When, as an editorial board, we started to explore the potential of information and communication technology (ICT) and how this relates to learning in primary science, we realised that the role of ICT was complex, many-faceted and evolving. Using ICT to access information in science via the Web, to communicate and develop understanding using the interactive whiteboard, and to collate and present data using electronic datalogging equipment is becoming familiar practice. But if ICT continues to advance at its current rate, what will it offer in the future?

Developing our confidence and expertise in ICT is vital if we are looking for ways to engage with the younger generation. For them ICT is part of their everyday existence: they network via *Twitter*, *Facebook* and *MySpace* and commonly listen to music on their iPods while at the same time texting their friends on their mobiles. This is the way that they engage with their environment and with each other. But to regard ICT simply as an innovative communication tool is limiting. The articles in this issue begin to distinguish between some of the different aspects that ICT can support, such as exploration, enquiry and communication. The articles on using cameras, dataloggers and voting pods show what can be done!

The interactive whiteboard (IWB), for instance, is more than just a fancy blackboard. It can be especially interactive when used as a teaching tool for discussing simulations, for demonstrating graph drawing, for saving and revisiting class work or for instant Web searches. The IWB offers the opportunity to take photos during a lesson and instantly display them to promote reflection in learning.

As with any teaching tool, we have to use our professional judgement and select particular ICT tools on the basis of their relevance and suitability. A tool may be appropriate because we are making use of features of ICT, such as rapid and reversible graph drawing to try out types of graph, or discussion of patterns, accurate measuring across time with dataloggers, or repeatable simulations which allow for in-depth discussion. Our decisions may be based on what we have available, perhaps an ICT suite slot to present results or research microbes.

Nevertheless, teachers should also feel confident *not to use* ICT, or to let the children explore the limitations of ICT equipment. One way of empowering our learners is to let them find the limitations themselves and decide whether ICT provides the best tool for the task or not. For one member of our editorial team, this happened when her class of 10–11 year-olds wanted to use the datalogger to measure the sound of a popping pot and quickly found that measuring the time until the 'pop' with a stopwatch was much more practical!

We recognise that confidence and experience will inevitably influence decision-making, and hope that the articles in this issue will allay some of your concerns. Rather than avoiding use of new equipment for fear of exposing our inexperience, perhaps we should use this as an opportunity to model being the 'learner' or as a problem-solving exercise where older or more experienced pupils could support less experienced learners (including us!).

All these possibilities support what we know about effective learning: start with the learner and tap into their experiences to develop understanding. If these experiences currently include a digital lens, then we need to work alongside our learners and see the world through their ICT lens. This requires seeing ICT as part of the technology and seeing how it can help with enquiry and exploration, rather than as an 'add on' that we feel we must tick the box for. Approaching ICT in this way will not only assist children to develop awe and wonder about science phenomena, it will also give them insights into the wonder of technology and its potential power.

The focus on ICT is all the more pertinent for our audience in England where the entire primary curriculum is set to undergo some dramatic changes in response to a recent independent primary review (Rose, 2009). Dealing with curriculum and assessment change is something that many of our readers, across the globe, face. One dilemma for classroom teachers is how to incorporate creativity and autonomy into their practice while still satisfying statutory government requirements. This, and the implications that curriculum changes will have for science (accompanied by the abolition of national testing in science at the end of the primary phase in England), require ongoing discussion that we will continue in future issues of *Primary Science*. One thing you can be sure of, however: while all these changes are going on, what was 'good practice' remains 'good practice'. The language used to talk about this may evolve, but the underlying principles are the same. Incorporating a range of approaches to enquiry has always engaged children and will continue to do so. With permanently shifting goal posts, the important thing, as always, is to support and empower our children as learners within their own environment. After all the years of national strategies it may feel 'scary' to be 'creative' and embrace a new curriculum; however, it is not about being 'whacky' but about doing the same thing differently in a way that engages all, including us!

Reference

Rose, J. (2009) *Independent review of the primary curriculum: final report.* London: DCSF. Available at: www.dcsf.gov.uk/primarycurriculumreview/