



scottish
schools
education
research
centre



Image: Jessie Kidd/Higher Photography Larbert High School

Annual report 2019

SSERC is grateful to the staff and pupils from Larbert High School (Art and Design Department) for the inspirational art work that is showcased in our newest building, and which appears throughout this annual report.

Contents

| | |
|---|-----------|
| Overview | 4 |
| Message from the Chair | 4 |
| Message from the CEO | 5 |
| SSERC functions | 6 |
| Career Long Professional Learning (CLPL) | 7 |
| Early Years/Primary sector | 8 |
| Secondary sector | 10 |
| Technicians | 11 |
| Digital skills | 12 |
| The Advisory Service | 13 |
| Wider STEM engagement | 15 |
| Corporate activity | 19 |
| Financial overview 2018/2019 | 20 |
| Looking ahead | 21 |
| SSERC Annual Conference | 22 |



Overview

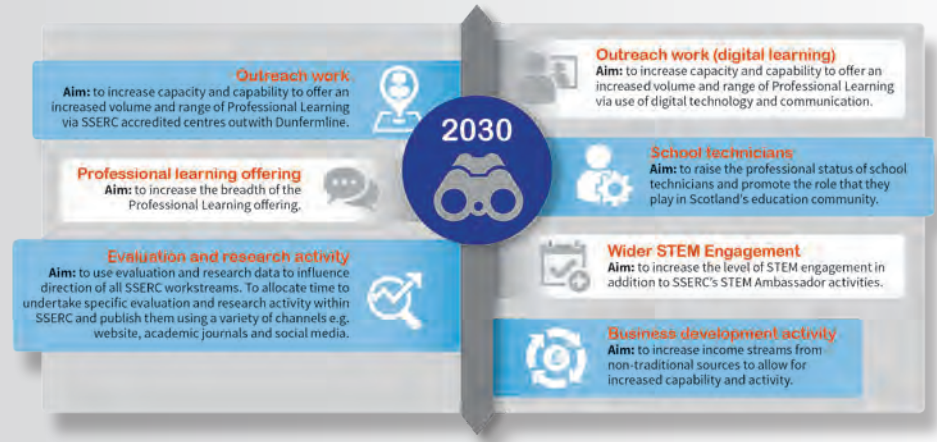
Message from the Chair

The 2017/2018 Annual Report set out the strategic vision of the SSERC Board of Directors and Trustees (hereafter referred to as the SSERC Board). Vision 2030 is based on 7 key workstreams that link to the three core functions of the organisation and which allow us to diversify and expand to meet the needs of the education community within Scotland and beyond.



During financial year 2018/2019 the organisation made major progress across all 7 workstreams, and advanced significant organisational change, which are highlighted in this report. On behalf of the SSERC Board I would like to thank the SSERC team for their hard work, passion and enthusiasm which has had a positive impact on this year's achievements.

We continue to be grateful for the funding that we receive from a range of partner organisations and bodies which allows SSERC to continue to be a key player in relation to STEM education and training in Scotland. As a membership organisation, supported by all 32 Local Authorities and other members, we continue to offer a range of products and services that provides significant value for money and we thank our members for their ongoing support.



To realise Vision 2030 and continue to meet the needs of the education community in Scotland the organisation will need to continue its journey of change and evolution and the SSERC Board will provide the support, advice and challenge that is needed to realise these ambitions.



Councillor Alan Nimmo - Chair of SSERC Board of Directors and Trustees



Message from the CEO

In financial year 2018/2019 SSERC continued to further establish itself as an organisation with a reputation for excellence in the products and services that it delivers to the education community in Scotland. We are the organisation of choice when it comes to high quality professional learning that supports and promotes the concept of STEM-based practical, hands-on, experiential learning, undertaken within an educational environment. Core to our ethos is the promotion of appropriate health and safety.

Our offering now supports STEM education from early years to senior phase and from childminders to school leaders. Combined with our range of wider STEM engagement activities that incorporate STEM Ambassadors, teacher placements into STEM industries, the Polar Explorer Programme, school/industry partnerships and now the Young STEM Leader Programme, we move nearer towards our goal of being the go-to organisation for STEM education in Scotland.



This was a year of significant corporate change - new logo, new website, opening of a third building in our Dunfermline base which supports our early years/primary professional learning as well as our new digital skills professional learning offering. Whilst change can be unsettling, I am proud to have a dedicated, professional and highly motivated team at SSERC who have supported the strategic changes that the SSERC Board has put in place for the organisation as outlined by Vision 2030. As a team we continue to grow and develop to realise the ambitions set out in Vision 2030 and do so in a way that is underpinned by our organisational values of innovation, integrity, passion, excellence and respect.

The year ahead will bring further success for the organisation, but also the inevitable challenge of working within an education landscape where finance is finite. We will continue to evidence our successes and impact to existing funders, but also use this to attract additional funding streams that will allow us to do more to support the STEM education community in Scotland.

Alastair McGregor - Chief Executive Officer at SSERC



SSERC functions

SSERC offers a unique portfolio of products and services designed to support STEM (Science, Technology, Engineering and Mathematics) education in Scotland.

