



The right CPD for the right teacher at the right time

Bryony Turford and Lynne Bianchi consider the role of the Network Guardian – a new approach trialled to gauge the depth of impact of professional learning within SEERIH Primary Science Subject Leader Networks

Since 2014, SEERIH (Science and Engineering Education Research and Innovation Hub) has developed a professional learning programme for primary science subject leaders in Greater Manchester. This responds to the ongoing need for teachers to develop skills and confidence in the teaching, learning and assessment of primary science (Wellcome Trust, 2017) and the standards for teachers' professional development (DFE, 2016). SEERIH's approach is based on social constructivist values, through which we seek to inspire communities of confident and curious teachers to drive the continuous improvement of teaching and learning in science and engineering education. Our Trajectory of Professional Development (TOPD) model underpins our theory of change (Bianchi, 2016/2017), which uses a stepped framework that encourages teachers to participate,

collaborate, co-create and connect with colleagues when engaged in professional development.

Context

A key aspect of the SEERIH programmes is the range of Science Subject Leader Networks, enabling any leader in a Greater Manchester school to access termly continuing professional development (CPD) meetings. Run in coordination with Local Authority and Teaching School Alliance partners, these are designed and facilitated to inform, inspire and improve the teaching of National Curriculum in England science. The growth of engagement across Trafford, Bolton, Tameside, Rochdale, Stockport, Manchester and Oldham now sees nearly 50% of all eligible schools attending regularly, with 93% of those reporting that they had been able

to apply new knowledge from the networks in their classrooms and that children's attitudes to science learning were improving all the time.

As much as we are very pleased with this growth and the fact that we are enabling teachers to take part in the right CPD at the right time on the right issues, we continually review our work. One of the key questions we posed ourselves recently was 'Are we sure we're getting it right?' Although numbers tell a positive tale of success, we wanted to know what teachers were learning, what they were taking away from the network sessions and how this was impacting on teachers within schools, and if this CPD was resulting in direct impact on children's learning. This article outlines a key change we introduced that can benefit all organisers and participants of CPD going forward.

Key words: ■ Professional learning ■ Impact ■ Leadership

Bring on the SEERIH Network Guardians

In order to deliver the network meetings, SEERIH adopts a two-year cyclical and thematic model. We identify the best person in the team to deliver these, based on their interest and passion for each theme, which is great in that teachers receive up-to-date knowledge about current thinking, linked to research and innovations across the UK. The downside, however, is that this does mean we forfeit the opportunity to strengthen the sense of a SEERIH community, as there isn't always a consistent and familiar face at the door. It also means that the link between meetings in terms of hearing back from teachers about how they have used new knowledge and skills was missing – something that we felt was crucial if we were really going to be responsive, developmental and establish a strong sense of community with our teachers and schools.

We scoped out and launched the SEERIH Network Guardian programme.

What is a Network Guardian?

A Network Guardian is a member of the delegate body who captures the learning of the group over the course of an academic year. As one of our guardians said:

My role is to keep everyone in the network together. I am the common thread between each of the sessions. I can be a friendly face for the group and someone they can check in with. I capture the learning and help make connections. (Jill Smith, St Ambrose RC Primary School, Manchester)

In brief:

● **How are they appointed?** Following open invitation, teachers self-nominate to take on the role.

● **What's their role? What do they aim to achieve?** SEERIH Network Guardians nurture the sense of community between the attendees, they support new colleagues and help everyone to feel valued. They collaborate with the subject leaders and the SEERIH team member leading the network to become the communicator and collator of learning.

● **What does this look or feel like before, during or after a network meeting?** They inform teachers of key dates, encourage sign-ups to the next meeting, remind the group of any gap tasks and any pre-course reading or activities. They are an additional

Slides from Network Guardian portfolios

What's been the impact? 'sciencesness'

What happened next? 'knowledge is key'

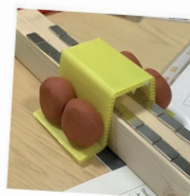
'healthy balance'



Beret Designing

Sharing of children's Science books stimulated discussion around Maths links and how these occur often and more naturally within Science.

Gap Task
Teach a lesson which makes explicit links with D&T or Maths.



Many of the teachers shared example of activities with made explicit links with DT.

Some teachers discussed how such cross-curricular links are only used when appropriate as on some occasions activities can lose their 'sciencesness'.

