating Youth Social Action: Final report. London: Behavioural Insights Team.

#### **Parental engagement**

Parental involvement on both the school and home fronts has been argued to enhance pupil achievements in school.<sup>56 57 58</sup> For schools situated within areas of deprivation, involving and engaging parents/carers in their children's education are particular challenges. For a number of teachers and experts in our sample, these events are seen as ideal opportunities to engage with parents and carers and attempt to raise their awareness of the nature of their supportive role in their children's future.

While the literature remains relatively silent on parental engagement<sup>59</sup> teachers, senior leaders and experts in our sample frequently mentioned engaging parents as a key driver when delivering career development activities. Dr Julie Young (Somerset County Council) noted that parents tend to be more involved with their children's education at primary school, making it an ideal period to engage:

I think that the other big thing for doing it [career-related learning] in primary is that because we have such good buy-in from parents at that age, parents get sort of more and more distant from the schools and from education as their children get older. They tend to be more involved at primary school. I think having parents involved is critical with career learning. It should be raising the aspirations of the parents as well as for their children. I think it is a dual role, I think there is a lot of education of the parents that we need to do. I think it is an ideal starting point while they're still involved in school.

#### Dr Julie Young, Somerset County Council

One headteacher noted that they carried out a parental survey which asked about their hopes and dreams for their children, which was then used to engage with parents over the school year:

We started the survey by asking parents what they wanted their children to aspire to. Then we looked at what the children wanted to aspire to and it was interesting to see the different aspirations for parents and for pupils. Then we looked at what the children's aspirations were [with parents] and how it changed in their results.

Deputy Headteacher, Ladybarn Primary School, North West

57. GroInick, W. S., Kurowski, C. O. and Gurland, S. T. (1999). Family processes and the development of children's self-regulation. Educational Psychologist, 34(1), 3-14.

58. Hill, N. E., and Taylor, L. C. (2004). Parental school involvement and children's academic achievement: Pragmatics and issues. Current Directions in Psychological Science. 13(4), 161-164.

59. Oomen, A. (2016). Parental involvement in career education and guidance In Secondary Education. NICEC Journal of Career Education and Guidance, 37, 39-46.

<sup>56.</sup> Epstein, J. L. (1983). Longitudinal effects of family-school-person interactions on student outcomes. In A. Kerckhoff (ed.) Research in Sociology of Education and Socialization. Greenwich, CT: JAI, pp.101-128

# **4** Challenges

To understand what best practice looks like it is important to understand the challenges schools face in designing and implementing career-related learning in their schools. Primary schools in our sample were asked about the barriers or challenges they have experienced preventing them from offering more career-related learning activities in their school.

#### Lack of time and staff capacity

The biggest barrier cited was the lack of support and time available to develop formal links with businesses and employers. Eight out of 10 interviewees mentioned the lack of time available to organise and invite volunteers from outside of school.

It's just time really and coordinating it all. It's the practical things really. You spend a lot of your own time at home sending emails and making sure that everything's organised.

#### Deputy Headteacher, St Anthony's Catholic Primary School, North West

Related to a perceived lack of capacity, a number of teachers believed that not having a member of staff as a coordinator or someone at the school to drive careerrelated learning was a major barrier.

It's been fairly time consuming, because we have so many visitors coming in, the amount of communications has been difficult because we're all very busy and I only work three days a week.

Senior Leader, Ashfield Park School, West Midlands The 2010 Qualifications and Curriculum Development Agency (QCDA) review of primary provision also found a resounding proportion of teachers also emphasised the importance of having a designated person who had direct responsibility for career-related learning at their school.<sup>22</sup> The careers strategy sets out that every post-primary school needs a Careers Leader who has the energy and commitment, and backing from their senior leadership team, to deliver the careers programme. EdComs found similar concerns when they interviewed 400 primary school leaders in 2008, with a considerable proportion highlighting that 'lack of suitable staff to support business involvement' was the biggest barrier in creating further opportunities.<sup>60</sup>

#### Difficulties developing links with employers

Despite their importance in facilitating careerrelated learning and bringing it to life, teachers have noted that the availability of local employers and or scheduling a suitable time for both groups is one of the biggest challenges they face in introducing children to the world of work.<sup>22</sup> Teachers also noted that connections with people from the world of work were often informal and depended on relationships with individuals. When an individual moved on from either the school or the organisation or business, the link would disintegrate. Primary schools thus spoke consistently of the need for support in developing more formal links with the local community. As one Deputy Head from the West Midlands noted:

