STEM AMBASSADORS

Youth Groups

User Guide:

How youth organisations can use STEM Ambassadors in their communities

STEM Ambassadors help bring STEM alive and provide real-life examples, facilitating an invaluable link between young people and careers.



Funded by UK Research and Innovation

POWERED BY STEM LEARNING

SCIENCE TECHNOLOGY ENGINEERING MATHS

Contents

Background

Programme Background 3
Who is STEM Learning? 3
Who are STEM Ambassadors? 4

Benefits and impact of the programme

Benefits 5
Impact 5
Ambassadors in action 6
Quotes 7

Ways to connect with STEM Ambassadors

Mentoring from STEM Ambassadors 8
Request a STEM Ambassador for your group 8
Browse STEM Ambassador activities 8
Guidelines for working well with STEM Ambassadors 8

Key information

Frequently Asked Questions 9
Contact details 9



STEM Learning and programme background

Programme Background

Since 2002, the STEM Ambassadors programme has supported thousands of amazing volunteers to bring real-life examples of STEM skills and careers into schools, colleges and universities across the UK. Volunteers help to break stereotypes and offer engaging activities to inspire the next generation into the infinite possibilities of STEM pathways.

UK Research and Innovation

The STEM Ambassadors programme is powered by STEM Learning and funded by UK Research and Innovation.

Who is STEM Learning?

At STEM Learning, our vision is to improve lives through STEM education. Through the STEM Ambassadors programme, teacher training courses, quality-assured learning resources and Destination STEM, we are dedicated to empowering young people with the skills and knowledge to thrive.

We work in collaboration with the UK Government, employers large and small, organisations and educational establishments to deliver positive STEM interactions for teachers, young people and beyond.

We're particularly grateful to our key funders, many of which have been with us on our journey since 2004: UK Research and Innovation, Gatsby, and Wellcome.



Who are STEM Ambassadors?

STEM Ambassadors are positive role models who give their time and enthusiasm for free to bring STEM subjects to life and demonstrate their value to young people aged 5 to 19.

They come from diverse backgrounds and a wide range of STEM-related disciplines, showcasing the many career paths available in STEM.

By sharing their knowledge, experiences and skills, STEM Ambassadors inspire students and demonstrate real-life applications of learning.

All STEM Ambassadors hold an enhanced **DBS** or **PVG certificate** and volunteer for **free** with schools and community groups across the UK.

STEM Ambassadors can:

- Give talks and presentations
- Support STEM Clubs
- Talk to educators and leadership
- Mentor or tutor
- Offer interactive activities and workshops
- Provide workplace experiences
- Support with employability events like careers fairs or mock interviews
- Help judge competitions or challenges

Benefits and impact of the programme

Benefits

STEM Ambassadors are inspirational role models for young people, bringing many benefits. They can:

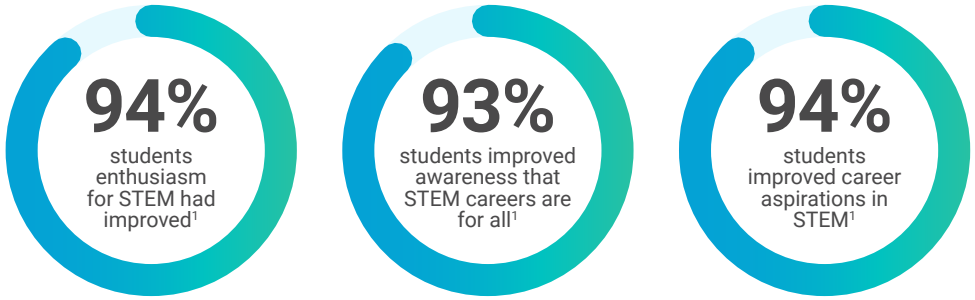
- show how STEM skills apply in the real world make STEM relatable by bringing experience of the everyday into sessions
- illustrate what a career in STEM really looks like and share their own stories
- make STEM relatable by bringing experience of the everyday into sessions
- bring specialist equipment for young people to experience
- challenge young people to solve real-life problems

> "We could not recommend the STEM Ambassadors programme enough for any organisation looking to explore science-related activities within their programme. With so many Ambassadors coming from diverse working backgrounds and areas of expertise, there will always be a skilled professional that can meet the needs of your community."
>
> – Children's Worker, Royston Youth Action in Glasgow

Impact

The STEM Ambassadors programme makes a real impact on young people. Research shows that interacting with a STEM Ambassador transforms young people's perceptions of STEM subjects and careers.

After working with STEM Ambassadors:



Helping young people to see a future for themselves in STEM

Research shows that inspiring STEM role models can boost young people's Science Capital[2] and help them see a future for themselves in STEM.

> "I write and create educational science activities, so have been able to show young people that choosing a STEM subject at university doesn't mean you will end up working in a lab in a white coat. You really can apply your STEM knowledge in so many different fields".
>
> – Katrina Dixon, STEM Ambassador

1 Educator perspectives on the STEM Ambassadors programme – July 2023

2 Science Capital is based around theories of social capital. The more you have, the more likely you are to believe that 'science is for me', which can lead to engaging better as well as taking science education further.

Ambassadors in Action



John Bradford, CEO
DigiLocal

"DigiLocal is a registered charity based in Bristol. We were set up to provide young people who are underrepresented in the tech industry with the opportunity to discover and develop their digital talents.

