## Improving Practical Work in science

Georgina Westbrook

## *Getting practical:* Improving Practical work in Science: the training begins

*Getting Practical* is now well under way, with training beginning across the country at the regional Science Learning Centres for the programme trainers. Over the summer months, a team from the national network of Science Learning Centres and the Centre for Science Education at Sheffield Hallam University have been designing the *Getting Practical* training programme and have produced some excellent materials to support the pedagogy behind practical science

## **Getting Practical**

- Improving Practical Work in Science Programme

is funded by Department of Children, Schools and Families with co-ordinating partners the ASE, CLEAPSS, **National Network of Science** Learning Centres, Centre for Science Education at Sheffield Hallam University, and contributing partners the **Specialist Schools and** Academies Trust, Institute of Physics, Society of Biology, Royal Society of Chemistry, **Gatsby Science** Enhancement Programme, National STEM Centre, with support from Science **Community Representing** Education (SCORE), the Royal Society and Gatsby **Science and Plants for** Schools, the National Strategies and the Young Scientist Centre at the Royal Institution for Great Britain.

The independent evaluators are the Institute of Education at the University of London. activities in schools at both primary and secondary levels.

As we know, practical work is seen by the majority of science teachers as a vital part of a learner's experience. Making the learning clear and effective is more difficult to achieve. Getting Practical addresses this by helping teachers to think about the practical work that they currently offer, in terms of its key objectives and purposes. This leads to further thought about how to stage practical work in order to increase its effectiveness in learners' development. The programme will not necessarily suggest new practical experiments and investigations, although the nature of the professional development sessions will inevitably lead to discussion of some new ideas and networking opportunities. Teachers will be asked to look at the pedagogy of practical work and then to think about how it can be made more effective through changes to their practice.

The professional development session explores the different contributions practical work can make to a learner's experience of science lessons. Some time is given to considering what is meant by a 'practical' in science in all its different forms. Participants will consider how a familiar practical activity can be used in different ways to support different learning outcomes for pupils. They have the opportunity to discuss the factors that contribute to the effective 'staging' of practical tasks, with a particular focus on ensuring teachers 'rehearse' their activities and avoid 'stage fright'. They will consider what criteria they might use to judge their effectiveness. By the end of the sessions, participants will have developed a deeper understanding of the place of practical activity in science teaching and as a result will be able to be more specific in their intentions for practical tasks when they plan a lesson, or series of lessons.

The *Getting Practical* programme trainers have been selected for the

2009/2010 academic year and, in the New Year, these trainers will be recruiting teachers and technicians in their local areas to engage in the programme. If your school is interested in receiving the professional development, please register your interest with Kirstie Hampson (Programme Manager for Professional Development) on

kirstiehampson@ase.org.uk or 01707 283000 and she can link you to your local trainer.

The autumn has also seen the launch of the *Getting Practical* website, www.gettingpractical.org.uk

Further information regarding the programme can be found here and we will constantly be updating resources and news items regarding the programme. We are also keen to receive suggestions for resources from teachers who wish to share their ideas, so do get in touch with us to contribute through the *Your thoughts* section.

Keep an eye out for us at the 2010 ASE Annual Conference in Nottingham, where we will be hosting a practical science stand and highlighting many of the practical science sessions on offer by our partner organisations and others offering high quality practical resources. You can see a selection of the sessions available on the *Getting Practical* page of the *Conference Programme Preview*.



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