60. Edcoms. (2010). Business in Schools Research Findings: Weighted data. Paper presented Edcoms and Business in the Community Conference: Maximising impact. London: Edcoms, 12th November 200

20

I guess that some of the challenges would be getting people into school, and maybe as well the people we get are brilliant but it takes a bit of time to find them and make the contact, and by the nature of it we don't build up any longer-term relationships with those people, it can sometimes feel like one off kind of work.

#### Deputy Headteacher, Red Oak Primary, West Midlands

This challenge is exacerbated in particularly rural, isolated and socially deprived areas:

In the particular area we live in there aren't many employers in the area. For instance, the engineers we have had weren't really in the area so we had to look further afield. So, it is a bit tricky to find the people that can come in and talk.

#### Middle Leader, Aylward Primary School, London

From the existing evidence it appears that there is both a desire and a need from teachers and school leaders for some form of online and/or offline brokerage to assist in making connections between education institutions, employers and other local partners. While organisations to assist linkages between secondary schools and businesses have existed for over 30 years,<sup>61</sup> much of the work to bring employers into primary schools has been done using informal local or personal connections. For most primary schools, the key transaction cost is finding a suitable person in a workplace and making a clear ask of them. Using online platforms designed for teachers to broker these connections can help formalise arrangements, ensuring that schools can facilitate meaningful interactions at a fraction of the costs involved in traditional brokerage.<sup>62</sup> There is significant scope to use technology enhanced approaches that can support teachers in the classroom.

#### Finding time in the 'crowded curriculum'

Another challenge that arose from both the literature and the stakeholder interviews was a perceived lack of curriculum flexibility. Teachers in the sample felt that unless career-related learning was built into the curriculum from senior leadership, or teachers were encouraged to weave career learning into subjects within topics, these activities would always be ad hoc in their nature.

I think the biggest challenge in schools is time. Everyone is pressured with the curriculum. We are judged on particular things rightly or wrongly. It's trying to make sure that the curriculum maintains breadth when external factors potentially squeeze that.

#### Deputy Headteacher, Ladybarn Primary School, North West

In the previously mentioned survey by Education and Employers (2018), teachers and school leaders highlighted curriculum rigidity as one of the biggest challenges when organising carer related learning. Of the 250 respondents, 22% highlighted that space in the curriculum was the biggest barrier in providing children with opportunities to learn about the world of work.<sup>30</sup> Susan Scurlock, CEO of the charity Primary Engineers also highlighted:

61. Huddleston, P. and Stanley, J. (2012). Work Related Teaching and Learning: A Guide for Teachers and Practitioners. London: David Fulton Publisher.

62. Mann, A., Kashefpakdel, E. T., and Iredale, S. (2017). Primary Futures: Connecting Life and Learning in UK Primary Education. London: Education and Employers

It's a crowded curriculum. The expectation and metrics that are driving the system are everything and they leave very little room for anything else. They have no wiggle room. Kids are spending the last year of primary school practicing tests. Until this is changed it's very difficult to put anything concrete in place. It's important with all of these activities, and what we are trying to do, that it fits in with the curriculum and the end goal, or one of the by-products is always improving attainment or engagement with learning.

Susan Scurlock, Primary Engineers

#### Lack of consistent monitoring and evaluation

The majority of the schools interviewed outlined that they did not carry out any systematic evaluation of their career-related learning activities which aimed to improve knowledge about the world of work. However, two schools did note that they ask their students and volunteers for anecdotal feedback to aid their decision making about future activities. Eight out of 10 schools noted that some sort of evaluation would be useful in improving their career-related learning offering.

I guess what would have been useful would have been to have some kind of baseline score before we started. With particular groups we've done various gauges and surveys and that has definitely made a difference. I suppose going forward long term it would be interesting in focusing on the Year 6s and doing some quantifiable work with them and long term taking a year group in nursery and doing some longerterm analysis.