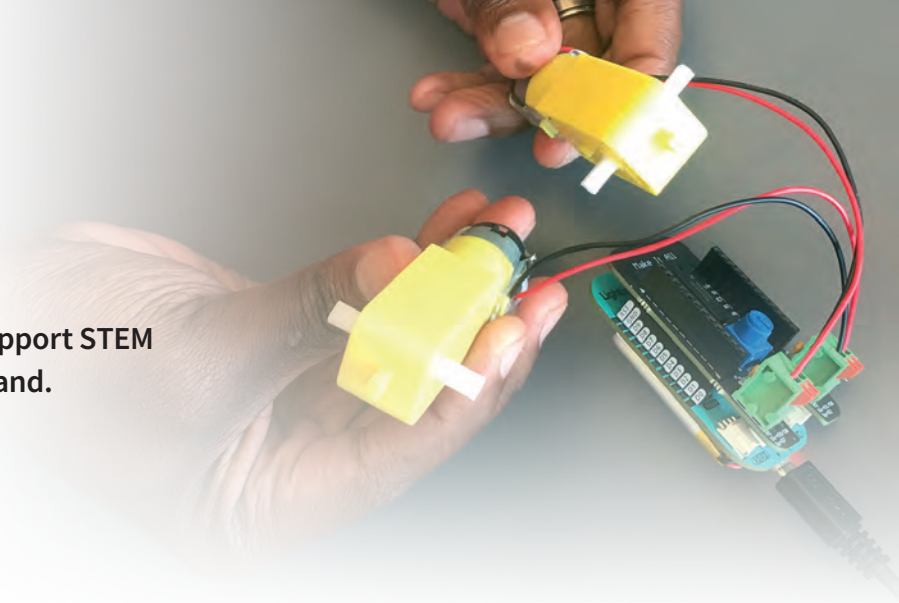
- 1 **Provision of Career Long Professional Learning (CLPL)** for childminders, early years practitioners, primary and secondary school teachers and school technicians.
- 2 **The Advisory Service** provides ongoing health and safety guidance for the Scottish education community to support safe STEM-based activities in the classroom environment.
- 3 **Wider STEM engagement activities** including liaison lead for STEM Ambassadors in Scotland, teacher placements into industry and the Young STEM Leader programme.

Funders

We remain grateful to our external funders who continue to support the work of SSERC:

- All 32 Local Authorities (LAs)
- Other member organisations
- Scottish Government
- STEM Learning
- Primary Science Teaching Trust (PSTT)
- Scottish Association for Metals
- The Edina Trust
- RSC
- IOP
- UKRI
- Education Scotland
- GTCS

We are grateful to the GTCS for sponsoring the Scottish Universities Science School and to the Scottish Association for Metals for sponsoring the Scottish Universities Technology School.

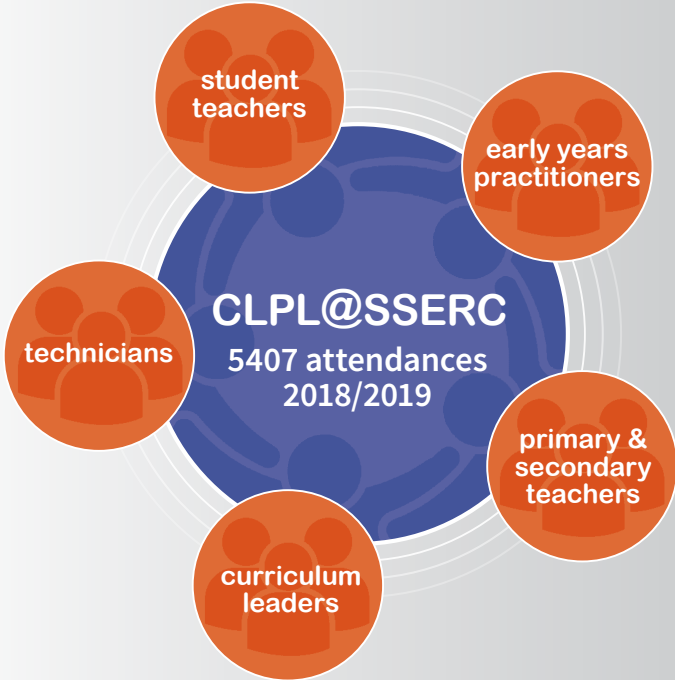


Support for STEM education



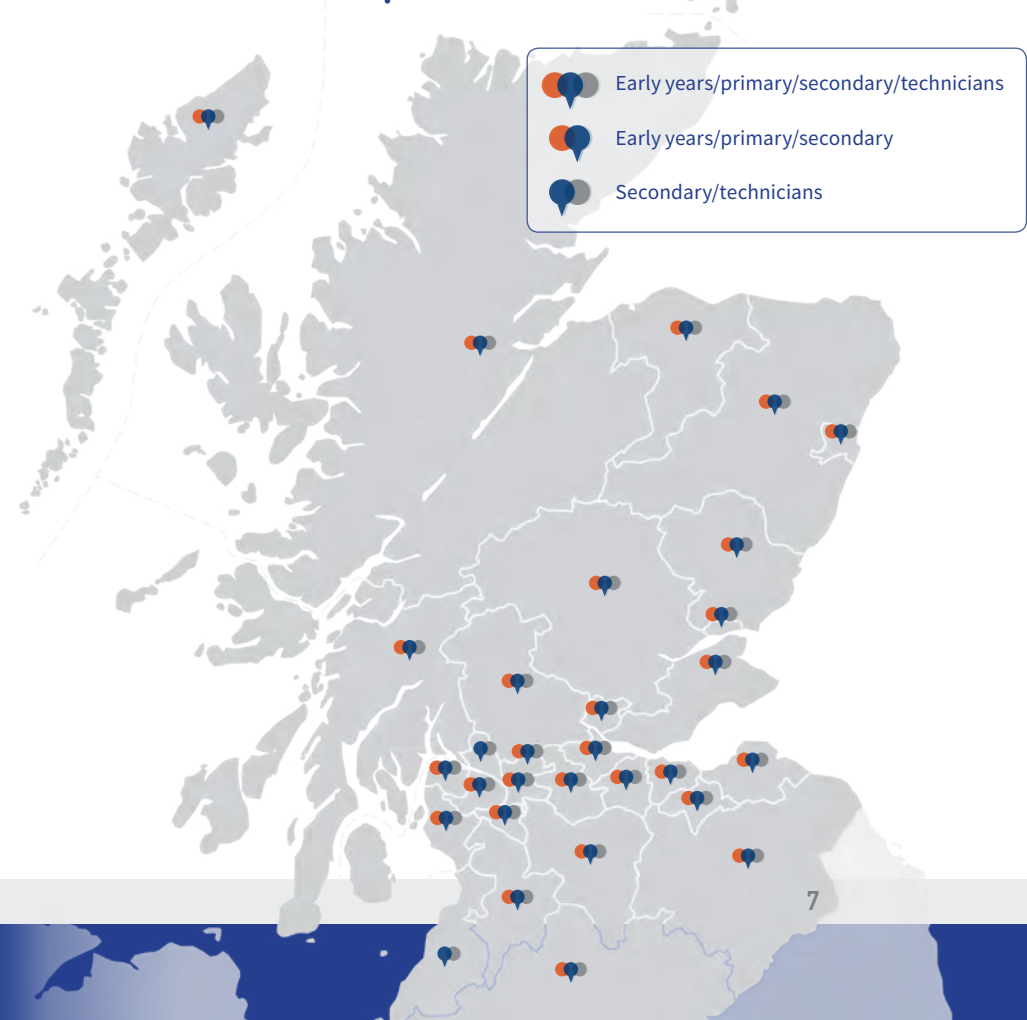
Career Long Professional Learning (CLPL)

