

STEM

Destination STEM: helping to navigate career journeys

While many students enjoy STEM, they do not always know where it can take them. And while teachers would love to be able to provide their students with personalised careers guidance, this can be difficult when time and resources are in short supply. To support teachers in enabling young people to take the lead in exploring careers for themselves, STEM Learning UK has set up Destination STEM. National Lead Ajay Sharman introduces this innovative online platform.

Why is STEM so important?

STEM (science, technology, engineering and mathematics) careers matter because they drive innovation for 'UK Plc', provide high-demand, well-paying jobs, equip individuals with crucial problemsolving skills for a complex world, and are essential for addressing societal challenges and fostering economic growth. From discovering new treatments in medicine to developing cutting-edge technology, STEM professionals contribute directly to progress and a better future.

The opportunities for young people within STEM-based industries and research are endless. STEM Learning is proud to be the largest provider of STEM education and careers support for young people in the UK. We work with teachers, schools, colleges, employers and the government to engage with young people and to inspire them to seize these opportunities.

Why did STEM Learning decide to launch Destination STEM?

It is crucial not to leave STEM careers to chance and to offer STEM resources and opportunities for young people to meet real people in STEM fields. We are passionate about connecting students with role models and offering career and enrichment support, and that's where Destination STEM comes in.

Destination STEM is a UK-based, online

platform that provides support, advice and opportunities for young people aged 13-19 to explore careers in STEM. The platform offers resources such as articles, videos and experiences. It provides mentoring and placements, to help students develop skills, connect with employers, and discover potential career paths, and it provides support for teachers and employers looking to engage young people with STEM.

Why is it important to give students the lead when thinking about STEM, careers and next steps?

Destination STEM puts young people at the centre of exploring STEM careers, enabling them to engage with programmes and resources that guide them towards exciting and rewarding futures. Parents and carers also play a key role, supporting young people as they shape their own STEM pathways.

Using our platform, students can easily access opportunities such as online mentoring, research placements and STEM career information, helping them to take control of their journeys and discover roles they may not have known existed.

How should students start exploring Destination STEM?

The platform is free to access and use, so

students are free to explore it in their own time and as they wish – there's no time limit or restrictions!

They can start by exploring STEM careers, which lets them discover information on various careers in STEM through articles, videos and events. We want students to build their confidence by finding resources that can boost their STEM skills, connect them with opportunities and guide them through apprenticeship and university applications. For example, students can sign up for a free, online mentoring programme to receive oneon-one career advice from a mentor. By chatting through a safe messaging system with trained and experienced STEM professionals, namely STEM Ambassadors, students can explore options for life after school, including further education and potential careers. Our aim is to put students in charge of the conversation about their future.

What subject support does Destination STEM offer?

Under Destination STEM programmes, students have the opportunity to learn about and become immersed in all areas of STEM, learning about real-world applications, meeting real people in real jobs, and developing skills for the future. Destination STEM supports the curriculum and takes students beyond the classroom.



How is Destination STEM helping students prepare for life after school?

The career guidance that Destination STEM offers supports personal goal setting, skill development and networking building – all key for students preparing for life after school. The platform offers:

- Access to opportunities: STEM fields are expanding, and advice helps individuals understand and pursue these careers.
- Career alignment: guidance connects personal interests with impactful STEM roles.
- Skill development: advice builds critical technical and transferable skills valued by employers.
- **Networking:** learning how to build professional networks provides essential support and growth.
- Essential skills: beyond technical ability, employers seek the 4Cs Creativity, Critical Thinking, Collaboration and Communication which help students adapt and thrive.
- Mentorship and feedback: learning from mentors and seeking feedback strengthens skills and career progression.

How does Destination STEM enable students to connect with STEM professionals?

STEM Learning has a cohort of over 28,000 STEM Ambassadors, and

students can now learn from them through Destination STEM's online mentoring scheme. STEM Ambassadors help students by making STEM subjects relatable and engaging, inspiring them to pursue STEM careers by connecting classroom learning to industry, providing mentorship and serving as positive role models. Ambassadors broaden students' career horizons, raise aspirations and enhance their understanding of STEM's impact on everyday life.

Students will be matched with a mentor

based on interests and career paths. They can message their mentor at any time during a 10-week mentoring period. Conversations take place via text-based messaging, so mentors will reply as soon as they can, in between their work commitments. To keep students safe, conversations can only take place via the secure and moderated mentoring platform. All STEM Ambassadors and mentors are enhanced DBS checked, and all have received training to help them maximise their engagement with students.



