The rise and rise of interactive whiteboards

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"I love my interactive whiteboard (IWB) and my students love it too"

"What's the point of spending our budget on interactive whiteboards? Can you prove they make learning better?"

Once again, a battle rages in the world of language teaching. Although the IWB has come to symbolise and typify the 'digital divide', this is more than just a battle between the 'haves' and 'have nots',' It is a battle about teaching approach, about methodology. This article will look at an IWB in terms of hardware and software; examine some of the ways in which it is changing the teaching and learning of languages in the ELT classroom; and finally, consider some of the issues involved in integrating the IWB into language courses.

Hardware

An IWB is defined in Wikipedia as "a large interactive display that connects to a computer and projector". Boards come in a number of sizes, from small and portable to the larger wall-mounted IWBs for use with full-size classes. To get up and running, three things are required: the IWB itself, a computer and a data projector. The current trend is to have a built-in projector above the IWB, which gets rid of problems such as users staring into the beam of light, or casting a shadow across the screen. There are cheaper, portable alternatives available such as the mimio and the e-beam. The mimio is small enough to fit in a laptop bag. It can be fixed to any hard surface, such as a normal whiteboard or even a wall. It is positioned next to an image of a computer screen from the data projector, and it is this image which then becomes interactive.

With Promethean boards, users need to use an e-pen, with others such as the SmartBoard you can interact with the surface of the board using your finger. There are also a range of peripheral devices, such as a 'wireless slate', allowing you (or your students) to be anywhere the classroom while working on the board, and 'learner voting devices', allowing students to respond to questions. Students vote by pressing an option (A, B, C or D for instance) and their responses are then displayed graphically, rather like the famous TV show "Who wants to be a millionaire?". Or they key in a word which is then sent to the whiteboard – the 'text to board' function.

Asking which hardware is 'best' is similar to asking if you prefer a pc or a Mac; users have individual preferences. ELT forums are awash with questions about teacher's hardware preferences, and the informed answers from users make for interesting reading.

Software – four approaches

1 Previously, many teachers did not have access to a computer and electronic data projector but once an IWB has been installed, these two technologies become an everyday part of the classroom. All the software you already have installed on a computer, such as PowerPoint and Word can be used with an IWB. The 'always-on' internet connection is a boon. It is easy to incorporate both authentic material from the internet and ELT materials, such as language learning CD-ROM's and DVDs, into language classes. One difference in using an IWB is that you can annotate the content of, say, a PowerPoint slide by writing on it and then save the annotations for re-use.

2 The IWB comes packaged with software. These 'flipchart' programs allow the creation or customization of pages containing visual and audio interactive elements. The range of proprietary material available to today's teacher is simply breathtaking. There are line maps of the world, flags, blank diary pages, pictures of fruit and vegetables, video clips such as Armstrong's moon-landing. The CLIL (Content and Language Integrated Learning) teacher must already be in materials heaven tapping into historical time-lines, diagrams and flow charts...the list is almost endless.

3 Some key general English course books from mainstream (and other) publishers, such as face2face (CUP), Cutting Edge (Longman), English File (OUP) and Inside Out (Macmillan), now have a 'whiteboardable' version available. This digital version of the course book pages can be displayed from the front of the class. This allows teachers to employ what is known as 'heads-up' learning with the class being encouraged to look at a specific exercise together on the whiteboard.

Teachers have convenient access to all the audio recordings and video clips, and instant access to the answers to the course book exercises. There are many popular features on such ELT software. Tools such as the 'crop zoom' for example can be especially effective, allowing the teacher to enlarge a section of the screen without the graphic losing quality. The first time you see this in action is a technology 'wow' moment!

4 Of course, many teachers enjoy creating their own materials, including digital material. This has never been easier and creative types are probably already using shapes and colours in imaginative ways, changing the background colour to hide and reveal text for instance. According to expert IWB trainer Francis Jones, there are five basic features you need to master in order to get started. These are: drawing, using shapes such as circles, rectangles etc.; using the colour fill, which can be used to change the background colour; ordering something on a page (exactly like the Word function 'bring to front' or 'send to back'); locking something into place and finally, grouping objects together. Sounds complicated? Well actually, it is possible to get to grips with these fairly quickly. Knowing how to use these functions allows the teacher to author simple tasks. For example, a drag and drop exercise where the answers appear as if by 'magic'. Here the, teacher has hidden the answers by making them the

same colour as the background, so when they are dragged to a different part of the screen, they are revealed.

It is relatively straightforward to insert audio clips and web-links into a flipchart page. A special teacher's area within Macmillan's NIOD provides a digital 'blank canvas' which can be accessed at any point and allows teachers to author and build up a complete repository of teacher and student generated material to support each unit of the course book. This is the best of both worlds – quality material from the publisher working seamlessly alongside a locally produced, personalised and re-usable materials bank.

