

Submission to the All-Party Parliamentary Group for Education

Do schools prepare young people for their future careers?

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Introduction

This submission provides the APPG with some examples of employer-led programmes that have had an impact, and which offer some interesting models and insights. It also draws general, evidence-based conclusions about how to ensure such initiatives successfully help to prepare young people for future careers.

EdComs is a well-established, medium-sized education communications agency. We have been working with major private and public sector employers since 1995 to develop 'real world' education resources for use in primary and secondary schools and in colleges across the UK. All our resources are developed with the help of practising teachers and often with input from children and young people themselves.

Projects we have worked on have helped to:

- Develop employability and other essential skills, either explicitly or as a 'by-product' of the particular approach adopted.
- Show the real-world relevance of the curriculum and how it will support future careers and life in general.
- Improve understanding of the world of work in general.
- Improve understanding of specific types of career and the pathways into them.
- Give young people access to adults working in a wide range of careers, who can share their enthusiasm and knowledge, and provide advice and support rooted in reality.
- Bring the curriculum to life so that the learning process is more engaging and effective.

EdComs evaluates all its resources and programmes on behalf of its clients, in order both to measure their impact and to inform their further development. We also regularly undertake research with teachers, businesses, young people and other stakeholders, either to directly assess the need for and inform the development of new projects, or as a stand-alone exercise to increase clients' understanding of an issue.

What teachers tell us they want

Some very recent research we carried out among teachers has given us a good sense of what teachers want from employers to enhance teaching and learning and support students' employability skills and careers aspirations. Although the focus of our research was on employer support for science, engineering, technology and maths (STEM), we believe the findings and the advice to be widely applicable and have set them out below in general terms.

The research was commissioned by Project ENTHUSE, a funding partnership¹ established in 2008 to support the continuing professional development of UK science teachers in order to bring about inspired science teaching. The aim of the research was to produce some very practical guidelines for employers², with a view to encouraging more of them to engage - and to engage more effectively - with schools. The partnership particularly wanted to reach small businesses, whose contribution is vital to showcase the breadth of employers that need STEM skills and the technologies they use or produce.

A survey of teachers provided the basis for a 'deliberative event' involving teachers, businesses and learned societies. This informed the guidelines and provided examples of good practice to highlight the key points. We also drew heavily on existing research in this area, particularly the King's College, London ASPIRES project.

Teachers told us that employers can make a real difference in a number of different ways. In particular, they can:

- Open young people's eyes to the possibilities opened up by studying particular subjects. This might be by: showing the breadth of jobs available in a range of sectors; highlighting the transferability of particular knowledge and skills and how employers use them; or simply sharing their personal enthusiasm.
- Give young people an opportunity to interact – face-to-face or online – with industry role models at all levels, so that they see the variety of people employed in particular jobs and the different routes they've taken to get there. This might give some a more realistic understanding of what's needed to achieve their aspirations, while others might see what a useful stepping stone a particular qualification can be.
- Give teachers the confidence to teach a subject in creative and inspiring ways, and to talk about particular careers. Employers can support teachers in areas that are outside their specialism; support professional development activities; and provide teaching materials that are both 'on' and 'off' curriculum.

¹ Project ENTHUSE currently comprises the DfE, the Wellcome Trust, BAE Systems, Biochemical Society, BP, the Institution of Engineering & Technology, the Institution of Mechanical Engineers, Rolls-Royce and the Royal Society of Chemistry.

² Project Enthuse (2016) *Why your business should go back to school: How you can inspire the next STEM generation.* www.stem.org.uk/next-generation.

- Provide activities that reach out to families and facilitate dialogue between young people and their parents, who we know exert a major influence on young people's choices, particularly when it comes to careers.

'Real world' is a recurring theme, and employers are uniquely placed to provide opportunities for 'hands-on' learning and to make learning more relevant by showing how a subject impacts everyday life and how it is used in the workplace by real people doing real jobs.

