

## **Interactive whiteboards: watch this space**

**By Stephen Bax**

For those of us interested in the role of technology in language teaching, interactive whiteboards (IWBs) represent not only a currently hot issue but a fascinating case study. The reason for this is that they exemplify the way in which technologies of all kinds frequently impact on teachers' working lives, and either succeed in making a contribution or disappear without trace. Remember interactive video disks? They were an example of a technology which promised to revolutionise our work, but are now collecting dust in the Museum of Expensive Failures. Will interactive whiteboards go the same way, as Gavin Dudeney predicted in the recent IATEFL conference in Cyprus (Dudeney 2006b), or will they instead become part of every language classroom in future, in the way which I have described as 'normalised' (Bax 2003)?

If we look at IWBs in the light of the wider literature on innovation (e.g. Rogers 1995) we witness many features typical of new technologies when they enter education. We have the initial excitement, as evidenced in our own profession in the recent IATEFL conferences in Harrogate and Cyprus. In terms used by Gladwell in his popular book 'The Tipping Point', we have 'mavens', whom I see as the 'techies', able to tell us all the technical details. Then we have 'communicators' such as Euline Cutrim Schmid at the recent Cyprus conference, ably illustrating the potential benefits of the new technology in her well-researched study (Schmid 2006). We also have what Gladwell calls the 'salesmen', such as Brendan Wightman of Cambridge ELT, also at the Cyprus conference and at Harrogate, who

energetically impresses us with what the product can do (Wightman 2006). In addition, we have ‘early adopters’ such as the British Council who have invested substantially in IWBs in their teaching centres, as for example in Lebanon (Orr, 2006), along with the UK government who have spent millions of pounds in installing IWBs in state schools, and whose investment may help to fuel important improvements in the technology in future.

These, then, are some of the features we see with many new technologies in education in the process of normalisation. We also have what I have described as the ‘fear/awe’ phenomenon, where people are excessively terrified of the technology, or else believe with equal exaggeration that it will completely revolutionise what we do (Bax 2003). For example in the Guardian newspaper this morning I read of whiteboards “not only allowing young students access to the curriculum but also simultaneously teaching them the English language’ (McLean 2006). Can a whiteboard really ‘teach the English language’? This silly suggestion perfectly illustrates what I have called the ‘omnipotence fallacy’ (Bax 2003). It seems that whenever a new technology comes into education someone jumps up to suggest that it will somehow do the whole job magically on its own, without the need for that always painful and troublesome element, the teachers. Another article in the same paper worries that ‘interactive whiteboards have had little or no impact on exam results’ (Nightingale 2006) – again typical of the ‘awe’ and ‘omnipotence fallacy’ in its foolish assumption that if the technology does not revolutionise all aspects of learning it is not worth having. Do pens noticeably ‘impact on exam results’? Do we therefore throw them out? A technology is useful when it has found its proper place, neither omnipotent nor terrifying, but normalised.

In other words, IWBs exemplify perfectly a technology in transition, with all the foolish hype and often misplaced hope (to borrow a phrase from Mark Pegrum’s Cyprus talk). But the key

question now is: what will happen in the next five to ten years? Will IWBs fail or will they become normalised?

In his recent talk and forum contributions at IATEFL Cyprus, Gavin Dudeney suggested that they will fail for three main reasons, the first being cost (Dudeney 2006b). The second factor which he considers crucial is the weakness of available ELT content. He several times and rather loudly described some of this material as 'rubbish' - uncharacteristically blunt for such a shy and retiring fellow. A third factor which he cited in his plenary talk as impeding the implementation of technology in ELT in general is the lack of adequate training (Dudeney 2006a).

In all three areas, he undoubtedly has a point, which makes the outlook for IWBs at first look rather gloomy. At the moment it is undoubtedly true that the cost of IWBs is far too high for most institutions, certainly for most private language schools, and definitely for most state schools. In addition to the cost of the whiteboards themselves schools would also need data projectors and computers in each room, and this is simply prohibitive in most settings. He is also right that most teachers do not yet have the necessary skills or confidence to integrate IWBs into their work in the way which normalisation would require, and in many settings there is little sign of adequate training to remedy this. He is undoubtedly right also to point out that there does not yet seem to be enough good and usable bespoke material for ELT.

