

Getting started with interactive whiteboards

Michael Tunks says introducing whiteboards delivers results in learning

I have long subscribed to the Plutarch philosophy 'the mind is not a vessel to be filled but a fire to be kindled'. With the advent of interactive whiteboards (IWB) in our classrooms, longstanding teaching philosophy is being challenged as students become more actively involved in the directions their lessons take. A teacher's role may change from the 'Sage-on-the-stage' to 'Guide-by-the-side' (Stinson, Milner, 1996). This can be exhilarating and scary at the same time. I think that IWBs will cause a tectonic shift in classroom teaching, to the benefit of both students and teachers.

You don't need an expensive IWB to start implementing interactive learning concepts into your lessons. You can get going with very little by way of equipment. For example, put together a PC and a data projector and you have the basic components. You don't even need a passive whiteboard – a white wall will do.

Schools that have not previously contemplated shifting to IWB lessons can access the Government funding now available for IT to get going.

In this article we visit Ulladulla High School and Copacabana Primary. Both have embraced the IWB concept and are looking forward to the day when every classroom has its own IWB.

Ulladulla High School

Ulladulla is a coastal town in NSW situated approximately three hours drive south of Sydney. Ulladulla High School (UHS) has over 1200 students and embarked upon the implementation of IWBs in Semester 2 2008.

Today, 32 classrooms are outfitted with computers, projectors and whiteboards; 29 are eBeam Pods (<http://www.keepad.com/ebeam.php>) and three are Smart Boards (<http://www.electroboard.com.au/products/smart.aspx>).

Ongoing teacher training includes half-day in-house sessions conducted by teachers who have attended intensive external training courses, while strategically trained small groups of cross-faculty staff are available to support their fellow faculty members.

UHS teachers also meet voluntarily for what they call 'a play in the sandpit'. This is a regular weekly afternoon gathering of interested teachers to discuss and share IWB ideas. As one teacher said: "The Wednesday afternoon 'play in the sand pit' has been excellent. There are always



Keyboard time at Copacabana Primary

little steps that need clarifying. Having a dozen or so teachers who can say 'Oh, that's easy, you just do...' and then show you how saves heaps of time and frustration."

Deputy Principal, Trevor Schofield, says that the IWB classrooms are in high demand from both staff and students and the school has a two-year plan to outfit all 55 classrooms over this period. Initially, the school experimented with using the eBeam Pods as portable IWBs, but soon progressed to a plan of equipping each classroom with a fixed projector.

UHS has found that the eBeam Pod is a cost effective solution, enabling the school to push on with the implementation at a faster pace. At around \$1000.00 each, these devices are significantly cheaper than dedicated IWBs.

Business Services Teacher, Karen Bulbert, said: "Even with all our eBeams, the number of staff who want to give it a go far outweighs the availability of rooms. It is quite infectious among the staff. Sharing the buzz of a good lesson amongst your peers in the common staffroom is now a daily occurrence. Other people wander

over to watch over your shoulder and we are all learning new applications and being inspired."

The school also purchased two class sets of TurningPoint student response systems (<http://www.keepad.com>). These credit card size keypads are distributed to students, allowing them to respond to questions posed on MS PowerPoint slides by the teacher. Student responses are instantly collated and displayed on screen, promoting valuable class discussion.

The keypads can be used anonymously or assigned to students, enabling the recording of each child's responses.

The Science Faculty uses the TurningPoint keypads to conduct self-paced assessment tasks for 200 Year 9 students, with automatic test marking and reporting.

Science teacher, Donna Miles, says: "You need to have your printed test, and you must hand out the keypads in numerical order and have a record of who has each one. I find that lining the kids up alphabetically outside the class room and handing them out in sequence is quite efficient."



TurningPoint keyboards provide instant feedback

Asked by *Education Today* why a teacher should make the effort to start using IWB technology, Business Services Teacher, Karen Bulbert, said: "Your lessons are more fun for students and yourself. You are learning together. The teacher clearly models that learning is a lifelong process. Making mistakes and having glitches is part of the learning curve, even when you have put in the effort beforehand.

"This can demonstrate to students that learning is not all plain sailing and successful. It can be a challenge; perseverance and determination are needed to achieve. The reward of self-satisfaction when it does work is good to share with the students."

Mathematics teacher, Matt Graham, added: "Once the teacher is comfortable using the hardware and it is shown to be reliable, the IWB really does benefit a teacher who is well prepared in their lessons and lesson sequences. The units of work can be reused and modified later, and inside a faculty the sharing of lessons can be very helpful too."

