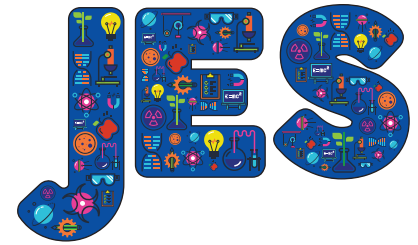


Practitioners as lifelong learners: a collaborative approach to professional learning in Scotland



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Abstract

In Scotland, the national model of professional learning highlights the importance of education professionals as lifelong learners across the education system. Agreement on the national model of professional learning was reached through collaboration across sectors including education, universities and teacher professional associations, and builds on national and international research into effective professional learning and teacher professionalism (GTCS, 2017; Hargreaves & Fullan, 2012; Timperley, 2008). In this paper, the evolution of this co-constructed national model is shared, with three examples of the model actively influencing science and wider learning and teaching at school, local, regional and system level.

Keywords: Professional learning, teacher development, CPD, Scotland

In Scotland, the national model of professional learning highlights the importance of education professionals as lifelong learners across the education system. In this article, Education Scotland explores the model alongside some other system-wide strategies in Scotland that support science learning and teaching and provide practitioners with further reading and online support resources.

Collaborating to construct the national model

Education Scotland (a Scottish Government executive agency charged with supporting quality and improvement in Scottish education) has strategic responsibility for professional learning and leadership. It has led work with partners and stakeholders to agree a national model of

professional learning, which builds on national and international research (Timperley, 2008; Hargreaves & Fullan, 2012, amongst others) and the work of the General Teaching Council for Scotland. In 2017, the Strategic Board for Teacher Education, the body that oversees and evaluates reforms to teacher education in Scotland, established a Short-Life Working Group on Professional Learning. To support the work of the group, the Scottish College for Educational Leadership (SCEL) commissioned a scoping study on professional learning, gathering the views of over 600 teachers from 30 local authorities regarding their aspirations for their own professional learning (Scottish Government, 2018).

The group then made 16 recommendations across four themes:

- communicating a consistent professional learning model;
- improving access to professional learning resources;
- accreditation and endorsement of professional learning; and
- developing professional learning partnerships.

Education Scotland then led on the work to take forward these recommendations. Agreement on the national model of professional learning (Figure 1) was reached through collaboration across sectors including education, universities and teacher professional associations.

For example, as part of Education Scotland's work engaging the wider system around this model, we delivered a seminar at the International Primary Science Education Conference held in Edinburgh in June 2019. During the session, primary science teachers were encouraged to reflect on the last time that they experienced professional learning



(or CPD, continuing professional development) that deepened their knowledge and understanding, challenged their thinking and was collaborative in nature. They also considered the extent to which time and space for professional learning was protected in their setting.

Figure 1. National model of professional learning in Scotland.



Education professionals engage in professional learning to stimulate thinking and to ensure that practice is critically informed and up-to-date. Whether that learning is with colleagues in their setting, or with external providers, the model of professional learning (Figure 1) identifies the key principles and features of effective learning that build capacity and promote collaborative practices. These principles build on the concept of teacher professional capital and the elements of 'human capital', 'social capital' and 'decisional capital' (Hargreaves & Fullan, 2012).

At the heart of the model is the relationship between the learning of the education professional and the learning of those they support. *'Teachers who are engaged in cycles of effective professional learning take greater responsibility for the learning of all students [...], as they discover that their new professional knowledge and practice are having a positive impact on their students, they begin to feel more effective as teachers'* (Timperley, 2008, p.9). Having a national model that emphasises the

importance of high-quality professional learning for practitioners will ultimately impact on outcomes for children, young people and adult learners.

The model identifies that professional learning should be:

- ❑ Challenging, and develop thinking, knowledge, skills and understanding;
- ❑ Underpinned by developing skills of enquiry and criticality; and
- ❑ Interactive, reflective and involve learning with and from others.

Professional learning should be informed and supported by professional standards and education policy. The General Teaching Council for Scotland in its paper *Teacher Professionalism and Professional Learning in Scotland* states that *'teachers and school leaders should be empowered, enquiring, collaborative professionals who are well-informed to make the best decisions for our children and young people'* (2017, p.1). Enquiry *'establishes and maintains a rhythm of learning, change and innovation'* (OECD, 2016, p.5).

Leadership of and for learning, across all levels of education, is essential to ensure that learning is well supported, promoted and sustained. *'Professional learning is strongly shaped by the context in which the teacher practises. This context is usually the classroom, which, in turn, is strongly influenced by the wider school culture and the community and society in which the school is situated'* (Timperley, 2008, p.6). The model encourages all those involved in teaching and learning – be it at classroom or Headteacher level – to consider themselves as leaders of and for learning and to create the culture for ongoing and sustained professional learning within their setting.

