



An update on *Getting Practical*, summer 2010

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Getting Practical is a continuing professional development (CPD) course that was launched at the ASE conference in Nottingham in January 2010. Here I give a snapshot of how the fledgling course has fared during the first six months of its life, its approach and possible areas of growth and development.

Getting Practical is the tangible outcome of a debate about the role of practical work in science teaching, which has been taking place for several years within the wider science education community. The CPD was funded by the then UK government Department for Children, Schools and Families and is a six-hour training course aimed at science teachers in primary and secondary schools in England and Wales. It arose from the deliberations of the SCORE consortium, whose report (SCORE, 2008) was influential in the development of the course. *Getting Practical* builds upon the work of Robin Millar and his colleagues in the University of York (e.g. Millar and Abrahams, 2009; Millar, 2010a; Millar, 2010b). The course and associated materials are freely accessible from the *Getting Practical* website (Getting Practical, 2010a).

The first six months

The first six months have seen over 700 teachers undertaking the CPD from all regions of England and Wales and from primary and secondary sectors. The first-year target of 1000 teachers undergoing training looks as though it will easily be met. The initial feedback has been encouragingly positive. Crompton and Chetwood (2010) quote the response of a typical delegate:

I have found that it has made me simply take a step back and look carefully at my lessons. What is the purpose of the activity I have given the children to do? My activities now have a sharper focus on learning outcomes.

Hampson (2010) reports that in feedback surveys 89% of delegates thought that the education content was excellent or good. As

importantly, 69% of delegates said that they were 'very likely' or 'likely' to share the materials with their colleagues in schools, which is the first step towards integrating the *Getting Practical* philosophy into the working practices of schools.

It is intended that the course should be the springboard for deeper reflection and further new thinking. It is clear from the proceedings of the first annual conference of *Getting Practical* (Getting Practical, 2010b) that this is already occurring. Below we give a glimpse of how the course and its philosophy might develop in the future.

Spoiler alert!

Part of the impact of *Getting Practical* arises from the way that the key ideas are introduced and developed during the course. The remainder of this article discusses some of these ideas in detail. Readers who have yet to complete the training might prefer to stop reading at this point and return to the article at a later date, having completed the training.

Philosophy of the course

The essence of the course can be simply put: a practical activity is more likely to be effective if it has a few clear learning objectives. Its effectiveness will also depend on the design of the activity and how the activity is presented, or 'staged' (Wardle, 2010; Millar, 2010b). The course provides tools to enable the analysis of learning objectives and intended outcomes. There is also a tool that helps with the staging of practical activities. In addition, Millar provides a model for evaluating the effectiveness of lessons that is summarised in Figure 1.

The use of these tools and models is explained on the course and can be followed up further in a recent ASE publication, *Analysing practical science activities* (Millar, 2010c). While this kind of reflective review is indispensable for any science faculty that wants to progress, it also lends itself to initial teacher training. All the science students on the PGCE course in the University of Bristol, for example, are being trained to use these

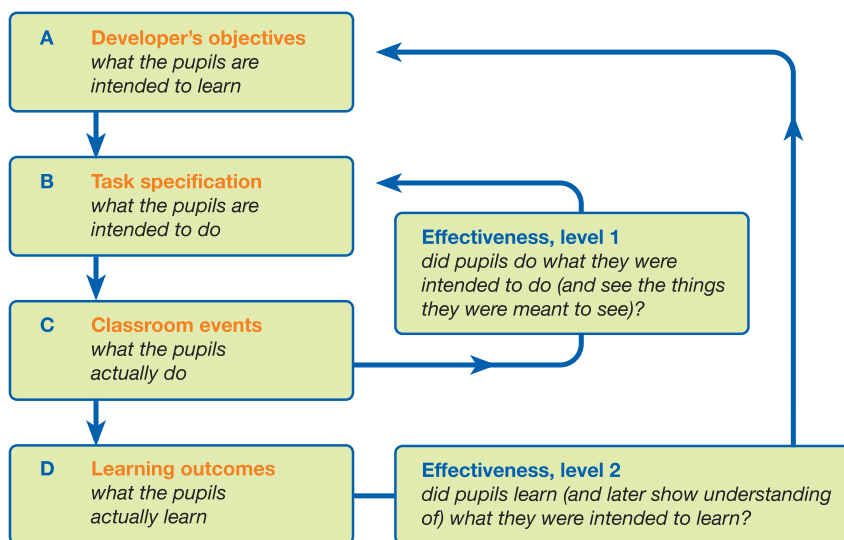


Figure 1 Reflecting on practical work

techniques for their initial class observations and also for their own teaching and planning cycles.

The future

The functionality of the *Getting Practical* tools will be enhanced further if they can directly benefit those schools using the government's Assessing Pupils Progress (APP) programme. We are working with a group of West Country teachers to develop a simple extension to the

Getting Practical model that will allow schools to plan and evaluate their APP activities. This extension involves the use of argumentation techniques (Osborne, Erduran and Simon, 2004).

Six months on, *Getting Practical* is proving to be a sturdy and robust toddler that is learning to establish itself in the rough and tumble of modern life. Its development will not be complete until it impacts upon the experiences of pupils in science lessons. I think its best days are yet to come.

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