

Getting Practical programme: Delivering the training and working with networks

■ Karen Crinyion

It was a particularly miserable Monday morning when an enthusiastic technician came bounding over to me asking if I had heard about *Getting Practical*. I had to confess that I had not and listened with intrigue. *'The ASE are running it and it is going to be fantastic, as it is for teachers and technicians.'* *'It would be great for teachers who avoid practical work at any cost.'* *'It could help NQTs who just don't seem to be able to manage the pupils during practical work.'* A week later, an e-mail arrived in my inbox from one of my ASTs stating that she was attending the *Train the Trainers* course. I was beginning to feel a bit out of the loop, so trawled the Internet, tracked down the *Getting Practical* website and got my name on to the next training course.

Arriving at the Science Learning Centre London, I scanned the room looking for other National Strategy consultants. Realising there was no safety in numbers and the room was full of nervous teachers, I sat down with my AST colleague, intrigued to hear what the much-hyped *Getting Practical* was all about. After a starter activity focusing on what science content could be delivered through a box of old toys, I listened intently, but somewhat cynically, waiting to hear all about the range of new practicals I could train teachers to deliver, transforming the experience for



teachers and pupils alike. As the day proceeded, I realised that the course was focusing much more on fundamental principles. This was not all about new experiments, but why and how we deliver practical work. What is the actual purpose of practical work and are pupils really learning anything from it? As a profession, have science teachers relied on practical work to keep the pupils entertained and to break up long theory sessions? Do pupils consider practical work as essential for learning or, as a Year 8 pupil (age 13) said, *'practical work is just something you do to prove something you know.'*

A month later, I sat down to plan, with my AST, how to deliver the training. We were both nervous. The *Getting Practical* team had done a great job marketing the course. Teachers were aware of the training and, consequently, signing up for our training sessions. Instead of having to send out hundreds of e-mails persuading colleagues to attend the twilight sessions, I was *receiving* e-mails asking if there were any spaces left on the course. We were concerned that teachers would have different expectations. Many believed that this would transform their teaching as they left with a new repertoire of practicals to deliver. Would they be happy when we challenged their current practice and asked them to reflect on basic lesson planning?

I confess, we did make changes to the materials. This is encouraged by the programme as, ultimately, the trainers know best how to work with teachers in their area. Knowing the teachers who would be attending the training, I knew that Assessing Pupils' Progress (APP) was at the forefront of their minds, so we integrated new APP materials into the training. We bribed participants by adding a session on 'sweetie science', knowing that they would all eat the sweets and be on a 'sugar rush' when they evaluated the sessions. However,

Getting Practical courses

are being offered locally and free of charge across England, by *Getting Practical* trainers such as Karen.

For more information and to find out what is on offer in your region, visit the *Getting Practical* programme website (www.gettingpractical.org.uk).

Teachers are invited to register their interest in attending a course near them by contacting: kirstiehampson@ase.org.uk

The *Getting Practical* team will also be running workshops during the ASE Annual Conference in Reading in January 2011.

whilst we did modify the materials, our main objective was to get the teachers to really focus on the true value of practical work and the importance of making it 'hands-on, minds-on.' Practical work should not be done purely to entertain the pupils, to illustrate content they already know or to meet coursework requirements. It is essential to help pupils truly experience science as a dynamic and evolving discipline. If pupils are to learn from practical work, it needs to have clear objectives and outcomes. One of the most powerful moments in the training is when the participants reflect on the numbers of outcomes they expect from one practical activity. An enthusiastic NQT was chuffed to see that the last practical her Year 10 (age 15) class had carried out had meant that they had met 14 outcomes in one lesson. A very experienced teacher worried that the pupils had only met 8 outcomes during their last investigation.

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How can we expect our pupils to develop specific content and skills if we have not defined the explicit reason for carrying out the practical work?

Despite my initial concerns, I thoroughly enjoyed delivering the sessions. Both teachers and technicians engaged enthusiastically with the materials. Most importantly, the action points they produced at the end of the final session reflected the journey they had undertaken. Practical work was not simply carried out because it was in the scheme of work, but was planned with clear objectives and outcomes and with the purpose of improving technical skills and conceptual understanding.

Getting Practical continues to evolve. I am currently involved in a project, funded by the Learning Skills Network, to modify the materials for teachers delivering Triple Science. These materials revisit the principles of the *Getting Practical* programme, helping teachers to define the role of practical work and how to make the teaching of it more effective. Additionally, they seek to increase teacher confidence in using old dusty bits of kit that have been sitting around unused in the prep room and

revisit standard experiments forgotten by double science specifications.

In Buckinghamshire, we will continue to deliver the *Getting Practical* programme. Following the success of last year's sessions, I will be working collaboratively with a local teacher who will be trained to deliver the programme. We believe that the combination of 'consultant' and 'teacher' delivery maximised the impact, combining strengths of local knowledge of teachers and networks and classroom practice. Additionally, we will be using key resources with specific groups of teachers. The *Staging Tool* can be used to help NQTs with lesson planning and I will be using the adapted Triple Science materials to help a network of chemistry teachers improve the level of challenge in their practical work. The *Getting Practical* materials are not all about new experiments and they will not offer solutions to the lack of opportunity in some specifications. However, the key messages are essential for all science professionals and I am looking forward to working with more teachers and technicians as they reflect on the true value of practical work.



Getting Practical is funded by the Department for Education with co-ordinating partners: ASE, CLEAPSS, national network of SLCs, CSE at Sheffield Hallam University; and contributing partners: the SSAT, IoP, Society of Biology, RSC, Gatsby SEP, National STEM Centre and the University of York; with support from SCORE, the Royal Society, Gatsby SAPS, the National Strategies, LSIS, the Wellcome Trust, the Nuffield Foundation and the YSC at the RI. The independent evaluators are the IoE at the University of London.

Karen Crinyion is a National Strategies Secondary Consultant working for Buckinghamshire School Improvement Service.