During 2018/2019 we have worked in partnership with the Scottish Government, National STEM Learning Centre, the Primary Science Teaching Trust and others to deliver a programme of experiential CLPL for early years, primary and secondary teachers, FE tutors, student teachers and technicians. Our main areas of activity focus on the STEM areas of the curriculum including digital skills.



Our reach increases year-on-year and during 2018/2019 there were a total of 5407 attendances at one or more of our CLPL activities.

Which LAs were represented?

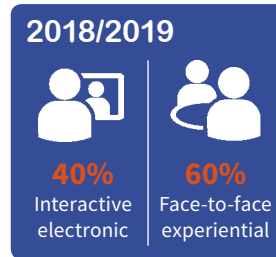


Early years/primary sector

The Primary Cluster Programme/Primary Science Teaching Trust Sustain and Extend Programme is a 2-year programme designed to equip teachers with the knowledge, skills and confidence to become STEM mentors. The role of the mentors is to promote and lead STEM activities within their cluster by sharing experiences and good practice, promoting collegiality, disseminating activities and information and providing support and guidance to their colleagues.

Provision

- 3285 attendances:
 - 50% via Primary Cluster Programme (PCP) and PSTT Sustain and Extend
 - 50% via Open Courses-open to applicants from across the country
- Face-to-face experiential
- Interactive electronic (SSERC_Meet)
- Early Level -> Second Level
- Primary/Secondary Transition



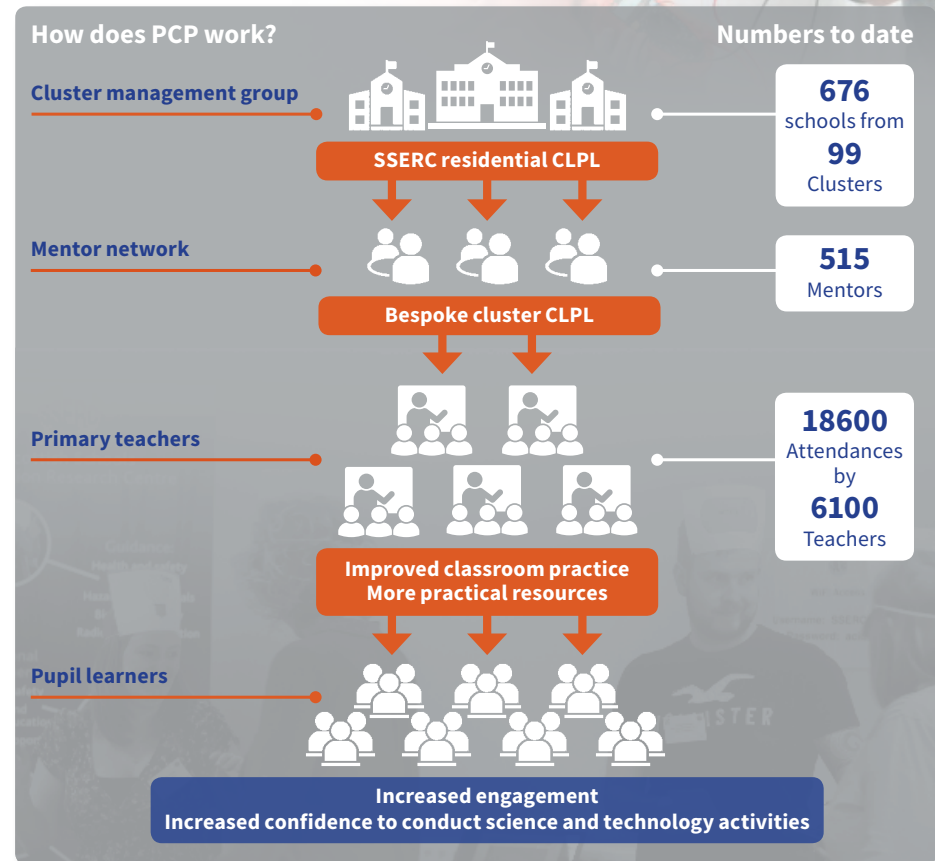
More than 95% delegates rate courses as 'very good' or 'good'.

