



GETTING PRACTICAL



WITH PRIMARY TEACHERS

Janet Chetwood, Melanie Smith and Georgina Chapman share their insights into the primary-tailored 'Getting Practical' programme

The Getting Practical – Improving Practical Work in Science programme offers professional development for primary teachers across England. During the 2009/2010 academic year, 237 primary teachers attended a Getting Practical training course, giving themselves the opportunity to reflect upon their own teaching practices and consider ways to make their teaching of practical science more effective. The programme aims to improve the:

- clarity of learning outcomes associated with practical work;
- effectiveness and impact of the practical work undertaken;
- sustainability of this approach for ongoing improvements

with schools as a whole;

- quality rather than quantity of practical work.

The key messages of the Getting Practical programme are designed to be used in the training of both primary and secondary teachers. However, there are of course different approaches to teaching for these levels. Following feedback from primary experts during the earlier stages of the programme, specific training materials have been produced for use with primary teachers. Two primary teachers, Janet Chetwood and Mel Smith, offer us their different perspectives, as trainee and trainer, on the programme and how it has impacted on their teaching.

Janet's reflections as a science subject leader

I have never been the sort of teacher that settles for last year's plans, so the Getting Practical review sheets are really useful for keeping me on track with addressing a spread of teaching and learning skills (Box 1). I was already familiar with many of the resources highlighted by the Getting Practical website (see *Websites*) but it is always useful to be reminded of how many good-quality materials are on offer. The course has given me the confidence and support to keep being original and up to date, while incorporating the children's ideas.

Impact in the classroom

Within my school, I have always

encouraged teachers to focus on what and how they want the children to record: what skill is actually being taught that 'needs' recording. The key message of the training supports this, and reminds us that children can be overwhelmed by too much recording. Teachers can still offer a whole investigation, but now they know exactly what focus is to be placed on the practical science skills. This is really critical when the children are so enthusiastic. Our children love practical work in science and enjoy making decisions themselves in an investigative manner. We have many 'playtimes' during which questions arise and lead us into the next lesson. Managing this effectively is vital for maximum impact on the children's learning and Getting Practical has reminded us of how this can be achieved.

Currently I teach science across key stage 2 (ages 7–11), but the class teachers also teach some of the science topics. This works well because they are able to incorporate the science into their termly topics, such as 'Food and farming' in year 4 (ages 8–9) and 'The rainforest' in year 5 (ages 9–10). I also don't like to feel that I am indispensable!

One point I have to remember is that, while I am really keen and focused on science, other teachers have many other pressures on their time from elsewhere in the school. The training has really helped to reduce some of these, particularly the staff feeling that they have to get the children to produce lots of written work. Many of the teachers were interested to see how focusing on only a few skills and their learning outcomes improved the effectiveness of the practical lesson. It is important, though, to have high-quality activities for the skills to be developed fully.

Indirect consequences

I have also been using the Getting Practical training as a way of working with my local secondary school, which has provided all of us with a cross-phase view. We have all learnt a lot from each other, including spotting a link between Assessing Pupils' Progress (APP) and the Getting Practical programme. As my school is just starting to work with APP, those links will prove useful and we will be having further discussions. We have also been able to exchange equipment, including (interestingly) the secondary school borrowing our magnets!

Melanie's perspective as a trainer

A priority for the Getting Practical programme has been to ensure that it has excellent-quality trainers delivering the training countrywide. Enthusiastic and keen teachers with a passion for practical work in science were invited to apply and I was appointed as such a person!

As part of my advanced skills teacher (AST) role, I coach and support teachers in their own school environment and aim to make science education for the children and teachers both real and relevant. Science is the knowledge and understanding of the world around us and I believe that children need to be interested and excited so that they want to explore and find out more for themselves. It is our job as teachers to offer them opportunities to become inquisitive and curious.

Accessing the training and managing expectations

The Getting Practical 'train the trainer' day provided us with a great deal of material to digest and use in running our own courses. Trainers also have access to the programme's wiki and can download and use the parts of the training that they have found most useful. The wiki offers the core materials and resources from the course, as well as other trainers' ideas and amendments and information about how they had implemented their training. I personally found this really helpful. As an AST and coach, I am used to delivering my own material to teachers rather than something compiled by others. Adapting the documents to my needs and those of my audience took time, but was essential to maximise the effect of the course. I included details of the course when I emailed all the teachers in my local authority and asked them to state their expectations of the course and what they required from the training. This also helps to manage trainees' expectations. Getting Practical is not going to give teachers '101 new practical activities in science' to try. It is a reflective, pedagogic course that can lead to improvements in the effectiveness of your teaching. The information that the teachers coming on my course provided was a great help in enabling me to understand my target audience and how to use the Getting Practical material to best address their needs.

Box 1 Getting Practical review sheets

The review sheets (blue and green) are central to the reflection process. Teachers are asked to consider the practical activities they have run recently and the learning outcomes that they would associate with those activities. This can help illustrate the gaps in learning outcomes. They can also be used as an 'audit' of the practical activities offered across a year group, a key stage or the whole school. The blue sheet focuses on individual activities, while the green version is based on collecting a summary of activity information.

Choosing the right venue

Hosting the training course in my own school was beneficial because I had access to all the science equipment that I am familiar with. I was able to organise resources to suit training needs and the exploration of practical activities rather than be restricted to the resources that I could transport to another venue. I had 12 delegates on my course and presented in a workshop style. Icebreaker activities were essential to get the group discussion going and, of course, coffee and cake always help. Finding out each teacher's prior understanding and experience was important as it quickly gave them ownership of the training and showed them how much they needed to get from the course.

Another advantage to running the course from my own school was the access to my own planning and plenty of examples of children's work to illustrate the points I was trying to make. If a particular question required further clarification, I had all my resources to hand.

Reviewing current practice

Introducing the green and blue review sheets (Box 1) was an interesting and relevant exercise for the teachers to carry out. They highlighted areas of their own weakness and strength early on in the course. The prompt sheets provided discussion points, especially with respect to how they had handled successful practical sessions in the past and, probably more importantly, how they had handled unsuccessful practical activities. The phrase 'hands-on, minds-on' was used regularly and the teachers really connected with it.

They were able to explain occasions in their teaching when 'hands' had been 'on' but 'minds' were not! I used the review sheets as a gap task between the two parts of the course, giving teachers a chance to take them back to their schools and look at their teaching in that context.

What did the course delegates think?

Feedback from the delegates was very positive and they all took away materials from the training that they felt they could use in their teaching with their classes. It is essential to provide time within the course to talk about and discuss ideas because there is so little free time in school. This worked well in bringing together teachers within the local authority, creating an informal network of support amongst them. All the teachers were keen to take back the Getting Practical message and implement it in their own schools. They felt the training would benefit the children by addressing their needs more effectively and encouraging them to apply their science skills to other situations.

Final thoughts from a trainer

As a trainer, I thoroughly enjoyed all the opportunities to share best practice and encourage the ideas of the other teachers. It is vital to continually develop activities and make practical work in science in the primary classroom more real and relevant for the children.

How to get involved in Getting Practical

Getting Practical courses are being offered locally and free of charge across England by Getting Practical trainers. See www.gettingpractical.org.uk

To register your interest in attending a course near you, contact: kirstiehampson@ase.org.uk

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Janet Chetwood is a science subject leader at Sedbergh Primary School in Cumbria.

Melanie Smith is a primary science teaching and learning advanced skills teacher (AST) for Wigan local authority.

Georgina Chapman is the programme manager for communications for the Getting Practical – Improving Practical Work in Science Programme. Email: georginachapman@ase.org.uk

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