



STEM Learning and  
Support for Scotland

# 2026 ANNUAL REPORT

60 YEARS



1965-2025 60 YEARS OF SUPPORTING STEM EDUCATION AND INSPIRING FUTURES

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# Overview

## Chair's introduction

The 2025/2026 reporting year has been a period of significant operational success for SSERC, coinciding with our 60th anniversary. While such a milestone naturally invites reflection on our history, the Board's focus has remained firmly on the present delivery of our mission and supporting the realisation of Vision 2030.



### A year of high achievement

This year, SSERC has not merely met its targets but has demonstrated a high level of resilience and impact across all core areas. Against a continuing backdrop of constraints, our commitment to providing world-class STEM support is reflected in the increased scale and quality of our professional learning programmes. We have seen tangible progress in translating our strategic priorities into meaningful outcomes to support educators, technicians and learners across Scotland.

The Board is pleased to report that the organisation's performance this year has been characterised by clarity of purpose and measurable success, ensuring that SSERC remains the primary point of reference for STEM safety and innovation.

### The contribution of our staff

The achievements of the past year are, first and foremost, the result of the expertise and dedication of the SSERC team and a reflection of their unwavering commitment to excellence. The Board is acutely aware that our strategic aspirations are only realised through the daily commitment of our staff. Their ability to provide trusted technical guidance, alongside the development of innovative resources, is what sustains our reputation. This year, the team has worked with exceptional professionalism to meet the evolving needs of the STEM community. We recognise that the organisation's strength is built on their specialist knowledge and their willingness to go beyond expectations to support our members. The Board extends its sincere thanks for their hard work and continued support in delivering SSERC's mission.

During 2025, we were delighted to be in a position to recognise a significant contribution to the important work of technicians in awarding the 2025 SSERC Honorary Fellowship to Neill Sproull.

### Strategic development and sustainability

To ensure SSERC's continued growth, the Board has prioritised long-term sustainability. This year, we have made significant strides in developing both our International Strategy and a new Commercial Strategy.

These initiatives are designed to diversify our income and extend our reach, but they are rooted in a singular goal: to protect and enhance our core service to Scottish education. This remains our core function and our absolute focus. By broadening our horizons, we are ensuring that SSERC has the capacity to innovate and lead for another sixty years.

### Looking forward

As we mark six decades of service, the Board remains confident in SSERC's direction. Our success is built on a foundation of strong governance, a cohesive Board, the active support of our stakeholders, and most importantly, a staff team that delivers excellence. We remain committed to the ambitious goals set out in Vision 2030 and look forward to the continued impact SSERC will make on STEM education in the years ahead.

Alistair Wylie - Chair of SSERC Board of Directors and Trustees



## Message from the CEO

### A milestone year for SSERC

The period from 1 April 2025 to 31 March 2026 has been a significant and rewarding year for SSERC. Not only have we continued to deliver



high-quality support across Scotland, we have also celebrated an important milestone – our 60th anniversary. This has been a chance to look back with pride on six decades of contribution to science, technology, engineering and mathematics (STEM) education, while also looking ahead with confidence.



### Supporting STEM Education Across Scotland

Over the past year, SSERC has remained a key partner for educators, technicians and learners. Our work continues to focus on improving the quality of STEM teaching and learning through professional learning, collaboration and innovation. The strong engagement with our programmes reflects the value placed on this support across the education community.

### Guided by our values

Celebrating 60 years has been about more than marking time. It has given us an opportunity to reflect on what matters most to us: supporting educators, promoting fairness and access, and recognising the powerful role education plays in people's lives. These principles continue to guide everything we do and remain at the heart of our work today.

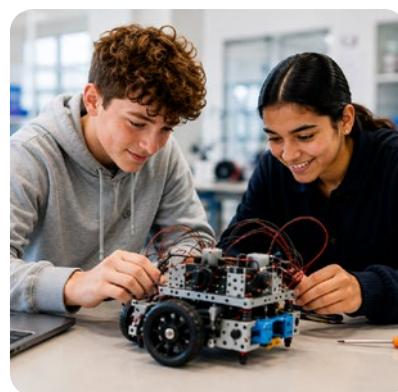
### Progress towards Vision 2030

We have also made steady progress towards Vision 2030. This includes strengthening our focus on sustainability, making better use of digital tools, and widening access to STEM learning. Our professional learning programmes have evolved to include new technologies and approaches, helping educators feel confident in preparing young people for the future. At the same time, we have continued to prioritise inclusion, working to ensure that all learners can benefit from opportunities in STEM.

### Building a sustainable future

Looking ahead has been a key theme this year. The Board has been developing a new international strategy, recognising the opportunity for SSERC to share its expertise more widely and to learn from partners across the world. This will help us grow our impact while staying true to our core purpose.

Alongside this, progress has been made on a new commercial strategy. The aim is to strengthen our financial sustainability by generating income in ways that align with our mission. This will allow us to reinvest in STEM learning and training across Scotland. Importantly, this work is being taken forward with care, ensuring that our values and principles remain central to everything we do.



### Looking ahead

Together, these developments put SSERC in a strong position for the future. As we continue our journey towards 2030, we are building on a solid foundation while adapting to new challenges and opportunities. This has been a year of both celebration and progress. SSERC remains committed to supporting educators and inspiring learners across Scotland. As we mark 60 years, we do so with energy and optimism, ready to continue our work in advancing high-quality STEM education for all.

*Alastair MacGregor*

Alastair MacGregor - Chief Executive Officer



# Corporate activity and organisational development

## The Board

Strong governance arrangements continued to underpin the work of SSERC throughout the 2025/2026 reporting year. During the year, several changes occurred in Board membership as members completed their terms of office and new members joined the Board. SSERC extends its sincere thanks to departing Board members for their commitment, expertise and support, and welcomes those new members who bring additional perspectives and experience to support the organisation as it continues to deliver against its Vision 2030 ambitions.



| Completed                                                         | Joined                                                            |
|-------------------------------------------------------------------|-------------------------------------------------------------------|
| K McNeill, ADES                                                   | K Haspolat, ADES                                                  |
| G Dempster, Association of Head Teachers and Deputies in Scotland | H Macormac, Association of Head Teachers and Deputies in Scotland |
| R Hunter, Stirling Council                                        |                                                                   |
| K Stewart MSP                                                     |                                                                   |
| K Coker, University of Dundee                                     |                                                                   |
| Appointed as Vice Chair: A Taylor, Perth and Kinross Council      |                                                                   |

## The organisation

The reporting year was characterised by a high degree of organisational stability. During the year, two members of staff chose to take advantage of SSERC's flexible working arrangements to move to part-time working as part of their retirement planning. SSERC is committed to supporting colleagues at all stages of their careers and recognises the value that flexible and agile working practices can bring to both individuals and the organisation. These arrangements have allowed SSERC to retain valuable expertise and experience while supporting staff in achieving an appropriate balance between their professional and personal aspirations.



As part of its commitment to being an inclusive and supportive employer, SSERC continued to strengthen its organisational policies and practices relating to wellbeing and inclusion. During the year, this included the introduction of a new Life Events Policy, a revised Diversity, Equity, Inclusion and Belonging Policy and a new Wellbeing Policy. Recruitment approaches for both staff and Board members were also reviewed and enhanced to further support equity, accessibility, and diversity in recruitment.

SSERC remains committed to delivering high-quality services and maintaining positive relationships with members, delegates and stakeholders. Pleasingly, the organisation received no formal complaints during the reporting period, reflecting the professionalism of staff and the continued focus on service quality, responsiveness and continuous improvement.





## Inclusion and impact

Delegate feedback continues to play an important role in informing organisational improvement and future planning. During the year, SSERC received responses from 637 delegates through its annual Equity, Diversity and Inclusion monitoring survey. The survey provides valuable insight into the diversity of participants engaging with SSERC professional learning and support activities and enables the organisation to identify and address any barriers to participation or unintended bias within policies, processes, products and services. SSERC is grateful to all delegates who voluntarily contributed to the survey and remains committed to using this evidence to inform future developments and ensure that its activities remain inclusive, accessible and representative of the communities it serves.



Alongside the EDI survey, routine delegate evaluations once again demonstrated very high levels of satisfaction with SSERC activities. Delegates consistently highlighted the quality and relevance of the professional learning opportunities provided, the expertise and responsiveness of staff and associates, and the positive impact participation had on their professional confidence and classroom or laboratory practice. The overwhelming majority of respondents indicated that they would recommend SSERC activities to colleagues, reinforcing the organisation's reputation for delivering high-quality STEM education support across Scotland.

## SSERC Membership

While SSERC's primary purpose remains to support STEM education across Scotland, the organisation's reach and influence continue to grow across the UK and internationally. Increasing engagement with SSERC's professional learning, specialist advisory services and STEM programmes reflects the organisation's growing reputation as a centre of excellence for STEM learning and laboratory health and safety.

This expanding reach has been driven by a growing digital presence, new national and international partnerships and increasing demand for SSERC's expertise beyond Scotland. As a result, the organisation has reviewed and modernised its membership model to ensure that a wider range of organisations and individuals can benefit from SSERC's products and services.

The new membership framework introduces a range of new membership categories for schools, colleges, individual educators, home educators, corporate partners, third-sector organisations and international institutions. The new model supports SSERC's commercial and international strategies while creating opportunities to reinvest income into services that directly benefit STEM education in Scotland.

The introduction of these new membership opportunities represents another significant milestone in SSERC's continued development, strengthening its position as Scotland's national STEM education support organisation while extending its impact across the UK and around the world.



## SSERC mailing list

In 2025, SSERC launched a new mailing list with the aim of growing our audience across all departments by sharing knowledge and contacts. The mailing list also allows people to sign up to be SSERC Educator members, a cohort of subscribers who wish to contribute to SSERC's ongoing work – this could be through completing surveys, joining working groups or sharing feedback. Educator Members also get targeted emails throughout the year with special resources and information just for them. In 2026 to 2027 we want to see this mailing list continue to grow!

1 November 2025 to 31 March 2026

**SUBSCRIBE**



**349**  
Subscribers



**304**  
Educator  
members



**43.3%**  
Average  
open rate



**6**  
Emails sent

All educator members were given exclusive access to a festive themed [STEM video](#).



**Sign up  
HERE**



# Professional Learning

## Aim

To increase the breadth and impact of the professional learning offering.

As SSERC celebrated its 60th anniversary in 2025, we continued to play a leading role in supporting secondary STEM education across Scotland. For six decades, SSERC has remained committed to promoting high-quality, safe and inspiring practical STEM learning experiences for all learners.

## Secondary

Throughout the year, feedback from teachers, technicians and education leaders continued to demonstrate the positive impact of SSERC's work, with many programmes and activities exceeding their targets. This success has been achieved despite ongoing challenges associated with school finances and increasing difficulties in securing teacher release for professional learning opportunities.



The continued demand for SSERC's support highlights the important role of practical STEM education in Scotland's secondary schools and the value of sustained national backing in this area.

## From April 2025 - March 2026 the Secondary Education Team delivered



**5576**

Hours of combined professional learning



**1115.2**

CPD units\* achieved



**917**

Delegates



**715**

Teachers



**56**

Technicians\*\*



**45**

NQTs



**101**

Other delegates including STEM Ambassadors and CLD Staff

\*1 CPD unit equates to 5 hours of SSERC PL    \*\* Technicians attending courses designed for teachers



## Biology

Biology provision during this reporting period was characterised by a mixture of both the successful deployment of popular courses from prior years, as well as some new additions to the SSERC professional learning offering. We engaged with external partners both to bring the SSERC team and its resources into the community, as well as to welcome new expertise into the delivery of our courses.



**935.5**  
Hours of  
combined  
professional  
learning



**187.1**  
CPD units  
achieved



**223**  
Teachers  
attending



**9**  
Courses  
(face-to-face)

## Senior phase support

Support for the national assignment and project tasks remained the backbone of this year. *Investigations for Advanced Higher Biology* ran over two days in September, aimed at practitioners new to delivering the course in school. A new course delivered in collaboration with the University of Edinburgh Medical School, *Experiments, Investigations and Skills for Higher Human Biology*, followed at the turn of October, and saw participating teachers spend one day at the SSERC HQ in Dunfermline performing enzymology assays and dissection activities, followed by a second day being welcomed to the Medical School to meet with their world-leading research staff. Our *Assignments for Senior Phase Biology* followed this programme in June 2026.

*Practical Techniques for Biology Teaching*, delivered in March, was substantially rebuilt for this session. New sessions covered bioinformatics platforms for phylogenetic analysis, alongside guided brain and eye dissection components. A cost-effective practical activity investigating the inhibition of trypsin by green tea was expanded and refreshed, alongside a workshop on construction of a micro-syringe to improve reliability in measurement. The course is designed to keep its emphasis on techniques that will run in an ordinary school laboratory, within the equipment budgets and technician time actually available.



Colorimetric analysis of photosynthesis in immobilised algae, one of the practical techniques explored during the year.

In the construction of our courses, we have sought to remember that educators who entered the profession after 2020, and whose own undergraduate laboratory training was curtailed by the pandemic, still form a substantial share of those attending and we have been heartened to hear from many attendees that our courses have helped to improve confidence in the laboratory.

*"I haven't taught the higher course for over 9 years. The hands-on practical activities and the visits in particular to the Roslin research labs, hearing from current professionals was inspiring and confidence boosting. The apparatus received was very gratefully appreciated as I work in a small school where funding is limited and hence so is apparatus."*



### Online and short-form provision

Short-form online delivery grew sharply this year. Seven sessions ran in this format, at no cost to delegates and without the need for classroom cover: a three-part workshop series on data analysis, three SSERC Meets, and a careers panel.

*Data Analysis for Secondary Education and FE* introduced educators to the R programming language across three ninety-minute workshops in January, February and March, each supported by an hour of independent coursework. The first session covered the basics of coding and handling data, the second moved beyond what a spreadsheet allows, and the third dealt with turning results into publication-quality charts. James Kilgour, a health statistician, joined some sessions as guest facilitator, bringing working practice into the course.

A *Careers and Pathways in Data Science* panel in January brought working data scientists together with educators for an hour, addressing the routes they had taken into the field and the skills young people actually need in order to pursue similar careers. As a group, we saw how data science now touches sectors from health to transport, and teachers are frequently asked to advise on pathways they have had no opportunity to learn about themselves.

*"I very much enjoyed facilitating the Data Analysis for Secondary Education/FE session to teachers in January this year. Data literacy is a very flexible skill set and one that can open lots of doors to learners, so it is great to see teachers are keen to grow in this area."*

*James Kilgour, Health Statistician (guest facilitator)*



Three SSERC Meets ran across the year. *Advanced Higher Biology* in September addressed curriculum and subject content directly. *Everyday Plant Microscopy*, delivered by Jackie Grocott of the Royal Botanic Garden Edinburgh, offered cost-effective techniques for visualising the anatomy of common plants and connecting that anatomy to biological processes. *Helping Learners Navigate Expertise and Misinformation* explored how teachers and lecturers can support learners in judging competing claims, and how to bring learners into that discussion rather than conduct it around them.

### Partnership working

*Experiments, Investigations and Skills for Higher Human Biology* was co-devised and co-delivered with the University of Edinburgh, following its development in the previous session.



The *Bee Biology and Pollinator Behaviour* course welcomed a number of guest contributors and was developed with Newbattle Abbey College and the Newbattle Beekeepers Association. The in-person apiary visit ran on 23 August with eight hours of supporting online lectures preceding it. Delegates opened hives and handled frames of live colonies at the Newbattle apiary.

The Royal Botanic Garden Edinburgh contributed by delivering the *Everyday Plant Microscopy* SSERC Meet in March and co-devising the *Practical Techniques in Plant Science* course, which subsequently ran in June 2026.

Honeybee hive observation activity at Newbattle Abbey College HQ.



### Safety in Microbiology

The SCQF credit-rated *Safety in Microbiology for Schools* programme ran three times, in November, February and April, and remained among the most heavily subscribed courses we offer.

Work also continued on the review of the *Safety in Microbiology and Materials of Living Origin* Codes of Practice, carried forward from the previous session with input from external academic advisers, ahead of publication of the revised editions.



Prepared growth media settling during a *Safety in Microbiology for Schools* course at Dunfermline.

### Resource development

The Biology team began supplying an ELISA Simulation Kit through the [SSERC Online Store](#) during the session, priced at £45 and available throughout the UK. This simple immunoassay, previously supported by Douglas MacDonald of Mystrica, has consistently rated among the strongest sessions on our practical techniques courses, but the technique has been hard for departments to adopt: commercial kits are costly, carry short shelf lives, and are built for undergraduate teaching rather than a school laboratory working to a fixed consumables budget. The kit uses partial substitute reagents to reproduce the full procedure, from patient sample through controls, wash steps and primary and secondary antibody binding to a colour change that matches the result obtained with authentic reagents. Kits are produced in small batches to keep them fresh, and sales during the year reached schools across the UK.



Preparing a blood smear at the ASE conference workshop, the resulting slide showing the biconcave discs of red blood cells, in some cases stained with histological dyes.

### Beyond the HQ

Work away from Dunfermline formed a key part of the year. A workshop on blood smear microscopy was delivered at the ASE annual conference in Nottingham in January, taking up the invitation extended to SSERC after the 2025 session. It demonstrated to educators how the technique can be prepared and viewed safely, using staining protocols that make cell structure visible with materials available in schools.

Sessions were delivered at the Orkney International Science Festival in September of 2025. These spanned a public lecture ('How to Find Love as a Honeybee'), school workshops on yeast metabolism, and a range of tabletop activities offered as part of the festival's Family Day, reaching audiences from schoolchildren to the general public in a single visit. Workshops were also delivered as part of the Fife STEM Learning Festival.

A bee Biology workshop was also taken into a junior school setting in Aberdeenshire, featuring a live observation hive of honeybees. A Biology Christmas lecture, 'The Anatomy of a Christmas Tree', was also recorded and published on our [SSERC TV YouTube channel](#).



An observation beehive was met with enthusiasm among the Primary 1 and Primary 2 classes in an Aberdeenshire school.





A monocular microscope stripped down during preparation of the new microscope maintenance course, developed with the Technician Education Team for delivery in December 2026.

Two developments are planned for the year ahead. Work began on changing Advanced Higher Biology provision, which will be refined into subject-specific strands, giving practitioners support targeted to the particular demands of their teaching rather than a single general course. A new *microscope maintenance course*, developed with the Technician Education Team, was revived from a previous iteration. It has been added to the professional learning calendar to run in December 2026.

