

What is RAiSE?

RAiSE is a programme of The Wood Foundation, Scottish Government, Education Scotland, and participating local authorities which empowers primary practitioners with the skills, confidence, and networks to develop and deliver motivating STEM learning experiences.

It has engaged 16 local authorities since its launch in 2016 and is being offered to all regions on a rolling basis until 2025.

Through a two-year funding model, local authorities appoint a Primary Science Development Officer (PSDO) to lead upon professional learning and partnership opportunities which align with national drivers, as well as local priorities. The network is led by the National Education Officer.

Active RAiSE funded authorities in 2020/21 were: Clackmannanshire, Comhairle nan Eilean Siar, Falkirk, North Lanarkshire, Orkney, North Ayrshire, South Ayrshire, and West Lothian.

Actively engaged legacy authorities (who have exited their funding period but have retained a lead officer for STEM in post and are contributing members of the RAiSE network) in 2020/21 were: Angus, Dumfries & Galloway, Edinburgh, Glasgow, and Fife.

A programme of:

This academic year

3628

professional learning
hours have been delivered

4093

primary practitioners
engaged

1394

schools engaged
with PSDOs

500

professional learning
opportunities

Figures from 2020/21 academic year

Highlights

Due to Covid-19, RAiSE adapted its delivery and engagement models and, as a result, increased its profile and impact across school communities.

Professional learning events moved online, increasing accessibility and engagement. These were a mix of live sessions, recorded for those who could not attend to view at a later date, and instructional videos.

The number of professional learning opportunities between August and December was 90% higher compared to the year before thanks to virtual engagement.

The RAiSE network was also responsible for the development of the Science Planning Framework and context planners which supported teachers to deliver meaningful, relevant STEM experiences in class or remotely. These were launched nationally by Education Scotland.

The focus of the curriculum during a disrupted period was literacy, numeracy, and health and wellbeing. PSDOs worked with schools to create exciting STEM opportunities which addressed these drivers in ways such as using stories as a stimulus for experiments, outdoor learning opportunities, and investigating climate change.

Bespoke professional learning was organised to best support evolving needs, responding with flexibility. Initiatives such as online STEM Clubs were positively welcomed.

Increased regional approaches to STEM collaboration, learning, planning, and delivery of opportunities through Regional Improvement Collaboratives.

Increased partnership working with organisations such as SCDI, Energy Skills Partnership, and Easter Bush Science Outreach Centre, as well as SSERC through its primary STEM, STEM Ambassadors and the Young STEM Leader programmes.

Increased collaboration across Education Scotland regional and national directorates including the wider STEM Team and Increasing Gender Balance and Equalities officers.

Bespoke evaluations with engaged authorities formed detailed and feedback-driven action plans informed by local teachers.

Continued strategic review of the Scottish Government's STEM Education and Training Strategy, working with partners in Scottish Government recognising RAiSE's alignment and delivery upon its objectives.

Impact

"Children have participated in meaningful and enjoyable activities that have sparked their imagination and engagement."

"The courses have provided some great resources which we have shared with our colleagues. This has helped us to encourage and support our school in our journey to building confidence around teaching STEM."

"The professional learning has provided me with tools to engage the children in my class. Particularly relevant has been the weaving together of ALL areas of the curriculum where and when achievable."

A snapshot of activities

Pondering Pond Life

Easter Bush Science Outreach Centre developed a microbiology toolkit and professional learning session, working alongside RAiSE to ensure these were delivered to school communities throughout Scotland.

30 sets were made available which include microscopes, slides, pond samples and teaching resources. The teaching guide is freely available and is focussed on ages 9-13. It gives young people the opportunity to investigate the links between nutrition and the growth of microbes from pond water.

Pupil: "I enjoyed looking at the different microorganisms under the microscope. I find it fascinating how there is a whole world of tiny things that are practically invisible unless under a microscope! I would like to look at more things in the future and hopefully be able to do more work on microorganisms."



DYW Orkney investment

DYW Orkney granted the local PSDO £18,000 to purchase equipment to deliver two significant projects across the islands impacting 1500 children.

Meccano, coding creatures, minicomputers, toolkits, and workbenches, were delivered to all schools with a suite of professional learning materials and lesson plans linking the equipment, STEM learning, and the local community and economy.

DYW Orkney: "We recognise that the development of STEM and digital skills is vitally important for the islands as we progress through a modern economy and we must be proactive in developing our young people for the future."

RAF glider challenge

The Falkirk RAiSE team worked with the Smallpeice Trust on the RAF Glider Challenge, tasking 260 pupils at 18 primary schools to work in teams to build gliders.

Pupils investigated materials and learned how to fit pieces together for maximum efficacy. They then tested their designs to measure impact.

Pupil: "I really enjoyed building the glider because we started off badly but then we made a very good one."



Strategic value of RAiSE

This year the impact of RAiSE as an established national model was explored.

Read more about:

The sustainable leverage offered by this programme and its leadership.

The legacy of the two-year funding model and how local authorities are sustaining and growing their investment in primary STEM thanks to RAiSE.

The value placed upon meaningful, powerful partnerships.

More information

 [#RAiSEScotland](https://twitter.com/RAiSEScotland)

www.thewoodfoundation.org.uk/developing-young-people-in-scotland/raise

www.education.gov.scot/improvement/learning-resources/Raise

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