From Tameside network, created by Kristina Hewitt, Inspire Academy, Tameside

Gap Task:

- Review your action plan
- Discuss what you have tried in order to improve your subject leadership

Some people have introduced floorbooks

Some people have introduced PLAN documents for assessment to their staff

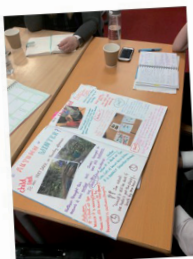
Some people have used the PLAN documents for a while

Some people have been organising their science curriculum, with a 'Topics on a Page' style format

Some people have restructured their science curriculums, creating concepts as subheading

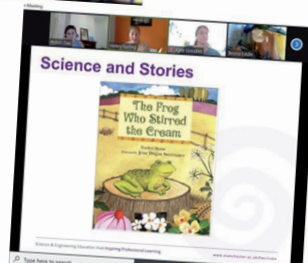
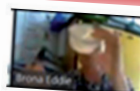
Very few people had completed the gap task, however there was enough for each group to look at something

Some people have been using concept cartoons



From Trafford network, created by Robin Das, Oldfield Brow Primary, Trafford

The Frog and the Cream



Resources available



As demonstrated in the meeting with the facilitator reading and the participants shaking the cream in little tubs.

The teacher could do this activity with the class to show an irreversible change, within a chemistry lesson.

Have you made real butter?

Reasons for using stories in Science:

- Fun
- Makes connections between people and the natural world
- As a hook into a topic
- Create a context for Science

From Trafford network, created by Robin Das, Oldfield Brow Primary, Trafford

source of support, responding to any queries from teachers, connecting the themes across the network programme and stimulating sharing of resources or ideas relevant to the group.

● How long do they stay in role for?
Guardians sign up for a year. There is opportunity to stay on for longer or to share out the role if others in the network are keen to get involved.

How SEERIH supports Network Guardians

All SEERIH Network Guardians are invited to meet to be introduced to the role, discuss responsibilities and look at previous examples of portfolios. This provides inspiration and support from other teachers also involved, where they can hear more about the way SEERIH seeks to evaluate CPD. In some cases, new guardians can work alongside the current one, supporting transition from the outgoing to the incoming.

Keeping in touch is important, so that members of this group share knowledge with each other. A *WhatsApp* group is there for informal communication between them and SEERIH and they become the administrator of their wider regional group of teachers. Once a year, we meet as a collective, a chance to share aspects of the role, to be reassured that peers are having similar experiences and, most importantly of all, to share good practice.

Each SEERIH Network Guardian has one-to-one support to review and refine their network portfolio annually, after which printed copies are sent out to Local Authority or Teaching School Alliance leads. Interestingly, guardians themselves use these as part of their annual appraisal cycle and professional development reviews.

The Network Guardian portfolio

This is an annual electronic portfolio organised in a *PowerPoint* style, which records how teachers have taken information and ideas from a meeting and implemented them in school. Key features include:

- information about the network including the geographical area they are serving and the schools that are a part of the network;
- collective starting point of the network members on the theme for the meeting;
- responses to themes, captured through comments and photographs, key

learning points from a network meeting
and responses to tasks and discussions;

- feedback from gap tasks showing the impact in the classroom.

Each term, these are uploaded to an electronic shared *Cloud* folder, where the Network Guardians can see each other's portfolios, thus encouraging an open culture of support and dialogue between peers.

So what are the gains?

It has become evident is that SEERIH Network Guardians are valuable assets to the CPD experience. The gains have been on three sides:

- **Guardians gain:**
 - confidence in a regional leadership role;
 - the opportunity to take on a leadership role within CPD, without the requirement to lead the session themselves;
 - a direct way to contribute to the Primary Science Quality Mark (PSQM, www.psqm.org.uk) by evidencing the way they support colleagues from other schools;
 - kudos from volunteering to take the role, as they gain recognition within their local area and their school.
- **Teachers gain:**
 - from the opportunity to have their learning recognised and valued;
 - by seeing the learning outcomes that make a difference in their own schools and others;
 - a supportive, listening 'other' who, like them, is a subject leader in a local school.

- **SEERIH gains:**
 - enthusiastic groups of teacher leaders, who have a close affiliation with the team;
 - the opportunity to inspire and develop future CPD leaders;
 - hands-on support to administer high-quality CPD.

Conclusion

What can you take away from this approach? We know that the role of a Network Guardian meets many of the DfE standards for teachers' professional development (DfE, 2016) including:

- **Professional development** should have a focus on improving and evaluating pupil outcomes. Our guardians focus on the learning of the subject leaders who attend, and collate the impact that has on children in the classroom at the next meeting.

- Professional development should be underpinned by robust evidence and expertise. This is how we can get the evidence and the subject leaders have ownership of it as they feel it is *theirs* not *ours*! They are doing it on behalf of themselves.

- **Professional development should include collaboration and expert challenge.** The SEERIH team support the guardians to hone their professional ‘eye’ and to look for the impact of learning in the teachers, not just the things they ‘did’ in each session.

If you are a part of a network currently or are thinking of starting one, then consideration should be given to how the learning and impact of the meetings is captured. Nominating a Network Guardian to do that for your group could be an approach worth considering.

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References

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This short video offers further information about SEERIH Primary Science Subject Leader Networks:
www.youtube.com/watch?v=krV6QSVcY4o

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