### Sustainability

The growth of short-form online provision carries an environmental benefit alongside its reach. Seven sessions were delivered online this year without delegate travel, against a single online session the year before, removing a considerable volume of journeys to Dunfermline over the course of the year.

Course design continued to favour approaches that use less material.

Microscale versions of enzymology activities and quantification assays were adopted where available, cutting the quantities of reagent and consumable each investigation requires and, with them, the plastic waste that laboratory work generates. Glassware was substituted for disposable plasticware where practical, and household items repurposed in place of purpose-bought equipment.

### Sustainability

Building a better future through STEM education.



#### PEOPLE

Empowering learners and supporting education.



#### INNOVATION

Inspiring curiosity and driving STEM excellence.



#### PLANET

Promoting environmental responsibility and sustainable practices.



#### PARTNERSHIP

Working together for a stronger sustainable future.



#### IMPACT

Measuring impact to create lasting change.



## Chemistry

In the 2025/2026 reporting year Chemistry delivered the following courses:



**796**

Hours of combined professional learning



**159.2**

CPD units achieved



**82**

Teachers attending



**7**

Courses

### For Teachers

- A 2-day course to support *Advanced Higher Projects*.
- A 2-day course *Chemistry Skills for Advanced Higher*.
- A 1-day course on *Chemistry Assignments for National 5 & Higher*.
- 2 sessions at the 13th International Symposium on Microscale Chemistry in London.
- Online session for teachers at the British Council in Spain.

### For Technicians

- A 2-day Technicians course for *Senior Phase Chemistry*.
- *Chemical Handling* (2 instances).
- *Introductory Chemistry* – now an online, self-study course.

### Additionally, Chemistry contributed to:

- Probationers Courses (2 cohorts).
- *N5 Lab Science* course.
- *Environmental Science*.

Feedback from course delegates include:

*“Will improve teaching of advanced higher projects by giving a greater range of safe practical work. This will hopefully improve attainment in Advanced Higher Chemistry.”*

*“Incredibly useful having the staff giving real trouble shooting advice on specific practical activities.”*

*“The course has given me confidence to support learners in their projects, knowing that they will be manageable in terms of timescale and equipment available.”*





We developed the following resources:

- A demonstration of the Marangoni effect.
- A new experiment to investigate mass change when burning steel wool.
- A microscale version of the decomposition of ammonium dichromate.
- A new version of conduction of ionic salts that does not use lead compounds.
- A microscale version of the elephant's toothpaste.
- A new colorimetric method for analysis of paracetamol.
- Plus a range of tweaks and improvements to existing activities.

### Other activity in Chemistry

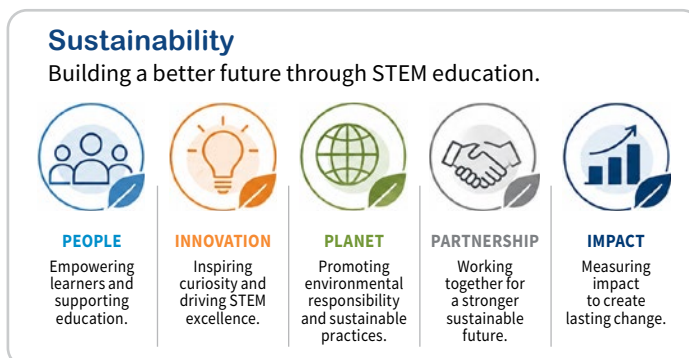
Chemistry also contributed to the following:

- The Nigel Botting meeting for Chemistry Teachers at the University of St Andrews.
- 6 x one-hour sessions for 40 delegates at the STEM Technician Training Day.
- We ran two Chemistry sessions for delegates attending our probationer's courses in December 2025 and January 2026.
- 1 day of the *N5 Laboratory Science* was taken up with Chemistry.
- We are continuing to work with the Royal Society of Chemistry to offer subject specific CPD around the country.

### Sustainability

Chemistry is a subject that, more than most, involves the actual using up of materials and so sustainability and reduction of environmental impact are of key importance.

We promote several approaches to help schools and colleges reduce the environmental impact of practical chemistry:



- 1) **Microscale Chemistry** – The use of these small-scale techniques is of obvious benefit as it simply uses up smaller amounts of materials. There are, however, further benefits as much of the apparatus is home-made or repurposed: alcohol burners from jam-jars, crucibles from bottle tops etc.
- 2) **Green alternatives** – We have a number of activities on our website that promote greener alternatives to traditional Chemistry experiments; especially using reagents that are less environmentally harmful. Such as using alternatives to Chromium VI compounds for oxidation experiments, replacing lead bromide in electrolysis experiments and using solvents such as ethyl ethanoate to replace more harmful chlorinated hydrocarbons.
- 3) **Disposal** – As well as offering advice on disposal companies for chemical waste, the disposal section of the website also offers guidance on how to recover and re-use many substances from the chemical waste produced in a reaction. For instance, rather than disposing of copper sulphate crystals that learners make, they can be reacted with sodium carbonate to produce copper carbonate which can, when filtered and dried, be used to react with sulphuric acid to make a new batch of copper sulphate crystals.
- 4) **Alternative heating** – an increasing number of new schools are being built without gas supplies (for environmental reasons). We have reviewed various alternatives to using traditional Bunsen burners and will offer advice on how to adapt Chemistry teaching for these new methods.



## Environmental Science

Much of our environmental science work this year took place away from Dunfermline, out in the field and in partnership with other organisations, each of which brought something of value to those courses, for which we are very grateful.



**150**  
Hours of  
combined  
professional  
learning



**30**  
CPD units  
achieved



**20**  
Teachers



**2**  
Courses  
(face-to-face)

In March we spent two days on the Isle of Cumbrae with the Field Studies Council (FSC), at their centre in Millport. This was the first outing of a course that we devised together in the previous session, built around the environmental sampling of animals. Our Education Officer for Technicians attended to aid in the facilitation of the course also alongside our Education Manager for Biology and the FSC team.



Working from a coastal field station gave us the opportunity to engage directly with ecological work: delegates sampled out on the shore, among the organisms and in the conditions that a laboratory in Dunfermline can only approximate. This course, titled *Practical Ecology and Environmental Sampling*, proved popular with delegates (with 84% of them rating it as 'Excellent') but did suffer from the characteristic Scottish spring weather event - to which the attendees responded cheerfully.

In May 2026 we ran our *Environmental Science for Non-specialists* course at our Dunfermline HQ, a course made possible by Ocean Winds UK, whose funding allowed the course to not only be offered to teachers without cost but to also include some equipment that they could add to their school's resources - including a wireless CO<sub>2</sub> probe. Originally

designed for geography teachers taking on environmental science, the programme moved briskly through the practical work the qualification asks for: refractometry and hydrometry, gas sensors used to follow respiration and photosynthesis, photosynthesis in seaweed, hydrogels and bioplastics, the properties of soil, and the making and analysing of biofuels in an ordinary classroom. The Environmental Science Subject Manager at Qualifications Scotland, joined us to take delegates through the coursework component of the qualification, which gave the day a direct link back to important course assessment standards.

91% of attendees rated the course as excellent, with feedback including:

"I feel that I now have loads of practical ideas on how to make learning and delivery of the subject fun!"

"Amazing at growing my confidence in a lab and I've been given some great ideas!"



Moth surveying and CO<sub>2</sub> quantification were among the activities carried out as part of our two-day visit to Millport.



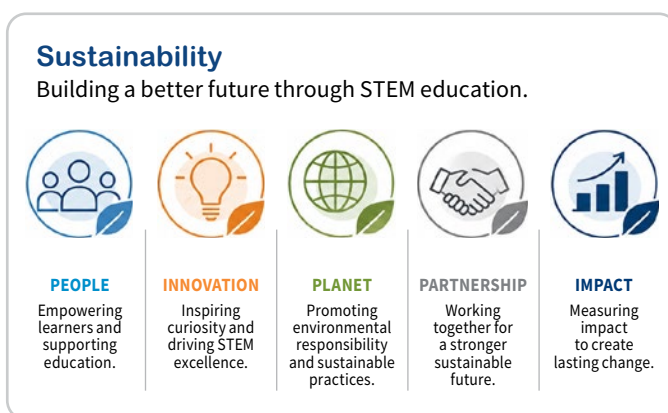
During this reporting period, our Education Manager for Biology also took a workshop on microplastics to the annual conference of the Scottish Association of Geography Teachers. Using a Nile Red stain, we made microplastic particles glow under fluorescence, and constructed a plastic density separation tower too.

### Funding and future work

During the year we were awarded a grant of £30,000 from The Royal Society, to fund transition projects on soil health for learners moving from P7 into S1. We are recruiting schools now, with delivery beginning in September 2026. This is a point in a young person's schooling where science can lose its footing and where learners having the opportunity to meet subject specialists for the first time offers valuable inspiration. Soil health is an increasingly important area of scientific inquiry and we are excited to give primary and secondary teachers a shared, practical thing to plan around, and to help foster that collaboration.

### Sustainability

Our Environmental Science professional learning supports sustainability by equipping educators with the confidence, practical skills and resources to explore environmental issues with learners. From biodiversity and soil health to microplastics, biofuels and carbon dioxide monitoring, these courses connect classroom science with real-world environmental challenges. By investing in educator capability, SSERC helps create a multiplier effect, enabling sustainability learning and practical environmental science to reach learners across Scotland.



## Psychology and health

This session saw SSERC extend its professional learning into subject areas we have not previously served. Provision for psychology, the health sector and social sciences reached practitioners who we have otherwise not been able to engage with. The introduction of these courses, which we expect to offer on an ongoing basis now, was a great opportunity to build out fresh activities and try something new!

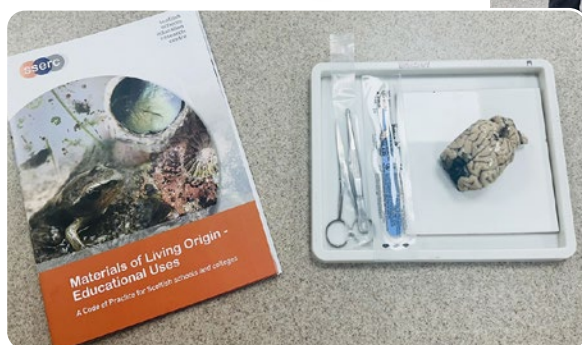
Devised and delivered by our Biology education team, a new course for psychology educators, *Experiments and Data Analysis for Psychology Teaching*, was delivered at the SSERC HQ in Dunfermline in January, and its first presentation was a great success. We were delighted to welcome Dr Gemma Mackintosh, a psychology researcher, who joined the delivery team and brought current research practice into the room, enriching the course with expertise for which we are very grateful.

Gemma said:

*"I thoroughly enjoyed this experience. The facilities available at SSERC are amazing for teaching a wide range of skills, and the breadth of knowledge in its team is incredible. It was a pleasure to see the delegates soak up the science of psychology!"*



Live physiological data recorded and displayed during the psychology teaching course.



A brain dissection was carried out during the psychology course, alongside the SSERC Materials of Living Origin Code of Practice that aids the carrying out of dissection work in schools.

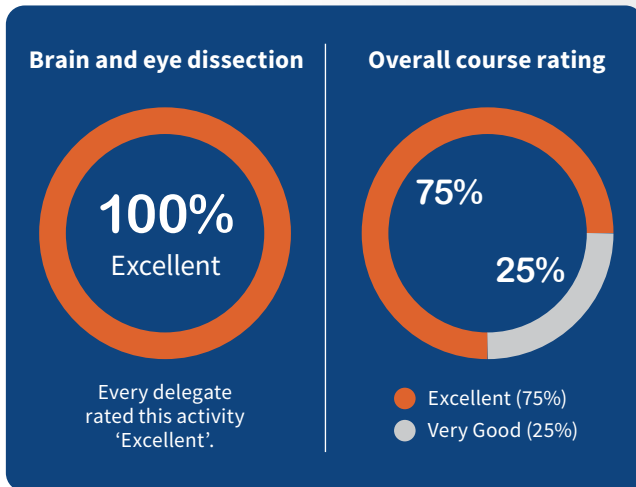
This new course saw delegates engaging with eye-tracking activities, dissections, reaction-time experiments, as well as biological metric monitoring such as ECGs and EEGs. The course was well received and we hope to provide more support to the psychology education profession, not just in the form of a revised version of this in-person course, but also by incorporating some relevant online talks into the SSERC academic calendar going forward.

A further new course, *Innovative Approaches in Skills for Work (Health Sector)*, ran over two days in May 2026 to support educators delivering the National 5 Health Sector qualification. We were joined by Siobhan Curran, a registered and practising nurse, who assisted in course delivery. This created an excellent opportunity to see medical devices demonstrated in a knowledgeable, care-informed way, as well as to get fruitful answers about how learners can successfully pursue nursing careers.

Siobhan remarked that:

*"I was grateful to be part of this course, helping to add teachers' skills in this area and loved seeing how much everyone enjoyed themselves. Courses like this are hugely beneficial and encourage learners to take an interest in nursing as an occupation."*





*"This will really benefit my teaching."*

*"I feel more confident discussing and teaching certain elements such as data collection and also interested in going home and studying data collection further."*

*"I feel inspired to add more practical elements in my lessons."*

Our course on the health sector consisted of a workshop on utilising medical devices such as peak flow meters, pulse oximeters, blood pressure cuffs and others, as well as modelling the dispersion of medications within the stomach, a chance to try out our new ELISA product, and a technique for quantifying sugar and fat also.

*"This will enable much of the theoretical learning in the course to be complemented with relevant, hands-on practical experiments. It has greatly improved my confidence in delivering aspects of the course."*



An iodine and starch reaction demonstrating diffusion across a semi-permeable membrane, one of the practical activities explored during the Health Sector course - a simple visualisation of how drugs move through cells and tissues.

*"Amazing protocols for teaching health sector. Will help MASSIVELY when making the course enjoyable and relatable to our young people."*

Taken together, these courses represent a widening of the SSERC offering and a responsiveness to the changing curriculum here in Scotland. As an organisation, we are striving to not only continue supporting the qualifications for which we have a long tradition of developing resources for, but also to support the introduction of qualifications that are either newly emerging or are growing in popularity with learners.



## Physics



### Sessions delivered 2025/2026

- ✓ We delivered our new *Support for practical activities in Higher Physics* course, introduced in 2025/2026, to 15 delegates.
- ✓ Evaluation data so far shows that 80% of respondents rated this course excellent with all stating that the course was of personal interest and will have an impact on their future practice.
- ✓ We also delivered a session at the ASE Scotland Conference.
- ✓ We offered a place on our *Support for practical activities in Higher and Advanced Higher Physics* course in September to 17 of the 24 teachers who applied.
- ✓ In October we ran our two-day *N5 Practical Electronics* course for 17 delegates.
- ✓ In August and November we delivered two one-day *Working with Radioactive Sources* courses to 22 delegates in total.
- ✓ In November we also ran our one-day *Intermediate Physics* course for 7 technicians.
- ✓ We also contributed sessions for the November STEM Technician Training Day.
- ✓ In December we contributed to the jointly run *N5 Lab Science* course and the *Science Probationers* (cohort 1) course.
- ✓ Physics delivered three sessions to 18 delegates attending our cohort 2 Probationers course on the 13th and 14th January.
- ✓ We also delivered a one-hour online session for 18 Physics teachers in Spain organised by the British Council.
- ✓ In March, one delegate completed our *Physics safety self-study* course, one delegate completed the *Electrical safety self-study* course, and 6 delegates completed our *Satellites self-study* course.
- ✓ We had over 60 delegates attend our two-part, online, twilight, *Radiological Protection* course which ran on the 4th and 11th March.
- ✓ We had four delegates attend our *BGE Physics* course on the 26th March.

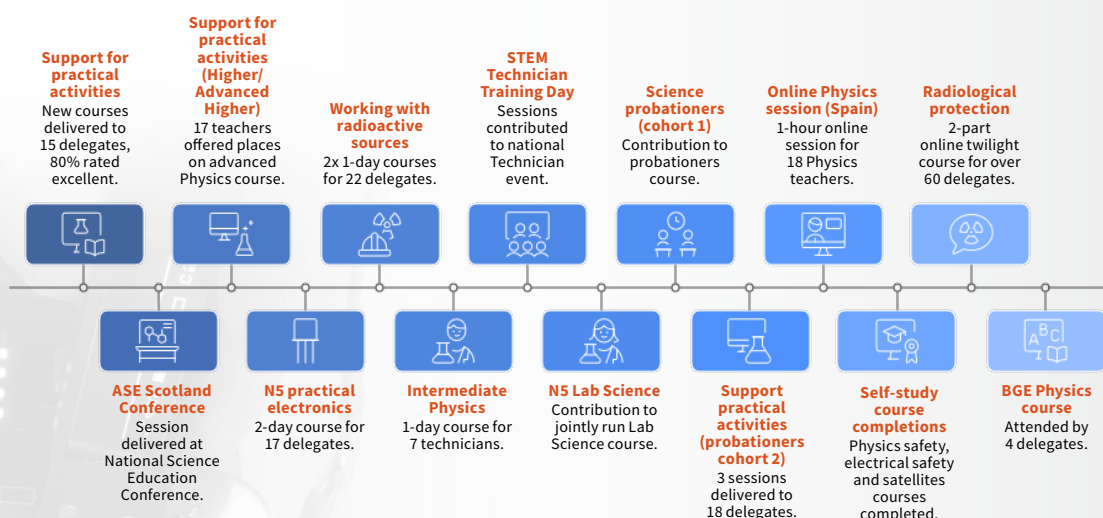




## Other activity

- ✓ We completed the build of a 'starlight simulator' to model the relationship between the colour and temperature of a star to support this area of the Higher Physics curriculum.
- ✓ We built a high specification, low-cost (about one quarter the price of a basic model) spectrometer which would be very useful to both Physics and Chemistry departments.
- ✓ We published a video on YouTube as part of the SSERC 60th celebrations showing how to plot the Doppler curve of an orbiting satellite. This activity has also been added to our satellites self-study course.
- ✓ We had the impact development officer from the photonics and quantum accelerator programme visit and present to our Advanced Higher course in September.
- ✓ We have updated our "Guide to Tracker" to reflect the changes in this software over the last five years.
- ✓ We have contributed to the Early Years and Primary course on 12/09/2025.
- ✓ An article written for Bulletin 283 describes a soap bubble experiment to calculate viscosity of air for Advanced Higher Physics.
- ✓ We constructed a small low cost (£12) Nanoprobe/oscilloscope for use in N5 Practical electronics. We wrote an article for Bulletin 284 detailing the construction and use of the Nanoprobe in N5 Practical Electronics.
- ✓ Another bulletin article has been written about the ageing of capacitors leading to the failure of some items of electrical equipment, which can be published in a future bulletin.
- ✓ We are in discussion with an organisation wishing to distribute Physics equipment to schools and expect to distribute the equipment to schools in session 2026/2027.
- ✓ To date we have loaned equipment to five schools to enable learners to complete Advanced Higher Physics investigations and during February we hosted a teacher and learners at SSERC to enable the learners to do work on their Advanced Higher Physics investigation.
- ✓ We are working with our primary colleagues and OPTOS to deliver Physics to delegates attending primary courses.