Deputy Headteacher, Ladybarn Primary School, North West

#### Case study 3

#### Linking career-related learning to the curriculum, Aylward Primary School, London

For the last two years, Aylward Primary School in Harrow, London has been organising career-related learning activities to enhance and raise the profile of curriculum-based careers and subjects. One of the school's Middle Leaders, Laura Street believes career-related learning is important for bridging the gap between class-based subjects and the world of work. Contacting local employers and universities directly, the school engages pupils in History, Geography, English and STEMrelated careers and opportunities. Year 3 and 4 pupils received workshops from UCL students in Geology, Egyptology and next year, Palaeontology; while Year 5s and 6s were introduced in the first year to maths and science-related careers.

While only in its second year, the success of the school's career programme is visible in the pupil's progress. In the activities' first year, the school ran a baseline survey asking pupils what they aspired to, and the parents what they aspired to for their children. The second survey, implemented after Year 6 SATs, revealed a positive change in pupil aspirations. Children appeared more talkative and aspired to more 'out of the box' career paths after partaking in the activities. The school also saw their pupils' SATs results raised particularly in maths after focusing on STEM-related career activities that academic year. Laura Street believes that pupils are more engaged in class because they can now contextualise and make links between the career visitors, class learning and their own aspirations.

## **5** | Lessons for practice

When designing or organising a career-related learning programme, there are a number of lessons for practice that can be inferred from the compiled evidence. Based on these evidence sources, it is possible to offer guidance to teachers planning to deliver career-related learning in their school. It should be noted that guidance offered here is based on the insights gathered from both limited literature sources and a small sample of insights from experts and key informants.

#### Successful leadership

Given the current lack of clearly defined standards and frameworks, the ability of senior leaders to prioritise career-related learning and shape the culture of schools in ways that support the development of pupils is crucial. In order for career-related learning to successfully achieve the outcomes and impacts outlined above for all learners, and to have curriculum flexibility to maximise the opportunities for career-related learning, it needs to be coordinated at a whole-school level and include planning of progression. Careful planning and organisation from the senior leadership team is vital to achieving this. This can also be supported by school governing bodies. Interviews with teachers highlight that when career-related learning is effectively delivered, it tends to be dependent on strong direction from the school's senior leadership.

It's everybody but it is led largely from me. I do have some very proactive teachers that have contacts. One of my teachers sends out a lot of applications including working on a project with Sky.

Deputy Headteacher, Oaks Primary Academy, West Midlands I have taken more of a lead role in inviting people in and pushing the Future Me programme, assistant heads are also involved in the role. The whole movement was designed and pushed by myself and the former deputy head teacher (now headteacher).

#### Assistant Headteacher, Crosshall Junior School, East of England

Me principally as leader. I'm the one steering the ship and I make the decision whether that's something that needs to be done and the teachers are very positive and receptive to that. I've committed all the staff to having elements of careers in their teaching so that everyone has a role to play in it.

#### Headteacher, Welton Primary School, South West

Whilst there are a wide range of high-quality resources openly available for primary school teachers to access,<sup>32</sup> there remains a gap in career-related learning (CRL) leadership programmes in England.

#### Make this open to all

All teachers, headteachers, and other key informants agreed that career-related learning in this phase should not be targeted at a particular group (for example, girls, disengaged learners, high achievers). When one teacher was asked whether they target specific outcomes:

No, it's absolutely imperative that every child has access to all of those areas. We want all the children to see that there are opportunities they haven't considered. That way it helps them to engage with the curriculum and aspects that aren't their strengths. This helps to create a broader child at the end of it that keeps them openminded for the future. We don't know what the future is going to hold for our children.

Senior Leader, Ashfield Park School, West Midlands

### The likely impact relating to improved pupil outcomes includes:

- More pupils and teaching staff learn about themselves and develop a better view of their self-efficacy; increased pupil and teacher awareness of career/work opportunities;
- Increased pupil and teacher understanding of the link between education, qualifications, skills and work opportunities, preparing pupils for adulthood from the earliest years;
- Gender stereotypes are identified, addressed and linked to opportunities to overcome barriers;
- Pupils' evolving perception of their own potential place in a future world of work is explored and nurtured;
- Pupils and teachers exposed to businesses and the world of work, develop a realistic view of differing occupations and sector skills gaps;
- Amelioration of restricted views by broadening horizons and raised aspirations, particularly for pupils with special educational needs and disabilities;
- Parents/carers' attitudes, perceptions and aspirations broadened relating to their children's education and career preferences.

