The STEM Ambassador Programme in Scotland

STEM Ambassadors are volunteers from a wide range of science, technology, engineering and mathematics (STEM) related jobs and disciplines across the UK. They offer their time and enthusiasm to help bring STEM subjects to life and demonstrate the value of them in life and careers. STEM Ambassadors volunteer to support learning, such as by delivering a careers talk, running an activity, helping to deliver a demonstration or by providing a broader context to a STEM subject.

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There are three STEM Ambassador Hubs in Scotland, each having specific responsibility for coordinating the activity in their region.

SSERC manages the STEM Ambassador Programme in Scotland, on behalf of STEM Learning.

North of Scotland

The North of Scotland STEM Ambassador Hub is coordinated by the newly renovated Aberdeen Science Centre (ASC). The Hub covers Aberdeen City, Aberdeenshire, Moray, Highlands, Eilan Siar, Orkney and Shetland local authorities. ASC have staff members spread across the region, along with fantastic links to education, employers and communities. For more information about requesting STEM Ambassadors, visiting the science centre and potential collaboration projects, visit https:// aberdeensciencecentre.org.

A great example of STEM Ambassadors in action is their ability to show young people their workplace through video tours and live Q&A. This is what is happening with a number of STEM Ambassadors working in labs and an Aberdeenshire secondary school – ensuring that secondary students don't miss out on experiencing workplaces during the pandemic.

Contact

stemambassadors@asc.scot

East Scotland

SAE@SSERC manages the Hub in the East of Scotland and is based at SSERC HQ in Dunfermline. We support over 1,600 Ambassadors to deliver engaging STEM experiences for schools across 12 local authorities: Angus, Clackmannanshire, Dundee, Edinburgh City, East Lothian, Falkirk, Fife, Midlothian, Perth & Kinross, Scottish Borders, Stirling and West Lothian.

We have continued to support secondary schools during COVID by providing new ways for learners to engage with the programme. A great example is where we provided case studies and videos from STEM Ambassadors working in a lab skills field to Kinross High School's Lab Skills class who were unable to visit workplaces as a result of pandemic restrictions. We have also supported career pathway events, CREST Awards, mock interviews and digital work experience.

science connects
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For more information about STEM Ambassador activity in the East of Scotland, visit https://www.saesserc.scot.

Contact

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West Scotland

Science Connects manages the West of Scotland STEM Ambassador Hub and is based at the University of Glasgow. Covering 13 local authorities from Dumfries and Galloway to Argyll and Bute,



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Science Connects has run the STEM Ambassador Programme since its inception in 2001 and has over 2,700 authorised STEM Ambassadors.

During the COVID pandemic they have been working with schools to assist with virtual careers events, either by providing pre-recorded videos of STEM Ambassadors discussing their careers or facilitating live sessions with Ambassadors.

They recently piloted a successful online evening engineering event with the DYW Co-ordinator at Boclair Academy in East Dunbartonshire for senior pupils and their families to hear from nine STEM Ambassadors in the engineering sector. Pupils

were given the opportunity to preselect the areas of engineering of interest to them and after a keynote presentation, they were allocated to breakout sessions to hear from STEM Ambassadors in their selected areas, rotating to different breakout sessions to hear from different STEM Ambassadors. In each session, pupils were able to ask questions of the STEM Ambassadors.

For more information about STEM Ambassador activity in the West of Scotland, visit https://www.gla.ac.uk/explore/scienceconnects/.

Contact

stem-ambassadors@glasgow.ac.uk



IOP Teacher Award 2020 Dr Catherine Dunn

Anyone who has worked with Catherine knows how sharp, rigorous, humble, creative and talented she is.

What also quickly becomes apparent is that she really is dedicated to helping pupils, students, teachers and colleagues in any way she can - nothing is too much trouble for Catherine. She is always extremely generous with her support. Catherine's physics and maths ability can only be described as "incredible". She rigorously writes up all her experiments and results in her lab journal so that if any enquiries come in about the experiment she can back up her advice with typical results. She is quietly efficient; she knows what needs to be done and works quietly away before presenting her well thought out product or idea. Catherine is a very creative teacher. She is superb at combining ideas and resources and

creating fantastic, novel teaching materials. Catherine is also just as happy making model cardboard houses for an energy topic so that she can share the template with other teachers.

All at SSERC were therefore delighted to learn that Catherine was a winner of the Institute of Physics Teacher of Physics Award 2020.

Catherine's citation for the award reads as follows:

In recent years Catherine has split her teaching between pupils at St Leonard's School in St Andrews and SSERC where she has supported the professional learning of teachers of physics. Catherine is a lovely, humble person but she has an extremely sharp mind. There can be few teachers who surpass her regarding intellectual ability and rigour. However, her creativity and empathy allow her to present difficult concepts in novel, accessible ways. Catherine has supported many



pupils and teachers and her support is often bespoke, but she then shares these solutions with the wider community. As a result Catherine is well-known throughout the Scottish physics teaching community. She attends and presents at national events and is well-respected, and indeed well-loved, by the Scottish physics teaching community.

A very worthy recipient of the 2020 IOP Teacher of Physics award. Congratulations from all at SSERC Catherine.

"Catherine pitched the music experience at a perfect level. It was very enjoyable and I can see how the experiences can be used and develop to engage with the children."

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