## Physics training sessions and courses 2025/2026



Some feedback from course delegates includes:

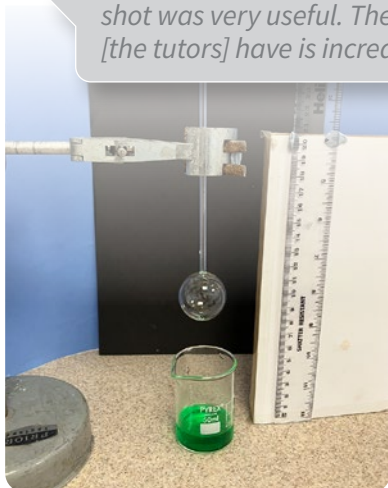
*"Hello, please find attached my attempts at the activities from the beginners' satellite course. I certainly learned a few things and even used activity 1 with my N5 class. Space and satellites are a topic I've always struggled to bring to life, and this certainly helped. I will be having a go at some of the more hands-on activities when time allows! Thanks for putting these resources together."*



*"All sessions in the lab and with SQA manager were extremely useful. Every session had exactly the right amount of time spent on them. Sessions were well organised and relevant."*

*"All of it was useful. I was there with a colleague from my school and we both got loads out of this."*

*"Seeing all the practicals and getting to have a shot was very useful. The amount of knowledge that [the tutors] have is incredible and really useful."*



*"The general demonstrations showed cheaper options for performing experiments which would otherwise be expensive to access."*

*"I only have high praise for the entire day. The warm welcome at the door, and the excellent and knowledgeable presenters. The practicals had all been thoughtfully planned and set up. [The tutors] did a fantastic job of walking us through each one and explaining the little intricacies of how to do them in a lesson. I am very pleased to have attended – it was well worth the trip. Thank you so much."*

## Sustainability

Sustainability is increasingly embedded within our Physics professional learning, helping educators connect core scientific principles with real-world challenges such as climate change, renewable energy and the transition to a low-carbon future. We also develop affordable practical equipment, including a high-specification spectrometer costing around one quarter of the price of a basic commercial model and a £12 nanoprobe/oscilloscope. By helping schools construct, maintain and make better use of equipment - and by loaning specialist apparatus - we can extend the useful life of resources, reduce waste and improve equitable access to practical Physics. Our online and self-study courses also widened access to professional learning while reducing the travel, cost and environmental impact associated with face-to-face delivery.

### Sustainability

Building a better future through STEM education.



#### PEOPLE

Empowering learners and supporting education.



#### INNOVATION

Inspiring curiosity and driving STEM excellence.



#### PLANET

Promoting environmental responsibility and sustainable practices.



#### PARTNERSHIP

Working together for a stronger sustainable future.



#### IMPACT

Measuring impact to create lasting change.



## Technology

Throughout 2025/2026, the Technology Team continued to deliver a comprehensive programme of practical hand and machine skills-based professional learning courses, supporting the ongoing development of teachers' and technicians' knowledge, skills, and confidence.



**280**

Hours of  
combined  
professional  
learning



**56**

CPD units  
achieved



**24**

Teachers  
attending

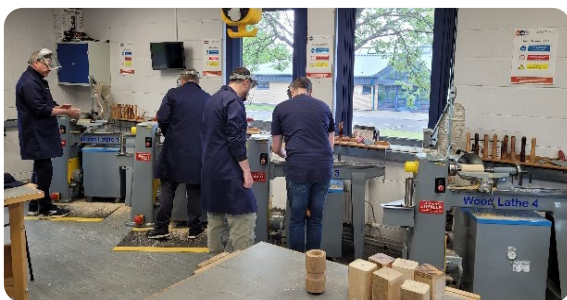


**5**

Courses  
(face-to-face)

The programme was designed to enhance professional competence and promote safe, effective practice in technology education. During this period, 56CPD units were delivered through the following two-day courses:

- Welding Skills
- Woodturning Skills
- Centre Lathe Skills
- Safe Use of Classroom Machinery
- SQA Practical Metalwork Skills



Woodturning course.

In addition, the Technology Team delivered a further 16 courses (174.5CPD units) as part of the Technician Portfolio of Professional Learning, providing technicians with a broad range of opportunities to develop their technical knowledge, practical skills, and professional expertise. This was achieved through the delivery of the following courses:

- Safe Use of Fixed Workshop Machinery
- Safe Use of Fixed Workshop Machinery – Refresher
- Maintenance of Fixed Workshop Machinery

The Technology Team also contributed to the STEM Technician Training Day by delivering taster workshop sessions in welding and woodturning. The welding sessions combined the use of virtual reality (VR) welding headsets with practical welding activities, allowing delegates to develop and practise core welding techniques in a safe, immersive environment before applying their skills in some real welding tasks. This blended approach showcased the effective integration of innovative technology with hands-on practical learning.

*“Lessons were pitched at the correct level, by knowledgeable and experienced staff. Atmosphere was very relaxed with no question unanswered. Learned many new skills that are fully achievable within a school environment. I left with a renewed confidence.”*

*“Excellent quality with regards to content and delivery. It was a good balance of practical and classroom-based teaching.”*

*“Lots of time spent welding! Hands on practice allowed me to develop my skills as well as increase my confidence both stick and MIG welding.”*

### Evaluation data

|                                                                              |                        |                 |
|------------------------------------------------------------------------------|------------------------|-----------------|
| <b>How would you rate the overall quality of this Professional Learning?</b> | Excellent – 77%        | Very good – 21% |
| <b>The PL was well organised and planned</b>                                 | Agree strongly – 88%   | Agree – 11.5%   |
| <b>The PL was relevant and useful</b>                                        | Agree strongly – 81.5% | Agree – 17.2%   |
| <b>The PL will impact my future practice</b>                                 | Agree strongly – 81.2% | Agree – 17.7%   |



### Courses/resources developed

During 2025/2026, the Technology Team continued to review and enhance its professional learning portfolio to ensure that courses and resources remained current, relevant, and aligned with developments in technology education.

- Updating the *Practical Metalworking* course to reflect changes to the SQA assessment project.
- Embedding virtual reality (VR) welding simulators into the *Welding Skills* course, enhancing the learning experience through a combination of immersive simulation and practical welding activities.
- Designing and delivering interactive taster workshops in welding and woodturning at the STEM Technician Training Day, incorporating both VR welding technology and live practical demonstrations.



VR welding.

### New for 2026/2027

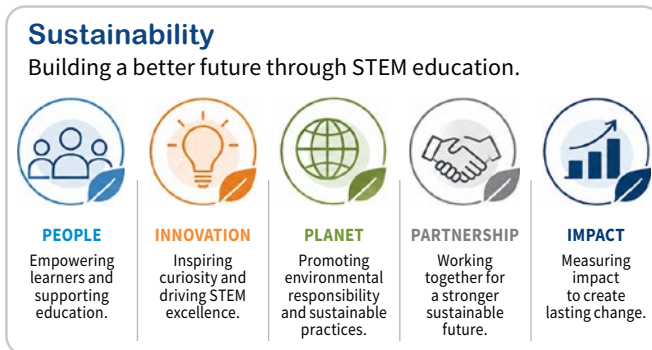
The Technology Team will continue to review, refine, and expand its programme of professional learning to meet the evolving needs of technology educators and technicians. Planned developments include:

- A redesigned *Hot and Cold Metal Forming* course, reconfigured into one-day professional learning sessions with updated practical activities and learning experiences.
- Development and delivery of the *Technology Probationer Residential* programme to include those early into career and those dual qualifying.
- Introduction of a new one-day *Tool Sharpening* course, focusing on the sharpening and maintenance of chisels, plane irons, and a range of woodturning tools to support safe and effective workshop practice.
- An *Abrasive Wheels Training* course for anyone who changes abrasive wheels or supervises the use of abrasive wheel equipment in the workplace. This course will include the safe selection, handling, mounting, inspection, and use of abrasive wheels.

### Sustainability

As part of the Technology Professional Learning programme, we remain committed to sourcing training materials and equipment in a cost-effective and environmentally responsible manner. Wherever possible, resources are reused, refurbished, or repurposed to maximise value, minimise waste, and reduce the environmental impact of course delivery.

During 2025/2026, the team further enhanced its training facilities by refurbishing two pillar drills and acquiring additional equipment to support course delivery, including sharpening machines, curing ovens, additional welding machines, and a range of smaller tools and accessories. Many of these resources were obtained through donations or by acquiring pre-owned equipment, extending the useful life of quality workshop resources while reducing unnecessary expenditure.



The team also expanded the use of virtual reality (VR) welding equipment within the professional learning programme, complementing practical workshop activities and providing an additional training resource to support the development of delegates' welding skills.

Sustainability remains a key consideration throughout the programme. Steel and other metals used during Practical Metalworking and welding courses are collected and recycled wherever possible, helping to minimise waste and ensure materials are managed responsibly.

Together with the refurbishment of workshop equipment and the reuse of donated and pre-owned resources, these initiatives support the delivery of high-quality professional learning while making effective use of available resources and reducing environmental impact.



Machine refurbishment.



## Cross-curricular activity

Science education does not sit neatly within individual subject boundaries, and neither does SSERC's support for the education community. During our 60th anniversary year, our cross-curricular professional learning continued to bring together expertise from across Biology, Chemistry and Physics, helping educators develop the confidence, practical skills and knowledge needed to deliver engaging, safe and high-quality STEM learning.



Activity during 2025/2026 placed particular emphasis on supporting educators at important stages of their professional journey and on extending expertise beyond individual subject specialisms. This included our substantial programme for newly qualified science teachers, *National 5 Laboratory Science* and dedicated *BGE courses for non-specialists*.

Alongside developing practical competence, these programmes provide valuable opportunities for collaboration, professional dialogue and peer support. By enabling educators to work across traditional subject boundaries and take new ideas and approaches back into their own settings, SSERC's cross-curricular activity helps strengthen professional practice and, ultimately, enrich the STEM learning experiences available to learners across Scotland.



**562.5**

Hours of  
combined  
professional  
learning



**112.5**

CPD units  
achieved

### Supporting Newly Qualified Teachers (Probationers)

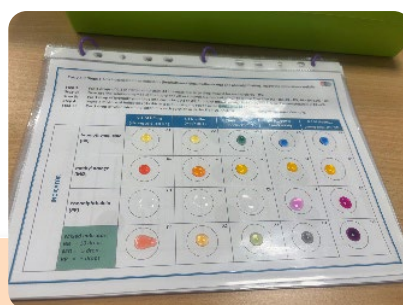
We supported two professional learning cohorts of *Newly Qualified Science Teachers* (Year 1 of teaching).

45 delegates in total attended a 2-day residential course based at SSERC HQ to support newly qualified teachers in Science to deliver safe, high-quality, hands-on practical STEM learning in the classroom/lab. There was coverage across a range of science curriculum organisers, allowing delegates to develop their skills in and out of their subject specialism which included aspects such as microscale Biology and microscale Chemistry.

The residential aspect of the course offered a great networking and peer engagement opportunity for delegates, creating opportunities to build new working relationships with other probationer teachers across the range of schools and Local Authorities in Scotland.

Feedback from delegates includes:

*"Evidence of impact was gathered through improved learner engagement during practical lessons, increased participation in class discussions and positive feedback from learners and colleagues. Formative assessment strategies such as questioning, exit slips and plenaries linked to the success criteria showed that learners were developing a stronger understanding of scientific concepts through practical application. Feedback from observations and professional dialogue with colleagues also highlighted improved clarity of instruction and organisation of practical activities. In addition, my own reflections showed increased confidence in planning practical lessons with a clear learning purpose and stronger links to learning intentions and success criteria."*



*"Since attending the course, I have implemented more experiments or tasks using everyday materials to make science accessible and to encourage learners to go home and experiment and show off what they have learned. I have used some of the Physics experiments as a hook to get learners interested and excited about what we are learning."*

*"The experience and opportunities offered by this course will allow me to bring new ideas about the implementation of practical skills and experiences within my school's curriculum. These outcomes will allow me to contribute more to the discussions around curricular improvement and, when looking specifically at Chemistry, will allow me to better contribute to discussions around skill development in BGE to benefit further levels of teaching."*

### National 5 Laboratory Science

As part of our 'broadening our portfolio' activity, we offered this two-day course with some additional online modules that aims to cover most of the practical work included in the *National 5 Laboratory Science* course. The course supported the development of the basic practical skills and knowledge needed for working in a laboratory: measuring, weighing and preparing compounds and solutions; and health and safety requirements. It also covered practical skills in microbiology, measuring radioactivity, chemical handling and laboratory instrumentation.

### BGE Physics for non-specialists – BGE Chemistry for non-specialists

Both of these one-day courses support BGE Chemistry and Physics experiences and outcomes outlined by Education Scotland. Each course was developed to support Science teachers who have limited specialist background in this subject and thus would benefit from some assistance in teaching.



Physics.

### Leadership in STEM Education

In the reporting period, we recruited 10 delegates to Cohort three of the *Leadership in STEM Education*, GTCS-accredited professional learning programme. This 12-month professional learning (PL) programme that provides leadership opportunities at the whole school level, developing the leadership skills and experiences of participants while seeking to improve the way in which STEM is delivered in their school. Over the course of the programme, participants received input across several areas, including National STEM policy, leadership in schools, Health and Safety, carrying out Self-evaluations of their centre and more.



Course participants also began completing a Critical Collaborative Professional Enquiry (CCPE) on a subject of their own, with direction and support from external academic professionals. They will present their findings at a showcase event at the end of the programme (June 2026) to the other cohort delegates. The Leadership in STEM programme is open to all primary and secondary practitioners from the classroom level through to senior management.



## Early Years and Primary (incorporating Digital Skills and Computing Science)

**The Early Years and Primary team have engaged with and provided professional learning (PL) for the following groups across the 2025/2026 reporting year:**

- Early Years Practitioners
- Nursery Teachers
- Primary School Teachers
- ASN Teachers (supporting learners working at Early, First and Second CfE levels)

Our professional learning opportunities are designed to keep pace with the evolving demands placed on early years practitioners, teachers and school leaders. Beyond inspiring and motivating, our focus is on building practical confidence - equipping staff with the skills, pedagogical understanding, and high-quality resources needed to deliver meaningful, hands-on STEM experiences.

By embedding enquiry, curiosity, collaboration, and critical thinking from the earliest stages, we support educators to create rich contexts for learning. This ensures every child develops the core capabilities required to thrive in an increasingly complex, technology-driven world.

### Professional learning delivered:

- *Inspiring a Sustainable Approach to STEM* (2025/2026)
- Open SSERC Meets
- Open Courses



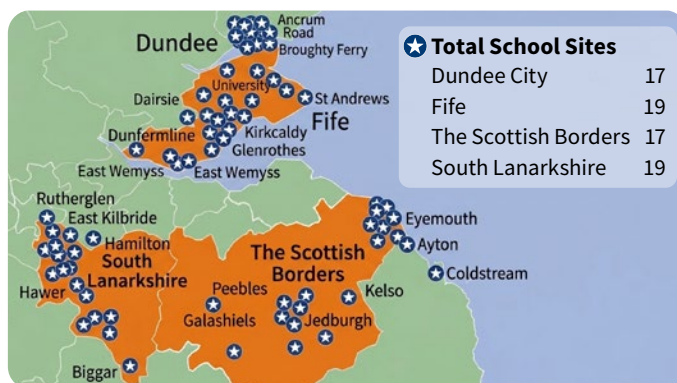
**2390**

CPD units covered across  
all PL (1 CPD unit =  
5 hours of study)

### Inspiring a Sustainable Approach to STEM

Our three-year programme, *Inspiring a Sustainable Approach to STEM*, aims to promote and support Science, Technology, Engineering, and Mathematics education across primary schools and wider learning communities. The initiative inspires practitioners to equip learners with the STEM knowledge, Digital Skills, and Computing Science capabilities required for the future workforce, encouraging early exploration of STEM pathways.

Now in Year 3, the focus across our 73 schools in the four initial Local Authorities – **Dundee, South Lanarkshire, Fife, and Scottish Borders** – has shifted from establishing foundations to demonstrating real, lasting impact, a clear legacy, and sustained capacity for all primary educators. Our SSERC STEM Associates (one within each participating school) have developed into confident STEM leaders, supporting colleagues and building capacity across whole school teams. This model creates an inclusive, supportive environment where practitioners – regardless of their starting point – feel fully equipped to deliver engaging, practical learning.



For learners, that impact is evident in the classroom. The shift toward practical, enquiry-based investigations has boosted engagement and heightened interest in STEM subjects. Hands-on activities connect directly to sustainability goals and core meta-skills, developing transferable capabilities such as problem-solving, critical thinking, and adaptability. By using STEM as a meaningful context for learning, we support learners to build essential skills for life while laying the groundwork for future learning pathways.



The programme's reach extends beyond the classroom to engage parents, carers, and the wider school community. As local STEM Resource Hubs take shape, these four authorities possess the leadership, resources, and momentum required to sustain a long-term STEM legacy.