I started volunteering myself as a STEM Ambassador around 15 years ago. I had a personal interest in increasing awareness of STEM subjects in schools, and I was working as an engineer at a university at the time. The STEM Ambassadors programme was the obvious route for me to take. So, when I began to run DigiLocal, it was clear that STEM Ambassadors would be the place to go to find accredited, DBS-checked volunteers to run our clubs.

> All our clubs have two volunteer STEM Ambassadors for each session.

I made the conscious decision that I didn't want youth workers, teachers or trainers running the clubs – I wanted real engineers who do it for a living. I knew that they could bring a different perspective to problem-solving and I wanted to show young people what real engineers look like.

We are quite a substantial user of STEM Ambassadors now, with each session being run by at least two people, if not three. We have between 40 and 50 STEM Ambassadors working with us. If anyone comes to us wanting to volunteer who hasn't come through the STEM Ambassador route, we will signpost them to our local STEM Ambassador Hub for their DBS checks and induction training. Some of our volunteers have been with us for four or five years now!

> The STEM Ambassadors bring their own problem-solving expertise and personal resilience to every session. They support the young people in diagnosing why their project isn't doing what they expected, and how to find a solution."



Quotes

"What we've learnt from working with STEM Ambassadors is the importance of role models. It's really powerful for young people to see somebody in front of them; to see a pathway, whether that's to a career or a particular lifestyle or choice that they can aspire to. We've been able to show real diversity of age and gender to those young people, and I don't think we could have done that without the STEM Ambassador programme."

– Christina Watson, Head of Programmes, UK Youth

"I would absolutely recommend STEM Ambassadors to other organisations, because it's this idea of getting different perspectives, seeing best practice, getting advice from people who have run similar events in different contexts – all of this enriches your own activities. And now I've got so many new contacts for the future too! The STEM Ambassadors programme puts you in touch with people in industry who are real science specialists who volunteer their time with youth groups and schools. I actually went on to register as a STEM Ambassador myself, I liked the programme so much!"

– Nigel Smetham, Scout Leader and STEM Ambassador



Ways to connect with STEM Ambassadors

Mentoring from STEM Ambassadors

For young people aged 13 to 19, a free 10-week mentoring scheme is available at regular intervals throughout the year, connecting young people online with a STEM Ambassador for personal guidance and careers advice. This scheme can be recommended to any young person based in the UK that you work with.

Request a STEM Ambassador for your group

You can request a STEM Ambassador to come and meet with your young people. This is great if you have a specific request for a STEM Ambassador, such as a weekly STEM or Coding Club. Written guidance on how to request a STEM Ambassador by advertising an activity is published here. To help you with your requests, there are also some example activity listings here.

Browse STEM Ambassador activities

STEM Ambassadors will put up activities offering their time and knowledge for a certain subject or topic. You can browse these activities and get in touch with the Ambassador directly through the integrated messaging system on our platform. There is some guidance on how to browse these activities here.



Guidelines for working well with STEM Ambassadors

It is important to remember that STEM Ambassadors are volunteers who generously give their time for free to support activities that benefit young people aged 5 to 19. They should not be asked to volunteer their time in roles where others are paid for the same role and, if your activity is run on a commercial basis, they should be aware of this before volunteering. You should also maintain good communication with STEM Ambassadors who contact you and provide clear activity details well in advance.

Full written guidelines for requesting a STEM Ambassador can be found here.



Quick Links

- Free mentoring scheme →
- Advertise an activity →
- Example activities →
- Activity browsing guide →
- Guidelines for requests →

Key information

Find out more about the STEM Ambassadors programme during our **online information session**: How to Access STEM Volunteers - for Educators.

Looking for answers to your questions? Check out a selection of frequently asked questions about the STEM Ambassadors programme.

Frequently Asked Questions

Contact details

If your question is not answered in the FAQs above, the STEM Ambassador Support Team are here to help:

For questions or feedback about the programme, please contact **stem-ambassadors@stem.org.uk**

For IT problems please contact **support@stem.org.uk** with screen shots if possible.

To speak to someone on the phone (between 9am and 5pm, Monday to Friday excluding bank holidays), please call: 01904 948702.

There is a fantastic network of 12 STEM Ambassador Delivery Partners who help to co-ordinate the volunteering opportunities for STEM Ambassadors across the UK, focusing on making an impact in their local area. If you have a question specific to activities or STEM Ambassadors in your local area, please contact the Delivery Partner for your region.



Safeguarding Information

All STEM Ambassadors are subject to background checks appropriate to their location — **PVG in Scotland, and DBS in England, Wales, and Northern Ireland.**

Please note that **PVG and DBS checks are not interchangeable between the UK nations**. For example, a PVG is specific to Scotland and is not valid in England, Wales, or Northern Ireland, and vice versa. If you are working with a STEM Ambassador from a different part of the UK, they may not hold a certificate specific to your school's/ community groups safeguarding requirements.

In some cases, Ambassadors may hold **both a DBS and a PVG** if their volunteering spans multiple regions.

If you'd like to know what type of check an Ambassador has completed, feel free to **contact us**, or use the chat function on the STEM Ambassador platform to speak directly with them. We're here to support you in making informed decisions about your event's safeguarding needs.



STEM AMBASSADORS



STEM Learning →

STEM Ambassadors →

Follow us on

Follow us on

Funded by
UK Research and Innovation

POWERED BY STEM LEARNING