

# How professional bodies engage with the STEM Ambassadors programme



## Background: STEM Ambassador Charles Horsey – Transport Technical Specialist

I have worked in the transport industry for 45 years. I chose to study engineering as the best way to start my career, but my passion is for transport. I've had so many different roles, from train design to supporting front-line operations on the underground and working on service scheduling. Today I work as a technical specialist – an internal consultant. I help people with problem-solving and work on process investigations and improvement projects.

## The STEM Ambassador journey

I'd already done occasional talks to schools and colleges when I first heard about the STEM Ambassador programme in a presentation at the London Transport Museum. It wasn't until my employer asked for volunteers to support a competition that they were running in schools that I signed up. I had to register as a STEM Ambassador to take part – it was very easy to get my DBS via STEM Learning. In my first year with the competition, I went with the team to five schools to talk staff and students through the process and help them with their initial ideas and problem-solving.

From that point onwards, I had the benefit of accessing a wider variety of volunteering opportunities. I found these were a good way to take my mind off the stresses of work.

## What I do as a STEM Ambassador

I have done all sorts of things as a STEM Ambassador. This role doesn't come naturally for me, however, but because I love my subject, I can tell a good story that's relevant to STEM. I've been lucky enough to be part of several major changes to the transport system and its engineering that have really made a difference to people's lives, so there are lots of examples I can share with young people.

It's not unusual for transport and logistics to be underrepresented at careers events, so I talk about both subjects alongside engineering in my sessions. When school students discuss their study or career interests in engineering, their most common ideas tend to involve mechanical engineering, or aeronautical or automotive themes. Often, I'll raise awareness of the wider engineering spectrum from the pure sciences to the system-based subjects and industry-related disciplines, to the very broad areas such as environmental engineering. **I like to signpost young people to places where they can research professional institutions, get careers guidance, or be inspired to take the steps they need to become engineers or work in logistics and transport –** including sharing sources that promote diversity and encourage women towards a future in STEM careers.

Over the years I've put together a folder with pictures from my early experiences, records of my achievements at work, presentations, graphs, diagrams – all sorts of material that I can use in discussions with students.

Some of the school activities I attend come from past customers, asking me to come back. The rest I find on the STEM Ambassadors portal. During the pandemic, I couldn't be involved in online activities, so I've been pleased to return to face-to-face work. To date I've made 300 school visits, delivered nearly 900 volunteering hours, and apparently these had a total catchment of over 36,000 people.

# The impact of being a STEM Ambassador

**Being a STEM Ambassador allows me to put my attention to something that's different during the working week.** When you stand in an assembly hall at 8.30am with an audience of 200 or 300 students, you have to focus very directly on the right opening words for that group at that moment.

I visit one school in Luton regularly for five two-hour events a year, involving two classes of Year 7 students each time. It's a speed networking event where they can meet a range of adults in different professions. What makes these events special is the emphasis on basic skills of how to meet and greet, listen, ask questions and discuss, and, **although the students come in very shy, they are buzzing by the end.**

## About STEM Ambassadors

STEM Ambassadors is a fantastic volunteer programme that has been running for over 20 years.

Our volunteers offer their time, passion and energy to visit schools, colleges and youth group organisations to deliver requests from teachers and youth group leaders who want to link STEM subjects to the real world of work.

Find out more at our [information session](#).



In the five sessions, you can meet the majority of the year group. It gives them a good foundation for future engagements with the world of work and it's so rewarding.

I've done a few question and answer sessions too. It's interesting to hear what the young people want to discuss. They ask me about how I got my job and what I do. Beyond telling them about my subjects, my career or my work activity, I also make sure to talk to students about the importance of being able to communicate, connect and collaborate with other people. This makes the foundation for them to build their portfolio of life and work experience before stepping out to the wider world. **STEM Ambassador volunteering gives me the opportunities to explain how important it is that young people have life skills as they go on to college or to work.**

Every school I go into is unique. I've tried so many different types of activities over the years. I will always enjoy speaking about transport, logistics and engineering – some of the planning issues and technical problems are incredible. I would like to do more and will carry on volunteering at least until I retire.



## How to get involved

If you have been inspired by how STEM Ambassadors support the learning and development of young people across the UK and you'd like to know more, please contact us at [employersupport@stem.org.uk](mailto:employersupport@stem.org.uk) or visit [stem.org.uk/stem-ambassadors/partner-info](http://stem.org.uk/stem-ambassadors/partner-info)

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