Does this mean that IWBs will join interactive videodisks in that Museum of Expensive Failures? In view of the history of other technologies in education, however, I am wary of writing off IWBs just yet, for the following reasons. In terms of cost, evidence suggests that if a technology has enough 'early adopters' who fund the development of a technology and

increase demand, competitors often move in and the price decreases substantially. Think of 'data projectors', which used to cost £5000, but now cost one tenth of that. The same is true of video players and overhead projectors, now normal tools in many classrooms. The same could easily happen with IWBs in the next ten years. There are also numerous examples of technologies merging (think of mobile phones merging with cameras and videos, or televisions merging with computer monitors) and it is plausible to anticipate that IWBs could borrow from televisions to offer back projection as well as interactivity, cutting out the need for data projectors, and at the same time coming down dramatically in price in the coming decade.

In terms of materials, Dudeney's second issue, on a recent visit to Bahrain, I saw Bahraini English teachers using IWBs not with published materials but with their own simple interactive activities which they themselves had created for use in their classes, and they were amazing in their simplicity and effectiveness. This exhibited what for me is the fundamental feature of a technology which has the potential to be normalised in language teaching, namely that it *allows integration with the already existing syllabus*, so that learners' needs can come first and the technology simply helps teachers to meet those needs. It does not do everything, of course, but is a useful tool.

In terms of training, Dudeney's third issue, or more generally of teachers becoming used to the technology, many state school teachers in the UK report that they now use IWBs quite naturally. They usually do not devote whole lessons to the IWB, but use it perhaps at the start of the lesson to stimulate and start discussion or present ideas, then at the end of the lesson to give and share feedback, and so on. This is typical of a normalised technology which has found its proper place. In Bahrain again, I came across English language teachers who use

IWBs relatively naturally in similar ways, and communicate their work to others, as well as attending training courses, which suggests that IWBs could become a natural part of their work when more schools have them. To help the process, the Bahraini authorities have set up a few beacon schools with superb technological resources in an attempt to move towards the 'tipping point' and get more teachers using them. At the same time teachers have good technical support if things go wrong.

The example of Bahrain suggests to me that IWBs could eventually become normalised in some language teaching contexts, if not perhaps all. In my view, there are still a few obstacles to the normalisation of IWBs in Bahrain, including the lack of full integration of IWB materials with the normal classroom materials, and some issues of layout of the classrooms and accessibility, but given that many of the other key factors are in place, normalisation of IWBs is not impossible in Bahraini schools in the next five to ten years.

This illustrates my wider point in answer to Dudeney's worries, namely that for any innovation to become normalised there are a host of factors which are always involved, and we need to look at all of them to see which way the technology will go. Dudeney has pointed out three possible obstacles to the normalisation of IWBs, but frequently when a technology is moving towards normalisation, other factors can work in the other direction and can sometimes make the crucial difference and nullify the obstacles.

So if I had to make a prediction, I would say that IWBs might well become substantially cheaper within ten years, and of better quality, easier to use and so on, to the extent that many ordinary language schools and many state schools around the world will be able to buy them. There will always be schools and countries for whom they are not feasible (as is the case for

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overhead projectors now, for instance) - we will never overcome what I see as the 'Technological Divide', even more pernicious than the 'Digital Divide' which we read about - but nonetheless many could have access to them.

Meanwhile teachers will start to see what IWBs are useful for and what they are not useful for, getting over the fear/awe factors and starting to treat them like any other useful (but not omnipotent) classroom aid, to be used not merely for gimmickry but when, and only when, they add something to the pedagogy. Content may come from publishers, but more probably will be created by teachers, or come free from the web. In short, normalisation of IWBs in many language classrooms is not impossible.

To conclude, IWBs offer a fascinating example of a technology entering language education. In my view they will not revolutionise our work as language teachers, as some may claim, and will certainly not be available in every classroom around the world – we have to remember the thousands of classrooms around the world which still have very limited resources. But in those classroom which, say, currently have whiteboards, IWBs could well become a normalised tool if enough of the factors I have considered come together in their favour.

The fascination of technology-watching, though, is that we never know which factors will win through. We have to wait and see. Watch this (possibly white and interactive) space!

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