

# Systemic Change

## Glasgow Primary STEM Leaders



This case study is for practitioners and Senior Leadership Teams in the primary sector.

### Rationale

Practitioners reported a lack of professional learning (PL) in relation to STEM subjects at a primary level and there was a need to increase the confidence and skills in a sustainable and systemic way.

Identifying enthusiastic teachers who were committing to be a STEM Lead within their setting was imperative to ensure that any PL had the widest impact. The Primary STEM Leaders (PSL) network was established to enhance collaboration across the city while upskilling these practitioners with experiential PL opportunities.

The 'trickle-down' effect of practitioners sharing these acquired skills within their setting is becoming an increasingly popular form of PL, empowering those throughout the school and not just the leadership team.

### The programme

More than 85 practitioners so far have been identified from across Glasgow. They've been supported by their headteachers to take on the STEM lead role in their settings.

The approach to PL was collaborative between the RAiSE team and practitioners, with sessions focused on practitioners' setting priorities.

Eight twilight and two full-day sessions took place across the year with a PL session happening at least once a month. The PL sessions included:



### What does it cost?

PL was delivered by the STEM Glasgow team and partner organisations. Some of these organisations charged a cost for their input.

### Where can I find out more?

Contact a member of the **STEM Glasgow** team at:

**Email:** [stem@glasgow.gov.uk](mailto:stem@glasgow.gov.uk)

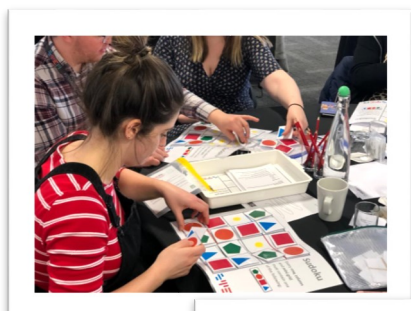
**Twitter:** [@STEMglasgow](https://twitter.com/STEMglasgow)



- Coaching and mentoring
- Developing the Young Workforce and the Career Education Standard
- Digital skills
- Experiential professional learning
- Leadership
- Resource development
- Self-evaluation and improvement
- Tinkering
- Unconscious bias and gender balance

Many of the PSLs then delivered these sessions to colleagues in their own establishments increasing capacity and promoting STEM PL opportunities. The PSLs were supported in running an event for British Science Week which gave further opportunity to work collegiately in their establishments, whilst continuing to develop partner engagement and increasing STEM capital in their local communities.

The PSLs collaborated to develop resources that have since been made available nationally, including the STEMaStory initiative. These resources have been used throughout the city and also delivered to the Literacy Challenge Leaders of Learning as part of the Glasgow's Improvement Challenge.



*This case study has been prepared by STEM Glasgow. The views contained in this document are those of the author and do not necessarily represent those of RAiSE, Education Scotland, and/or The Wood Foundation.*



## Impact

Participants reported their role had heightened the profile of STEM in their setting among pupils, staff, parents and the wider community. Moreover, it has developed closer working relationships across the learning community from nursery to secondary through a cluster-approach.

They also stated increased confidence – not only in their own abilities to teach STEM but that of their colleagues. The majority expected to continue the STEM lead role in the next academic year and support the next cohort of Primary STEM Leaders.

*“It really has transformed my own knowledge, understanding and teaching. I feel much more confident in my science pedagogy and better able to not only meet learners’ needs, but provide progressive and enjoyable science experiences for them.”*

*Primary STEM Leader*

A showcase at the end of the academic year allowed each of the STEM Leaders to profile their own school's STEM achievements providing further opportunities for collaboration and shared learning. This showcase demonstrated a diverse variety of projects and approaches tailored for their settings.

*“Having the support of STEM Glasgow has been hugely beneficial for our school. The level of training offered to our Primary STEM Leader was of a very high quality and the continuing support available has been hugely beneficial to us. The teaching of STEM subjects in our school has been totally transformed and there is a real buzz in the classrooms when it comes to STEM.”*

*HT, Glasgow North East*