



## Careers Policy Position Statement

Engineering occupies a unique space in society, transforming needs and ideas into practical, life-enhancing solutions, constantly advancing the way we live. By harnessing design, science and technology, the creativity of the engineer provides innovative solutions to real world problems. And yet, the world of engineering is almost invisible to young people. The provision of excellent Careers Education, Information, Advice and Guidance (CEIAG) will change this and ensure an adequate, future supply of engineers for the UK.

We support the partnership model of careers education and guidance with schools providing careers education and external agencies providing impartial, expert advice and guidance. We make the distinction between education and information, advice and guidance.

**Teachers should be educators and teach.**

**Careers professionals should provide formal careers advice and guidance.**

We welcome the Government's announcement of an all-age external careers advisory agency. For young people, it is important that careers advice is provided by experts, in a timely manner, so as to enable them to make the necessary subject choices to support entry to engineering and technology careers. Teachers do not necessarily have an understanding of engineering careers and may not be in a position to provide *formal* advice and guidance. In addition, schools can have conflicting incentives that may encourage them to persuade young people to take A levels when their learning requirements might be better served by vocational education in another institution such as an FE College or one of the proposed UTCs.

But there is more to be done. E4E has a number of recommendations that we believe will further improve CEIAG.

### **Recommendation 1**

**We ask Government to ensure there is a statutory entitlement for young people in England to receive careers education as part of existing Personal, Social and Health Education (PSHE). The quality of provision of careers education should be monitored through Ofsted inspections.**

At present there is a statutory duty on schools to provide a careers education as part of the national curriculum. However, there is a patchwork quality of provision across the country and provision can amount to careers material in the library. A student responsive model of careers education, such as library resources, is not acceptable as young people do not have the necessary knowledge or understanding of the broad range of careers or sectors. This is particularly the case for engineering.

**Recommendation 2**

**To provide a greater understanding of national and local labour market and employer needs, all secondary schools should have access to transparent national and local labour market information and advice and where possible schools, colleges and FE providers should be encouraged to establish an advisory panel of local and regional employers.**

It is crucial that students are able to make informed choices on both qualifications and in parallel the career paths (through robust labour market information) that these qualification routes open up. Careers education in schools therefore would be improved by each school establishing a local employers' forum. This would provide schools with a greater awareness of local employment prospects and employer needs. The advisory panel would provide an invaluable resource for careers education in schools.

**Recommendation 3**

**Competent delivery of careers education should form a part of the professional teaching standards for Qualified Teacher Status. There should be an entitlement for STEM teachers to develop their understanding of STEM careers.**

Teachers are a strong influence on the opinions of young people, and will often be asked to provide *informal* advice by learners in their care, yet many will not have had broad knowledge of the full range of careers and employment opportunities. With STEM subjects, teachers are unlikely to know much about careers outside their specific disciplines; in particular engineering and technology careers. There is a need for formal development of teaching of career education and awareness. The engineering community will work with STEM teachers to address their needs.

**Recommendation 4**

**Careers advisory agencies should have a specialist in engineering and technology careers.**

We welcome the all-age careers service. This will provide a single point of entry for the engineering profession to impart expert information on the various career opportunities in engineering and technology. However, we also believe there should be a specialist STEM careers advisor in each agency.

We strongly support the recommendations put forward by the Careers Profession Taskforce that, as part of initial training for careers professionals, there is a specific focus on STEM careers. We also support the Taskforce recommendation that further specialist STEM careers training should be offered for careers professionals who wish to become Advanced Careers Practitioners. Engineering Institutions routinely deliver CPD programmes that are able to supplement and enhance teacher and careers adviser-specific CPD activities, and we welcome the opportunity to contribute to Dame Ruth Silver's recommendations.

#### **Recommendation 5**

**To contextualise learning in STEM subjects, we recommend that real-life examples drawn from the science, engineering and technology industries with careers awareness are embedded within the curriculum.**

STEM subjects would benefit from more real-life examples. This would make them more relevant to young people as they make connections with their everyday experiences. At Key Stage 3, careers awareness needs to be integrated across all strands of the STEM curriculum. All teachers of STEM subjects at Key Stage 3 need to be aware of the opportunities that currently exist in order to enhance their teaching with real-life examples drawn from the science, engineering and technology industries. The Engineering community welcome the opportunity to work with DfE and subject associations to provide this information to teachers.

## **E4E Commitments**

### **E4E members will take a more active role in interacting directly with careers professionals through the Careers Profession Alliance**

The Professional Engineering Institutions promote and inform young people under the age of 16 on engineering *in the round*. EngineeringUK is the engineering community's body for promoting the profession and careers to young people. It is now providing CEIAG through the Big Bang and Tomorrow's Engineers. We will also work with Careers Professionals through the Careers Profession Alliance to ensure the best information on engineering careers reaches young people.

### **E4E members will work together to ensure careers awareness is more strongly coordinated and embedded in their enrichment and enhancement activities**

The landscape of enrichment and enhancement activities is confusing for schools and teachers to navigate. Tomorrow's Engineers makes access to engineering and technology enrichment activities by providing a structured age-based approach. In addition, Tomorrow's Engineers has careers education and awareness embedded in its programmes and its activities are evaluated.

### **E4E members are committed to long-term investment in coordinated and sustainable activities to support the national careers information, advice and guidance services**

The Big Bang Fair and Tomorrow's Engineers are proving to be effective in coordinating previously disparate activities aimed at improving awareness of engineering amongst young people. We will ensure we have a coherent, coordinated and continuous strategy for delivering the CEIAG in the most effective and efficient way to attract young people to the sector. The profession has indicated its willingness to make a long-term commitment to this aim.

## About Education for Engineering

E4E is the mechanism through which the engineering profession offers coordinated and clear advice on education to UK Government and the devolved Assemblies. It deals with all aspects of learning that underpin engineering. It is both proactive and reactive to ensure that the education system continually remains appropriate to meet the challenges facing society. It is hosted by The Royal Academy of Engineering with a wide membership drawn from the professional engineering community including all of the professional engineering institutions.

More details can be found at: [www.educationforengineering.org.uk](http://www.educationforengineering.org.uk)