Children actively explore their worlds and begin to construct possibilities for present and future selves.963 These life stories include a sense of self (self-identity), life roles, skills, and knowledge, and are shaped by everyday events and experiences. They are also often shaped, moulded and restricted by gender stereotyping, socio-economic background and the role models in their surroundings.<sup>1664</sup> Making careerrelated learning open to all children in primary schools is a social, cultural, educational and economic imperative. By investing in children from an early age and creating a wide range of experiences of and exposure to education, transitions and the world of work, this is more likely to achieve good outcomes and contribute to a fairer society rather than simply leaving things to chance.65

## Embed career-related learning in the curriculum

It is vitally important that curriculum staff feel there is a useful structure in which they can supplement areas of their teaching with chosen career-related learning activities. Schools and senior leaders should make the relationship between career-related learning and the aims and ethos of the curriculum of the school explicit. This can help ensure buy-in from curriculum staff and subject leaders. Due to staff capacity issues and the ever-growing pressure on metrics and SATs results, career-related learning in primary schools must be seen to contribute to or sit alongside the ongoing learning objectives and outcomes in subjects across the curriculum. It was outlined that career-related learning, at a basic level, must be attractive to the classroom teachers expected to embed it: It's important that all teachers feel that there is flexibility in the event and that they can have their own input into what their classes are doing. We wanted them to link it to their own curriculum. Plan it for their own children in their year group. That way it's personalised and relevant and meaningful, that way the teachers are also interested and enjoying it as well.

Senior Leader, Ashfield Park School, West Midlands

#### Involve external organisations and employers

The evidence suggests that schools very rarely provide a comprehensive career-related learning programme on their own.<sup>30</sup> Schools often need the cooperation and time of local and national employers to deliver and supplement various events. There also appears to be a strong desire from school leaders for an online and/or offline brokerage platform that removes the barriers between schools and employers and formalises the connections to the world of work.

...It's good to have [a] database which you can just go to and find people if you need them. There were so many different varieties, for science to have chemistry, biology and physics so it widens our range.

Middle Leader, Aylward Primary School, London

63. Cahill, M., & Furey, E. (2017). The Early Years: Career Development for Young Children - A Guide for Educators. Toronto: CERIC.

64. Archer, L., & Dewitt, J. (2017). Participation in informal science learning experiences: The rich get richer? International Journal of Science Education, Part B: Communication and Public Engagement, 7(4), 356-373.

<sup>65.</sup> In January 2018 the Department for Education published its statutory guidance document for post-primary schools and colleges. The document links directly to the recent Careers Strategy and provides a timeline for schools to introduce and publish key elements, such as details of their careers leader and career programme. It also provides an expectation for schools to meet the Gatsby Benchmarks by 2020 as well as strongly recommending schools to use the Quality in Careers Standard (for which Career Mark is a licensed Awarding Body) to externally assess.

Interviewees also noted that schools could be supported by being provided with better signposting to mechanisms that can broker connections to employers. This could help teachers to better deliver a wide range of activities and to set up and maintain more regular formal links with such organisations.

I've developed really good relationships with Manchester airport and asked friends of the school to come in. We ask people from the community to come in. We know people from local businesses [and] we've asked them to come in. We're quite proactive in asking people to come in and when the opportunities arise getting the children to take part.

#### Deputy Headteacher, St Anthony's Catholic Primary School, North West

When engaging schools, teachers interviewed for this report note that any schools looking to set up a programme of career-related learning should also focus on networking and learning events. This can foster long-term inter-school collaboration with the aim of sharing best practice and forming enduring networks of support. This is especially relevant for smaller, more rural primary schools.

I've shared a lot of these resources with my fellow colleagues in our local area because I feel a duty of care to promote this to other schools.

Headteacher, Welton Primary School, South West

#### Start early

As the literature has shown, perceptions about the suitability of different sectors and career paths are embedded in the minds of children from the youngest ages. All interviewees argued that career-related learning should begin as soon as children start primary school.

I can envisage talks about aspirations and stereotyping being useful and important for children in year 1 and, with a bit of tweaking, suitable for children in reception. As soon as they are learning in school they should be thinking about why they are learning it.