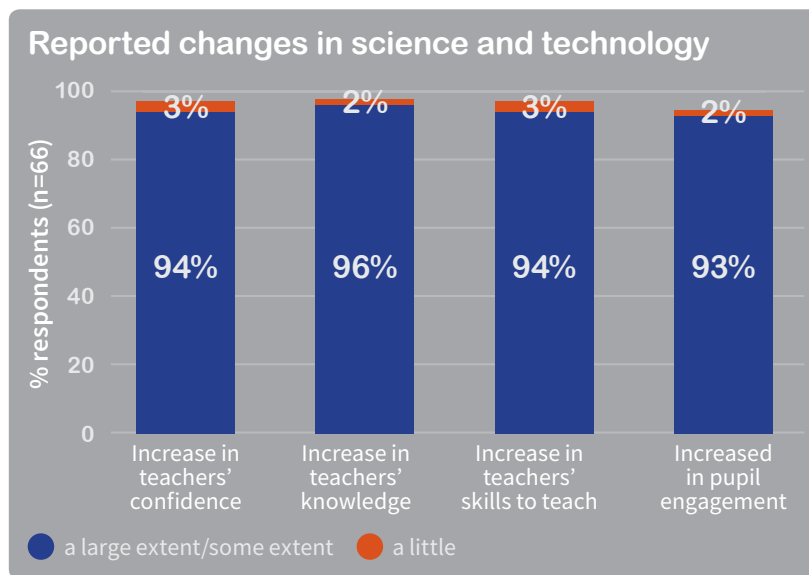
PCP in Science and Technology

A systematic programme to:

- Develop cluster mentors in science and technology
- Provide the opportunity for every primary teacher in a cluster to engage in experiential CLPL
- Raise levels of confidence and expertise
- Further develop pedagogic and assessment skills
- Provide opportunities for individual professional practice
- Develop a collegiate approach across the cluster
- Offer leadership opportunities

During 2018/2019 we successfully worked with teachers from 14 clusters in 5 Local Authorities (Dumfries & Galloway, East Renfrewshire, Highland, North Ayrshire and North Lanarkshire).





The chart above shows the percentage of mentors who agreed there had been a change in the stated aspects relating to science and technology in their setting to 'a large extent/some extent' or 'a little'.

Evaluation by Robert Owen Centre for Educational Change

We have received the *SSERC Primary Cluster Programme in Science and Technology: Final Report* from the Robert Owen Centre at the University of Glasgow [available at <https://www.sserc.org.uk/professional-learning/evaluations/>]. Key recommendations from that report are that government and its agencies should:

- Sustain and expand the programme to increase the number and coverage of mentors.
- Use the model to enhance transition from early years to primary and primary to secondary.
- Extend the model to other areas of the curriculum and to the secondary sector.

Primary Science Teaching Trust Sustain and Extend Programme (PSTT-SEP)

- Supports Local Authorities to sustain and extend the impact of their participation in PCP.
- Worked with 5 Local Authorities (Argyll and Bute, CnES, East Lothian, Orkney, and West Lothian) during 2018/2019.

The Edina Trust

The Edina Trust has continued its collaboration with SSERC during 2018/2019 and has committed to doing so for 2019/2020. The Edina Trust offers Science Resources for Schools grants to all schools whose teachers participate in PCP and PSTT-SEP. Any school that engages with the bespoke CLPL organised by the mentors qualifies for an Edina Trust Science Resources for Schools grant. During 2018/19, 85 schools benefited from the scheme, receiving, in total, more than £29,000.

Awards

- Laura McGeary, St Vincent's Primary School, East Kilbride received a Rolls Royce Merit Award 2018.
- Nicola Connor, Peel Primary School, West Lothian received an ENTHUSE Award for Excellence in STEM Teaching - Primary 2018.
- Anita Angier, Shapinsay Primary School, Orkney received the Primary Science Teachers Award 2018.

"So well run and very organised. Thoroughly enjoyed being part of the course and will definitely recommend to more staff."

Going forward

- Working with 14 clusters from 7 Local Authorities (Renfrewshire, City of Glasgow, Midlothian, Perth & Kinross, Shetland, South Ayrshire, and Stirling) through a 2-year programme incorporating PCP and PSTT SEP.
- Working with 5 Local Authorities (Dumfries & Galloway, East Renfrewshire, Highland, North Ayrshire, and North Lanarkshire) as they move into year 2 of the programme incorporating PCP and PSTT SEP
- Further development of early years CLPL provision.
- Dedicated research input.
- The total amount of potential funding for 2019/2020 provided via The Edina Trust is set to increase.



Secondary sector

We continue to offer a wide range of courses to support the career long professional learning needs of teachers involved in STEM education in secondary schools.

1495 secondary teachers attended one or more of our courses/programmes in 2018/2019.



1495
secondary
teachers
attended one
or more of
our courses/
programmes
in 2018/2019.

New courses 2018/2019

- The Scottish Universities Technology School
- Practical Electronics - Soldering Skills
- Technician Data Logging Course
- Technician 3D Printing/Laser cutting course
- Technology Makerspace
- Cold & Hot Metal Forming
- Welding Skills
- Graphing in R: for science teachers
- Online Health & Safety
- Blended Learning in Physics

"I would like to say a big thank you to all at SSERC involved in this CPLP. The course was very well organised and useful. I felt that all sessions were professionally delivered and relevant. The session on "Ideas for Investigations" was excellent. Please pass on my gratitude to all. I have left inspired and enthused!"

Student teachers

The Scottish Universities Science School (SUSS) for all PDGE and Joint Honours science students was held in Glasgow in January 2019 with 219 attendees representing more than 95% of the eligible cohort. Additional health & safety training opportunities for secondary science students were offered during the year.

In December 2018, in a parallel development, we ran the 1st Scottish Universities Technology School (SUTS) for Design & Technology PGDE Technology students from the universities of Strathclyde and Edinburgh.

"The CLPL was absolutely fantastic and will make a huge positive impact on my practice! I will be sure to keep you updated on all of the progress I make in improving the pupils learning experiences."



Technicians

In association with our LA and FE College training partners, we have continued to provide competence-based training courses to support school technicians. During the year over 450 technicians attended SSERC events with a total 510 completion certificates being awarded.

The annual 2-day conference for technicians, held in May 2018, offered opportunities for training, and associated accreditation, as well as discussion and networking.