Embedding the model across the system using a process of endorsement

For those planning professional learning, the model can be used to stimulate thought around deepening the learning and the approaches used to do so. Through Education Scotland endorsement, external programmes that demonstrate how they reflect the national model can be identified as examples of high-quality professional learning.



These endorsed programmes sit on Education Scotland's website, meaning that practitioners can feel confident in choosing options to support their own development and that of their staff.

An example of this is provided by Juliet Lunnis, who leads Edinburgh City Council's 'Edinburgh Learns: Inspiring Teacher Enquiry Programme', which was recently endorsed by Education Scotland.

'The programme supports practitioners to critically reflect on their values, strengths and pedagogy, then develop skills to lead teaching and learning improvements in their establishments.'

'Going through Education Scotland endorsement and reflecting on the national model of professional learning ensured we were rigorous in the process of producing a coherent, high-quality and valuable course.'

'Edinburgh Learns now aims to achieve GTCS Professional Recognition status for Inspiring Teacher Enquiry and has plans to apply for Education Scotland endorsement for a number of their other courses.'

Outlined below are three examples of the model in action actively influencing practice. The first focuses on teachers supporting teachers' professional learning within their setting, the second looks at how the model has influenced national strategy around STEM professional learning, and the third how the model is being used to encourage practitioners to question and challenge practice around gender balance in education.

□ **Example 1: using the model as a shared tool in schools**

Dougie Gillespie is Principal Teacher of Career Long Professional Learning at Hillhead Secondary School in Glasgow. He describes how having a national model has helped to shape the school's thinking around its own professional development and has tied in with his own further professional reading. In this section he explains how he has engaged with the model. *'Teacher growth is closely related to pupil growth. Probably nothing within a school has more impact on students in terms of skills development, self-confidence or classroom behaviour than the personal and professional growth of their teachers'* (Barth, 1990, p.49). As Dougie views it, *'Barth's quote perfectly summarises the use of the national model of*

professional learning at Hillhead Secondary School. The model views the teacher as the learner, at the centre, and we look at the impact of this upon the pupils.'

'All teaching staff are members of Teacher Learning Communities. These are led by volunteers who attend training and deliver sessions to the members of their community. This provides the foundation for enquiry at Hillhead, engaging with professional reading and working as a collaborative to challenge ideas.'

'Our Maths Department engages further with professional literature during department meetings, developing the Mastery approach. There is a confidence in taking a risk, with staff feeling supported through being given space and respect to explore new learning and make professional judgements.'

'The national model of professional learning acts as a planning tool for all of our professional learning. We ensure that any in-house event is well-led, tailored to the [General Teaching Council for Scotland] professional standards, allows staff to work together to deepen their knowledge, and is well-resourced with all book titles purchased and added to our extensive library. All of this, of course, to provide more positive learning experiences for our pupils.'

Hillhead High School is an example of the growing number of teachers working collaboratively to inform their practice. This is being replicated at: local level (through informal groups such as the Teachers Enquiry Network (TEN) in East Lothian and Mid Lothian); regional level (through programmes such as the Collaborative Enquiry Networks in the West Partnership); and nationally (through organisations such as the Scottish Professional Learning Network and Education Scotland's own Professional Learning and Leadership programmes).

□ **Example 2: enhancing professional learning through the STEM Grants Programme**

In 2018, Education Scotland launched a grants programme funded by the Scottish Government. The aim of this programme is to enhance provision of local, regional and



national STEM-related professional learning and supports the implementation of key commitments within the STEM Education and Training Strategy (Scottish Government, 2017) and the *Making Maths Count Report* (Scottish Government, 2016).

The new STEM Grants Programme seeks to support early learning and childcare practitioners, community learning and development practitioners, teachers and school technicians. Round one of funding in the 2017/18 academic year awarded £187,000 to support 24 projects throughout Scotland. The programme was extended in Round two, with £1.3 million being made available through the grants programme to give funding for providers delivering on a regional or national basis, as well as introducing a new Leadership and Collegiate Professional Learning Fund. This new fund was created to enable collaborative professional learning across sectors, within school clusters or to support practitioner networks. All of which works to link national strategy and funding to the key principles and themes of the national model of professional learning.

Ninety-seven professional learning programmes have been awarded funding in 2019/20 and a further forty-one professional learning programmes will be supported through the Regional and National Partner Fund.