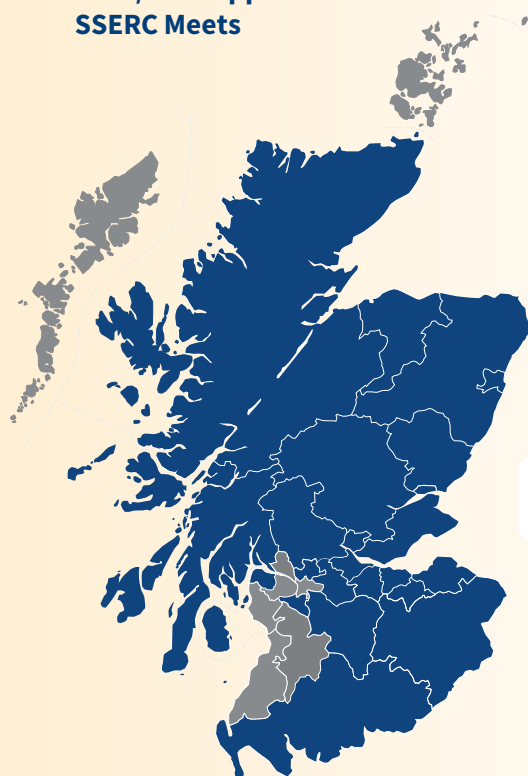
Building on this success, as we transition into the 2026/2027 academic year, we are excited to roll the programme out to our next cohort of Local Authorities: **South Ayrshire, North Ayrshire, Dumfries & Galloway, and North Lanarkshire.**



*"I am very lucky to be taking part in this course. Out of all the courses I have taken part in throughout my teaching career so far, Inspiring a Sustainable Approach to STEM has been the most engaging, fun and effective courses I have been a part of. I have loved every opportunity in Year 1 and 2 and I am excited for Year 3 and to see what the course has to offer myself, staff and learners within my school."*



## Scottish Local Authority (LA) 2025/2026 applications for SSERC Meets



● LAs that applied for SSERC Meets  
2025/2026 (27 LAs in total)

## SSERC Meets

SSERC Meets provide cost-effective, practical STEM PL designed to benefit both educators and learners across Scotland. Generously supported by the Edina Trust and the Scottish Government, these live MS Teams twilight sessions run at no cost to settings from 3.30 pm to 5.00 pm. Each registered setting receives a dedicated resource kit enabling multiple staff members to take part in hands-on activities during the session and reuse materials with learners afterwards. Supported by a suite of digital materials and opportunities for live discussion, participants can ask questions, share ideas, and access ongoing online resources.



## Delivered SSERC Meet PL courses

- ✓ **Understanding Simple Electrical Circuits** – Focused on the CfE Electricity organiser across First and Second Levels, exploring energy transfers and circuit building. Practitioners gained hands-on experience in battery safety, assembling and troubleshooting circuits, drawing component symbols, and investigating conductors and insulators.
- ✓ **The Weird and Wonderful World of Mosquitoes** – Delivered in partnership with Reece Labs (University of Edinburgh), offering insight into authentic scientific research, ecological roles, disease control (such as malaria prevention), and biological adaptation.
- ✓ **Assessment and Progression in Primary Science (APiPS)** – Led by Professor Sarah Earle, focusing on practical science tasks as purposeful assessment tools that nurture critical thinking, enquiry skills, and natural progression across CfE.
- ✓ **Elf on the STEM Shelf** – A festive, high-engagement session featuring practical investigations linked to a seasonal theme, spanning engineering challenges, physics concepts, and chemical reactions.
- ✓ **STEM Challenges for First and Second Level** – An exploration of progressive engineering challenges across CfE levels, highlighting skill progression and transferable problem-solving capabilities.
- ✓ **Marvellous Magnets** – Practical investigations into magnetic forces, compass construction, real-world applications, and designing magnet-based games for any educational setting.
- ✓ **STEM by the Book** – A showcase of the SSERC STEM by the Book resource, demonstrating how popular children’s literature serves as a rich context for primary STEM learning.



*“These sessions never disappoint, they are visual and hands on, we get to be the kids which is fun and better to learn hands on even as a teacher than being spoken at. This allows us to teach the lessons with actual experience and understanding of the activity. And the resources are provided which school are so lacking in when it comes to even the likes of a pencil never mind these amazing STEM resources provided to get us started.”*

## SSERC Meet figures 2025/2026



**27**

LAs covered through the open SSERC Meets



**17**

SSERC Meets delivered



**1018**

Delegates that attended these SSERC Meets



**634**

Schools supported



**975**

Applications





### Open courses

- BP Super ENTHUSE Partnership – Online Showcase Event
- PSTT/SSERC Outreach Event – Microscopy & Biodiversity
- PSTT/SSERC Science Day
- Nuffield Foundation Primary Science Event
- Great Science Share for Schools

### Open course reach 2025/2026



12

LAs covered through open courses



54

Schools supported



275

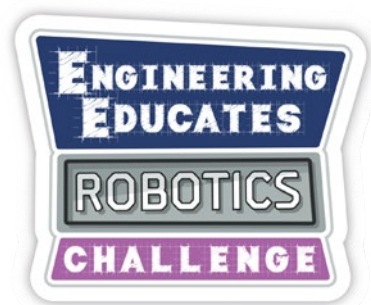
Delegates that attended open courses

*“The fact that all the equipment comes ready for use. With lots of attention as to the workload these are easy to follow activities that are engaging and suitable for the children.”*

### Strategic partnerships & outreach

#### Engineering Educates

SSERC is in the fourth year of our Engineering Educates partnership with the Science and Engineering Education Research and Innovation Hub (SEERIH) at the University of Manchester. SSERC has supported schools across Scotland with this campaign, engaging 61 schools with the Engineering Educates Robotics Challenge resources so far. Find out more about Engineering Educates [here](#).



#### Great Science Share for Schools (GSSfs)

SSERC continues to support and promote the [Great Science Share for Schools](#) campaign across Scotland. The campaign reached a milestone of more than one million registered learners globally. In January 2026 SSERC had a GSSfs article accepted for publication in the [Association for Science Education Primary Science journal](#).



The article reflected on the successes of the popular SSERC “live lesson” model - with SSERC supporting a group of learners from a local primary school to develop and broadcast a series of live science activities to schools across Scotland.



## Sustainability

The SSERC Early Years and Primary team is committed to modelling sustainability across every aspect of our professional learning. From reducing single-use plastics to utilising reusable, upcycled, and multipurpose materials, we ensure our practical resources are as environmentally friendly as possible.



SSERC Meet resource kits are distributed in recyclable cardboard packaging rather than plastic containers, and environmental sustainability is embedded as a core context across all workshop content. Furthermore, expanding our live online PL delivery allows us to provide high-quality, practical STEM support directly into Local Authority settings - extending our reach while significantly reducing travel and our overall carbon footprint.

## Looking ahead, what's next

We will continue to refine existing offerings and develop new professional learning to support early years and primary practitioners across Scotland. Look out for the following developments in the coming year:

- **Inspiring a Sustainable Approach to STEM** – Refreshing and enhancing workshop materials based on direct feedback and reflections from Year 1 and Year 2 Associates.
- **STEM by the Book** – Developing additional activity cards that explicitly link literacy to STEM contexts that cover all CfE levels.
- **STEM Context Planners** – Expanding our online bank of planners to highlight science as a rich context for learning while actively reducing planning bureaucracy for educators.
- **Early Years & Primary Resources** – Uploading a wide range of new member-exclusive practical resources and guidance.
- **Health & Safety Guidance** – Updating the Health and Safety page with refreshed FAQs, risk assessment support, links to current bulletins and practical classroom examples.
- **New In-Person Professional Learning** – Developing *The Science of the Honeybee* (launching May 2027), integrating Food Technology, Technology, and Environmental Sustainability.

*“What sets the SSERC Early Years and Primary team apart is their genuine understanding of what it’s like to stand in front of a class today. The team is remarkably knowledgeable, delivering highly engaging sessions packed with creative, practical ideas and excellent physical resources. Because every presenter brings real classroom context to their delivery, educators leave feeling genuinely supported, confident, and equipped with resources that seamlessly integrate into their daily practice.”*



## Digital Skills and Computing Science

Digital Skills and Computing Science (CS) are fundamental to the early years and primary curriculum across Scotland, equipping young learners with critical problem-solving and computational thinking capabilities. As national expectations evolve alongside the ongoing Curriculum Improvement Cycle, ensuring every setting can deliver high-quality, progressive digital learning is more vital than ever. However, practitioners continue to face complex, real-world barriers. Alongside time constraints and varying levels of staff confidence, schools must navigate the significant challenge of managing diverse digital hardware – from iPads and Android devices to Chromebooks and traditional laptops.



To bridge these gaps, SSERC's professional learning is built on absolute flexibility, creativity, and equity of access. We recognise that no two classrooms in Scotland look the same, and we are always willing to support and be highly creative in our delivery to meet every setting's unique needs. We actively adapt our workshops to seamlessly match the specific hardware available in a school, ensuring practitioners feel confident implementing what they have learned from our PL. We prioritise versatile, cross-curricular resources that include "unplugged" approaches, ensuring that computational thinking can be embedded effectively into wider learning without requiring additional technology or screen time.

Our approach connects this in person training directly with our resource support. To remove financial and procurement barriers, SSERC provides an equipment loan kit to all participants who attend the PL for a period of up to 16-20 weeks, allowing practitioners to trial and embed high-quality equipment directly in their classrooms. SSERC's commitment extends well beyond the initial PL session. Through dedicated support via MS Teams throughout the loan period, we provide educators with the space to share their experiences, reflect on the practical impact of the training, and plan sustainable future steps for their setting. By experiencing this positive impact first-hand, many schools have gone on to confidently invest in their own digital equipment, purchasing directly through SSERC, knowing exactly how to use it to its full potential.



**303.2**

CPD units covered  
across all PL  
(1 CPD unit = 5 hours  
of engaged PL)

### SSERC Digital delivered the following courses

| Courses 2025/2026            | Delegates attended |
|------------------------------|--------------------|
| Dash and Dot                 | 8                  |
| Introducing Indi             | 27                 |
| VEX Go                       | 23                 |
| Sphero Bolt                  | 28                 |
| Marty V2                     | 6                  |
| VEX 123                      | 9                  |
| Digital Xtra (using VEX 123) | 10                 |

Each of these sessions was run multiple times over the year, including trialling Saturday courses to alleviate teacher release time from class, as well as supporting a 16-school week loan of a class kit.

*"I'd say my confidence is sitting at a solid 8 out of 10 now! Before the course I knew the basics, but after actually getting hands on with VEX 123, I feel so much more comfortable. I understand how the robot works, how to use the coding cards and the programming app, and I can totally see how to build lessons that get the learners thinking, problem solving and having fun. The delivery of the lessons were great too!"*

This year, our Digital Skills and Computing Science PL calendar engaged 111 teachers representing 94 schools across 20 Local Authorities. This widespread participation demonstrates SSERC's capacity to deliver flexible, high-impact support across Scotland, equipping practitioners with the skills needed to ensure every learner gains access to outstanding digital and CS education.

## Digital Skills and Computing Science 2025/2026



**111**

Delegates that attended PL



**94**

Schools supported

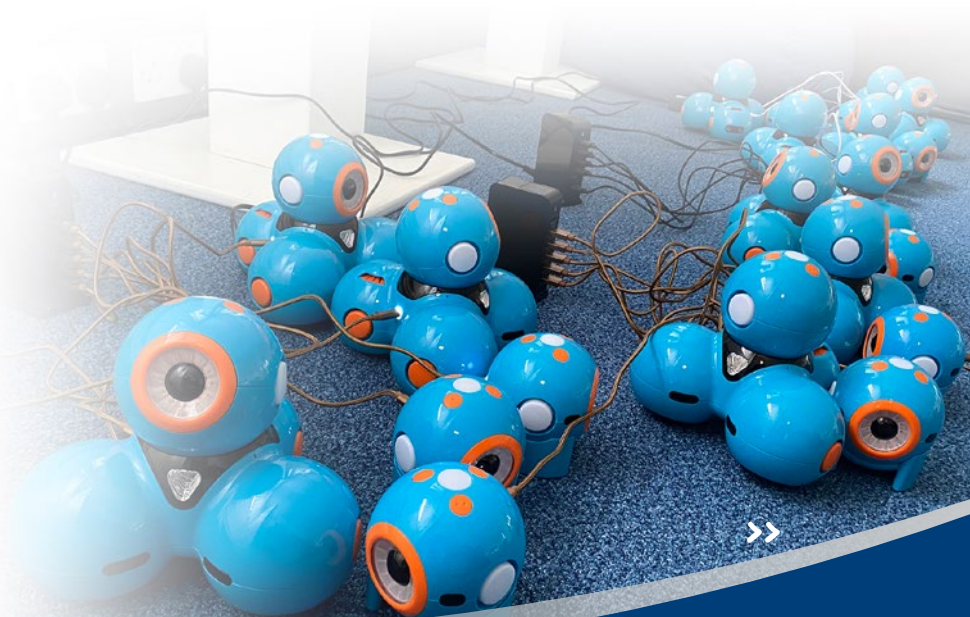


**20**

LAs covered

### Additional PL delivered

- ✓ **RAiSE Expo Event** – We ran two face-to-face workshops on ‘Simplifying Computing Science: Unplugged & Sphero indi’ to daytime delegates and evening delegates
- ✓ **Inspiring a Sustainable Approach to STEM** – Focussing on the VEX 123 resource, we covered from basic to advanced CS concepts, pedagogical approaches, and introduced the delegates to the VEX 123 block coding app. The final session covered creativity using the BBC Micro:bit V2.
- ✓ **STACS connect workshop (Robots and Physical Computing)** – An opportunity to share with primary and secondary teachers from the STACS community and schools across Scotland. Along with Graeme Robertson from Dens Road Primary school, SSERC Digital presented on the importance of robots and physical computing when teaching Computing Science.
- ✓ **Apple RTC (Everyone can create video with clips)** – Demonstrating ‘Clips’ on the iPad to create easy video content.
- ✓ **STACS Conference** – We had the opportunity to deliver 2 workshops at the STACS conference, considering how Physical Computing can be used to support learners and enhance engagement. Delegates were provided with evidence before being given the opportunity to explore resources such as Sphero BOLT, indi and VEX AIM.
- ✓ **Scottish Football Association** – We have had discussions with Motherwell FC, Heart of Midlothian and Dunfermline Athletic football clubs around working with their coaches to introduce computing science and digital skills to their communities. This has led to us working closely with St Johnstone through their programme Saints in the Community.



## Digital partnerships



Our close partnerships and collaborations with leading providers such as Sphero, VEX Robotics, and Robotical enrich our professional learning, giving Scottish educators direct access to cutting-edge technologies, tailored PL, and streamlined resource purchasing for their schools. Their confidence in choosing SSERC to champion their platforms is a testament to the trust they place in our nationwide reach, high-quality PL delivery, and ability to inspire classrooms across Scotland.

*“When we were at Dunfermline for the PL session, it was practical and exploratory, just like it would have been in the classroom. Fabulous resources, fabulous training, helpful! Loved every minute.”*

*“The Indi loan kit had a strong positive impact on our setting. It made early coding skills accessible and engaging for all learners, boosting their confidence and encouraging problem solving through hands on exploration. Learners were highly motivated, worked well together, and showed increased resilience when testing and improving their ideas. The kit also supported clear progression in Computing Science and helped me deliver more practical, enjoyable STEM learning experiences across the class.”*



## What's next

We will continue to expand, refine, and deliver innovative professional learning to support practitioners across Scotland. Key developments to look forward to in the coming year include **new in person Professional Learning Courses**:

### VEX AIM

Bringing artificial intelligence, computer vision, and machine learning into the primary classroom in an accessible, hands-on way. Featuring an omnidirectional chassis, interactive screen, and built-in AI vision sensor, this course explores how to introduce object recognition, colour detection, and autonomous navigation, progressing from simple button-coding to block-based VEX code algorithms.



### Makedo & BBC micro:bit V2

An immersive STEM journey designed to turn educators into master inventors. By combining the tactile world of Makedo cardboard construction with the digital capabilities of the BBC micro:bit V2, participants learn how to build structures and program them to react dynamically to light, sound, motion, and touch - turning simple cardboard into intelligent creations.



### Robotical Cog

Designed for early years and lower primary educators, this course introduces foundational computing, sequencing, and cause-and-effect thinking through Robotical Cog (created by the team behind Marty the Robot). Practitioners explore how Cog's interactive inputs, vibrant light displays, and playful sensors make abstract computing concepts visible, engaging, and directly applicable across early literacy and numeracy contexts.

## Programme & website enhancements

### Supporting the Inspiring a Sustainable Approach to STEM Programme

Continuing to enrich workshop materials, integrate digital skills and computing science, and support cohorts as the programme expands across participating Local Authorities.

### Resources and health & safety

Expanding both the practical resource hub and the dedicated Health & Safety section of the SSERC website with updated FAQs, classroom guidance, and risk assessment support for subscriber access.

## Sustainability

Environmental sustainability is embedded directly into our Digital Skills and Computing Science strategy. We prioritise sustainability across all practical delivery by using reusable, rechargeable devices and rechargeable batteries in all our resource sets and loan kits, reducing single-use battery waste.

The introduction of our new Makedo and BBC micro:bit V2 course actively promotes recycling in schools. By emphasising the reuse and upcycling of everyday cardboard packaging, the course encourages schools and their wider communities to get involved in local collection and donation networks – demonstrating that impactful, cutting-edge physical computing can be achieved using recycled materials.

### Sustainability

Building a better future through STEM education.



#### PEOPLE

Empowering learners and supporting education.



#### INNOVATION

Inspiring curiosity and driving STEM excellence.



#### PLANET

Promoting environmental responsibility and sustainable practices.



#### PARTNERSHIP

Working together for a stronger sustainable future.



#### IMPACT

Measuring impact to create lasting change.



# School technicians

## Aim

To raise the professional status of school technicians and promote the role they play in the education community in Scotland.

Technicians are at the heart of practical STEM education. Their expertise, dedication and professionalism ensure that learners have access to safe, engaging and high-quality practical experiences that bring learning to life. Beyond supporting the day-to-day delivery of the curriculum, technicians play a vital role in inspiring curiosity, supporting health and safety, developing skills and enabling innovation across the Scottish educational landscape.

SSERC remains firmly committed to supporting this essential workforce. Throughout the year, we have continued to invest in high-quality professional learning opportunities, helping technicians develop new skills, share best practice and respond to the evolving needs of STEM education.