#### Assistant Headteacher, Crosshall Junior School, East of England

In the previously mentioned survey by Education and Employers (2018), 47% of teachers believed children should start learning about the world of work at reception.<sup>30</sup>

### Ensure activities are personalised and relevant to age group

A number of school staff noted that primary careerrelated activities are most effective when they are not only embedded in the curriculum but adapted depending on the Key Stage involved.

There is so much they can do in nursery in the way of play-based learning and anything that gets them exploring, developing ideas, thinking, is a good thing. We had discovered over the years that we needed to start earlier and earlier. So, with things like stereotyping it really is too late if you don't do anything about it until Year 9 in secondary.

### Anthony Barnes, Independent careers education specialist

The emphasis in Key Stage 1 should be on exploring as many careers as possible, as well as challenging stereotyping by showing that anyone can perform a particular job, regardless of gender and ethnicity.

When they're in the early years they are learning about what a job is, and so we invite people from obvious job places; fire services, etc. so they can understand what that means, so we develop it as we go, the curriculum does start in the early years with that initial understanding of workplace.

Deputy Head, Ladybarn Primary School, Manchester The majority of schools interviewed felt that in Key Stage 2 children should continue exploring careers and challenging stereotypes about those careers, but further emphasis should also be placed on gaining a deeper understanding of particular careers, as well as the vocational and academic routes available to achieve them. Teachers also noted that in Key Stage 2 children should begin working in earnest on their non-academic skills, including financial awareness. Teachers interviewed for this report also highlighted the importance of briefing volunteers before they come to the school, especially if the event or activities are aimed at younger children.

It's very two-way, I think what's great is that the visitors know their audiences. So, some of the classes and groups that are only 4 years old, so what's really impressive actually is that all the volunteers we've had tailored what they're saying to the kids that come in. So, they all have their stock PowerPoints, maybe some things to show, and some of them bring uniforms and hats that they can get kids to dress up in.

#### Headteacher, Welton Primary School, South West

# 6 Developing the evidence base

There are a small number of robust evaluations that use some kind of control to measure the association between primary activities and certain outcomes. It must also be noted that the literature is particularly weak on the comparative value of different careerrelated learning activities for different key stages. More comprehensive research is needed on the effectiveness of different career-related learning activities and programmes for children in different year groups and key stages.

More research is also needed into the teacher training and/ or school-level support required to address postschool progression barriers which begin in primary. This would involve understanding the specific role of teachers in organising and delivering career-related learning, including the taxonomy of teacher roles with regards to careers and training needs in a primary setting.

Further testing is also needed in this area to explore the formation of children's career identities. While there are a handful of studies which empirically test the various career development theories put forward throughout this review, more rigorous analysis is needed to explore their continued applicability.

Moreover, larger scale research is needed to fully ascertain what teachers and schools are providing within primary schools across England. This small-scale review provides a timely and informative snapshot of insights to career-related learning in primary schools, but it should not be seen as being representative of all schools in all contexts.

### Key areas for improving the evidence base include:

- Further investigation into the activities that are most effective for different year groups within primary schools
- Longer term studies to attempt to quantify the impacts of these activities on educational attainment and attitudes towards schooling
- Sharing and celebrating success stories of good/ interesting policies and practices.

# **7** Conclusion

The evidence suggests that careerrelated learning in primary schools has the potential to help broaden children's horizons and aspirations, especially (though not exclusively) those most disadvantaged. Schools are encouraged to develop policies, curriculum and practices that best suit their local circumstances, and give impetus to building strong local partnerships. A small number of high-quality studies, as well as evidence from interviews with teachers and other leading experts in this field, suggest that participation in career-related learning can improve children's knowledge about work and help develop 'soft skills'. In this report, we suggest that certain activities can also be categorised as developing children's social and emotional skills and behaviours. Evidence also suggests that career-related learning can be useful in engaging parents in their child's learning and enhance their own understanding of how the world of work is fast changing in a digital age.

The evidence included in this review also helps provide a range for how career-related learning may best be delivered. The findings suggest career-related learning is best delivered when:

The school has a leadership and senior leadership team committed to embedding career-related learning into the curriculum; activities and programmes are provided from an early age; employers, universities and other external organisations are involved, and best practice contacts are shared between and across local schools.