Students with learning difficulties also benefit from the use of IWBs as Special Education teacher, Chris Armati told *Education Today*: "Although I am hardly a skilled practitioner and will need a lot more training, I do believe that the introduction of this technology engages students with emotional disturbances. It is instantly gratifying, dynamic and adaptable. You can skip from interactive, literacy-based work, search the net to research anecdotal questions and skip to a *Clickview* movie to support the direction that students' thoughts are heading. As soon as you pull out the eBeam stylus the kids are hooked."

Copacabana Public School

This small primary school, set in an idyllic position on the NSW Central Coast two hours drive north of Sydney, is a global force when it comes to IWBs. The school website contains a gold mine of IWB resources and has had over 1.2 million visits from educators around the world. Under the guidance of school computer coordinator, Glenys Goffett, almost every classroom has an IWB with overhead fixed projector.

Copacabana is now in its fourth year of using

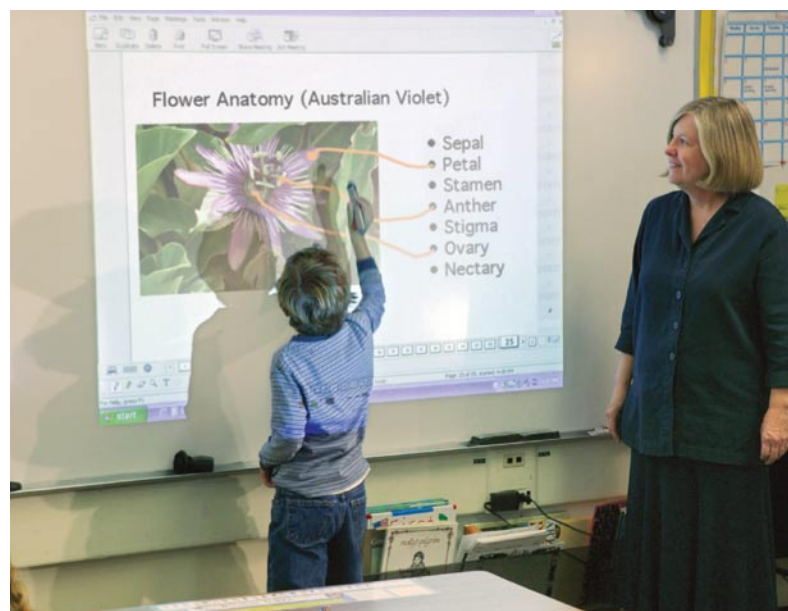
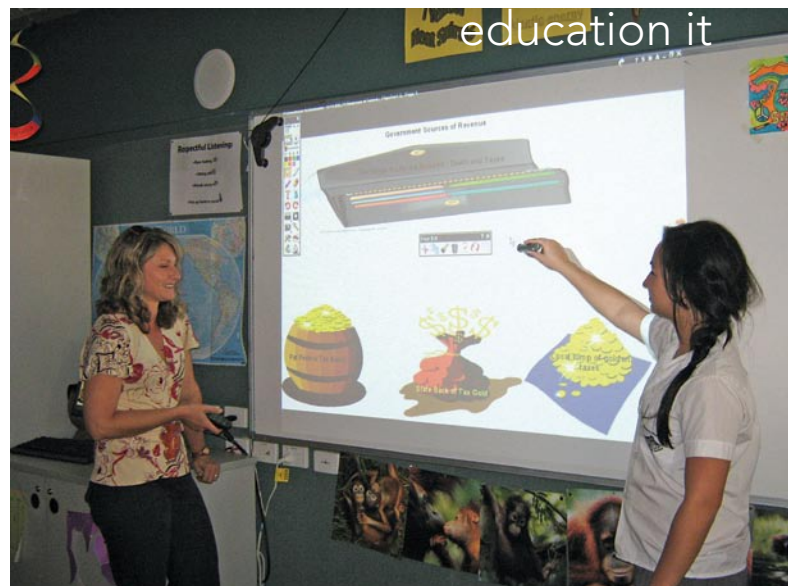
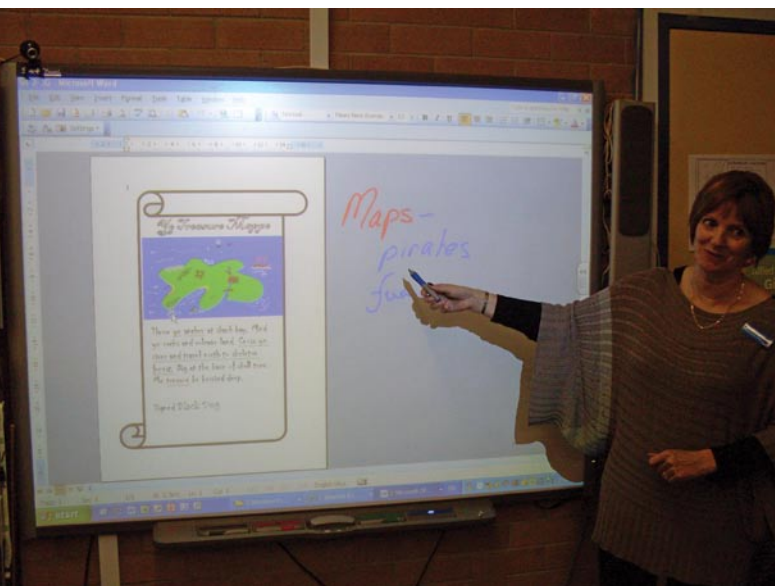
IWBs and is nearing completion of their plan to have an IWB, ceiling mounted projector, computer and cabling in every suitable classroom.