Alongside this, we have strengthened our advocacy for the profession, championing the vital contribution technicians make to educational outcomes and promoting greater recognition of their expertise and impact. Through our ongoing programmes, resources and engagement with stakeholders, SSERC continues to work in partnership with technicians, ensuring they are supported, valued and empowered to thrive in their crucial role.

## PL courses for Technicians 2025/2026



**2685**

Hours of combined professional learning



**537**

CPD units achieved



**269**

Technicians



**28**

Technician specific PL courses

## School Technicians Professional Learning

For the 2025/2026 reporting year, SSERC delivered the following courses for technicians.

| Professional Learning courses                      | Delegates |
|----------------------------------------------------|-----------|
| 2 x Chemical Handling                              | 24        |
| 1 x Electrical Safety and PAT                      | 6         |
| 1 x Intermediate Physics                           | 7         |
| 1 x Leadership in Technical Support                | 4         |
| 2 x Maintenance of Fixed Workshop Machinery        | 14        |
| 3 x Safe Use of Fixed Classroom Machinery          | 18        |
| 9 x Safe Use of Fixed Workshop Machinery           | 54        |
| 2 x Safe Use of Fixed Workshop Machinery Refresher | 12        |
| 3 x Safety in Microbiology for Schools             | 30        |
| 1 x Senior Phase Chemistry for Technicians         | 12        |
| 1 x STEM Technician Training Day                   | 40        |
| 2 x Sessions at ASE Conference Nottingham          | 48        |

*"I loved the microscale Chemistry - using as a learner it was easy to understand the method and found it just (if not more) impactful than traditional practices used. As a technician this will be useful to reduce waste, cut costs, save storage and reduce exposure to harmful chemicals."*



## Leadership in Technical Support

We continue to run the *Leadership in Technical Support* course having just completed cohort two, with cohort three standing in the wings ready to start their journey next session. This year-long professional learning opportunity will stand participants in the right stead for leading a technician team through the ever-changing academic environment. The course remains graded at SCQF Level 9 with 11 credits.

## The School STEM Technician

We continue to publish the School STEM Technician bulletin on our website. Issues 8 and 9 were published this academic year with input from the wider technician community, as well as the usual mix of information and safety updates. It remains a very popular download for the organisation.



## ASE Annual Conference in Nottingham 2026

SSERC was in attendance again at the January National ASE Conference in the University of Nottingham. This year we ran two sessions specifically for technicians: Sensational Seaweed and Microscale Biology. Both sessions were hands-on practical sessions, with almost 50 delegates attending both sessions.

## STEM Technician Training Day

SSERC's annual STEM Technician Training Day was held in November at SSERC HQ. 40 delegates were in attendance. Similar to last year, 7 sessions were offered for 4 different 1 hour slots, with additional opportunities for networking.

### Sessions on offer

|                                          |                                                 |
|------------------------------------------|-------------------------------------------------|
| <i>Building Microscale Chemistry Kit</i> | <i>Centre Lathe turning</i>                     |
| <i>Using Microscale Chemistry Kit</i>    | <i>Basic Electrical Principles</i>              |
| <i>Eye Dissection</i>                    | <i>CO<sub>2</sub> Probes and Photosynthesis</i> |
| <i>Woodturning</i>                       |                                                 |

*"I enjoyed all the sessions I undertook today; basic circuits and electrical theory was most helpful as that is my weakest profession area."*

What our delegates say:

*"The hands-on practical aspects were invaluable, but so was the theory too!"*

*"Just wanted to use the opportunity to express my high appreciation for the wonderful programme delivered on the course! I wanted to share that the first thing I have been requested to prepare after returning to my school was "Ammonia Fountain" demo. I wouldn't be able to do this with confidence before attending the course. Despite all the available protocols and videos, only at the course I was able to learn the method along with all the useful tips for the gas collection and building the apparatus. The results are two very successful demonstrations for the classes this week and a very positive feedback from the teachers."*

*"I enjoyed the atmosphere and it was a nice group of people on the course. The course facilitator made it clear and easy to follow. Both days were informative and enjoyable."*



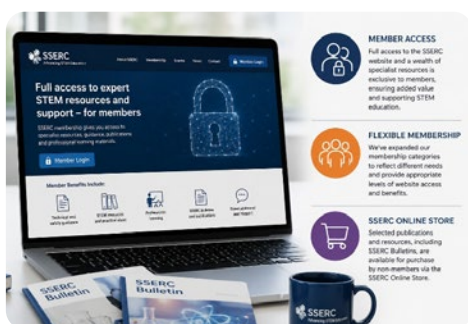
# Outreach work

## Aim

To increase capacity and capability to offer a greater volume and range of Professional Learning via SSERC accredited centres and the use of digital communication and technology.

SSERC continues to extend its reach across Scotland and beyond, ensuring that high-quality STEM support, resources and opportunities are accessible to educators and learners wherever they are located. During our 60th anniversary year, outreach activities continued to grow through the SSERC Accredited Centre network, SSERC TV, SSERC Online Learning, and increased engagement with the extensive resources on the SSERC website.

This wider reach also reflects SSERC's growing profile beyond Scotland, including emerging international interest in our programmes, expertise and approaches to STEM education. Positive feedback and strong usage figures continue to demonstrate the value of this work in widening access to professional learning, specialist advice and STEM enrichment opportunities.



## SSERC website

SSERC's website continues to be a key route through which we provide specialist STEM support, guidance and resources to the education community. During the 2025/2026 reporting year, we strengthened the link between website access and SSERC membership, ensuring that membership provides clear and demonstrable added value.

While selected information remains publicly available, full access to the SSERC website and its extensive range of specialist resources is reserved for members. This includes access to technical and health and safety guidance, practical STEM resources, professional learning materials and other specialist content developed by SSERC's teams. Maintaining this member-focused approach ensures that the expertise and resources developed by SSERC form a tangible and valued part of the membership offer.

During the year, we also expanded our range of membership categories, reflecting the increasingly diverse organisations and individuals engaging with SSERC across Scotland, the wider UK and internationally. Different membership options now provide appropriate levels of website access and benefits, allowing us to broaden our reach while protecting the value associated with full membership.

Alongside this, we have begun to make selected SSERC publications and resources available to non-members through the SSERC Online Store. This includes access to individual editions of the SSERC Bulletin, providing those outside our membership community with the opportunity to purchase specific resources while retaining enhanced access as a core benefit of membership.

Together, these developments are helping SSERC to achieve an appropriate balance between widening access to our expertise and maintaining a strong membership proposition. They also support our wider commercial ambitions by creating new routes through which organisations and individuals can engage with SSERC, generating income that can be reinvested in our services and in supporting STEM education and the learner journey.



SSERC TV

We continue to grow and expand the range of content available on the channel with the introduction of YouTube Shorts. A number of Shorts have been uploaded this year with a total of 9759 views.



|                                                               | Views       | Watch time (hours) ↓ |
|---------------------------------------------------------------|-------------|----------------------|
| Total                                                         | 9,759       | 28.4                 |
| 0:45 Have a great 2026! If you're an educator then think ...  | 4,801 49.2% | 7.1 25.2%            |
| 1:41 Invertase and the science of Crème Eggs! 🍷               | 979 10.0%   | 6.3 22.1%            |
| 1:20 Pumpkinberry?! 🍁 Happy Halloween from the SSE...         | 1,111 11.4% | 5.0 17.5%            |
| 1:24 Sixty years of SSERC! 🎂🎁                                 | 1,039 10.7% | 4.6 16.2%            |
| 1:25 As the days get shorter, this year the plants are put... | 957 9.8%    | 3.3 11.7%            |
| 0:45 Very cultured! Take a look at our Safety in Microbio...  | 630 6.5%    | 1.8 6.2%             |
| 0:11 Augmented reality welding system                         | 224 2.3%    | 0.3 0.9%             |
| 0:10 Mouse & Cheese                                           | 6 0.1%      | 0.0 0.0%             |

Channel performance

From 1st April 2025 to 31st March 2026 the channel had:

|       |                    |             |
|-------|--------------------|-------------|
| Views | Watch time (hours) | Subscribers |
| 37.8k | 752.2              | +91         |

| Content type | Views ↓      | Watch time (hours) |
|--------------|--------------|--------------------|
| Total        | 37,834       | 752.2              |
| Videos       | 27,998 74.0% | 722.1 96.0%        |
| Shorts       | 9,759 25.8%  | 28.4 3.8%          |
| Live stream  | 77 0.2%      | 1.8 0.2%           |



## Top performing videos

|                                                                                                                              | Views         | Watch time (hours) ↓ | Subscribers |
|------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|-------------|
|                                                                                                                              | <b>37,834</b> | <b>752.2</b>         | <b>91</b>   |
|  Secret Message Using Water                 | 4,080 10.8%   | 80.1 10.7%           | 3 3.3%      |
|  Immobilised Yeast                          | 3,184 8.3%    | 67.2 8.9%            | 12 13.2%    |
|  Making a Lighthouse Model                  | 1,719 4.5%    | 56.6 7.5%            | 2 2.2%      |
|  Secret Message                             | 1,662 4.4%    | 54.6 7.3%            | 4 4.4%      |
|  Eye Dissection                             | 1,477 3.9%    | 45.7 6.1%            | 3 3.3%      |
|  Immobilised Algae                          | 1,282 3.4%    | 29.6 3.9%            | 2 2.2%      |
|  Micro Technique 11 E coli smear            | 486 1.3%      | 18.6 2.5%            | 1 1.1%      |
|  Measuring the rate of photosynthesis       | 701 1.9%      | 18.0 2.4%            | 1 1.1%      |
|  Micro Technique 9 Vital stain S cerevisiae | 453 1.2%      | 14.7 2.0%            | 3 3.3%      |
|  Chromatography with Skittles               | 659 1.7%      | 12.4 1.7%            | 0 0.0%      |

## Top performing playlists

|                                      | Views from playlist ↓ | Watch time (hours) |
|--------------------------------------|-----------------------|--------------------|
| <b>Total</b>                         | <b>2,269</b>          | <b>752.2</b>       |
| Microbiological Techniques           | 1,589 70.0%           | 104.0 13.8%        |
| Primary                              | 187 8.2%              | 261.7 34.8%        |
| Secondary Technology                 | 125 5.5%              | 19.4 2.6%          |
| Secondary Chemistry                  | 84 3.7%               | — —                |
| Secondary Biology                    | 71 3.1%               | 229.6 30.5%        |
| Physics Videos for Technicians       | 59 2.6%               | 24.3 3.2%          |
| Introductory Physics                 | 37 1.6%               | 8.3 1.1%           |
| Understanding Electricity SSERC Meet | 21 0.9%               | 0.5 0.1%           |
| Tech_meets                           | 17 0.8%               | 5.6 0.7%           |
| Secondary Physics                    | 12 0.5%               | 39.1 5.2%          |

## Views by geography

Amount of views per city

| Cities                         | Views ↓       | Watch time (hours) |
|--------------------------------|---------------|--------------------|
|                                | <b>37,834</b> | <b>752.2</b>       |
| London, UK                     | 273 0.7%      | 1.1 0.2%           |
| Hong Kong                      | 121 0.3%      | 3.3 0.4%           |
| New York, NY, USA              | 24 0.1%       | 1.6 0.2%           |
| Dublin, Ireland                | 23 0.1%       | 0.8 0.1%           |
| Overland Park, KS, USA         | 16 0.0%       | 0.4 0.1%           |
| Edinburgh, UK                  | 15 0.0%       | 0.1 0.0%           |
| Fishers, IN, USA               | 14 0.0%       | 0.3 0.1%           |
| Ayer Lanas, Kelantan, Malaysia | 14 0.0%       | 0.2 0.0%           |
| Perth WA, Australia            | 13 0.0%       | 0.4 0.1%           |
| Chennai, Tamil Nadu, India     | 11 0.0%       | 0.0 0.0%           |

## Amount of views per country



**8612**

United States  
(93.1 hours)



**7000**

United Kingdom  
(161.8 hours)



**2319**

India  
(47.9 hours)



**312**

South Africa  
(13.2 hours)



**307**

Hong Kong  
(10.4 hours)



**113**

Germany  
(1.0 hour)



**159**

Australia  
(1.9 hours)



**130**

Netherlands  
(0.5 hours)



**87**

Canada  
(0.5 hours)



**69**

Ireland  
(1.6 hours)





accreditedcentre

## Professional Learning at SSERC Accredited Centres

The SSERC Accredited Centre Programme continues to allow approved organisations, colleges, Local Authorities, and training providers to deliver selected SSERC professional learning courses locally while maintaining SSERC quality assurance standards. It is a way for our accredited partners to offer professionally recognised STEM-related training that is credit rated against the Scottish Credit and Qualifications Framework (SCQF).

### SSERC Accredited Centres



**25**  
Courses  
delivered



**140**  
Delegates



**398.5**  
CPD units of  
Professional  
Learning



**1992.5**  
Hours of  
combined  
Professional  
Learning

There are currently 9 centres who offer SSERC courses that are credit-rated and levelled on the SCQF across many areas of Scotland. This helps to remove the geographical barrier to meaningful professional learning. We continue to see interest from other parties in joining the programme.

We increased the number of courses on offer this year by adding Safe Use of Fixed Classroom Machinery (2 SCQF points at Level 5).

Within the last year, SSERC accredited centres have generated the following stats.

| Professional learning course                       | Delegates |
|----------------------------------------------------|-----------|
| 3 x Electrical Safety and PAT                      | 10        |
| 1 x Introductory Physics                           | 5         |
| 1 x Intermediate Physics                           | 7         |
| 1 x Maintenance of Fixed Workshop Machinery        | 7         |
| 5 x Safe Use of Fixed Classroom Machinery          | 23        |
| 3 x Safe Use of Fixed Workshop Machinery           | 13        |
| 2 x Safe Use of Fixed Workshop Machinery Refresher | 5         |
| 5 x Safety in Microbiology for Schools             | 39        |
| 4 x Safety in Microbiology for Schools Refresher   | 31        |

## Expanding the SSERC Online Store

During the reporting period, SSERC continued to develop its online retail offer, broadening the range of resources available beyond our traditional publications. Reflecting this expansion, **the SSERC Online Book Store was renamed the SSERC Online Store**, providing a more flexible platform through which we can make an increasing range of STEM resources available to members and the wider education community.

Alongside SSERC STEM Bulletins, *STEM by the Book* resources and our *Ten Top Experiments* series, the store now includes a growing selection of physical STEM resources and science kits. This development represents an important step in extending access to SSERC expertise and practical resources beyond the membership-only areas of our website.



### Expanding the SSERC Online Store

During this reporting period, we broadened our online offer beyond publications, adding science kits and a growing range of STEM resources. **The SSERC Online Book Store is now the SSERC Online Store** – your source for STEM resources, books and science kits.



The expansion also supports SSERC's wider commercial ambitions by creating an additional route to generate income from our expertise, publications and specialist resources. Importantly, income generated through activities such as the Online Store can be reinvested in the organisation, helping SSERC to continue developing high-quality STEM support, resources and opportunities for educators and learners.

Looking ahead, the **SSERC Online Store** provides a platform from which we can continue to expand our range of publications, practical resources and STEM products, complementing the enhanced benefits available through the different categories of SSERC membership.

## SSERC Online Learning



During the reporting period, **SSERC Online Learning** continued to develop as an important part of our professional learning offer, providing educators with flexible access to high-quality STEM professional learning wherever and whenever it suits them.

The platform complements SSERC's face-to-face and live online professional learning by offering self-directed courses that can be completed at a pace appropriate to the individual learner. This flexible approach helps extend the reach of SSERC beyond those able to attend scheduled courses, supporting educators across Scotland, the wider UK and, increasingly, internationally.

The continued development of SSERC Online Learning also supports our ambition to make greater use of our specialist expertise and digital resources. By converting elements of our professional learning into accessible online formats, we can reach a larger audience while maintaining the quality and practical relevance associated with SSERC provision.

Our list of online self-study opportunities includes, but is not limited to:

- *An Introduction to Safety in Microbiology*
- *Satellites*
- *Practical Support for the National 5/Higher Chemistry Assignments*
- *Immediate Remedial Measures*
- *Embodied Learning: self-study course*

Online Learning also contributes to SSERC's wider commercial and income-diversification ambitions. Income generated through course participation can be reinvested in the organisation, supporting the continued development of professional learning, resources and services that ultimately benefit STEM educators and learners.

Looking ahead, we will continue to expand the range of courses available through **SSERC Online Learning**, providing an increasingly important route for extending our reach, supporting different categories of membership and strengthening the sustainability of SSERC's professional learning offer.



# Evaluation activity

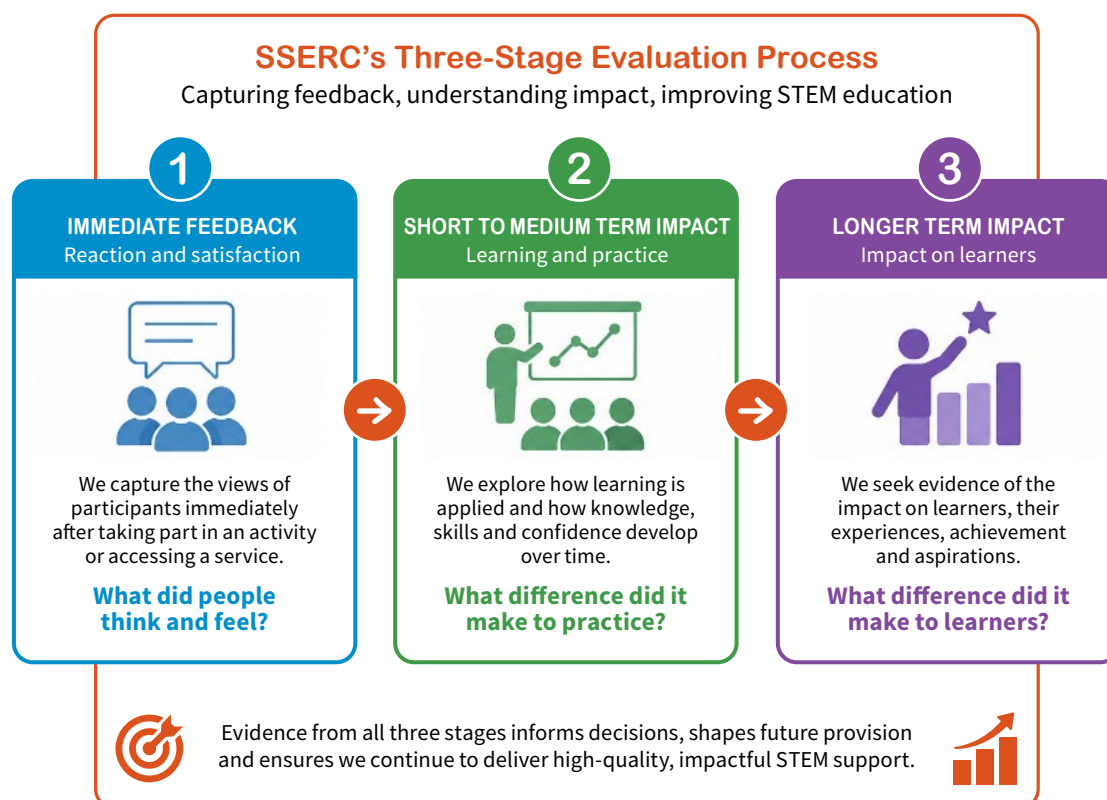
## Aim

To use evaluation data to influence the direction of all SSERC workstreams and publish using various channels, e.g. website, academic journals, social media.