However, it is also important to recognise that good/ interesting practice is often influenced by contextual factors. There is no 'one-size-fits-all' approach to organising these activities, with geographical location often being an important consideration. Therefore, each school needs to work out what more can be done to achieve career-learning for their pupils (and parents). By doing so, this will give all children and families the chance for greater success now and in the future.

## "

A small number of high-quality studies, as well as evidence from interviews with teachers and other leading experts in this field, suggest that participation in career-related learning can improve children's knowledge about work and help develop 'soft skills'.



Akerlof, G. A., and Kranton, R. E. (2000). Economics and identity. Quarterly Journal of Economics, 115(3), 715-753.

**Archer**, L., & Dewitt, J. (2017). Participation in informal science learning experiences: The rich get richer? *International Journal of Science Education*, *Part B: Communication and Public Engagement*, 7(4), 356-373.

Archer, L., DeWitt, J., Osborne, J., Dillon, J. and Wong, B. (2013). 'Not girly, not sexy, not glamourous': primary school girls' and parents' constructions of science aspirations. *Journal of Pedagogy, Culture and Society*, 21(1), 171–194.

Archer, L., DeWitt, J., Osbourne, J., Dillon, J., Wong, B. and Willis, B. (2013). ASPIRES: Young People's Science and Career Aspirations, Age 10–14. London: King's College London.

Bandura, A., Barbaranelli, C., Caprara, G. V., and Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72(2), 187–206.

**Breen, R., and Garcia-Penalosa, C.** (2002). Bayesian learning and gender segregation. *Journal of Labor Economics,* 20(4), 899–922.

**Cahill, M., & Furey, E.** (2017). The Early Years: Career Development for Young Children – A Guide for Educators. Toronto: CERIC.

**Career Development Institute.** (2013). The ACEG Framework for Careers and Work-Related Education: A Practical Guide. London: CDI.

Career Development Institute. (2012). A Framework for Careers and Work-Related Education. London: CDI.

**Chambers**, N., Rehill, J., Kashefpakdel, E. T., and Percy, C. (2018). Drawing the Future: Exploring the Career Aspirations of Primary School Children from Around the World. London: Education and Employers.

**Chambers**, **N**. (2018). Primary career education should broaden children's horizons. Available from https://www.tes.com/news/primary-career-education-should-broaden-childrens-horizons [accessed 30/11/2018]

**Confederation of British Industry.** (2014). *Gateway to Growth: CBI/Pearson Education and Skills Survey* 2014. London: Confederation of British Industry.

Côté, J. E. (1997). An empirical test of the identity capital model. Journal of Adolescence 20(5), 577-597.

**Crause E., Watson, M., and McMahon, M.** (2017). Career development learning in childhood: Theory, research, policy and practice. In McMahon, M., and Watson, M. (Eds.) *Career Exploration and Development in Childhood: Perspectives from Theory, Practice and Research.* Abingdon: Routledge, pp.186-198.

**Cullinane**, **C.**, **and Montecute**, **R.** (2017). *Life Lessons: Improving Essential Skills for Young People*. London: The Sutton Trust.

**Department for Education.** (2017). *Careers Strategy: Making the Most of Everyone's Skills and Talents*. London: Department for Education.

**Early Intervention Foundation.** (2017). Social & Emotional Learning: Support Children and Young People's Mental Health. EIF Policy Briefing. London: EIF.

**Edcoms.** (2010). Business in Schools Research Findings: Weighted data. Paper presented *Edcoms and Business in the Community Conference: Maximising impact*, London: Edcoms, 12th November 2007.

**Education and Employers.** (2018). *Introducing Primary Children to the World of Work*. London: Education and Employers.

**Education and Employers.** (2018). Starting early – the importance of career-related learning in primary school. Available from *https://www.educationandemployers.org/career-related-primary/*[accessed 30/11/2018]

Edwards, L. J. and Muir, E. J. (2012). Evaluating enterprise education: Why do it? *Education and Training*, 54(4), 278-290.

**Enabling Enterprise.** (2015). A Complete Approach to Transforming Students' Enterprise Skills, London: Enabling Enterprise.