New courses developed during 2018/2019

- Working with Technology in Science - Data Logging.
- Working with Technology in Technical - 3D Printing and Laser Cutting.

Courses re-validated during 2018/2019

- Introductory Physics for Technical Support Staff.
- Maintenance of Fixed Workshop Machinery.

The Scottish Technicians' Advisory Group (STAG)

During 2018/2019, STAG has become more fully integrated into SSERC's Advisory structure and renamed as the Scottish Technicians' Advisory Council (STAC).

Effectiveness and relevance of SSERC CLPL for technicians

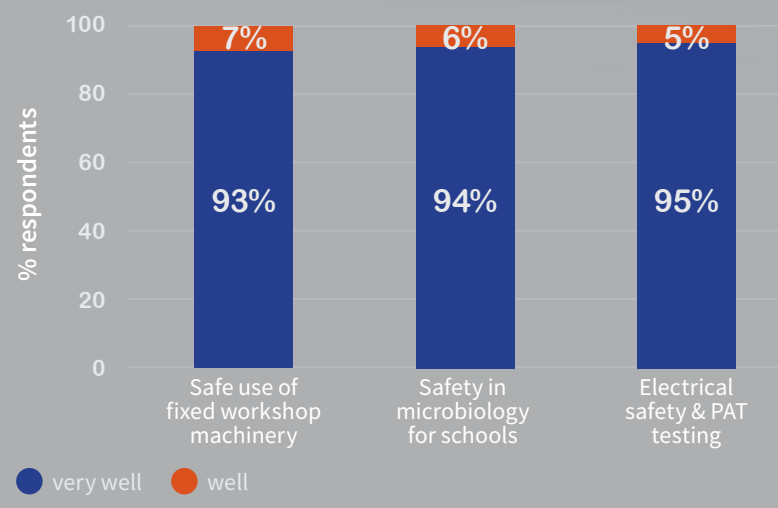
Our internal and external evaluation procedures confirm that our provision is both effective and relevant.

Moving forward

During 2019/2020 SSERC, in partnership with STAC, we will launch *Techne*, an on-line discussion forum. *Techne* will provide an opportunity for school technicians, across the length and breadth of Scotland, to enter into professional dialogue, discussion and debate, as well as sharing best practice.

We recognise that within SSERC we do not currently have the capacity to meet all the training needs of the technician community. To further support technicians across the country, we have established a process by which

To what extent did the course meet your expectations?



external organisations can become SSERC Accredited Centres and once approved are able to deliver SSERC courses. We are currently completing this process with 7 potential new partners, and through strict quality assurance procedures, we aim to deliver the same high standard of CLPL no matter the location. <<

Digital skills

We are pleased to report that, with support from the Scottish Government and Education Scotland, we are able to deliver digital skills training across early years, primary and secondary sectors.

A new Digital Skills Education Manager was appointed and we have been able to offer a range of digital skills courses including:

- Enriching opportunities across the BGE - Early and First Levels
- Supporting literacy and language using digital.
- Computing Science - building and testing computing solutions using block based coding.
- Laying the foundations of Computing Science - Early and First Levels.
- Computing Science: enriching opportunities across the BGE - Third and Fourth Levels.
- Discovering micro:bits across the BGE.
- Reaching all learners using digital tools.
- Supporting learning using rich media.

In addition, we have been delivering external professional learning sessions in partnership with, and for, Education Scotland and Local Authorities.
<https://sway.office.com/pL26C8sZQCGHhNF?ref=Link>

Moving forward

During 2019/2020 we plan to increase the number and variety of courses and programmes offered in this important area of the curriculum.

“Thank you SSERC Digital for providing another great opportunity to play and experiment with coding resources, giving us new ideas and a chance to learn through tinkering; it’s so valuable having time to do this.”

“I loved the mix of information transmission, hands-on playing and exploring and sharing of ideas and good practice. Being pointed in a direction for books and apps that are of high quality is invaluable when there is so much choice available. It’s great to have time to give things a go so you can really imagine how it might work in your setting. I have also come away with nice videos, quotes and ideas to share with my staff to inspire them.”



The Advisory Service

In 2018/2019 SSERC continued to offer advice and guidance on safe, engaging, effective practical work to support the STEM curriculum.

Key functions

- Specialist health and safety advice for schools and LAs.
- Unlimited access 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 Adviser.
- Free management of health and safety courses for Curriculum Leaders. Other specialist health and safety courses, including radiological protection, which are heavily subsidised or free.
- Access to the SSERC website - curriculum support materials, health and safety advice and resources e.g. exemplar 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 conformance with standards.

In autumn, updates of two Codes of Practice used by schools and colleges across Scotland, namely Safety in Microbiology and Materials of Living Origin were launched. Around the same time, the new Environmental Authorisations (Scotland) Regulations 2018 concerning radioactive materials came into force. This had some implications for schools, including a requirement for those with sources over a certain activity to notify SEPA. SSERC liaised with SEPA and were involved in consultations on the notification process. SSERC was established as the link between schools and SEPA, which made the notification process much more straightforward for members.

Some figures



106541
visits to the
SSERC website
during the
reporting period



548650
page views



Data on 700+
chemicals used in
Scottish schools



1000
calls and emails
in/out of SSERC
per week*

* Estimate based on surveys taken on two separate weeks.

Guidance for New and Expectant Mothers has also been updated as has SSERC's Guide to Laboratory Design.

In the summer of 2018, a major incident occurred that threatened to severely constrain practical work in schools. It was discovered that two schools' equipment suppliers were unknowingly selling heat-proof gauzes containing small amounts of asbestos. At first it was not known whether more suppliers were involved, or for how long these items had been on sale. SSERC, working with the Health and Safety Executive and CLEAPSS, helped develop and disseminate guidance on a proportionate solution to the issue. Disruption to experimental work in schools was minimal.

