

Introduction

The UK needs more young people from more diverse backgrounds to choose a career in engineering and technology to help improve sustainability and achieve net zero and to drive economic prosperity. If UK engineering and technology are to thrive, inspiring a more diverse future workforce that boosts creativity, innovation and market insight is essential.

We need more young people to realise there could be a future for them in engineering and tech, yet many of them don't understand what the opportunities are or how to access them. Working in partnership, EngineeringUK wants to change that.

2023/24 marked the first year of EngineeringUK's 5-year strategy, based on our mission to enable more young people from all backgrounds to be informed, inspired and progress into engineering and technology. We achieve this through conducting research and providing evidence that enables us to understand more about future workforce needs and how to inspire the next generation to meet them. We work in partnership with hundreds of organisations across the engineering and technology community and lead efforts to improve our collective impact. We run activities for schools to ignite a passion for engineering and technology. And we advocate to ensure all students have the STEM careers education they need and deserve.

EngineeringUK

Thank you for your support

Many thanks to all the supporters, partners, members, funders, volunteers, teachers, careers advisors and students who have worked with us over the year.

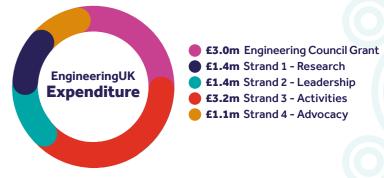
EngineeringUK is a registered charity, and our main source of income is from the registration fees of professionally registered engineers and technicians, which also fund the Engineering Council in its role as the profession's regulatory body via a grant from EngineeringUK. We are grateful for this valuable financial contribution from the members of Professional Engineering Institutions and for the time their staff give to supporting our work.

Thanks too to our Corporate Members and supporters of individual programmes, including The Big Bang, Climate Schools Programme, Energy Quest and our bursaries. This additional funding enables us to expand our activities even further and ensure that young people experience interactive encounters with a range of employers.

Breakdown of income



Breakdown of expenditure across our 4 strategic pillars alongside the annual grant to Engineering Council (a portion of the registration fees of professionally registered engineers and technicians)



^{*} Other programmes comprise: Climate Schools Programme, Energy Quest, EDI bursaries and support for Tomorrow's Engineers Live and Science Education Tracker

Our year in numbers

20,700

students visited The Big Bang Fair

51,500 students participated in Tomorrow's Engineers

102

new activities

added to

Neon

23

new Neon activities on environmental sustainability

Week 120,000

participants in our activities for schools

More than

37%

of all secondary schools engaged with our programmes and resources

53% of those schools were priority schools*

44,000

students participated in a Big Bang at School

90

priority schools received one of our bursaries

248

teachers and careers

leaders downloaded

our Climate Schools

Programme

resources**

*Priority schools have higher proportions of young people from groups who are underrepresented in engineering and technology

**From 236 schools during its pilot year



coverage

118

public examination

results day

analyses

delegates at Tomorrow's **Engineers Live**

5 policy consultation responses

pieces of media

33 Corporate Members

14

Our partners include:

346

members of the Tomorrow's **Engineers Code** community

45

new Signatories

> organisations that contributed to our work on resources, policy or schools activities

Supporters







39 Professional Engineering Institutions

Many more









We worked in partnership with the Royal Society supported by funding from Wellcome to publish the Science Education Tracker 2023, a survey of over 7,200 young people's experiences of STEM. Following the 2016 and 2019 surveys, the 2023 survey tracks evidence on key indicators for science engagement, education, and career aspirations among young people in England including questions specifically about engineering for the first time.

Climate Schools Programme

We launched our Climate Schools Programme, with support from the Helsington Foundation, to help integrate solutions to climate change and the associated careers in engineering and technology into school lessons. Designed to be delivered by teachers to empower students to explore innovative solutions to tackling climate change and discover brand-new skills, the programme provides schools with curriculum-linked resources across English, science, and geography lessons. And we launched the 'Tackling Climate Change' resource to support STEM and Climate Ambassadors volunteering in schools.