**Epstein**, J. L. (1983). Longitudinal effects of family-school-person interactions on student outcomes. In A. Kerckhoff (ed.) *Research in Sociology of Education and Socialization*. Greenwich, CT: JAI, pp.101-128.

**Flouri, E. and Pangouria, C.** (2012). Do Primary School Children's Career Aspirations Matter? The Relationship Between Family Poverty, Career Aspirations and Emotional and Behavioural Problems. London: Centre for Longitudinal Studies.

Francis, B. (2010). Gender, toys and learning. Oxford Review of Education, 36(3), 325-344.

**Gensowski, M. Heckman, J. and Savelyev, P.** (2011). The Effects of Education, Personality, and IQ on Earnings of High-Ability Men. Chicago: The University of Chicago.

**Goodman, A., Joshi, H., Nasim, B., and Tyler, C.** (2015) *Social and Emotional Skills in Childhood and their Long-Term Effects on Adult Life*. London: Early Intervention Foundation.

**Gottfredson, L. S.** (2002). Gottfredson's theory of circumscription, compromise, and self creation. In Brown, D., and Brooks, L. (Eds.) *Career Choice and Development*. San Francisco, CA: Jossey-Bass, pp. 85-148.

Grolnick, W. S., Kurowski, C. O. and Gurland, S. T. (1999). Family processes and the development of children's self-regulation. *Educational Psychologist*, 34(1), 3-14.

**Gutman, L. and Akerman, R.** (2008). *Determinants of Aspirations*. London: Centre for Research on the Wider Benefits of Learning.

Herr, E. L., Cramer, S. H., and Niles, S. G. (2004). Career Guidance and Counseling Through the Lifespan: Systematic Approaches (6th ed.). Boston, MA: Allyn & Bacon.

Hill, N. E., and Taylor, L. C. (2004). Parental school involvement and children's academic achievement: Pragmatics and issues. *Current Directions in Psychological Science*. 13(4), 161-164.

Howard, K. A., Kimberly, A. S., Flanagan, S., Castine, E., and Walsh, M. E. (2015). Perceived Influences on the Career Choices of Children and Youth: An exploratory study. *International Journal for Educational and Vocational Guidance*, 15(2), pp.99-111.

**Huber, L. R., Sloof, R. and Praag, M. V.** (2012). *The Effect of Early Entrepreneurship Education: Evidence from a Randomized Field Experiment.* Bonn, Switzerland: Institute for the Study of Labor.

Huddleston, P. and Stanley, J. (2012). Work Related Teaching and Learning: A Guide for Teachers and Practitioners. London: David Fulton Publisher.

**Hytti, U., and O'Gorman, C.** (2004). 'What is 'Enterprise Education?' An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education and Training*, 46(1), 11-23.

Kashefpadkel, E. T., Rehill, J. and Hughes, D. (In Press). Career-Related Learning in Primary: The Role of Primary Teachers and Schools in Preparing Children for the Future. London: Teach First.

Kautz, T., Heckman, J. J., Diris, R., Weel, B., and Borghans, L. (2014). Fostering and Measuring Skills: Improving Cognitive and Non-Cognitive Skills to Promote Lifetime Success. Germany: National Bureau of Economic Research.

Kelly, P. (2004). Children's experiences of mathematics. Research in Mathematics Education, 6(1), 37-57.

**Kirkman, E., Sanders, M., Emanuel, N. and Larkin, C.** (2016). Does Participating in Social Action Boost the Skills Young People Need to Succeed in Adult Life? Evaluating Youth Social Action: Final report. London: Behavioural Insights Team.

Knight, J. L. (2015). Preparing elementary school counselors to promote development: Recommendations for school counselor education programs. *Journal of Career Development*, 42(2), 75-85.

Lackéus, M. (2015). Entrepreneurship Education: What, Why, When, How. Paris: OECD Publishing.

κ.

33

Mann, A. and Percy, C. (2014). Employer engagement in British secondary education: wage earning outcomes experienced by young adults. *Journal of Education and Work*, 27(5), 496-523.

Mann, A., Kashefpakdel, E. T., and Iredale, S. (2017). *Primary Futures: Connecting Life and Learning in UK Primary Education*. London: Education and Employers.

Mann, A., Rehill, J. & Kashefpakdel, E. T. (2018). Employer Engagement in Education: Insights from International Evidence for Effective Practice and Future Research. London: Education Endowment Foundation.