Businesses need to think carefully about what they have to offer, where they can have most impact and how much capacity they have. Support can come in many different forms and on different scales, can be geared to different types of pupil, and can engage, inspire and educate in different ways.

Teachers told us that the activities and resources that were of most use to them were:

Careers-related support

- Individuals visiting to talk about their job and the career pathway.
- Videos and other materials that show the range of jobs people do that need particular skills, and the range of people that do them.
- Workplace visits for groups of pupils of any age.
- Work experience placements for older pupils.
- Mentoring, particularly for disadvantaged students.
- Contributions to business-led CPD courses, mentoring and support in lesson planning, improving teacher confidence and leadership.
- Teacher placement schemes in business or business-led workshops or open days for teachers.
- Encouraging employees to become school governors, particularly if they can help the school think about subject-specific provision and careers advice.

Curriculum-related support

- 'Real-world' examples that link to the curriculum and show its relevance. These might be in the form of downloadable or 'hard copy' information leaflets, posters, videos, presentations or lesson plans.
- Realistic projects that encourage independent learning and team work and bring the curriculum to life. This might take the form of a simple project brief, or include supporting resources.
- Project-based competitions.
- Demonstrations, for example of scientific processes.
- In-person support for lessons and after-school clubs.
- Other events, such as fairs, workshops or open days that give young people an opportunity to engage with a subject area.

We have also undertaken a number of surveys of teachers on behalf of clients. A recent cross-phase survey of teachers – mostly in England – told us that:

- Four-fifths used resources produced by businesses or brands.
- Overall, teachers felt that the most impactful resources were those linked to the curriculum, those which brought a subject to life and those which were provided by business. Those linked to careers scored less highly. Good quality resources had the added benefit of saving teachers time on lesson preparation.
- The most popular subject areas were: science (47%), maths (39%) and English (36%), closely followed by ICT (28%), history (23%), geography (23%) and D&T (20%).
- The most popular formats were websites (75%), worksheets (72%), printed materials (60%) and videos (58%), with digital apps and games chosen by a third, and practical kits by a quarter.
- Almost all the different formats had a good impact on students, with the most impact generated by videos (57%), websites (48%), practical kits (46%), games (40%) and team tasks (35%).
- Useful resources were used for more than three years, and three quarters of teachers shared them with colleagues.
- Generally, two thirds of teachers didn't think they had enough input into the creation of resources – EdComs always encourages clients to work with teachers to help develop them.
- Three quarters of teachers liked resources that encouraged parents to engage with pupils outside the classroom.

We also recently surveyed teachers on careers provision in the UK, and found that:

- Work experience was considered the most effective way of providing careers advice by 65%, and visits by employers, universities, etc by 40%. Use of websites was among the least useful.
- The most useful way for employers to engage with students was considered to be work experience (58%), mentoring students (47%), interactive workshops with students during school hours (42%), and helping students with interview skills, writing CVs, etc (39%).
- Providing events for students to attend outside of school (29%), running enterprise days (26%) and providing resource for teachers to use in class (24%) and providing careers information for careers teachers (23%) were also thought useful.

Some examples of initiatives that have had an impact

KPMG Work Readiness: employability skills and careers education

This programme is an example of really effective employer support for the often confusing and intimidating subject of careers education and employability skills. It was targeted at KS3 and KS4 pupils (11-16), with a particular focus on socially disadvantaged young people.

A two-hour intensive workshop comprising practical group tasks, discussion and table-based activities replicated – as far as possible - the real life experience of seeking and preparing for work. We wanted to make it fun, hands-on and practical, but also give students ample opportunity for self-reflection.

Participants worked collaboratively in teams of six and undertook a ‘career journey’, comprising a series of challenges focused on employability skills. Each team had to create a ‘brand new young person’ - albeit one that reflected their own interests and ambitions - equipping them with relevant employability skills and qualifications so that they could become ready for the world of work. Each team was given a mannequin to work with, affording them a ‘safe’ way to make life choices and consider how to present themselves to employers in the best possible light.

