

Introduction to SSERC

To inspire, enthuse and support STEM educators for the benefit of all learners

Graeme Rough

Head of STEM Programmes

www.sserc.scot

[@SSERCSTEM](https://twitter.com/SSERCSTEM)

SSERC is the “*go to*” organisation for STEM professional learning in Scotland, offering a broad portfolio of services supporting STEM learning which are not available from any other source:

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.



Vision:

SSERC is internationally recognised as a centre of excellence for STEM learning and support.

1 Provision of Career Long Professional Learning (CLPL) for childminders, early years practitioners, primary and secondary school teachers and school technicians.



SUBJECT AREAS ▾ HEALTH & SAFETY ▾ TECHNICIANS ▾ STEM ENGAGEMENT ▾ **PROFESSIONAL LEARNING ▾** NEWS ABOUT ▾ Q

Inspiring STEM Educators

PROFESSIONAL LEARNING, PROGRAMMES AND EVENTS

EARLY YEARS & PRIMARY PL

SECONDARY PL

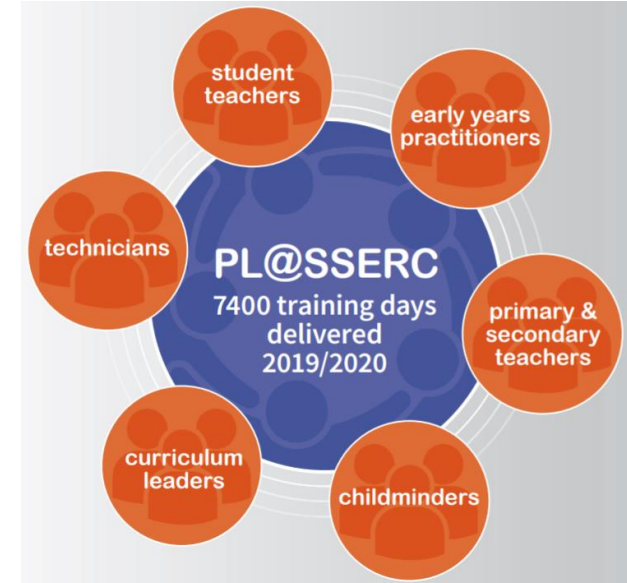
DIGITAL PROFESSIONAL LEARNING

TECHNICIANS PL

ENTHUSE FUNDING

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el restrictions.



The Advisory Service provides ongoing health and safety guidance for the Scottish education community to support safe STEM-based activities in the classroom environment.

Health & Safety

Sealed radioactive source disposal

When the Environmental Authorisations (Scotland) Regulations (EASR 2018) were introduced, there was a subtle but important change to legislation permitting dustbin disposal of sealed radioactive sources with activities of 200 kBq or below. Dustbin disposal was still permitted, provided that waste went directly to landfill. One reason for this is that a lot of waste is now processed to make refuse-derived fuel (RDF). Black bag waste is shredded and electromagnetic induction is used to remove metal waste for recycling. The rest is burned in power plants. Scotland's environmental agency, SEPA, does not want radioactive material ending up in the scrap metal chain. With many councils adopting a



Figure 1 - A source undergoing a leak test.

difficulties. There is, however, one sealed source that even the most enthusiastic schools want to get rid of



Health & Safety

PPE

Our online guidance document [1] discusses all relevant PPE and suggests suitable sterilising solutions. Here we will focus on eye protection. Sharing an item of eye protection between learners, be it a pair of safety glasses, indirect vent goggles or a face shield, should not happen unless the equipment is sanitised between wearers. As with hand-washing, this is a control measure that is likely to outlast most others. In an ideal world, every learner would have their own eye protection, labelled and kept in school. This is not a scenario that is likely to be commonplace. Indirect vent goggles with elasticated straps are the most problematic. The only really effective way is to fully immerse them in sterilising solution for 15 minutes, rinse them and allow to dry.

The real problem here is with the straps taking time to dry. A solution that will work for some designs at least is to make a strap for each learner using elastic and two bulldog clips. The straps are kept (separately) for each learner and



The above issues can be mitigated to an extent in some cases by changing the experiments, reducing concentrations for instance, such that eye protection is no longer needed.

Teachers should have their own set of PPE. This can be sterilised at the end of the day and left to dry overnight. <<

Health & Safety

Dissection of animal materials in school

We receive enquiries about animal material dissection on a regular basis from both teachers and technicians. Many of these simply ask, 'What are we allowed to do?' Our answer is that dissection of animal material is permitted if it is obtained from animals that have been slaughtered for human consumption. Such material may be obtained from butchers, abattoirs, or fishmongers. The dissection materials must be fresh or, if they



1. STEM Ambassador Programme
2. Teacher Placements and EIPs
3. ENTHUSE Partnerships
4. Young STEM Leader Programme

3

Wider STEM engagement activities including liaison lead for STEM Ambassadors in Scotland, teacher placements into industry and the Young STEM Leader programme.