In March 2019, SSERC ran its first full online health and safety course where delegates interacted with live presenters over three twilight sessions. Self-study material was also supplied. The course was very



well received. There were 65 participants from 40 schools. We also ran a new health and safety course for subject leaders in Design and Technology. This was also evaluated very positively by participants.

Staff

SSERC now has a full complement of advisers in biology, chemistry, digital skills, physics, primary and technology. Staff routinely attend training. During the reporting period, a Senior Technician achieved the NEBOSH General Certificate. One of SSERC's Senior Education Managers was awarded the prestigious NEBOSH National Diploma in Occupational Health and will now aim for Chartered Membership of IoSH, another certification that is highly regarded by those in the health and safety community. Other members of staff have been identified for further training, and succession planning regarding our Radiation Protection Adviser role has begun.

Members of the SSERC team attend committee meetings and events run by a variety of partner organisations and bodies such as:

- The Health and Safety Executive
- British Standards
- ASE Health and Safety Group
- CLEAPSS
- The Society for Radiological Protection
- The Institute of Food Science and Technology
- The Scottish Non-Nuclear Industries Liaison Group
- Scottish Parliament Cross Party Group on Accident Prevention and Safety Awareness



Wider STEM engagement

SSERC continues to broaden its wider STEM engagement offer by facilitating teacher placements and encouraging children and young people to become actively involved.

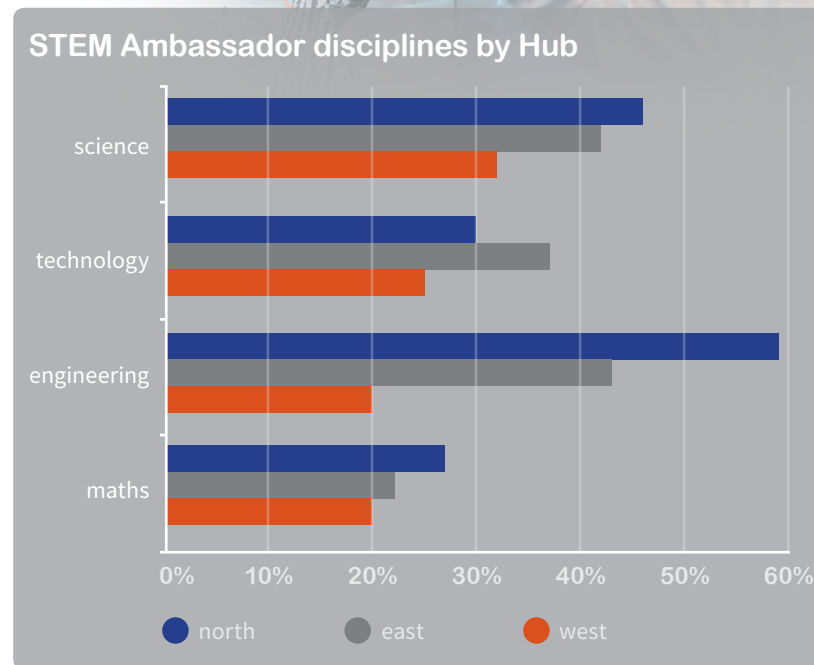
STEM Ambassador programme in Scotland

SSERC, in its capacity as liaison lead on behalf of STEM Learning, continues to support the 3 STEM Ambassador Hubs in Scotland. Our role is to encourage the building of capacity, capability and sustainability across the sector.

| | | |
|--|---|---|
|  <p>2736 Active STEM Ambassadors in Scotland</p> |  <p>6374 Activities delivered</p> |  <p>51450 Hours volunteering</p> |
|--|---|---|

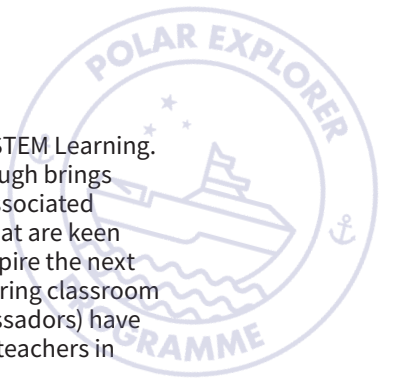
Active STEM Ambassadors

| | | |
|---|--|--|
|  <p>590 NORTH</p> |  <p>882 EAST</p> |  <p>1264 WEST</p> |
|---|--|--|



Note: Some STEM Ambassadors register under more than one discipline therefore % tally exceeds 100%.





NORTH

STEM Ambassador
Delivery Skills training session at Apollo office in Aberdeen.



WEST

STEM Ambassadors from Siemens opened their offices for pupils to visit and take part in a group project design challenge.



EAST

STEM Ambassadors played a key role at 'STEM at The Helix' annual event in Falkirk.

Polar Explorer Programme (PEP)

SSERC has facilitated this funded programme on behalf of STEM Learning. The build, launch and operation of RRS Sir David Attenborough brings an exciting context to the teaching of STEM subjects. The associated education programme encourages and supports schools that are keen to raise aspirations and attainment in STEM and aims to inspire the next generation of scientists and engineers. In addition to delivering classroom activities to pupils, the Polar Ambassadors (all STEM Ambassadors) have also delivered a dedicated professional learning session to teachers in each of the 25 schools.

Building on the Polar Explorer programme, pupils at Sandwood Primary school composed a song on Climate Change for British Science Week and created their own news report on ocean pollution at Sky Studios in Livingston. With the help of STEM Ambassadors from the high school, P7 pupils led the school Science Fair. This included hands-on experiments for younger pupils. >>



Sandwood Primary school.



Teachers attended a residential placement at Dumfries House visiting a range of STEM-related local businesses.

Teacher placements in industry

SSERC facilitated STEM Insight placements on behalf of STEM Learning. Funded through Project ENTHUSE these professional learning opportunities have been developed in recognition that young people often look to their classroom teachers for advice and support on subject choices, further study options and careers. However, teachers often feel underqualified to provide this information and guidance.