As SSERC celebrated its 60th anniversary in 2025, the organisation remained committed to understanding and demonstrating the impact of its work on educators, learners and STEM education more broadly. Robust evaluation and performance evidence continued to play a central role in informing service development, demonstrating value to funders and stakeholders, and ensuring that activities remain focused on improving learner outcomes.

SSERC's established three-stage approach to impact evaluation enables us to capture immediate feedback, longer-term changes in professional practice, and the resulting impact on learner experiences and achievement. The continued collection and analysis of impact and performance evidence ensure that SSERC can demonstrate the effectiveness of its work while supporting continuous improvement across all areas of activity. We also conduct **anonymised equality monitoring** to ensure that our programmes are inclusive, equitable, and accessible to all participants.

SSERC's corporate three-step evaluation process is designed for seamless application across early years and primary practitioners, secondary teachers, and technicians. This single, unified approach goes beyond measuring the immediate quality of professional learning; it evaluates the wider impact on individual delegates, their colleagues, and, most importantly, the learners in their settings.





SSERC is proud to have received an extension of our GTCS accreditation, reaffirming our role as a trusted national provider of professional learning. Grounded in the Standard for Career-Long Professional Learning, this extension reflects our sustained alignment with national standards and our dedication to supporting teachers at every stage of their careers. Through our PL, we enable educators to deepen their subject knowledge, adopt innovative classroom practices, and build rich, enquiring learning environments for learners nationwide.

## The Inspiring a Sustainable Approach to STEM Programme

The implementation of the Reflective Action Plan within the Inspiring a Sustainable Approach to STEM primary programme has proved transformative. This living document actively captures the journey of change across participating schools, driving the strategic planning and implementation of consistent, coherent approaches to STEM across actively engaged Local Authorities.

A critical factor in the success of this process has been the close, collaborative working relationship between the SSERC STEM Lead and Local Authority STEM Officers. Together, their shared leadership and ongoing guidance have ensured that associates and schools are fully supported to reflect, set strategic goals, and embed lasting change.



Through the qualitative narrative gathered in the Reflective Action Plans, SSERC gains a real-time understanding of the progress made by SSERC STEM Associates, their colleagues, and their wider school communities. The data demonstrates a clear shift: STEM is increasingly being embedded as a context for learning, acting as a vehicle to deliver interdisciplinary connections across the primary curriculum. By establishing a shared direction across schools and Local Authority teams, the reflective action planning process is ensuring that high-quality, sustainable STEM education becomes a consistent reality for learners in those authorities.

### What our delegates say...

"We used the activities to host a STEM family learning event. The feedback from parents was overwhelmingly positive – it was fantastic to see parents learning and experimenting right alongside their children."

"Please find attached my attempts at the activities from the beginners' satellite course. Certainly, learned a few things and even used activity 1 with my N5, space and satellites are a topic I've always struggled to bring to life, and this certainly helped. I will be having a go at some of the more hands-on activities when times allows! Thanks for putting these resources together."

"It has impacted learners through my continued teaching of, and updated methods of, safe working practices and helped me to plan tasks in a way to increase motivation, engagement and progression."

"Learner attainment has increased because we can now offer N5 Metalwork in our department. Changes have also been made to the S3 course to add more detailed turning. I am now able to better organise the workshop and segments of learning, this has streamlined lessons more as I can now convey with more confidence what operations I want learners to perform."

"The SSERC evaluation process has been very helpful in supporting my personal and professional development. It encouraged me to reflect critically on how professional learning can directly impact classroom practice and learner experiences."

"This programme has been the most impactful PL I have experienced throughout my teaching career. Not only has it enhanced my knowledge, skills and teaching practice, but it has had a lasting impact on our school, the community and, most importantly, the learners. It has helped me transform STEM learning and teaching across the school and I will continue to drive this forward next year and the years to come. The support from SSERC staff has been amazing throughout and I feel privileged to be part of this programme."

"I only have high praise for the entire day. The warm welcome at the door, and the excellent and knowledgeable presenters. The practicals had all been thoughtfully planned and set up. The presenters did a fantastic job of walking us through each one and explaining the little intricacies of how to do them in a lesson. I am very pleased to have attended – it was well worth the round trip from Thurso. Thank you so much."

# Advisory Service

## Aim

To further develop and promote the Advisory Service.

Over the year the SSERC Advisory Service has continued to consolidate and further expand both its provision and reach.

### Key functions

- Specialist health and safety advice for schools, colleges and Local Authorities.
- Unlimited access for core members to specialist advisors in Primary Science, Biology, Chemistry, Digital Skills, Physics, Technology, Technician Services and health and safety.
- Guidance and compliance advice for radiological health and safety legislation through our Radiation Protection Advisory service.
- Free online management of health and safety courses for Curriculum Leaders.
- Other face-to-face and digital specialist health and safety courses, including radiological protection, which are heavily subsidised or free.
- Access to the members' area of the SSERC website – curriculum support materials, health and safety advice and resources e.g. model risk assessments for both specific subject and whole school activities.
- Recommendations on equipment and design of specialist accommodation.
- Free consultancy and technical information.
- Apparatus testing for safety, performance and conformity with standards.
- Free health and safety courses for Initial Teacher Education (ITE) learners.

### SSERC Advisory personnel

The training of our Education Officer (Physics and RPA) to become a Radiation Protection Adviser (RPA), is ongoing and it is anticipated that she will achieve RPA status during the coming year. Our Biology advisor has just started a NEBOSH Diploma in Occupational Safety and Health. We have a new Physics advisor starting in August and it is anticipated that he will undertake appropriate health and safety training in the next year.

### SSERC Advisory Service

While most of our advice is accessed at will by members via the website, more complicated matters require a more personal approach by phone, email or the enquiry form on the website. Over the past year, the Advisory Service has dealt with over 2,000 enquiries across a broad spectrum of both curricular and non-curricular areas.

### HSE inspections

There have been no further inspections of specific areas in schools from the HSE but we have continued to support those establishments that were inspected to help them address any issues that were raised in the past round of inspections.



## Publications & advice

The Advisory Service continues to contribute to the various SSERC publications, especially the STEM Bulletin and the School STEM Technician Bulletin as well as having its own dedicated Advisory Service Bulletin. These can all be accessed at [Publications – SSERC](#).

Recent articles have included guidance on: purchasing suitable lasers, Fume cupboards, keeping radioactive sources and many more.

Over the last year we have published new guidance on health and safety for home educators, as we reach out to that sector, and also for learners with Additional Support Needs (ASN).

We have also updated several other guidance documents and a revision of the guide to Laboratory Design will take place over the summer: in particular to address the issues of schools using (and storing) butane burners and the implications of the adoption of the Passivhaus standards across the estate. We now have a health and safety updates page as a part of the Advisory section of the website. There is a table of any changes in guidance on the website and a separate table with links to all the health and safety articles published in the Bulletin over the last 20 years.

## Advisory related courses

A range of health and safety courses was delivered to ITE learners in Aberdeen, Napier, Edinburgh, Stirling and Highlands and Islands Universities. This has further developed our strong working relationships with ITE institutions in Scotland to support the safe delivery of practical STEM learning by educators at the gateway of the profession. A typical comment was

*“It was good to meet the SSERC staff and I will feel more confident in approaching SSERC regarding H&S issues in the future.”*

The online, self-study course that was requested for Glasgow University learners is still running and we have adapted that to create a general ‘Introduction to Health and Safety’ course on our online-learning platform. We have made this available for free to all users and it has been well-received.

We are now in the process of producing a more in-depth, Managing Health and Safety course for the same platform.

There was also a live, three-part online health and safety course run in November for teachers and technicians. A typical comment was

*“I found the scenarios very useful as it gave me an understanding of how to look at situations and assess the H&S aspect of them and how to prevent accidents/incidents which could impact the department.”*

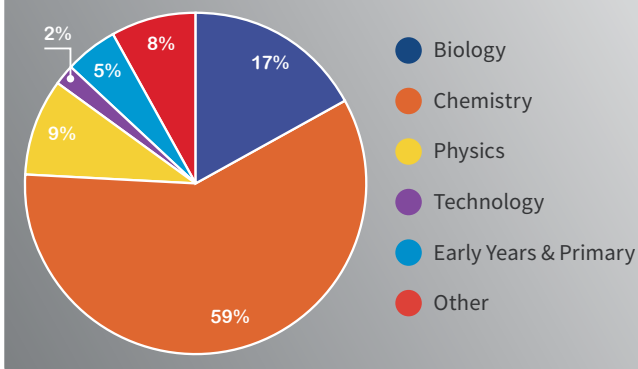


### Health and safety website pages 2025/2026

The health and safety home page got nearly 34% of all the traffic to the website and the top 3 website pages on the whole site were health and safety related.

Bearing in mind that unlike most of our content, these pages are viewable by members only, this is another strong performance. The increase over last year probably represents the decision in April to restrict access to our resource pages.

Health and safety website hits 2025/2026



### In-house health and safety

SSERC has continued working with Croner (our external HR and safety partner), mainly via their BrightSafe health and safety management system, to help us with aspects of in-house health and safety. With their assistance we have continued to review and develop our practices and documentation, in particular, implementing a more formalised programme of staff development in health and safety. We now have monthly health and safety updates for Staff after our regular Monday Staff meeting as well as an annual inspection from Croner.

### Looking forward

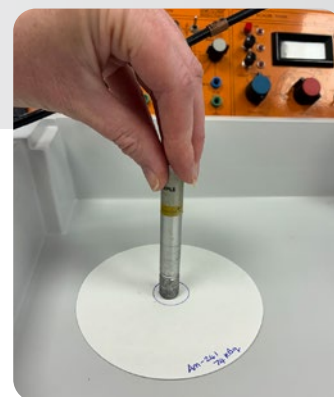
We will continue to support our members with advice relating to all aspects of safety in schools and colleges and provide guidance to ensure that practical based STEM activities can once again become a core part of the curriculum at all stages.

We will further expand our self-study professional learning offerings and examine what additional support we can provide to other practical-based curriculum areas.



## Radiological protection team update

In 2025/2026 following new information that came to SSERC's attention regarding the construction of some sealed radioactive sources used in Scottish schools, SSERC took the decision to move from a wet wipe to a dry wipe for leak tests, which resulted in significant changes to the procedure. This update in procedure was a large focus of the work done during this period, and has resulted in:



- ✓ Parts of our guidance documentation needing to be completely rewritten.
- ✓ New equipment being ordered and tested.
- ✓ New resources required for the leak test being produced and a new instruction guide for schools being created on how to make this item themselves.
- ✓ A new video of the procedure being filmed.
- ✓ Our training courses needing updating.
- ✓ A strategy required to be devised and implemented for how to mitigate the effect of the changes on schools.



This guidance update has also led to an increase in the already large volume of enquiries our radiation protection team deals with as part of the SSERC advisory service. In addition there was good demand for the training courses we ran in 2025/2026 both online and face-to-face.

Our training and advice are well received by the schools we support and our work on the new leak testing procedure has been appreciated.

"The mention of the different jobs where radioactive sources might pop up was great and I have added to my planning for next year."

"The session about how to conduct safety measures when handling radioactive sources. It is so useful because I was so worried at first to work with the radioactive source and after attending the session I feel more confident to work with the radioactive because I know what to do in term of the safety aspects."

"The hands-on labs were of great use to me, the Physics area of work for me in school is not my speciality. This gave me the confidence to use equipment I don't normally use."

### What our delegates say...

"The section on leak testing was particularly helpful as the procedure has significantly changed recently. It was helpful to see the new procedure being carried out in the video."

"The entire course was very well presented and very informative."



# STEM Engagement

## Aim

To increase the breadth and impact of the STEM engagement offering.

During SSERC's landmark 60th anniversary year, our STEM engagement and enrichment activities continued to inspire learners and strengthen connections between education, industry and the wider STEM community across Scotland. Through programmes such as the Young STEM Leader Programme, the STEM Ambassadors in Scotland Hub, learner research placements and a wide range of partnership initiatives, SSERC continues to provide opportunities for learners to experience STEM beyond the classroom.

Positive feedback and strong participation levels continue to demonstrate the value and impact of these activities in raising aspirations, developing skills and broadening participation in STEM. Despite ongoing financial pressures across the education sector, demand for high-quality STEM engagement opportunities remains strong, reinforcing the importance of sustained investment in this area and SSERC's continuing contribution to Scotland's STEM education, skills, innovation and net zero ambitions.

## STEM Ambassadors in Scotland

### Overview

The STEM Ambassador programme across Scotland has contributed to a range of amazing projects in the last year, including the Solarpunk Island Innovation Project with Daydream Believers, the Go Construct STEM Ambassador scheme funded SSPP Teacher Education (see SSPP section) and the beginning of the Eco-orbit Challenge funded by ESERO (see ESERO section). It also supported a range of SSERC programmes, including Young STEM Leaders, Research Placements, primary Digital Xtra, primary ISAS programme and secondary PL.



However there have been challenges in the last year, with STEM Learning beginning a year-long task to update the digital platform. This is where the majority of STEM Ambassador related tasks take place and the disruption not only affected SSERC staff but also our users – namely STEM Ambassadors and Educators. This has led to a slowdown in growth of the programme, but we have managed to offer consistent and reliable support throughout this transition.

### April 2025 - March 2026



**1408**  
Active STEM  
Ambassadors



**26770**  
Volunteer hours  
were completed



**25.3%**  
of Primary  
schools engaged  
with the  
programme



**76.4%**  
of Secondary  
schools engaged  
with the  
programme



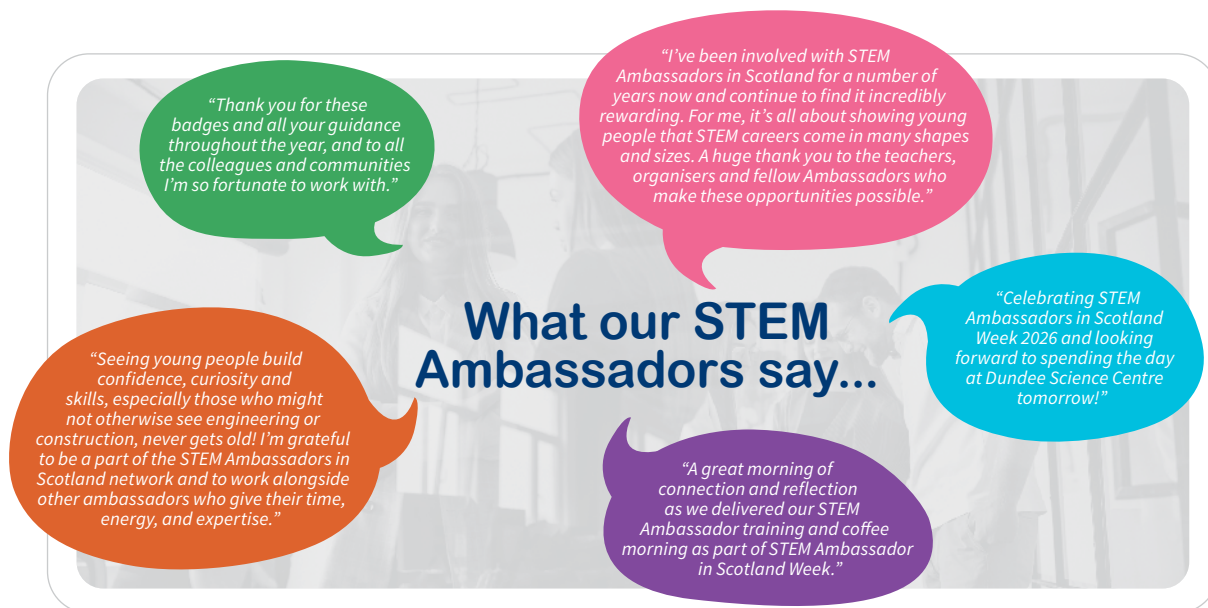
**2689**  
PVG applications  
processed (new  
and renewals)

A highlight of the year was bringing the SSERC team together for the SSERC 60th Anniversary – where Young STEM Leaders, STEM Ambassadors and staff contributed to our time capsule. The capsule will be opened in another 60 years – will any of the predictions be correct? Find out more [here](#).



## STEM Ambassador in Scotland Week

This year was SSERC's 5th STEM Ambassador in Scotland Week and again we were supported by some fantastic partners: Marine Conservation Society, MCR Pathways, EDT, Code Clubs and STEMazing. This year we also included a Business Breakfast with a focus on AI with support from Education Scotland, Lifescan and DXC Technology, with Code Clubs and Tech She Can making a second appearance for the week as well. Find out more about the week [here](#), and check out these amazing quotes from the week:



## In-person meet-ups

In the 2025/2026 reporting year we hosted two in-person STEM Ambassador meet-ups: one in Edinburgh at the CreateFuture office and one in Glasgow at the WSP office. Around 60 people attended across the two events and shared their wonderful experiences and insight to bring a fabulous energy and enthusiasm to the sessions. We aim to organise these sessions every 6 months in different regions going forward, with the next one planned at SSERC HQ in June.