Recognising that levels of confidence and aspiration would vary enormously amongst the pupils, potentially proving a barrier to engagement, the workshop was built around hands-on activities that encouraged team-working. We also gave a central role to KPMG volunteers, giving the workshop invaluable real-world authenticity.

The students were encouraged to understand the importance of presentation and creating the right first impression. They also had to prepare a short CV and personal statement. Each team’s work was assessed by the workshop facilitators while a KPMG volunteer gave a brief career talk and took questions. At the close of the session all teams were given constructive feedback.

We deliberately introduced a competitive element in order to mirror the real-life pressures of entering the job market. We also designed the workshop so that it could easily be adapted to the differing needs of individual schools in terms of length of time available and different audience sizes.

1,953 pupils took part in sessions that ranged in participant size from 23 to 118 pupils, representing a broad range of backgrounds and learning abilities. The evaluation showed that:

- 91% felt they had a better understanding of what employers look for
- 86% felt that their CV writing skills had improved
- 84% felt that their team working skills had improved
- 81% felt that their communication skills had improved
- 79% felt that their problem solving skills had improved
- 78% felt that they had improved their interview techniques
- 78% felt that they had improved their business and client awareness

- 76% felt that they had improved their self-management skills
- 50% had a better idea of the job/career they wanted in the future

BP Educational Service: curriculum-related learning and careers inspiration

BP has been investing in education since 1968 and EdComs has partnered with them on the BP Educational Service (BPES) for around a decade. It aims to inspire students and help them to see themselves as future scientists and engineers or to choose careers related to STEM. It does this by:

- ensuring the programme is built around teachers' needs and shaped by best practice research on what really makes a difference;
- attaining critical mass – we reached 50% of UK secondary and 25% of primary schools in 2016;
- widening participation in STEM learning and influencing attitudes to STEM;
- increasing STEM Club participation through an appealing and successful schools competition – the Ultimate STEM Challenge.

In 2014, BP and EdComs developed a new strategy for BPES with reference to: the ASPIRES research study on STEM engagement by King's College, London; Enterprising Science, a research partnership between BP, King's College, London and the Science Museum; and teacher focus groups and surveys.

The research shows that building interest in science is not enough; to be effective in boosting engagement in STEM, educators and resource providers need to build science capital (science-related qualifications, interest, literacy and social contacts). 70% of young people already find science interesting, but only 17% see it as being 'for them'. Science based on everyday scenarios can help young people see themselves as future scientists.

Building on this insight, BPES developed a resource called Where's the Science In That? It demonstrates science is for everyone and can be found everywhere - it's not just for 'brainy scientists' in labs. Young presenters ask questions sparked by the world around them, then go to find the answers themselves. The resources are targeted mainly at students aged 7-14, as research suggests we have the biggest opportunity to make a difference during this period.

Resources use a variety of formats, including videos, interactive activities and worksheets, developed in close collaboration with teachers to ensure they meet their needs and are appropriate and engaging for students. Teachers review resources throughout the development process, and teacher focus groups and surveys refine resource ideas at the start of campaigns and evaluate them at the end. Scientists undertake scientific accuracy reviews, while science experiments are checked by an expert advisory service.

Since the new resources were introduced, we've seen registrations rise by around 15,000 to over 65,000, and 73,255 resource downloads.

Ultimate STEM Challenge

BP's Ultimate STEM Challenge (USC) competition was also shaped by the ASPIRES research and Enterprising Science. The USC caters for and encourages the start-up of STEM Clubs and links schools with STEM Ambassadors, both of which can be powerful ways of building science capital, furthering the programme objective.

The challenge was targeted at 11-14 year-olds, again because ASPIRES suggests this is the key 'window' when students are developing their attitudes to science, and by age 14 their opinions about science are fairly fixed.

EdComs worked with teachers to develop a range of real-world STEM Club challenges accessible to all yet capable of stretching high achievers. Schools were invited to enhance their students' experience by working with a STEM Ambassador through a partnership with STEMNET. We also added a dedicated STEM Clubs section on the BPES website to inspire schools to continue running their STEM Clubs and engaging with STEM-based enrichment activities.