The aim of both funding streams is to support interdisciplinary approaches to STEM and subject-specific support to each of the STEM-related disciplines, including numeracy and mathematics, sciences, technologies, digital learning and teaching, and engineering. However, the design of the Leadership and Collegiate Professional Learning Fund places an emphasis on supporting schools in taking forward their own partnership plans in building capacity through professional learning: *'[I]f teachers are to change, they need to participate in a professional learning community that is focused on becoming responsive to students, because such a community gives teachers opportunities to process new information while helping them keep their eyes on the goal'* (Timperley, 2008, p.19). The STEM Grants Programme facilitates the *'leadership of and for*

learning' from the national model with practitioners planning collaboratively across sectors. Funding going directly to schools will allow the flexibility in planning for that time and space to build these professional learning communities.

□ Example 3: Using the model: critically reflecting on improving the gender balance in STEM and beyond

Reflecting on and challenging your practice is one of the key principles and features of the national model of professional learning – 'learning by enquiring'. Barriers to science qualifications and careers for certain groups are well documented (Archer *et al*, 2013) and the younger we can start to address these barriers (in primary education, if not earlier), the better. Increasingly, research (Koenig, 2018; Kurtz-Costes *et al*, 2014) shows that the best way to combat the negative effects of gender stereotyping on young people is through an embedded and sustained approach to raising gender bias awareness. Based on this growing evidence base to address gender biases and stereotyping across education, the Scottish Government has funded the *Improving Gender Balances and Equalities* team.

This team offers training on gender, stereotypes and unconscious bias, underpinned by principles of the national model of professional learning. The team aims to support all practitioners in Scotland over the next four years to critically reflect on their own biases and how they impact on their practices in the classroom, on their structures and planning within schools, and on their wider learning community.

As with all professional learning, training can often be simply the first step on a journey. Further reflection, professional dialogue and collaborative planning and practices will need to be put in place in schools, early learning and childcare centres and community learning to truly challenge gender imbalances in education.

The Improving Gender Balance pilot: countering self-selection in clubs:

One secondary school in Scotland was keen to find ways to enable all their students to



experience the fun and reward of STEM challenges, but found that asking for volunteers meant that a lot of the young people ruled themselves out.

'We've had a long tradition of having a science club that has been very successful and won awards, and various extra-curricular activities. But, when we look at who engages, it tends to be the same self-selecting group of pupils.'

'We realised that a number of our pupils were very, very good, had the right skills to do well at these sort of events and would enjoy them, but wouldn't go to the traditional lunchtime or after-school clubs to take part.'

'One of our approaches was to select a large STEM challenge (Shell's 'The Bright Ideas Challenge') and run it for the whole of S2 (ages 12–14). Every S2 pupil got to take part in it and then only after they'd all experienced it did we ask for groups of volunteers to continue with it further. We ended up with mixed gender groups, which we wouldn't normally have had. Speaking to the girls who had been involved, they wouldn't have volunteered normally to take part. It gave them the opportunity to experience STEM in action' (Institute of Physics, 2018, p.23).

Further case studies can be found in the *Improving Gender Balance* report (Institute of Physics, 2018). In the *Improving Gender Balance*

Figure 2. Tackling common misconceptions.



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toolkit, practitioners, school and system leaders are asked to critically reflect on the statements in Figure 2. To what extent do they challenge assumptions about gender in education?

How do schools' policies and practices work to break down gender, and other, barriers for learners? There is an ethical prerogative to taking an enquiry stance to improve outcomes for children, young people and adult learners.

Alongside delivering training, the *Improving Gender Balance and Equalities* team works with schools and early learning providers to expand and embed the approaches, including developing a gender champion network and a gender schools award to grow and spread best practice. For a literature review of the *Improving Gender Balance and Equalities* work, see Education Scotland (2019), and practical resources to support this journey of understanding are freely available on the Education Scotland website (see link below).

Questions to consider for developing professional learning

In the past twelve months, how many teachers and practitioners can say that they have experienced professional learning that **deepened** their knowledge and understanding, **challenged** their thinking and was **collaborative** in nature? Is the time and space for their learning protected in their setting? Primary science practitioners *teach* enquiry skills; how often do they have an opportunity to *enquire* into their own practice?

For those designing professional learning opportunities, some challenge questions are posed: How much do programmes rely on the 'sage from the stage' approach? How often is the experience, knowledge and skills of participants utilised to co-create new shared knowledge?

The national model provides a further focus to move professional learning forward in Scotland and to pose questions for the wider education world. To learn more about the model, and for supporting documents, please visit: <https://professionalllearning.education.gov.scot/>

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