The benefits of an interactive whiteboard

Teaching 30 children all working on their own computers can be an exhausting business. In fact, as Stephanie Gilbert, curriculum manager for ICT at Bishop Milner Catholic School in Dudley, puts it, "You have to be a fitness expert." Now, however, her school has introduced interactive whiteboards.

Interactive whiteboards provide a simple, effective way of teaching software applications to a group of students. For example, it is easy to demonstrate a specific function, such as highlighting, cutting and pasting a paragraph of text. As a result, teachers can spend longer with individual pupils, either extending their learning or giving extra help to the ones who need it.

Before, if a pupil had produced an excellent piece of work, 29 children would have to crowd round his or her machine to see the results, whereas now it's easy to display that work to the rest of the class. "We use the whiteboard to help students reinforce their learning," says Stephanie. "A child can demonstrate what they've just learned to the others. It's delightful to see the look on their faces when they present what they can do to the class. And they can teach the teachers at the same time - students often have greater ICT skills than the teachers standing in front of them."

Bishop Milner has used whiteboards to build on its existing ICT strategy. The school has around 580 pupils in Years 7 to 11, plus a sixth form of 88, and 106 PCs mean that ICT lessons, with a computer for each student, can be offered to all year groups. "Of course the technology is brilliant. The students think that Christmas, their birthdays and the summer holidays have all come at once," says Stephanie.

However, with ICT an integral part of teaching and learning at Bishop Milner, staff felt it was important to develop a proper attitude to the equipment, so pupils drew up their own computer etiquette rules. These include: respect the ICT suite as a learning area; respect the machines; respect other students' work; always give your best during lessons; and aim for success.

The interactive whiteboard opens up new opportunities for presentation, re-presentation and communication. Information can be presented in exciting and engaging ways, creating more motivating outcomes. Interactive whiteboards allow collective engagement with learning problems at greater depth. They encourage creative and seamless use of materials including:

- websites
- video and audio clips
- internet and email exchange
- interactive teaching programs
- interactive and electronic texts
- interactive software such as digital flipcharts
- use of additional peripherals such as electronic microscopes or digital cameras and scanners.

Texts can be written or created, and data and information presented in electronic and multimedia formats. It can be re-presented in ways that further explore, unpack or explain the content, and communicated through e-presentations, email and on the internet. This not only provides a medium for presentation and communication, but also opens possibilities of new, 'authentic' audiences and learning communities.

The software enables the teacher to quickly change and reconfigure information, providing opportunities to engage with pupils at a higher and/or deeper level. Pupils are encouraged to deepen their level of enquiry and generate their own questions and hypotheses, which they can then easily test and confirm.

Effective use of the interactive whiteboard incorporates a variety of teaching techniques that support a range of preferred learning styles. Effective use of interactive whiteboards can also support visual, auditory and kinaesthetic learning. The use of the technology can undoubtedly increase learning opportunities; however, the technology does not replace effective teaching.

In order to take full advantage of benefits of the technology, the teacher needs to combine knowledge of the subject; an understanding of how children learn; a range of teaching strategies along with skilful manipulation of the technology. Schools should not underestimate the time needed for teachers to become confident with the technology and to develop their teaching style and strategies. Headteachers should consider a long-term plan of training opportunities for teachers in order that they can develop effective practice.