



Inspiring students to consider careers in engineering

EUK Education

The UK is facing a shortage of skilled engineering and technology professionals. To address this, **EUK Education** provides STEM lesson plans and competitions, along with engineering role-models, to help teachers increase students' interest in the field. **Charlie Cantwell**, Marketing and Communications Manager at **EngineeringUK**, tells us about the range of resources and activities available to inspire young people to consider careers in engineering.

What ideas and misconceptions do young people commonly have about careers in engineering?

Overall, young people have some understanding of engineering and engineering careers. Our research shows that 32% of young people surveyed know a fair amount about what engineers do. However, more needs to be done to encourage them that a future career in engineering is for them, especially girls. Just 16% of girls surveyed said that engineering is suitable for them, compared with 44% of boys.

A common misconception is that engineering is a career for a specific type of person. The

reality is that engineering and technology jobs offer a wide range of opportunities for young people. Engineers work in so many different sectors – from food and fashion to transport and climate change solutions. They get to be creative, solve problems and make a difference in the world.

Why did EngineeringUK launch EUK Education?

The engineering and technology sector employs 6.3 million people in the UK, accounting for 19% of all jobs. But the sector is facing a huge skills and labour shortage. More needs to be done to encourage young people from all backgrounds into careers in engineering and technology.

We launched EUK Education to give educators everything they need to inspire and encourage young people into STEM and to increase their knowledge of the diverse career paths available. EUK Education provides free curriculum-linked lesson plans, activities, competitions and programmes. These resources all support teachers to showcase a wide range of STEM role models to their students, as well as highlighting future jobs and routes into careers in engineering and technology.

How do you support teachers to find STEM activities and resources?

EUK Education hosts **Neon**, the UK's dedicated platform helping primary and secondary teachers find quality-assured engineering and technology activities. There is so much to discover on Neon, from live lessons, assemblies and guest speakers to technology-focused workshops, school trips and exciting competitions.

We take the guesswork out of finding external activities, as everything on Neon is checked by our expert team. This means that, as a teacher, you can be confident that what you are booking is high quality, impactful and good value. With filters and location-based searches, you can find



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the perfect STEM activity for your class. You can also use the cost filter to find free experiences – whatever your school budget, we have a wealth of activities for you.

What annual events can students look forward to?

Every year, we host **The Big Bang Competition** and **The Big Bang Fair**.

The Big Bang Competition aims to inspire students to bring their ideas to life and celebrate their skills. Projects can be on any topic in STEM, and they don't need to be perfect or finished – it's all about the journey! The Big Bang Competition celebrates projects of all shapes and sizes, from climate change to life-saving healthcare. UK students aged 11 to 18 can enter individually or as a team, with no limit on team size. For the 2026 competition, [enter for free](#) by 5 pm on 4th March. If you miss the 2026 event, try again next year!

The Big Bang Fair is the UK's largest celebration of STEM. It brings together workshops and activities from all over the STEM community. From cutting-edge

tech and robots to renewable energy, biology and sustainability – we have it all! There are also exclusive live shows, careers panels where students can meet real STEM professionals, and hundreds of exciting hands-on activities to get stuck into. This year, we'll be at the NEC in Birmingham from the 9th to the 11th of June. Tickets are completely free, and schools can book to attend a morning or afternoon slot.

What do students gain from participating in The Big Bang Competition?

A real highlight of The Big Bang Competition is seeing students grow their skills and confidence in STEM. Every student who enters a project in the competition gets feedback from real STEM professionals working in a similar field, which helps them expand their skills and knowledge.

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Find out more

EUK Education: eukeducation.org.uk

Engineering UK: engineeringuk.com

The Big Bang Competition: thebigbang.org.uk/the-big-bang-competition

Entry deadline: 5 pm, 4th March 2026

The Big Bang Fair: thebigbang.org.uk/the-big-bang-fair

Dates: 9th to 11th June 2026

Location: NEC, Birmingham

Neon: neonfutures.org.uk

We truly celebrate students' amazing ideas. Prizes include international celebrations and conferences, work experience opportunities, and cash sums. Some students have even gone on to patent their inventions or share their projects on TV shows such as Steph's *Packed Lunch* and *BBC Breakfast*. There's so much to gain from entering The Big Bang Competition!

How is The Big Bang Fair increasing students' interest in STEM?

The Big Bang Fair is an amazing tool for engaging young people in STEM, and attendance makes a real difference in their STEM outcomes. Our evaluation shows high levels of enjoyment – in 2025, 88% of students who attended The Big Bang Fair said they enjoyed it. This is across the board for all young people, with no significant differences by gender, ethnicity, disability, free school meal eligibility or school type. And teachers love The Big Bang Fair too! In 2025, 98% of educators rated it as 'excellent' or 'good'.

What other programmes are available?

EUK Education also runs **Energy Quest**, which highlights the role of engineering in the

renewable energy sector, and the **Climate Schools Programme**, which showcases the role of STEM careers in creating climate change solutions. The Climate Schools Programme also supports cross-curricular learning – why not team up with colleagues in English and geography to deliver lessons focusing on debate, government policies and more?

What impact is EUK Education having on young people's engineering career aspirations?

We're pleased to say that we're making a difference! After attending The Big Bang Fair, 94% of students reported an increased knowledge of what people working in STEM do, and 86% were motivated to find out more about STEM jobs. We know that students have an interest in topics that support a career in engineering. For example, 64% of young people are interested in climate change issues, and 35% are interested in a career that will reduce the impact of climate change. We're confident that by continuing to support teachers to deliver impactful STEM engagement activities, we will make a real change for students. Together, we can show students how they can tackle the issues that matter to them and shape the future of the engineering workforce.

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