STEM engagement round-up

SSERC offers a wide range of STEM engagement and enrichment programmes to further increase access to, and participation in STEM, well beyond the traditional classroom setting. The STEM engagement portfolio offers educators, young people, and partners in industry the opportunity to collaborate and create learning activities and opportunities in STEM for children, young people and adults in Scotland.

With so much STEM Engagement activity going on at SSERC, the team has taken the opportunity to give a comprehensive round-up of all their programmes in recent months and also look ahead to what is coming. STEM Engagement offers are continually accessible and there are often new opportunities and activities being created so there's always the chance to get involved.

SSERC Education Industry Partnerships (EIPs) bring partners in industry together with education settings, enabling groups of early years, primary/secondary schools and colleges to improve young people's engagement in STEM.



PARTNERSHIPS



Leidos STEM Challenge online launch.

Leidos and SSERC STEM Challenge

Year 3 of the EIP with Leidos is well underway with 8 schools taking part across Glasgow and the West. Each of the school teams are being mentored by a STEM Ambassador from Leidos to solve a real-life STEM Challenge. A combination of workplace and school visits are taking place with careers-based learning for both learners and educators. The Showcase event will be held in Leidos HQ in Glasgow in June 2024.



Looking ahead, Leidos has now confirmed it wishes to continue their hugely successful EIP with SSERC and plans are already underway for Year 4! If your school is interested then contact SSERC on partnerships@sserc.scot



Teacher launch at Leidos HQ.



STEM Challenge learners from Cleveden Secondary School.

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STEM Engagement

Ocean Winds EIP

SSERC continues to deliver its vast and aspirational programme of activity with



Ocean Winds (OW), supporting them to deliver their co-devised STEM Engagement Strategy. Through this EIP, The Engineering Development Trust Scotland was commissioned to deliver Challenger Days at Buckie High School and Fraserburgh Academy in November 2023 and subsequently, Fraserburgh Academy registered two teams to participate in Industrial Cadets Bronze (a 12-week renewable energy project). OW is also supporting EDT to deliver a similar programme at Trinity High School and Royal High School in Edinburgh in March 2024. Eight secondary schools are currently participating in First Lego League (funded by OW), with the Moray Final being held in UHI Elgin on 5th March 2024.



Ocean Winds is also funding the development and pilot of SSERC's SCQF Level 7 Award in STEM Leadership, the new and highly sought after pinnacle level of the Scottish Government Young STEM Leader Programme (YSLP). For more information on this, read on to the YSLP section.



The Ocean Winds Director Mark Baxter pictured here with SSERC CEO Alastair MacGregor, SSERC Board Members, National Partnerships Manager and Head of STEM Programmes.

Enthuse Partnerships

ENTHUSE
Partnerships
empower
schools, colleges
and employers
to share practice
and work
collaboratively
aiming to help young people achieve
increased attainment, interest and
understanding in STEM.

Spectris Tayside

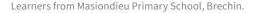
Year 1 of this partnership is now complete with partner schools and their learners



completing a series of professional learning and activities on digital technologies using Sphero robotics kits. Year 2 is now underway with a focus on engineering and construction via SSERC's popular Primary STEM Challenges course.



Spectris Tayside.



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STEM Engagement

Aramco Northeast

Year 1 of this EP is **QrQmco**

now complete with partner schools and their learners respectively completing a series of professional learning and activities with our Early Years and Primary Team on engineering and construction themes via SSERC's popular Primary STEM Challenges course. Year 2 is now underway with a focus on enhancing STEM learning in the classroom using digital technologies and robotics.

Intergen - The M in STEM



Through this Enthuse Partnership, SSERC has worked directly with STEM Learning UK to develop and pilot a numeracy-focussed professional learning course for secondary teachers in Scotland: The M in STEM.

After the successful development work by a project and design team, a two-day professional learning course for middle managers in schools was launched in Scotland. This two-day residential course forms part of a year-long journey to enhance the delivery of maths and numeracy in schools, bringing practical work to maths classes and linking Science and Maths Departments together. The course took place in October 2023 with 7 schools taking part. Action planning and "interruption to practice" is now being delivered in these schools to impact on maths and numeracy in STEM.

An impact showcase will take place in May 2024.

For more information see here.







Teachers completing a series of professional learning and activities with our Early Years and Primary team.

BP Super Enthuse

A practical-packed two-day PL event took place at Aberdeen Science Centre back in September 2023. Twenty delegates

took part in workshops covering forces, energy, electricity, renewables and other key STEM themes. This practical work is now being delivered to learners in primary schools across the northeast. An impact update took place in February 2024 with guests from bp joining us to hear about the work we are doing. As we progress to year two of the partnership, we will concentrate on new areas such as engineering and construction and biology.



BP Super Enthuse delegates.



BP Super Enthuse - a two-day PL event at Aberdeen.

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STEM Engagement

Launching soon!

New Enthuse Partnerships are never far away and SSERC is excited to be launching a further two for 2024 with even more in early discussion!



Up to 20 primary schools from all over Scotland will join the SSERC Early Years and Primary Team and the STEM Engagement Team to take part in a year-long professional learning journey linked to the Space Experiences and Outcomes from Early to Second Level.

CATERPILLAR FOUNDATION

CATERPILLAR

The Secondary and STEM Engagement Teams at SSERC are working together to deliver a yearlong professional leaning offer for secondary teacher of Environmental Science. Sixteen delegates will be offered a place on our revamped two-day professional learning residential course in May with a range of free resources to support hands-on practical learning in schools across the country.



Nuffield Research Placements

Nuffield Research Placement Programme offer S5 pupils from disadvantaged backgrounds the opportunity to participate in a twoweek research project in a university or industry over the summer. The Nuffield programme is now positioned within STEM Learning's new Destination STEM portfolio and has been rebranded as "Research & Experience Placements, formerly Nuffield Research Placements". The programme will operate under both names for Summer 2024 placements.

Pupils will be matched with one of 70 placements on offer across Scotland and will participate in the Celebration Event to showcase their reports and posters on 1st October 2024 at University of Glasgow.



Research Placements & Experiences

Formerly Nuffield Research Placements



The Nuffield programme has been rebranded as "Research & Experience Placements".

ESERO

STEM Ambassadors with an interest in Space can provide inspirational talks and activities to schools and help deliver ESERO's resources such as Mission X: train like an astronaut. Climate Detectives and Astro Pi Challenge. Request INSPIRATIONS



a visit from a Space Inspirations STEM Ambassador on the STEM Ambassador portal.



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