- Over 5,000 STEM Ambassadors in Scotland
- Engaging STEM experiences for schools, community and youth groups
- Over 30 years



[Home](#) [About](#) [The Programme](#) [Events](#) [Resources](#) [News](#)



3

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SSERC EIPs (Education/Industry Partnerships) contributing to the local community.

If you are a business looking for a ready made programme to support your corporate social responsibility strategy - then a bespoke industry/education partnership is ideal for you.



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3

Wider STEM engagement activities including liaison lead for STEM Ambassadors in Scotland, teacher placements into industry and the Young STEM Leader programme.



- ✓ Increased attainment in STEM subjects, narrowing the gap for disadvantaged students
- ✓ Increased interest in STEM careers: more students interested in working in STEM industries
- ✓ Increased understanding of STEM careers: more students aware of the qualifications and routes to progress in STEM

Buckburn and Dyce learning communities in Aberdeen

The focus here is on building a consistent approach to maths and numeracy learning and teaching via a series of professional learning events for teaching staff in the primary and secondary schools in both clusters. The hope is that there is an increased achievement and attainment in numeracy for learners across primary and secondary. The partnership is supported by BP and La Salle Education.

This partnership launched in early 2021 and is making excellent progress with our series of professional learning events underway.

Shawlands, Cumbernauld and St Mungo's Academies, Brannock and Barrhead High Schools in the West of Scotland

Staff and pupils in these five secondary schools are working together with Jacobs, going on a journey of enhanced career-based learning, finding out the many STEM-linked opportunities and pathways that exist beyond school. As the learning takes place, young people in these schools will lead careers learning events to peers, gaining Young STEM Leader Awards as a result.

After extensive planning, this partnership will officially launch on 10th June 2021 and we are inviting those involved in STEM education to join us to find out more and meet our team.



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Inspiring and developing young people through STEM

Welcome to the Young STEM Leader Programme (YSLP), an exciting opportunity for young people in Scotland.













MillburnScience @millburnscience · Oct 27
 #YoungSTEMLeaderWeek @YoungSTEMLeader @MillburnAcademy our S6 stem leaders helping the S3 pupils #create and deliver different presentations to demonstrate the process of fertilisation.



BHSscience @SscienceBh · Oct 30
 "To celebrate #YoungSTEMLeaderWeek our leaders @biggarhigh got involved with our S1s as they designed and created their own volcanos! 🙌 well done everyone they look AMAZING!! 🙌 @YoungSTEMLeader"



YOUNGSTEM
 leader
 led by **sserc**

STEM VIP INTERVIEW

Dr Craig Poku
 Climate Scientist

Young STEM Leaders
 Kings Park Secondary

#YoungSTEMLeaderWeek

Post
STEM Girls > Homework Help

S3 Chemistry Revision Session
Tuesday, 10 November 2020 @ 17:00

Scheduled by you

Meeting started

Thank you very much for your help! 😊

Meeting ended 48 min 32 s

Ruby Finn 17:46
No problem thank you

Amber Jeary 17:46
Yes no problem at all it

https://sites.google.com/d/1ZLWvC_xkgZVNF55u33sl
Glow - Launch Pad
My Drive - Google Drive
STEM

File Edit View Favorites Tools Help

STEM Home Engineering Films Resources Breaking stereotypes in STEM Young STEM Leaders Killoeggen science fair Maths help 2nd level



What this club is about:

Our club is about finding out where and how clothes are stitched, we cant make actual clothes but this is a good start to learning the skills to do that, we hope you enjoy our club and are inspired to do more with fashion in the future!



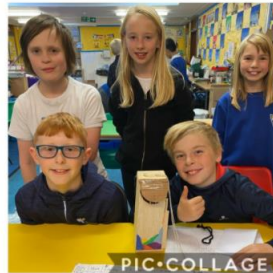
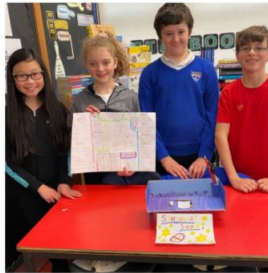
Stitching types!

Here are some of the different stitches. If your clothing has none of these, just draw a running stitch or a baste stitch on the sheets for the activity.



MHS Technologies @PeopleWhoCan · Nov 13

Beautiful nails in Top Coat Nail Gallery @MonifiethHigh today!!! Well done to all involved! 🌟🌟🌟 @PrincesTrust @YoungSTEMLeader @DYW_DA @dundee_angus



Opportunities

- SSERC International membership
- International Young STEM Leader
- Organisation visits
- Education/industry partnerships

enquiries@sserc.scot

Contact

Please make contact if you have any further questions, comments or you would like to progress with opportunities.

enquiries@sserc.scot