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I've experienced working in a lab environment, which is something I was very keen on learning about. I've also witnessed the collaboration and team effort between scientists when working on a shared goal. Also, I've learnt about a new area of science, biotechnology, which combines both science and data/coding.

77 – Research Placement participant



What other role models can students meet?

When young people think about life after school, it can be hard for them to picture what employment could look like for them. That's why, with the help of industry experts, we've pulled together insights into careers in different STEM sectors. Students can learn essential life skills, personal values and practical abilities by participating in a 'Day in the Life' session.

The platform provides a series of videos that provide an insight into many roles, from researchers at the UK's Natural History Museum, to aerospace and space scientists building robotic devices to drive on Mars! Many of these videos provide a snapshot of the varied STEM careers available and, for many schools and teachers, there are opportunities to formally invite STEM Ambassadors directly into school! You cannot be what you cannot see and the value of the videos – of the access to such inspirational role models – cannot not be overstated.

What placements does Destination STEM facilitate?

Research Placements and Experiences offer year 12 (or equivalent) students real-world STEM workplace opportunities with universities or industry partners. Funded by strategic partners, these placements let students apply subject knowledge, develop research skills and contribute meaningfully to 'live' projects:

• Research Placements (2 weeks):

Students get to collaborate with STEM experts on live research questions, producing a scientific or technical report and poster. Students gain hands-on experience, problem-solving skills and an insight into wider career opportunities.

• Experience Placements (5 days):

Students work with industry professionals to understand essential STEM skills and workplace challenges, completing a reflective workbook while preparing for future employment.

All successful students are invited to join the STEM Alumni Network, connecting past participants and supporting students beyond school.

These placements are hugely valuable. In an evaluation report we compiled in 2024, 96% of students said they would recommend Research and/or Experience Placements to other students.

Placements enhance university applications, increase career readiness and connect students to professional networks. In the report, the following proportion of teachers agreed that their student improved in the following areas since completing their research placements: communication skills (92%), ability to work independently (92%), problem solving skills (92%), time management skills (85%), and ability to

work as part of a team (77%). And all teachers said they would recommend placements to future students.

How is Destination STEM helping teachers?

Destination STEM provides young people with opportunities to develop their skills and knowledge, to aspire to fulfilling careers and to make a positive contribution to their community - all things that we know teachers are striving for. Everything on our site is designed to support the STEM curriculum and is free for all schools and colleges in the UK to use, in whatever way they see fit, to inspire a new generation to think and act differently in their career destination. Teachers can also use Destination STEM to enrich lessons, embed careers into the curriculum and highlight real career pathways linked to STEM subjects. Destination STEM helps teachers to help students to guide themselves!

There is a downloadable teacher handbook on the platform, providing practical suggestions on how Destination STEM can be used to support career provision and the teaching of STEM within their school. It identifies how each activity from the wider campaign can be used to support students' development and aspirations and develop the schools' approach to STEM engagement.

Who supports your work?

STEM Learning is honoured to be supported by a unique collaboration of government, charitable trusts, employers, professional institutions, and scientific societies who share our vision of improving lives through STEM education. Employers and other trusts and foundations can champion, inspire and empower young people to become STEM professionals in the future and support greater social mobility, particularly for students from disadvantaged backgrounds, alongside adding real social value for a better society.

For STEM Learning and Destination STEM, our ethos is about building a better future – for all of us.

We'd love to hear from any businesses and professionals keen to support what we do! Supporting Destination STEM programmes strengthens Corporate Social Responsibility (CSR), Environmental Social and Governance (ESG) and Social Mobility strategies by delivering measurable social value. Employers back STEM initiatives for various reasons, including building future talent pipelines and addressing skills shortages; engaging



with diverse new talent drives innovation, fresh thinking and economic growth. Supporting programmes like Destination STEM demonstrates a company's commitment to meaningful causes, improves public image, promotes diversity and inclusion, and connects businesses with local communities – positively impacting students and families.

Many employers offer an opportunity for employees to volunteer through

the STEM Ambassador programme and support online mentoring. Many employers have also then gone on to fund Research and Experience Placements, offering tangible opportunities for students. Investment in Destination STEM enrichment activities provides a return on investment of £5.4m social value for every £300,000 invested. This is making life changing opportunities for many young people.

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"Learning to use/repair application programming interfaces (APIs) during my Research Placement at the HM Treasury has been incredibly useful – not only in my computer science A level, but also in my workplace when I'm giving technical support for APIs or making new ones."

– Research Placement participant

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