Ms Goffett first saw an IWB at a training session and says they were a 'must have' at first sight. The school has eight Smart Boards permanently installed in classrooms and the library and all are in high use. "Due to the cost of boards and projectors, immediate mass unlikely," she told *Education Today*, "Our slower phased-in approach allowed for mentoring amongst

A first IWB lesson

Here is a simple sample lesson for you to try with your current spelling list. You can set this lesson up on your own computer first and try it out before using it with your class.

- 1 Go to <http://www.kidsspell.com>
- 2 Half way down the page click on 'Create a Custom List' and enter your spelling list separating each word with a comma
- 3 Give your list a title – 'My IWB Spelling List' and click the button 'Create My List'
- 4 Copy the URL from the box and paste it into the URL address bar at the top of the screen and hit 'Enter'
- 5 Bookmark this page so you can come back to it easily
- 6 Your spelling list is now displayed along with several spelling games that will use your list. Click on 'Letter Drop' and read the instructions.
- 7 Click the 'Play' button and test out the game.
- 8 When you feel confident with the Letter Drop game, use an IWB to project the website for your class and have them play it in teams of two.
- 9 Enjoy!



From top: Fun with maps at Copacabana Primary School; business studies at Ulladulla High School; eBeam in a primary setting; IWB lessons are popular with special needs classes at Ulladulla High School

teachers and for minor problems to be sorted out along the way.”

Teachers at Copacabana have used various ways to get started implementing the IWB technology in their classrooms. Music sites like Virtual Orchestra (<http://ngfl.northumberland.gov.uk/music/orchestra/default.htm>) are easy to use and greatly enjoyed by students. Apart from the Copacabana school website, another favourite resource is Learning Clips (<http://www.learningclip.co.uk/>) which has excellent maths activities and demonstrations.

For IWB lesson preparation, Copacabana teachers offer the following tips:

- ◆ Don't expect teachers to make their own lessons until they are proficient in operating the IWB
- ◆ Spend time observing a mentor using the IWB
- ◆ Initially, lesson preparation takes time but quality time needs to be spent
- ◆ Always have Plan B in mind in case of computer problems
- ◆ Just get in and try it.

References

Stinson, J. Milter, R. (1996). "Problem-based Learning In Business Education: Curriculum Design and Implementation Issues". In Wilkerson, LuAnn and Gijsselaers, Wim (Eds.), Bringing Problem-Based Learning to Higher Education: Theory and Practice. Jossey-Bass Publishers, San Francisco, CA.

UHS' Hints and tips for getting started

- ◆ Most teachers tend to get started by using flipcharts and then progress from there
- ◆ Asking the kids for patience and their help and understanding while learning this new technology will help to get through the teething problems.
- ◆ Use of eBeam in lessons includes using the highlighter tool to highlight text, filling in cloze passage, matching worksheets, annotating diagrams and revising via the playback tool.
- ◆ Seniors love using the eBeam IWB and like to discuss their answers with the rest of the class while they are out the front.
- ◆ Try out new flipchart techniques on your 'settled' classes first.



Michael Tunks is Director of ImproMation, a software development company with its focus on helping schools. The company currently provides online services for over 1800 schools throughout NSW. Visit www.impromation.com.au.