The competition attracted 198 entries from over 600 students in its second year, which compares well with other similar competitions. The USC has succeeded in reaching students who are not well represented in STEM careers. 96% of entries are from state schools and 58% of finalists are girls. 40% of schools entering set up a new STEM club to take part.

The programme is supported by an integrated marketing and communications strategy including email marketing, outreach and online PR, social media, direct mail and paid search. This has resulted in an 89% increase in web traffic and a 130% increase in resource downloads and registrations.

The approach is based on enabling young people to interact with people in science careers and to broaden their horizons, embedding information in wider resources rather than focusing on careers per se.

McDonald's: 'real-world' curriculum resources that promote a knowledge of business and working life

As a major employer of young people, with a deep commitment to the education of its own employees, McDonald's is keen to build its reputation as an employability champion by providing world-class resources that will help young people succeed. By helping young people to understand more about the McDonald's business, McDonald's also hopes to increase the talent pool of young people considering a career with them.

By mapping McDonald's expertise against the curriculum, we identified three subject areas where McDonald's had credibility and could make a difference: Business Studies, Food

Technology and Careers. Through real-life examples and case studies, McDonald's was able to highlight the ethical way it runs its own business, the quality of its food, and its commitment to its employees. McDonald's was clear that talking about nutrition or appearing to promote their food in schools would be inappropriate. However, insight into their business was of great interest to students and teachers.

The principal mechanism in year one has been an innovative teacher website, which contains curriculum-linked resources developed by EdComs in conjunction with teachers. The resources (for students aged 14+) include videos and vox pops, in-depth case studies and engaging student challenges. The website uses animated parallax scrolling – a creative approach that makes the site appealing to young people and teachers, presenting McDonald's as an innovative brand.

At teachers' request, all the materials:

- Have clear learning objectives
- Are flexible (can be delivered over lesson/s, or in bite-sized chunks)
- Cater for a range of learning styles
- Are differentiated for different ability levels

In the Challenges, students work on real business issues around product development, corporate social responsibility and recruitment.

Videos use McDonald's crew members rather than actors, making the resources more authentic and relevant to young people. Crew auditioned for the presenter roles, which created excitement and raised the profile internally. Under development is a link to the employee volunteering programme, which will enable teachers to request visits from McDonald's crew. We will also be launching a national competition based on the challenges.

Our evaluations show that:

- Teachers are positive about McDonald's contribution, particularly in relation to appeal to students (94%) and helping young people gain employability skills (84%).
- Over two-thirds (69%) of students felt they had learnt something from the McDonalds lesson on careers and around half (49%) felt it had helped them with their studies.
- Around two thirds of students (67%) felt they had learnt something from a lesson on Food Technology, while 56% felt it had helped them with their studies and 58% felt it had brought the subject to life.

Financial Education: impartial, well-designed, practical resources

EdComs has over 10 years' experience in creating resources and training programmes to support financial education in schools, working for clients that include pfeg, Standard Chartered Bank and RBS. As our work for the recent inquiry by the APPG on Financial Education for Young People revealed, teachers find this a challenging area to teach, and are often expected

to do so despite not having any particular financial expertise. They lack confidence and training and worry about teaching the right things at the right time.

Financial services companies are well-placed to support financial education, but must ensure that the support they give is completely impartial, well-designed, practical and created from the perspective of young people themselves. Our research shows that young people who have benefited from such financial education are more likely to keep track of their spending, believe it is important to save, have better knowledge of financial products and services and have more realistic expectations about money.

Between 2006 and 2015 we worked with RBS on its MoneySense for Schools (MSFS) programme, which guides students on how to manage their personal finances both now and in the future. The resources we developed were free and impartial and were accredited by the pfeg quality mark and a Business in the Community (BitC) Big Tick. Their development was based on extensive research among young people, parents, teachers and experts. At the time when we were working on it, the programme was used in 65% of all UK Secondary schools.