“The STEM Insight placement was an amazing opportunity to meet with a number of businesses and understand exactly what is required of our pupils in the future. I particularly enjoyed the passionate discussion that followed, where both the business partners and ourselves became more informed of the issues faced and how to overcome them. This placement addresses the missing link between teachers and the workplace”.

STEM Insight placements equip teachers and technicians with real-life knowledge and experience, helping to bring careers to life in the classroom. They learn about the business world, what roles and skills are needed, the breadth of career possibilities and the variety of routes into jobs, including technical pathways and apprenticeships.

Working alongside key partners and Developing the Young Workforce contacts, SSERC facilitated 22 teacher placements in 2018/2019:

- Teachers attended a residential placement at Dumfries House visiting a range of STEM-related local businesses.
- Teachers spent a week in the Jacob’s offices in Glasgow as part of a Transport Scotland teacher placement.



The Young STEM Leader (YSL) Award

The YSL Award, which aims to spark greater interest and participation in STEM among young people, is being launched in Scotland.

In its Strategy for STEM Education and Training (2017), the Scottish Government committed to ‘establish a new Young STEM Leaders programme to stimulate and strengthen the development of peer mentoring and inspiration in STEM for children and young people by children and young people.’

The YSL programme is being led by SSERC and a range of partners including the four Scottish Science Centres, Scottish STEM Ambassador Hubs, Science Festivals, YouthLink Scotland, Young Scot, Children in Scotland, Education Scotland and the Scottish Mentoring Network.

The key aim of the YSL programme will be to facilitate the development of peer role models to inspire more young people to develop an interest in STEM and pursue related subjects and relevant future careers.

The YSL programme will help with the development of important personal skills that are increasingly in demand from employers.



SSERC Annual report 2019



Children and young people will be given the chance to inspire, lead and mentor their peers through the creation and delivery of STEM activities and events within their school, early years centres or local community groups.

A Scotland-wide pilot of the YSL programme, which will include a diverse mix of schools, community groups and existing awards/initiatives, was launched in early summer 2019. The programme will be fully operational across Scotland by 2020.



Corporate activity

The period from April 2018 to the end of March 2019 saw the organisation undertake a significant amount of corporate activity, aligned to Vision 2030 and associated workstreams. Corporate achievements were reliant on the input of staff, stakeholders and the SSERC Board.



Our Vision 2030 statement
Internationally recognised as a centre of excellence for STEM learning and support.

SSERC Board of Directors and Trustees

- Our Vice-Chair, Ian Stephen, retired from the SSERC Board in December 2018. We are grateful for his long and dedicated service to the Board.
- Appointment of Greg Dempster as Vice-Chair of the SSERC Board of Directors and Trustees.
- Appointment of one new Board member.

Corporate branding

Our new logo and associated corporate colours were launched in early April 2018, to coincide with the launch of the new SSERC website which is now our main communication method with the STEM education community. In this same period the SSERC Bulletin became digital and was rebranded as the STEM Bulletin whilst the Primary Science and Technology Bulletin was given a digital make over.

Our main social media platforms remain as Twitter and Facebook (@SSERCOfficial being the corporate social media account), complemented by sub-accounts supporting biology, chemistry, digital, physics, technicians, technology, STEM and primary.

SSERC Estate

We took the opportunity to rename our existing (and new) buildings after three female scientists/technologists who, despite being at the leading edge of their disciplines at the time, were overlooked in terms of recognition of their achievements: the Rosalind Franklin Building; the

Ada Lovelace Building and our newest building, the Jocelyn Bell Burnell Building. The Jocelyn Bell Burnell Building is home to our early years/primary professional learning offering, our digital skills professional learning offering and to our two broadcast studios. We were honoured that Richard Lochhead MSP (Minister for Further Education, Higher Education and Science) officially opened our new building in September 2019.

Staffing

In this financial year our staffing complement increased to 37 as a result of SSERC being awarded the contract to lead on the development of the Young STEM Leader programme and our expansion into digital skills.

The organisation prepared for the introduction a new pay structure which is designed to be more open, transparent and allow for more effective career progression opportunities.



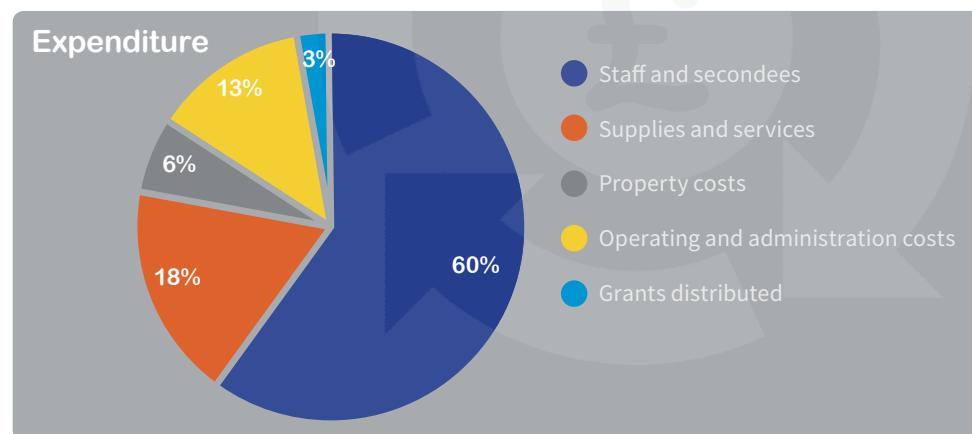
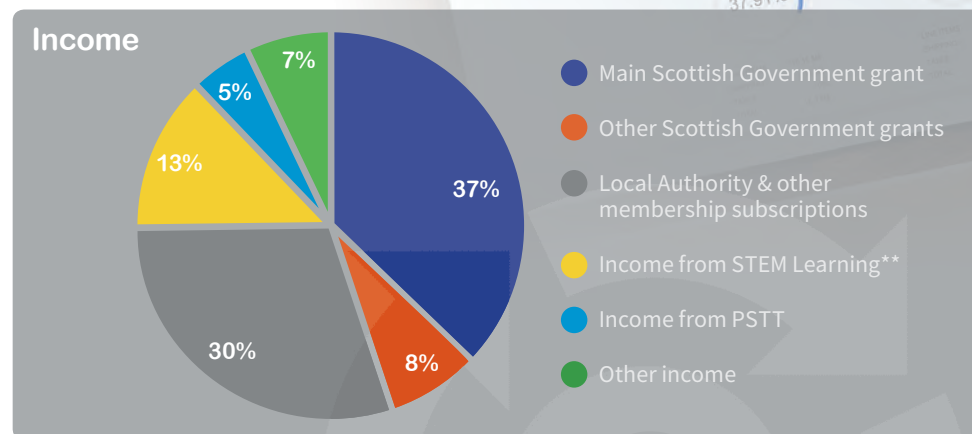
Financial overview 2018/2019