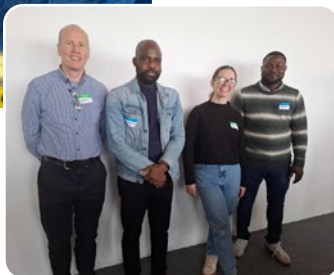
## Solarpunk island innovation project

In June 2025 SSERC launched a year-long project with Daydream Believers, with funding from the STEM Ambassador programme through STEM Learning, with the aim of changing S3 biology learners' perceptions of engineering by showcasing engineering in biological settings.

During the project we followed 23 learners from St Andrew's RC Secondary School in Glasgow for the entire year as they learned to survive and thrive on their islands and overcome curveball challenges with support from over 15 STEM Ambassadors. Find out more about the project [here](#).



*"My highlight was getting to talk and innovate with those I'd never imagine I'd talk to."*



## Tick Talk

Tick Talk is a STEM Ambassador scheme set up in partnership with the Lyme Resource Centre which aims to increase the public's awareness of ticks and tick-borne diseases like Lyme Disease.

20 STEM Ambassadors were recruited and trained in Spring 2025 and started volunteering over the summer and autumn. We plan to continue to grow this cohort of STEM Ambassadors in Spring 2026. Find out more about the partnership [here](#).

We also continue to grow and develop existing partnerships with organisations like FDFS and new partnerships with organisations like You Can Be a Doctor.

*"Huge thank you to our Tick Talk STEM Ambassadors in Scotland for their support!"*



## Learner Research Placement Programme

Building on the success of the Research Placements & Experiences Programme delivered by STEM Learning, SSERC's Education Industry Partner, Ocean Winds, funded a new Scottish initiative for 2026: the **Learner Research Placement Programme**.

## Research Placements & Experiences

Formerly Nuffield Research Placements

**Learner Research Placement**

powered by



**MORAY EAST**  
OFFSHORE WINDFARM

This programme has enabled SSERC to extend the reach of placements for S5 learners, broadening access beyond the original focus on learners from disadvantaged backgrounds to include those from rural and remote communities and learners from ethnic minority backgrounds. This has enabled participants from across Scotland, including Orkney, Stranraer, Plockton, Dumfries, Inverness and Aberdeen, as well as the Central Belt to get involved.

Learners also have the opportunity to complete a STEM Leader 7 Award as part of their placement. This qualification is the highest level of the Young STEM Leader family of awards and carries SCQF credit points, credit rated by Qualifications Scotland.

Research Placements provide learners with an invaluable opportunity to undertake a challenging two-week summer project within a host organisation, supported by a STEM Ambassador mentor. Through this experience, participants develop confidence, enhance their skills, and deepen their engagement with STEM-related subjects.

Quote from Sofiia during her placement at Offshore Renewable Energy Catapult:

*"I am really enjoying my work environment, and my mentor is really good and helpful. He introduced me to the office team in the first two days of placement, and all of them are so friendly and welcoming. All of them ask if I need any help, and they are happy to help and answer any kind of question. Also, there is one employee who has done a degree that I'm planning to do, and it was really useful to meet her. My project is going well, even though there are difficulties along the way, but in my mind, it should be challenging, and I am enjoying it. I cannot wait to return there tomorrow."*



Quote from Gayathma who was on placement at Glasgow University:

*"I really enjoyed my research placement. It was an amazing experience to work in a professional laboratory setting and learn about muscarinic 5 receptors. Throughout the placement, I gained a great deal of knowledge and valuable hands on experience using complex laboratory equipment. It has been a wonderful learning opportunity and has helped me develop both my practical skills and my confidence in a research environment. Thank you so much for giving me this opportunity."*



Quote from mentor at Glasgow University:

*“Both of my placement learners are brilliant and have shown genuine enthusiasm and interest in the project from day one. They have worked incredibly hard throughout the two weeks, and today they presented their work to other members of the lab with confidence and a clear understanding of what they had been doing. I also think they genuinely enjoyed the placement, as they have both been very grateful for the opportunity and their time with us.”*

## Projects 2026

Projects for 2026 included a wide range of STEM related subjects with titles such as:

- Exploring Augmented Reality Human Anatomy Educational Resources
- Photocatalysis in Action: Watching Dyes Disappear Under Light
- Using Data and Learning Science to Develop Skills in Aquaculture
- Civil and Environmental Design Constraints for replacement bridge project
- Exploring improvements to ground-based optical observation of satellite and space debris



Applications for Summer 2027 will open in November 2026. For more information click [here](#).



## Go Construct SSPP Teacher Education

SSERC organised for secondary teachers in Scotland to participate in an immersive and hands-on experience in the construction industry, which aimed to increase knowledge of STEM career pathways and highlight the practical applications of the curriculum. Funded by CITB's (Construction Industry Training Board) Go Construct STEM Ambassador programme, this was part of the SSERC product Scottish STEM Placement Programme (SSPP): Teacher Education.

 Scottish STEM  
Placement Programme

### Teacher Education

 Construct | STEM  
Ambassadors

  
**ROBERTSON**



Robertson Construction and Wills Bros supported this programme by hosting placements and providing STEM Ambassadors. The placements took place in June 2025 and learning was embedded in classroom settings between August and December 2025. Find out more about the programme [here](#).



*"The experience made me feel much more confident in talking to learners in construction related careers that don't just involve a trade."*



## SSERC's Time Capsule for 2085



With SSERC celebrating its 60th Anniversary, this was an opportunity to not only reflect on SSERC's 60 years of successes, but to look forward as well. The STEM Engagement Team worked together to celebrate a 60-year legacy and asked Young STEM Leaders and STEM Ambassadors to contribute their ideas on how they imagined the world 60 years into the future. Five key themes were selected, and entrants were encouraged to think about Space, Power, Health, Gadgets and Planet Earth.



A range of submission types were accepted and visible on our digital gallery such as drawings, collages and articles. All were then carefully packed into a time capsule and will be stored in SSERC until 2085, when future generations will revisit the entries and can see how close our thoughts came to reality.

## Young STEM Leader Programme (YSLP)



Scottish Government  
Riaghaltas na h-Alba  
gov.scot

The Young STEM Leader Programme (YSLP) is an award that is free and open to all young people in Scotland. Generously supported by the Scottish Government, its aim is to use STEM as a platform to inspire young people to develop leadership skills through sharing their learning with others.

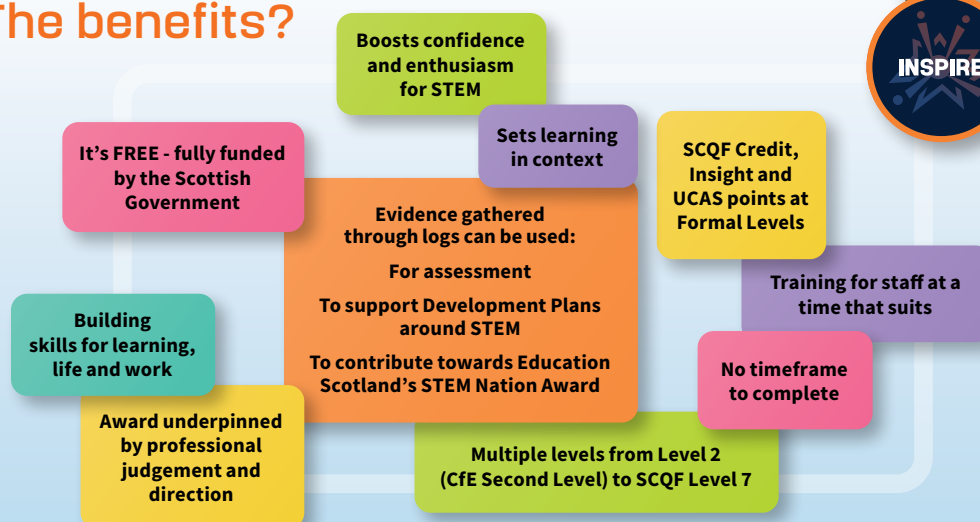
The programme supports learners from Levels 2 (CfE aligned), up to SCQF Level 7, to lead STEM within their schools, youth groups, families and communities. Thanks to support from Ocean Winds the STEM Leader 7 (SL7) Award is available to anyone aged 16+ across the country, enabling learners of all ages and stages to participate.

By participating, learners gain a nationally recognised award that boosts confidence in STEM, whilst building wider employability skills.

The free programme is delivered in schools, colleges and community groups across Scotland. For more information on the YSLP visit [www.youngstemleader.scot](http://www.youngstemleader.scot).



## The benefits?



## Programme participation

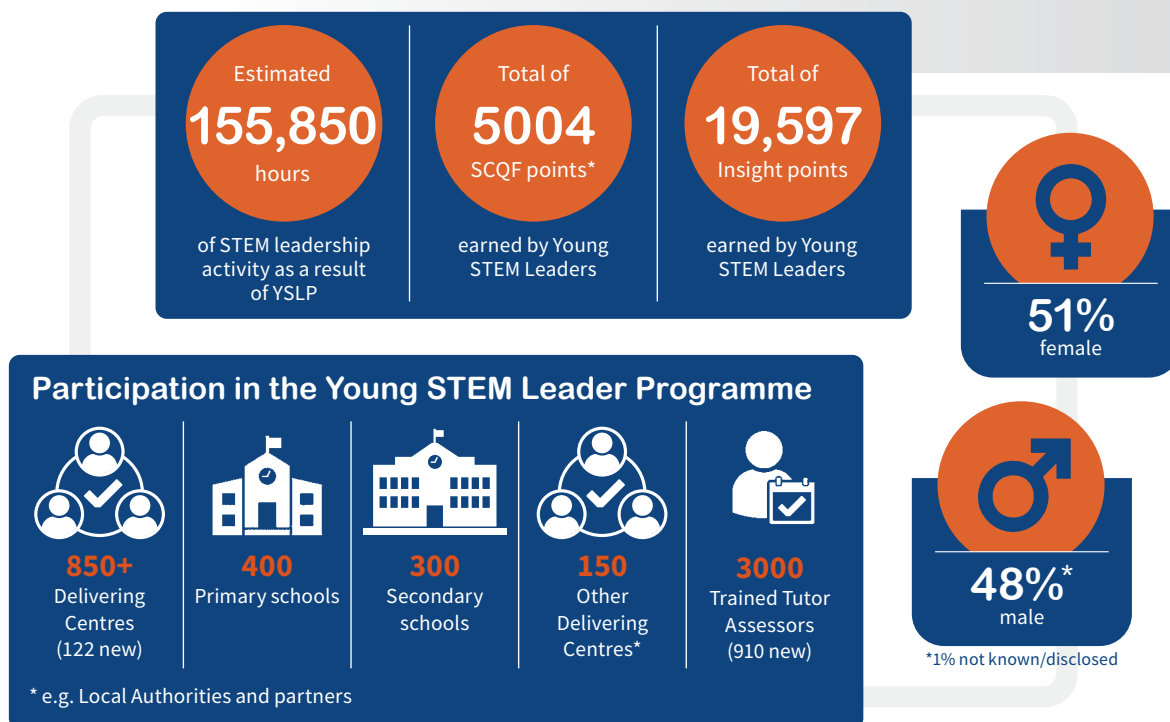
This financial year has seen record certification levels achieved with 4882 Young STEM Leader Awards achieved. This is an increase of just over 1000 new YSLP awards since last financial year.

The programme continues to reach across Scotland with 72% of awards made at non-formal levels (YSL2-YSL4(NF)) and 28% at the formal levels (YSL4(F)-SL7). The Formal Awards are credit rated by Qualifications Scotland, offering SCQF credits.

| Level                     | Specific themes                                                               | LOs | SCQF Credit points | Insight points | UCAS points |
|---------------------------|-------------------------------------------------------------------------------|-----|--------------------|----------------|-------------|
| <b>YSL4(F)<br/>SCQF 4</b> | The impact of STEM and its ability to solve problems; Scotland's role in STEM | 8   | 3                  | 3              |             |
| <b>YSL5<br/>SCQF 5</b>    | Opportunities, pathways and futures in STEM; YSL's own potential in STEM      | 8   | 3                  | 5.5            |             |
| <b>YSL6<br/>SCQF 6</b>    | Challenging stereotypes, misconceptions and outdated views in STEM            | 8   | 4                  | 18.7           | 7           |
| <b>SL7<br/>SCQF 7</b>     | Generating and leading a project question; Analysing and presenting findings  | 6   | 6                  | 51             |             |

## Award certificates by level in the 2025/2026 reporting year



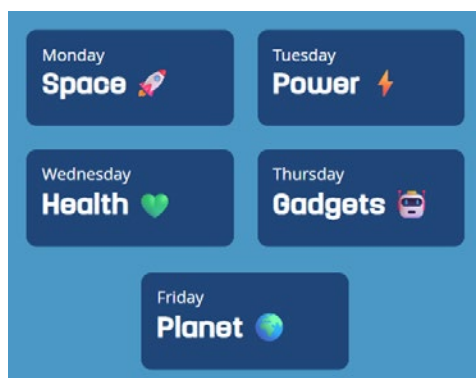


Follow the Young STEM Leader programme on [@YoungSTEMLeader](#) and [@YoungSTEMLeader.bsky.social](#).

## Celebrating #YoungSTEMLeaderWeek

The annual **#YoungSTEMLeaderWeek** took place from 27th-31st October 2025. The theme, 'Imagining 2085', built on SSERC's 60th anniversary themes.

Advances in STEM will continue to shape the way we live, learn, work and care about our planet and #YoungSTEMLeaderWeek encouraged young people to think 60 years into the future. Young STEM Leaders were encouraged to ask big questions and share hopes for the world we want to see around 5 key themes.



Young STEM Leaders were supported in their thinking by STEM Ambassadors. Experts in each of the five themes shared their thoughts and ideas on the topics to help stimulate ideas and discussion.

Throughout the week Young STEM Leaders and Tutor Assessors were encouraged to engage via social media using #YoungSTEMLeaderWeek. During the week over 5800 people engaged with the content on the website and there were more than 10,000 impressions on our X posts.

The content and resources remained live until the end of 2025 acting as an additional resource for the YSLP community.



## Associate Regional Trainers and Verifiers (ARTAVs)

The Associate Regional Trainers and Verifiers (ARTAVs) team are a group of inspirational individuals with experience and expertise in delivering STEM Learning in Primary, Secondary, CLD and ASN settings across the country. Working alongside the [YSLP team](#), they play a vital role and are involved in 4 key activities:

- 1) Providing training and other professional learning sessions for Tutor Assessors, both online and in-person, in their local area and as part of the national training offer.
- 2) Undertaking External Verification activity.
- 3) Providing ongoing support to Tutor Assessors within their area of specialism.
- 4) Providing development support to the YSLP team in updating and/or developing new programme materials.



The YSLP and ARTAV Teams.

The Young STEM Leader Team provide support to Tutor Assessors across the country at Local Authority and Centre Level and operate an open-door policy to support individual Tutor Assessors too.

### Training

The YSLP and ARTAV teams collectively delivered **77 sessions to 910 delegates** from schools and community groups across Scotland. A selection of training sessions were available including, Information Sessions, Kickstart refresher sessions and Tutor Assessor training at various levels.

This year the Young STEM Leader Programme Tutor Assessor training became an integral part of the teacher training courses at the University of Strathclyde thanks to the leadership of John Cochrane who is both a Teaching Fellow at the University and an ARTAV for the YSLP.

*“Raising participation in STEM and, in turn, increasing the number of young people entering STEM-related fields and/or employment has been a long-term goal of all involved in Scottish education. The Young STEM Leader Programme (YSLP) has been immensely beneficial in trying to achieve these lofty goals. Taking advantage of my role as an Associate Regional Trainer and Verifier (ARTAV) for YSLP, we at the University of Strathclyde undertook a programme to embed Tutor Assessor training in the course programme for all initial teacher education learners from session 2025/2026 onwards. This includes all PGDE primary and secondary learners, as well as those studying undergraduate “with teaching” degrees. We also offered training to all BA Primary Education learners in years three and four. Overall, this resulted in 600 new tutor assessors being trained and ready to launch YSLP in their centres upon completing their studies.”*

*John Cochrane*



To book on to a training session click [here](#) or contact the team [yslp@sserc.scot](mailto:yslp@sserc.scot).



## STEM Engagement Partnerships

### Young STEM Leader Partnerships

The YSLP believes in supporting and building the STEM Learning Community in Scotland. The programme partners with many other organisations and Award programmes to ensure that young people engaging in STEM learning and leadership can gain support and, where appropriate, additional recognition.



As we look forward to 2026/2027, we will continue to grow the programme and hear from our Young STEM Leaders in their own words. As part of Young STEM Leader Week 2026, we're inviting Young STEM Leaders from across the programme to get involved by sharing their own short video, audio, image or written contribution that captures what being a Young STEM Leader means to them.

This year's theme, **Stories from the Young STEM Leader Programme**, will involve revealing and celebrating the real stories behind what it means to be a Young STEM Leader through contributions shared in their own words, voices, images and creations.

We are collecting stories now and Young STEM Leader Week 2026 will act as a showcase and will take place 26-30 October 2026. To get involved visit [Young STEM Leader Week 2026](#) | [Young STEM Leader](#).



## STEM Ambassadors Scotland Partnerships

### ESERO

SSERC is proud to continue to support ESERO-UK (European Space Education Resource Office) and STEM Learning to inspire and encourage young people in Scotland to pursue STEM and careers within the space sector. Through the Space Inspirations STEM Ambassador scheme, volunteers employed in space-related industries or passionate about space are given resources and support to engage in effective outreach in schools and communities across Scotland.



The last year has brought exciting opportunities for collaboration between Space Inspirations STEM Ambassadors and the wider SSERC offering.



### Young STEM Leader Week 2025

During Young STEM Leader Week, Space Inspirations Ambassadors contributed to SSERC's 60th anniversary Time Capsule, giving learners a reminder of the groundbreaking advances in space travel and technology within the last 60 years and challenging young people to think towards the future.

Design a postcard from space

### The Eco-Orbit Challenge

In January 2026, the STEM Engagement and Early Years & Primary teams at SSERC successfully secured funding from the ESERO-UK Innovation Fund through STEM Learning to run an exciting new project in Scotland: The Eco-Orbit Challenge\*. Designed and delivered in partnership with Aero Space Kinross, the Eco-Orbit Challenge is a transition project which connects primary school learners with their local secondary school and takes them on a journey to design, build, and test their own model satellites with a focus on sustainability and climate. The project delivery will take place over the course of the 2026 Autumn term.



