Leveraging additionality from the RAiSE investment

A recent legacy report details the ongoing impact within exited authorities who remain engaged in the network beyond the period of investment.

Alongside this, the programme and its officers are leveraging additional funding, resources, and support to better realise opportunities to enhance the role of STEM in Scotland's primary classrooms.

Gayle Duffus, National Education Officer, leads the RAiSE programme. She said:

"RAiSE is about much more than the funding of the PSDO position post. We recognise that in order to be sustainable and meaningful, it must be used as a catalyst to cultivate engage committed networks. Our position gives us the opportunity to work closely with partners and find ways of working which realise a plethora of opportunities for all stakeholders."

Additional resource that has been leveraged to date includes:

- More than £70,000 worth of resources and professional learning opportunities.
- Local authorities, including Dumfries & Galloway, Highland, and Glasgow, funded additional hours for the post to appoint two staff to RAiSE, deepening and broadening the reach and impact.
- More than 100 hours from external partners dedicated to the development and delivery of high-quality professional learning.

Two thirds of the authorities engaged since it was launched in 2016 have now exited their formal funding period and all remain engaged with the collaborative national network, connected to a growing cohort of regions committed to the development of primary STEM.

The relationships formed at national and local levels allow for context-driven STEM learning experiences. Some key partner inputs have been:

- DYW Orkney granting £18,000 to the local PSDO to purchase Meccano sets, codable robots, and workbenches and tools to distribute throughout the islands' schools. These kits have been shared with lesson plans and there are professional learning opportunities being developed.
- 800 copies of the Lost Words, a book celebrating the learning from nature. PSDOs benefitted from a training session with the John Muir Trust to lead professional learning with teachers who would receive copies of the book.
- Securing more than £14,000 of First Lego League Kits with the Energy Skills Partnership and working collaboratively to align the resources to the curriculum.

Why partners are supporting RAiSE:

Wind farm company Quaybridge has developed a free-to-use web resource detailing careers in the renewable energy sector, and the skills and pathways which support entering the industry.

Zoe Barnes, Strategy Manager, said: “Offshore wind has potential to provide more than 6500 jobs in Scotland, many of which will be in remote communities. Working with programmes like RAISE, which enthuse young people in all Scottish communities about STEM, ensures that the benefits from offshore wind develop can be realised within communities close to the wind farms and that we have a passionate and capable workforce for the future.”

Energy Skills Partnership supported the introduction of the First Lego League into Scottish schools, working with RAiSE.

Wendy Findlay, STEM Programme Manager, said: “The Energy Skills Partnership introduced FIRST Lego League EXPLORE to RAiSE authorities in 2018. Since then it has engaged 65 schools with more than 150 teams. RAiSE supported the alignment of the opportunity with Curriculum for Excellence to deepen its impact. The support of RAiSE has without doubt increased the effectiveness of our STEM programmes, providing outreach into the most rural and deprived areas of Scotland, whilst ensuring that the resources provided are used for maximum effectiveness.”

The UK Centre of Astrobiology, based at the University of Edinburgh,y worked with RAiSE to provide a suite of resources and materials to engage and excite the youngest learners.

Charles Cockell, Professor of Astrobiology, said:

“RAiSE has allowed us to enhance science education by using astrobiology as a tool. As a subject area that links diverse areas of science to address questions about the origin and evolution of life, and the potential for life elsewhere, we have been able to develop new curriculum materials to enthuse and stimulate primary interest in STEM across Scotland. It has been an astonishingly productive, enjoyable, and energising experience to work with RAiSE to get our jointly produced materials out to Scottish schools.

“Astrobiology covers subjects from the origin of life to life beyond Earth and within these questions are many fascinating science questions and pedagogical tools to teach fundamentals of science and critical thinking. The materials also introduce pupils to cutting-edge science topics to enthuse them for a future in STEM.”

SCDI provided 20 ‘Climate Smarter’ kits for schools in the Western Isles and Clackmannanshire, supported by professional learning and a celebration event.

Thomas Wild, Programme Manager (Young Engineers and Science Clubs) at Scottish Council for Development and Industry (SCDI), said:

“It is incredibly valuable for SCDI to be able to work in partnership with RAiSE. The PSDO, as an on-the-ground resource, really helps us ensure our projects are getting into schools for the benefit of pupils.”

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