

2021 Comprehensive Spending Review

EngineeringUK calls for £40 million investment in careers provision

Since coming into power the government has outlined its extensive ambitions to develop the UK as a leader in science and net-zero, on levelling up and on building back better after the pandemic. Recently these ambitions have been reiterated in the statement in relation to the upcoming three-year Comprehensive Spending Review. EngineeringUK believes that in order to achieve these ambitions the government needs to ensure that it has the engineering and technical workforce to deliver on them. This will require government not only to focus on re-skilling and upskilling the current workforce but to ensure that the UK educates and develops many more young people from all backgrounds with the right engineering and technical skills to deliver them in the future.

The science, technology, engineering and maths sector (STEM) is likely to need hundreds of thousands of qualified engineers and scientists over the coming years. Ensuring that young people can access these opportunities is therefore a win-win situation. It will not only offer valuable opportunities for good quality, secure employment to many of the young people currently hardest hit by the pandemic and worried about the future, it will also mean that the sector has the workforce to help deliver the government's ambitions and economic prosperity for the country.

Young people, whatever their background, gender or ethnicity, will need to be able to access good quality STEM education and teaching, training as well as careers advice and guidance to be able to take advantage of the opportunities. EngineeringUK has welcomed the positive developments made in relation to careers provision in this context in schools around the country. However, recent research¹ has highlighted that careers provision is still underfunded, limiting what schools can offer to young people.

We want to see the government use the 2021 Comprehensive Spending Review to plug that gap and invest an additional £40 million annually on supporting schools in England to deliver careers provision.

We ask that the government invest more in careers provision in schools in colleges to ensure that young people have the knowledge to navigate the pathways into a variety of roles and careers, giving them the opportunity, for example, to better understand what a career in STEM has to offer and how to get there.

EngineeringUK would like to see government provide **an additional £30 million annually, an average of £8k per secondary school or college in England, to ensure that schools are better resourced to support all young people with their careers choices.**

In addition to this additional general funding, we ask that the government fill the funding gap that has been identified by recent EngineeringUK reports² and others particularly in relation to STEM, and invest an additional:

¹ Securing the future, STEM careers provision in schools and colleges in England, EngineeringUK (2021); Engineering Brand Monitor, EngineeringUK (2021) – yet to be published.

² Ibid

- **£3.5 million annually to pay for STEM leaders in careers hubs**
- **£10 million annually for a ‘STEM Diversity Fund’ for careers provision activities.**

This small investment in the context of the wider schools’ budget, will ensure that schools have the capacity to fulfil their statutory duties in relation to careers provision in a meaningful way. This is not only vital for the future of young people of this country and for levelling up, but also for the economic success of this country.

What are STEM leaders?

Careers hubs are an important element of the government’s careers strategy and there is evidence that they have a positive impact on careers provision in schools and colleges. Responses to EngineeringUK’s recent survey³ from schools and colleges showed that those currently part of a careers hub⁴ were more likely than those not part of a careers hub to offer their pupils at least one encounter with STEM employers every year (80% and 53% respectively). This highlighted and confirmed previous research that being part of a careers hub ensures greater engagement by schools and colleges with the local labour market and STEM employers specifically. However, while we found this insight encouraging, as encounters with employers are a vital element of careers provision in schools and of inspiring the next generation of engineers, it also highlighted that there is a considerable minority of schools and colleges that are part of a careers hub yet have not been able to offer their pupils STEM employer encounters.

The main barriers for working with employers identified by respondents to our survey included limited capacity within their school (44%), limited funding for their careers programme (34%) and not knowing how to engage with STEM employers for careers provision (24%). Several respondents to our survey suggested that enabling more shared learning between schools on STEM careers would be a useful way to increase insights and knowledge, but time and cost constraints appear to be hampering efforts to do this.

This is why EngineeringUK’s report recommended that each careers hub is given a new coordinator – a STEM leader – whose role it is to build up the capacity of schools and colleges around STEM careers and facilitate joint STEM careers activities with employers, including work experience. This would help to alleviate some of the time constraints and barriers to employer engagement highlighted in our research and help bring currently under-represented employers, such as engineering employers, into schools, as well as link up their activities better geographically. STEM leaders would have a pivotal role in supporting strategic efforts across a careers hub to improve STEM careers provision in schools, as well as in enabling schools to engage with College Business Centres and Local Skills Improvement Plans as proposed in the Skills for Jobs white paper.

£3.5 million would pay for 70 STEM leaders across 70 careers hubs, based on the assumption that the role would demand £50,000 per head.

³ See Securing the Future: STEM careers provision in schools and colleges in England

⁴ Careers hubs were first stipulated in the careers strategy and associated guidance and have over the last three years become central to the way careers provision is delivered in England. There are 20 to 40 secondary schools and colleges in each hub, within a specific Local Enterprise Partnership (LEP) area. They work together to deliver the Gatsby benchmarks

Why a STEM Diversity Fund?

The UK has long-standing skills gaps in areas of STEM, especially engineering, and a lack of diversity in associated industries. The way STEM careers provision is currently delivered risks narrowing careers pathways for certain groups of young people. Current approaches to STEM careers provision in schools and colleges seem to focus on pupils already interested in STEM subjects rather than reaching out to all pupils⁵. More needs to be done to support young people who are typically not engaged or able to access these activities.

However, we also know that funding is a real barrier, particularly for schools with medium to high levels of Free School Meals (FSM) pupils. EngineeringUK's forthcoming research with teachers shows, for example, that 49% of teachers in schools with low levels of free school meal eligibility reported carrying out STEM activities on a weekly basis, which is significantly higher than the 29% of schools with high levels of FSM pupils. The same survey also found that some of the ability to carry out these activities has been attributed to difficulties in funding within the school environment, with 48% of teachers agreeing that a lack of funding had negatively affected their ability to run STEM activities within their school. There are significant differences by level of FSM eligibility within schools, as you might expect. However, the highest agreement that funding is an issue comes from schools with medium levels of FSM, followed by schools with high levels of FSM pupils.

Providing targeted funding to schools and colleges who meet a range of EDI criteria, including Free School Meal eligibility, will help address the financial barriers hindering greater participation in STEM careers activities by students who are currently underrepresented in the STEM workforce, and support efforts to address some of the additional challenges by schools with more young people from those groups.

EngineeringUK's submission should be read in conjunction with the National Engineering Policy Centre's submission to the Comprehensive Spending Review 2021.

⁵ Securing the future: STEM careers provision in schools and colleges in England, p. 29