If you would like to find out more about how you and your learners can engage with a Space Inspirations STEM Ambassador, please contact [stemambassadors@sserc.scot](mailto:stemambassadors@sserc.scot).



## Education Industry Partnerships

Education

sserc

Industry

### Leidos STEM Challenge

SSERC and Leidos started an EIP in September 2021 and each year it has developed and grown to become an established programme in the West of Scotland. In its fifth year over 400 learners have now benefitted from the EIP experience with Leidos, participating in the STEM Challenge and gaining valuable skills for a future career in STEM.

The Leidos STEM Challenge is open to primary and secondary schools in the West of Scotland and teams of up to six learners take part, with a broad range of learner participation encouraged. Teams select a specific challenge from a range of challenges created to reflect Leidos' aims and values and are mentored by STEM Ambassadors from Leidos. The mentors support and coach their team throughout the academic year to help them to produce a solution that not only meets the Challenge goals, but includes innovative ideas and designs.

PARTNERSHIPS

leidos



In June, the 2026 Glasgow Showcase took place at The Pyramid at Anderston and learners from ten schools enjoyed talking and demonstrating their projects to parents, guests and Leidos mentors. Their responses to Challenges such as "Design and run a festival in a city where Robots, AI, and humans coexist" and "Design and build a device that can improve an everyday task" were commendable.



>>



## Ocean Winds

The Education Industry Partnership between Ocean Winds and SSERC also entered its fifth year in December 2025, building on the success of this well-established collaboration. Through its continued commitment to STEM education, Ocean Winds has expanded its support for programmes in schools, helping to extend the reach of initiatives that develop skills, raise aspirations and provide meaningful opportunities for young people.

### Key successes OW supported include:

- **Skills for Work – Energy National 5 course:** providing 30 schools with resources and a professional learning course to enable practitioners to deliver this practical course in their school.
- **New Learner Research Placement Programme:** enabling 50 S5 learners to undertake a research placement during the summer. This has expanded the reach of the existing Research Placement and Experiences Programme.
- **Virtual Welding Challenge:** bringing together school learners and pre-apprentice welding learners from NESCOL to work collaboratively in teams and compete using Seabery Augmented Technology virtual reality welding kits.
- **Provision of 6 Virtual Reality Welding kits** to loan to schools.
- **Continued support for Young STEM Leader Programme, STEM Leader 7 Award:** enabling schools and other delivery centres to support young people on a 60-hour project, including developing their leadership skills.
- **FIRST® LEGO® League Challenge** for 8 secondary schools in Moray including training, robot kits, challenge kits and Regional Final at UHI Moray.
- **EDT Industrial Cadets Bronze registration** for S1/S2 learners at Fraserburgh Academy.
- **Delivery of SSERC Environmental Science Course** for secondary school Geography teachers. Resource box of equipment provided to all attendees.
- **Sponsor for STEMOVATOR Celebration Event** in Edinburgh for schools to showcase their Climate Smarter projects.
- **Support for Buckie High School** and provision of equipment for Geography department.



### **Babcock International**

This EIP started mid-2025 and enabled the creation of new resources for CfE First and Second levels learners. After two hands-on training sessions in early 2026, these resources are now used by their STEM Ambassadors to inform, educate and inspire young people in topics related to Babcock's line of business.

**babcock**<sup>TM</sup>



# International activity

## Aim

To participate in a range of international activity linked to SSERC's three core functions.

SSERC's international profile continued to grow during our 60th anniversary year, reflecting increasing global recognition of the organisation's expertise in STEM learning and support. The growing number of international visitors to the SSERC website, alongside collaborative activity and partnerships in Spain, Colombia and China, demonstrates the widening reach and influence of SSERC beyond Scotland.

During the year, the SSERC Board approved the organisation's International Strategy, providing a clear framework for the International workstream within Vision 2030. The strategy establishes the priorities and principles that will guide the planned and sustainable development of SSERC's international activity over the coming years.

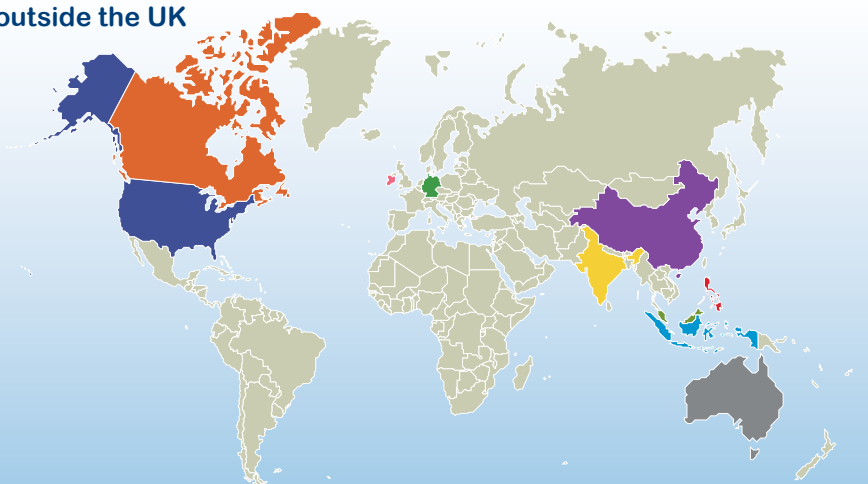
Together, this activity strengthens SSERC's progress towards its Vision 2030 aspiration of being internationally recognised as a centre of excellence for STEM learning and support. Importantly, it also creates opportunities to exchange expertise, learn from international practice and develop new sources of income, with financial returns reinvested to enhance STEM education and support learners across Scotland.

## Demographics

Over the period 2025/2026, 185 countries accessed the SSERC website.

### The top 10 countries outside the UK

- China
- United States
- India
- Germany
- Singapore
- Australia
- Philippines
- Canada
- Ireland
- Malaysia

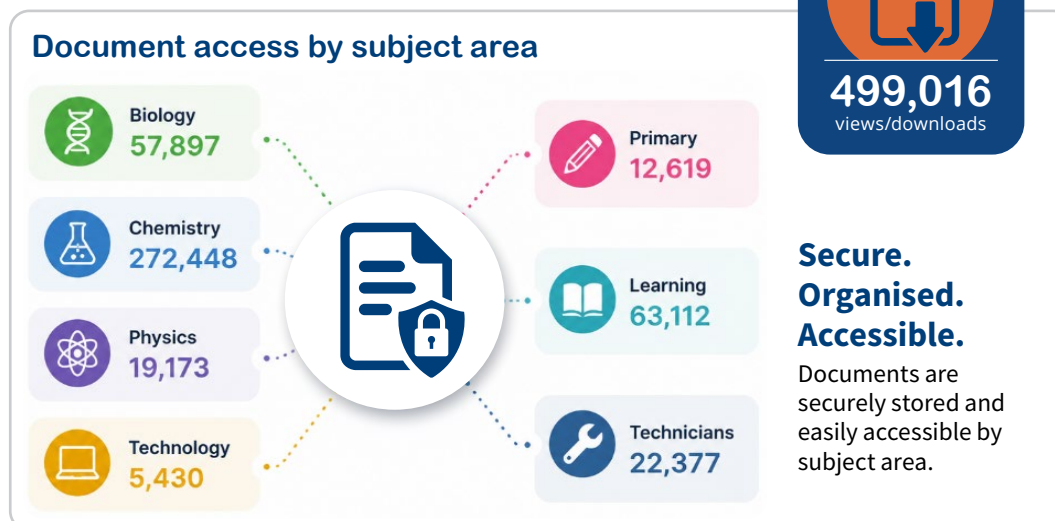


The website pages had 499,000 views, and the top 10 pages were:

- 1) advisory-service/chemical-index/
- 2) advisory-service/hazardous-chemicals-database/
- 3) advisory-service/chemistry-health-and-safety/
- 4) resources/cfe-advanced-higher-biology/
- 5) resources/advanced-higher-chemistry/
- 6) resources/chemistry-resources/
- 7) resources/chemistry-datasets/electrode-potentials-data/
- 8) professional-learning-calendar/
- 9) resources/biology-resources/
- 10) resources/chemistry-resources/ preparation-of-aspirin/



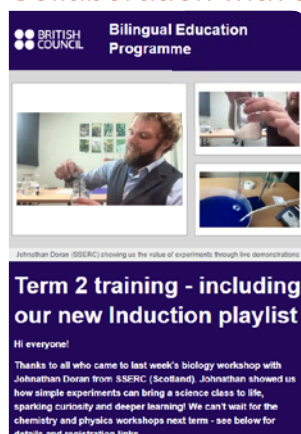
In this reporting period, there were 499,016 views/downloads of SSERC documents accessed via the website.



## High Level website statistics

| Region   | Users   | Percent of total | Views per session | Time per session |
|----------|---------|------------------|-------------------|------------------|
| Overall  | 126,741 | 100              | 2.5               | 3m 24s           |
| UK       | 82,879  | 65.39            | 2.8               | 4m 15s           |
| Scotland | 44,660  | 35.24            | 3.77              | 5m 01s           |

## Collaboration with the British Council: Spain



Building on the success of SSERC's Early Years and Primary STEM Meets delivered in the previous reporting period, our collaboration with the British Council in Spain expanded during the 2025/2026 reporting year to include secondary education.

SSERC delivered a series of live, online professional learning sessions for secondary science teachers across the 10 autonomous regions participating in the bilingual education programme. Three subject-specific sessions, covering Physics, Biology and Chemistry, provided delegates with access to SSERC's expertise in practical STEM learning and opportunities to explore approaches applicable to their own classroom contexts.

This expansion represents another positive step in strengthening SSERC's international reach, demonstrating the relevance of our professional learning beyond Scotland and developing our relationship with the British Council in Spain.

## Feedback from British Council Spain:

"Thanks for bringing science alive for our teachers – they will have really benefited from the hands-on approach and so will their learners. The practical focus fits nicely with our aim to make learning more accessible and inclusive. It was a real privilege being able to count on your professionalism and expertise, a highlight for me was the 'scientific conversations' taking place in the chat."

"The presenter's style and the format were both great!"



## Expanding the Young STEM Leader Programme Internationally

The Young STEM Leader Programme (YSLP) is firmly established across Scotland, with participation also extending into England. During the 2025/2026 reporting year, SSERC continued to explore opportunities to build on this success and develop the programme's international reach.



Engagement with international English-speaking schools in Colombia and China has created opportunities to introduce YSLP to learners beyond the UK. These developments represent an important step in establishing the programme internationally and demonstrate the potential for the YSLP model to support STEM leadership, skills development and learner engagement across different educational contexts.

This activity also contributes directly to SSERC's wider international ambitions and our Vision 2030 aspiration to be internationally recognised as a centre of excellence for STEM learning and support.

### INTERNATIONAL MEMBERSHIP

We offer international membership of SSERC to organisations and bodies that are interested in STEM education specifically and education generally and are based outside the UK.

| Membership Benefits                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tier 1 Membership</b><br><b>£200</b><br><b>SSERC Website:</b> Access to the SSERC website. Some areas of the website are restricted to member access only.<br><b>Website Feature:</b> Organisation name and an embedded link to the organization/body website, and 100 words of additional text. | <b>Tier 2 Membership</b><br><b>£250</b><br><b>SSERC Website:</b> Full access to the SSERC website. Some areas of the website are restricted to member access only.<br><b>Website Feature:</b> Organisation name, an embedded link to the organization/body website, and 100 words of additional text.<br><b>Dedicated Support:</b> Access to our specialist education and engagement team to provide advice and support relating to STEM education. |

In preparation for the new financial year, we have revised our membership categories to support additional international membership. In addition to Tier 1 and 2 organisational membership for overseas centres and organisations, we offer subject-specific individual membership options covering a range of STEM subject areas, available at different prices depending on geographical location. Membership gives:

- Unlimited access to the relevant curriculum resources section of the website.
- Unlimited access to the curricular Health and Safety area of the website.
- 50% discount on our Professional Learning courses.
- Access to our specialist advisors (additional cost).

Membership Level

**Individual (Chemistry)**

Individual memberships are aimed at individual teachers outwith the UK. The pricing varies with geography, being lower for less wealthy countries.

Membership gives:

- Unlimited access to the Chemistry resources area of the website
- Unlimited access to the Chemistry Health and Safety area of the website
- 50% discount on our Professional Learning courses
- Access to our specialist advisors. (Additional cost)



# Business development activity

## Aim

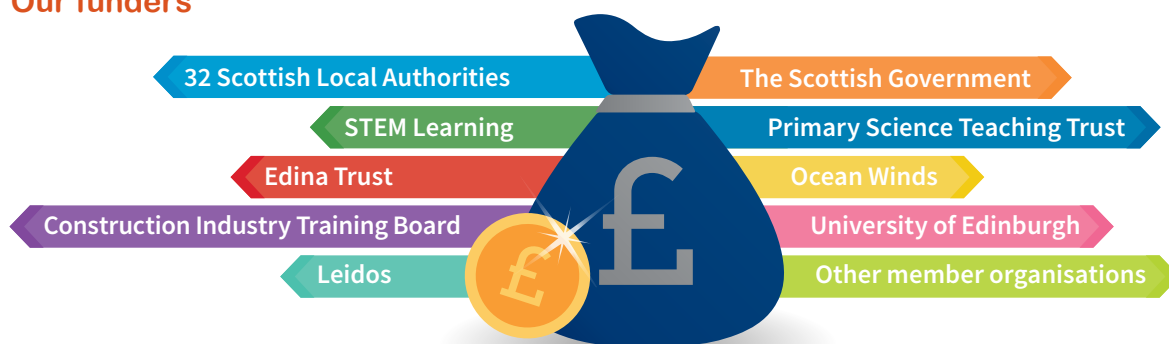
To increase income streams from non-traditional sources to allow for increased capability and activity.

The milestone of SSERC's 60th anniversary highlights not only the organisation's long-standing contribution to STEM education, but also the importance of ensuring its financial resilience and sustainability for future generations of learners and educators. Despite the wider financial pressures affecting the education sector, SSERC continues to demonstrate financial resilience and organisational strength through the effective management of grants, funded programmes and partner activity, attracting income that can be reinvested to support STEM education and the Scottish learner journey.

The development of a commercial strategy further strengthens this approach, providing a clear framework for identifying sustainable income opportunities that align with SSERC's charitable purpose, values and strategic ambitions. This ensures that business development activity supports long-term organisational sustainability while directly contributing to high-quality STEM learning, professional support and enrichment opportunities across Scotland.



## Our funders



**Every £1 donated by the Scottish Government earns an extra £0.46 from other funders, which is invested to support STEM Education and training in Scotland.**

## Sustainability

As part of our commitment to reducing SSERC's environmental impact, we continued to review how our buildings, travel and working practices could contribute to a lower carbon footprint.

A significant development was the completion of our solar energy project in July 2026, with 60 solar photovoltaic panels installed on the roof of the Ada Lovelace Building. The panels will enable SSERC to generate more of its own renewable electricity, reduce energy costs and lower carbon emissions. The financial savings generated are expected to repay the initial investment over time, while providing longer-term environmental and operational benefits.

### Sustainability

Building a better future through STEM education.



#### PEOPLE

Empowering learners and supporting education.



#### INNOVATION

Inspiring curiosity and driving STEM excellence.



#### PLANET

Promoting environmental responsibility and sustainable practices.



#### PARTNERSHIP

Working together for a stronger sustainable future.



#### IMPACT

Measuring impact to create lasting change.



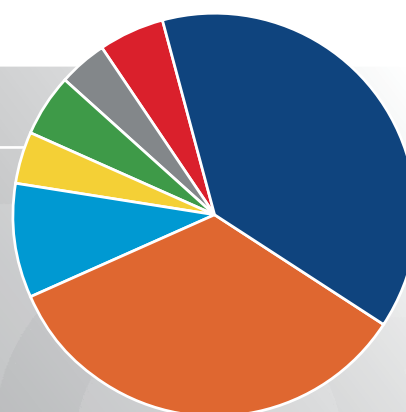
We also encouraged staff to consider more sustainable ways of working. This included choosing rail travel rather than air travel wherever practical, making greater use of Teams and other online platforms to reduce unnecessary journeys, and considering whether meetings and activities required face-to-face attendance. Where in-person engagement remained important, travel was planned carefully to make the best use of staff time and resources.

Alongside these measures, we continued to promote responsible use of energy and resources across our operations, including reducing waste, limiting unnecessary printing and supporting the reuse and recycling of materials. Together, these actions demonstrate SSERC's commitment to embedding sustainability within its everyday decision-making and future planning.

## Income\*

### 2025/2026

|                                               | £'000s       | %          |
|-----------------------------------------------|--------------|------------|
| Scottish Government Grants                    | 986          | 38         |
| Membership Subscriptions**                    | 877          | 34         |
| Wider STEM Engagement Income***               | 238          | 9          |
| Other Grants Supporting Professional Learning | 105          | 4          |
| Course Income                                 | 117          | 5          |
| Education/Industry Partnerships (EIPs)        | 106          | 4          |
| Other income                                  | 138          | 5          |
| <b>Total income</b>                           | <b>£2567</b> | <b>100</b> |



\* Percentages may not total 100% because of rounding.

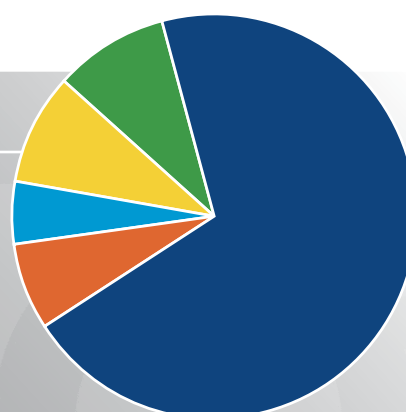
\*\* Local Authorities, colleges and independent schools.

\*\*\* This includes STEM Ambassadors in Scotland, STEM Enrichment Partnership and ESERO.

## Expenditure\*

### 2025/2026

|                                              | £'000s       | %          |
|----------------------------------------------|--------------|------------|
| Staff                                        | 1787         | 70         |
| Professional Learning Courses                | 189          | 7          |
| STEM Engagement Activities and EIP Resources | 123          | 5          |
| Property cost and insurance                  | 218          | 9          |
| Other                                        | 220          | 9          |
| <b>Total expenditure</b>                     | <b>£2537</b> | <b>100</b> |



\* Expenditure before pension scheme interest, current service costs and actuarial remeasurements.





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