New approaches for the digital age

The increase in interest in the IWB heralds a sea-change in approach. Naturally enough, teacher's classroom practice is changing due to their use of an IWB. Here are some examples.

1 Memorable presentations
The whole world of multimedia is open to teachers to present language, including video-clips, photographs, animations and diagrams. One evergreen warmer is using the screen reveal tool. Here, the teacher can start to show a picture bit by bit, encouraging the students to guess what it is. This simple activity can be a lovely lead-in to a lesson to generate interest and relevant vocabulary. The 'spotlight' tool can be used in a similar way, to reveal segments of a picture.

2 Engaging practice
On language learning CD-ROMs and DVD-ROMs, feedback is devised for the self study student, and shows if an answer is 'right' or 'wrong'. With an IWB, it is possible to deal with greyer areas of language that have not been addressed in digital materials. This is because in some IWB exercises, the answer is not necessarily automatically shown. The teacher is involved in the learning equation, and can ask someone in the class to come out show his or her answer, using the drag and drop function. If someone else disagrees, they can come out and change the answer, initiating classroom discussion. Students in class discussing the relative merits of one answer compared to another sounds like a good thing to me.

The 'infinite clone' tool is fun. Imagine setting up a role play involving giving students a sum of money to spend. Now, you can drag out innumerable pictures one after the other using this tool – let's say, lots of copies of a ten euro note! If only real life were like this!

3 Listening

The audio transcript can be displayed and specific sections of the listening can be played at the touch of the e-pen or finger. Does anyone really prefer the days of finding the place on the tape, or always playing a recording from the start on a CD-audio? The teacher can play audio and video through the IWB, rather than switching to the CD-audio player or the TV and DVD console.

4 Marking an exercise

In marking exercises, teachers need only reveal the answers to the questions students have problems with. The answers can be revealed in any order. This instant accessibility is a popular feature with teachers and can make marking more efficient

5 Effective review

The teacher can go back to any of the flip-charts they have used in the lesson, meaning that reviewing the language covered in class has never been easier. Because you can save the flip-charts you create, it is quite quick and easy to build up a bank of lessons using digital materials, and these can be shared with other users. In fact, being able to access and re-use material from a complete course is one of the most important ways in which IWBs are radically changing the approach of language teachers.

6 Learner modalities styles

It is claimed that the IWB can appeal to all kinds of learning modalities. Clearly, the visual learner and the auditory learner are catered for. It is, I believe, exciting that teachers can invite their students up to the front of the class to use the IWB and engage in a particular learning task. The kinaesthetic learner can benefit from these hands-on tasks.

Issues

There are many issues connected to the IWB. Perhaps the most frequently-cited objection is that of cost. It is probably no comfort to the many teachers for whom an IWB is simply unattainable to say that "prices are falling".

There are theoretical objections to using the IWB. The internet, it is argued, has been responsible for allowing learners across the world to communicate, and thereby abolishing the constraints of the classroom in favour of more constructivist learning approaches. The IWB, on the other hand, is sometimes criticised as a return to the 'four walls of the classroom'. The IWB can most certainly hasten the return to the teacher-centred classroom. Indeed, it is easy to fall into this trap, as it is often the centre of attention. Of course, it doesn't have to be; it just depends on how it is used.

Should we be waiting for evidence that 'using an IWB promotes better learning' before making that investment? Much of the existing literature is from the area of schoolchildren in the UK state sector rather than data gathered from ELT classrooms. One of the great paradoxes in technology is that

generally the technology will lead. In a world led by innovation, the pedagogical studies of necessity come next, and by the time we are reading about the effectiveness of a particular technology, and the data is gathered, we are already exploring the next big thing.

Teachers notoriously disagree about the use of language teaching materials; some use course books, others don't. *Dogme* enthusiasts Meddings and Thornbury argue for a 'technology-lite' approach. So, Promethean's recent decision to allow users to use a large amount of its material free is not, of itself, guaranteed to solve issues connected with using materials in classroom.

There is a danger that an IWB can be overused, perhaps while it is a novelty. It is more effective when used at certain moments during the course of a lesson. It does need occasional re-calibration, and it can take a little longer to set up the classroom, so the IWB is yet another thing to worry about, and of course, it can malfunction. Still, teachers sticking to good practice should have a Plan B. (Plan B is not an option in an online class or a class in Second Life. If the technology collapses around your ears, there is no lesson). A good classroom teacher has any number of fallback positions – reading a tapescript aloud, miming, using the blackboard or whiteboard or an emergency 'lesson without published materials'.

In conclusion, an IWB is, essentially, a tool. One recent suggestion on using IWBs on the humming ELT forums was: 'don't use it' My advice? If you can use one, go for it. The IWB can certainly produce many of those 'wow' moments. It seems to me that if it unleashes the power of multi-media into the classroom; can be used to promote a range of learning styles, preferences and modalities; and simply makes the teachers life easier and saves time in the long run, then it has a lot going for it. At this point in time, it seems set to stay the distance.

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