Interviews with teachers in April 2014 suggested that what they liked about the resources was that they were visually engaging, interactive, practical, up-to-date, flexible and easily adaptable across a range of subjects and ages. They also made students think proactively about their future and gave them practical information to take their next steps.

Various evaluations we undertook over the lifetime of the programme gave us a set of critical criteria that can be applied to any education resources provided by employers:

- They must be really well-designed, both in terms of format and content; they must be easy to access, navigate and use, with clear pathways and clear signposting to the curriculum.
- They must be fully contextualised in the ‘real world’, using real examples, real people and real scenarios.
- Content must be topical and reflect current concerns, which means it must be easy to update and regularly reviewed.
- The technology used must meet the expectations of students for whom the web and social media are an integral part of their lives.
- The style should be contemporary, youthful and relevant rather than academic and/or corporate.
- They should include practical activities wherever possible; they should be interactive and engaging and include peer-to-peer communication.
- They must be fully thought-through from the teacher’s perspective, and offer both complete lessons and the flexibility to build tailored lessons from a resource ‘bank’.
- They must be differentiated so that they can be used with a wide range of learners, and include case studies and activities that are relevant for different age groups.
- They should include materials that stimulate debate about behaviours and options.

- Wherever possible and relevant, they should include materials aimed at parents.
- The learning experience can be enhanced by including face-to-face time with experts.

Conclusion

Overall, we would draw the following conclusions to inform the APPG's thinking.

- We have found a strong appetite among employers to get engaged in supporting young people's learning and development. Larger employers in particular understand that they have a lot to offer and they can see the benefits of getting involved. Smaller employers might need more persuasion and support, but there is plenty of guidance available to help them contribute effectively and have an impact.
- There is also a strong appetite among teachers for support. They recognise that employers can keep them up to date, provide engaging and exciting learning resources, open young people's eyes to opportunities and the realities of working life and provide them with opportunities, networks and 'capital' that they might not otherwise have access to.
- Any employer-led initiative must be carefully thought through and expertly designed if it is to have impact and be sustainable. There is a great deal of guidance available on building relationships with schools and colleges, which we don't need to repeat here, but our own experience tells us that:
 - The initiative will be more effective if it is based on evidence. That might be academic evidence of what's needed and what works, of which there is a growing base; but also the evidence that comes from talking directly to teachers and young people about what they want and need from any particular business or in any specific subject area.
 - Support needs to be impartial. There have been concerns, for example, about major banks supporting financial education; but we have found that teachers will welcome such resources as long as they are clearly impartial and of very high quality. At the same time, however, employers need to think very carefully about what is appropriate and acceptable.
 - The support needs to be designed from the perspective of the young people themselves, rather than based on a 'top-down' view of what they need. Style, language, content and general approach need to be completely 'customer-focused' and preferably co-created with young people as well as their teachers.
 - Flexibility and differentiation are critical. Every time we go into a school we think about the age group, the types of pupils, their interests (are they already committed to the subject or are we trying to win them over?), their wider context, the particular purpose of the particular intervention. Never has one size been less likely to fit all.
 - The presence of employers can have an enormous impact, as the research and our experience show. But it is not enough just to 'get employers in'. Process, content and the role of the employers themselves have to be carefully thought through and based on

sound pedagogic principles. The experience must be authentic as well as fun and engaging.

- The initiative must be well communicated and professionally marketed. Communicating with schools is a specialism in its own right and employers can waste time, money, good will and enthusiasm getting it wrong.
- The initiative must benefit everybody: the organisation, the teachers and the students. We always advise our clients to think carefully about what they as an organisation want to get out of it.

Overall, there are many examples of employer-led initiatives that have had an impact, but only because the employer has been prepared to invest time and money into the initiative, preferably over a reasonable period. Equally, there are many examples of schools and colleges using employers to prepare young people well for the workforce; but again, they have to be prepared to invest time and effort, and ensure that the initiative is of the highest quality, properly supported and properly embedded in the curriculum. It can never be a 'quick fix', a one-off or simply a way of ticking an Ofsted box.