Summarised accounts

| Income | £000s | % |
|--------------------------------------|--------------|-------------|
| Main Scottish Government grant | 860 | 37% |
| Other Scottish Government grants | 178 | 8% |
| LA* & other membership subscriptions | 693 | 30% |
| Income from STEM Learning** | 300 | 13% |
| Income from PSTT | 117 | 5% |
| Other income | 165 | 7% |
| Total income | 2,313 | 100% |

* Local Authority
 ** STEM Learning Income includes courses where schools were funded through Enthuse bursaries.

| Expenditure | £000s | % |
|------------------------------------|--------------|-------------|
| Staff and secondees | 1,511 | 60% |
| Supplies and services | 456 | 18% |
| Property costs | 161 | 6% |
| Operating and administration costs | 324 | 13% |
| Grants distributed | 65 | 3% |
| Total expenditure | 2,517 | 100% |
| Net expenditure in year | (204) | |



Looking ahead

As we move into financial year 2019/2020 our focus will be to continue our progress toward achieving the goals as set out in Vision 2030. Our emphasis in 2019/2020 will be on the following workstreams:

Outreach work

- Offer an opportunity for appropriate bodies and organisations to deliver SSERC SCQF Credit and Levelled professional learning courses as part of a new SSERC Accredited Centre scheme.
- Investigate which other SSERC professional learning courses could be offered at SSERC Accredited Centres.



Outreach work (digital learning)

- Further develop our online professional learning utilising our highly regarded SSERC_Meet format.
- Further refine our 'blended learning' professional learning courses and supplement our fully online professional learning courses.
- Re-launch our SSERC YouTube channel.
- Launch a digital forum to support primary school STEM mentors.



Evaluation and research activity

- Publish all our internal evaluations relating to our professional learning courses.
- Publish the final evaluation report on our highly regarded and impactful Primary Cluster Programme.
- Continue to have at least two SSERC papers published in academic literature/journals.



Business development activity

- Seek opportunities at local, Scottish and UK level, to support and promote STEM education and training.
- Market opportunities to hire SSERC accommodation to external organisations.
- Expand our sponsorship and conference/event exhibition opportunities.
- Bid for relevant externally-funded projects.



2030



Wider STEM Engagement

- Continue to support the three Scottish STEM Ambassador Hubs.
- Work with other national bodies to develop a UK-wide teacher-in-residence scheme.
- Move the Young STEM Leader Programme into its pilot phase and roll out activities across Scotland.
- Work in partnership with the local community to support digital and STEM literacy and skill development.



Professional learning offering

- Seek to become a SCQF Credit Rating Body.
- Offer STEM professional learning to support childminders and community learning and development specialists.
- Extend our range of professional learning courses for early years practitioners.
- Offer new professional learning opportunities for technology student teachers.
- Extend our existing STEM offering.



School technicians

- Add to our range of SCQF credit and levelled professional learning courses, particularly to serve the needs of school technicians and technology teachers.
- Launch *Techne* - a digital forum to support the technician profession.
- Work with the technician profession to launch the Schools Technicians' Advisory Council (STAC) which will form part of SSERC's advisory structure.



SSERC Annual Conference

The SSERC Conference has become a key date in the calendar for those in education who have a responsibility and passion for Science, Technology, Engineering and Mathematics (STEM). The audience includes a wide range of education professionals who have a background or interest in STEM.

In November 2018, we were very fortunate in having Professor Tim Benton as the Keynote Speaker. Tim is Dean of Strategic Research Initiatives at the University of Leeds and Distinguished Visiting Fellow at Chatham House. From 2011-2016, Tim was the UK Champion for Global Food Security, acting as ambassador and spokesperson for matters to do with food and food security, and coordinating work across this area between research councils and government departments. For his presentation at the conference Tim took the title '*Agriculture, Food and Food Security: why it is an important topic for students*'.



Tim gave us permission to record his presentation and it is available through the SSERC YouTube channel [https://youtu.be/p_7KCELpqq].

Plans are well advanced for our 2019 Annual Conference which will be held at the Carnegie Conference Centre in Dunfermline on Friday 6th December 2019.



Image: courtesy of Scottish Childminding Association and its childminder members





SSERC, 2 Pitreavie Court, South Pitreavie Business Park, Dunfermline KY11 8UU.
Telephone 01383 626070, enquiries@sserc.scot, www.sserc.scot

SSERC is a Company Limited by Guarantee (Scottish Company No. SC131509) and a registered educational charity (Scottish Charity No. SC017884)
Registered Office - 5th Floor, Quatermile Two, 2 Lister Square, Edinburgh EH3 9GL.

© 2019 SSERC. This publication may be reproduced in whole or in part for bona-fide educational purposes provided that no profit is derived from the reproduction and that, if reproduced in whole or in part, the source is acknowledged.