Apprenticeships report

We held a Parliamentary launch of the report of our inquiry (co-chaired by Lord Knight and Lord Willetts) into the decline in engineering and manufacturing apprenticeships for young people. The 'Fit for the Future' report is a 5-point plan to grow and sustain engineering and technology apprenticeships for young people.

Some outcomes

We evaluate our schools' activity with young people and teachers in different ways, tailoring our approach to the activity. And we survey our stakeholders, including our Corporate Members, Professional Engineering Institutions and supporters, annually. The feedback we receive helps us iterate and improve what we do.

What young people told us:

- Energy Quest had increased their knowledge of engineering jobs (72% of students)
- Attending The Big Bang Fair made them want to find out more about STEM jobs (75% of students)
- Participating in The Big Bang Competition made them want to do more STEM activities in the future (81% of students)

What teachers told us:

- Climate Schools Programme was 'good' or 'excellent' (95% of teachers)
- The Big Bang Fair had made them more likely to suggest students consider an engineering career (73% of teachers)
- The Big Bang at School was accessible to students of all abilities (94% of teachers)



What stakeholders responding to our surveys told us:

Engineering UK is seen as a trusted voice on:

- approaches to engage young people in STEM by94% of stakeholders responding
- equity, diversity and inclusion in the engineering sector by 86%
- what enables, deters or inspires young people to pursue a career in engineering and technology by 86%

Engineering UK is seen as effective at:

- providing insight and guidance to stakeholders on evaluating STEM engagement activities by 74% of stakeholders responding
- providing access to information and guidance on engaging underrepresented audiences by 73%
- providing access to advice on how to align and develop effective STEM engagement plans and practices by 71%
- delivering campaigns to change young people's perceptions of engineering and tech by 72%
- highlighting to young people that they can make a positive impact on the environment through a career in engineering and tech by 78%
- helping teachers identify engineering and techfocused STEM engagement activities by 60%

The Tomorrow's Engineers Code helps members:

- 76% of Signatories agree that being a member of The Code improved the way their organisation understands how its activities relate to other STEM outreach activities
- 59% agree that being a member of The Code has improved the way their organisation evaluates its STEM outreach activities
- 61% agree that The Code has improved how they collaborate with other organisations involved in STEM outreach



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Some of our plans for: 2024/25

Our commitments to environmental sustainability and equity, diversity and inclusion underpin all our work. Knowing that environmental sustainability is a topic that's important to young people, particularly girls, we use it to inspire them about engineering and technology careers.

Organisationally we commit to reducing our environmental impact and becoming a net zero organisation, reducing all our carbon emissions by at least **90%** by 2040 in line with the Science-Based Targets initiative (SBTi).

By focussing our school activity on inspiring more young people from groups underrepresented in engineering, so they are better informed about careers in engineering and technology and the variety of routes into those, we aim to improve both the number and diversity of those joining the sector's workforce.



Research and evidence

 We will be working with a research partner to secure funding for a longitudinal research project to explore the extent to which multiple STEM engagements impact on young people's later attitudes and choices

Leadership

 We will be working with partners to develop/test/deliver actions to step up the number of girls who are on pathways to engineering and technology careers at age 18

Activities for schools

 We will build awareness of our new EUK Education brand with teachers, careers leaders and school leaders so that more of them know more about and benefit from access to all our activities for schools: Energy Quest, Climate Schools Programme, The Big Bang programme, Neon, Tomorrow's Engineers Week, bursaries and careers resources

Advocacy

 We will be engaging with the new government, in partnership with the engineering community and National Engineering Policy Centre, to advocate for action to address policy and delivery challenges in STEM and careers education and in workforce planning for engineering and tech

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Working together to drive change



We're fortunate to have an incredible network of Corporate Members, supporters, funders, professional institutions and the Code community. We collaborate with each other to inspire the next generation into STEM.

If you share our ambition, we'd love you to work with us to inspire the next generation.

To find out more contact us partnerships@engineeringuk.com