**McMahon, M., & Watson, M.** (2017). Telling Stories of Childhood Career Development. In McMahon, M., & Watson, M. (eds) *Career Exploration and Development in Childhood: Perspectives from Theory, Practice and Research.* Abingdon: Routledge, pp.1-8.

**Miller, S., and Connolly, P.** (2013). A randomised controlled trial evaluation of a school-based volunteer tutoring programme aimed at increasing reading skills amongst 8–9 year olds. *Educational Evaluation and Policy Analysis*, 35(1), 23–37.

Musset, P., and Mytna Kurekova, L. (2018). Working it out: Career Guidance and Employer Engagement. *OECD Education Working Papers*, 175. Paris: OECD Publishing.

Niles, S. G., and Harris-Bowlsbey, J. (2017). Career Development Interventions. (5th ed.). Toronto: Pearson.

**NSW Government, Education & Communities.** (2014). *The Case for Career-Related Learning in Primary Schools:* An Invitation to Primary School Principals. Available at <u>https://www.det.nsw.edu.au/vetinschools/documents/</u> <u>schooltowork/Career-Related\_Learning\_in\_Primary\_Schools\_2014%20.pdf</u> [accessed 08/08/2018].

**Oomen, A.** (2016). Parental involvement in career education and guidance in secondary education. *NICEC Journal* of *Career Education and Guidance*, 37, 39-46.

**Qualifications and Curriculum Authority.** (2004). *Work-Related Learning Baseline Study*. London: Qualifications and Curriculum Authority.

**Qualifications and Curriculum Development Agency.** (2010). *QCDA Review of Work-Related Learning for Young People Aged 5-19*. Coventry: Qualifications and Curriculum Development Agency (unpublished).

**Raffo, C., and Reeves, M.** (2000). Youth transitions and social exclusion: Developments in social capital theory. *Journal of Youth Studies* 3 (2), 147–166.

**Reece, L.** (2018). *The Value of Careers Work with Primary School Pupils: Research and Resources*. Available from: <u>https://www.centralcareershub.co.uk/2018/02/07/the-value-of-careers-work-in-primary-education/</u>[Accessed 28th September 2018]. **Skorikov, V. B., and Vondracek, F. W.** (2011). Occupational identity. In Schwartz, S.J., K. Luyckx, K., and Vignoles, V. (Eds.), *Handbook of Identity Theory and Research*. New York, NY, US: Springer Science and Business Media, pp.693-714.

**Specialist Schools and Academies Trust.** (2010). *Enterprise Education in Primary Schools*. London: Specialist Schools and Academies Trust.

**Stanley, J., and Mann, A.** (2014). A theoretical framework for employer engagement. In Mann A. Stanley J., and Archer L. (Eds.) *Understanding Employer Engagement in Education: Theories and Evidence*. Routledge: London, pp.36-52.

**Sultana, R.G.** (2014). Rousseau's chains: Striving for greater social justice through emancipatory career guidance. *Journal of the National Institute for Career Education and Counselling*, 33(1), 15–23.

**Super, D.E.** (1990). A life-span, life-space approach to career development. In Brown, D., and Brooks, L. (Eds.) *Career Choice and Development*. San Francisco, CA: Jossey-Bass, pp.22-35.

Wade, P., Bergeron, C., White, K, Teeman, D., Sims, D., and Mehta, P. (2011). *Key Stage 2 Career-Related Learning Pathfinder Evaluation*. London: Department for Education.

Watson, M., McMahon, M., and Liu, J. (2015). Parental influence on mainland Chinese children's career aspirations: child and parental perspectives. *International Journal for Educational and Vocational Guidance*, 15(2), 131-143.

Watts, A.G. (2002). Connexions: Genesis, diagnosis, prognosis. In Collin, A., and Roberts, K. *Career Guidance: Constructing the Future*. Stourbridge: Institute of Career Guidance, pp.150-172.

**Young, D.** (2014). *Enterprise for All: The Relevance of Enterprise in Education*. London: Department for Business, Innovation and Skills (BIS).



**The Careers & Enterprise Company** 2-7 Clerkenwell Green Clerkenwell London EC1R 0DE

www.careersandenterprise.co.uk