

The Role of IWBs in 2015

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A decade on from the initial surge in the whole school use of interactive whiteboards (IWBs), six years after the writing with Chris Betcher of *The Interactive Whiteboard Revolution* (Betcher and Lee, 2009) and four years after the initial release of the iPad it is opportune to ask what role should IWBs play in you school in 2015?

In answering that question it bears underscoring that

- the situation globally school and digital technology wise is fundamentally different in 2015 to 2002/2003 when IWBs and data projectors finally reached the maturational and price level where they could be installed in every classroom
- the nature of the 'IWB' technology has evolved at pace and in form, and will continually do so
- alternative technologies now exist
- the promise of IWBs as being the instructional technology that would directly enhance student learning has been found wanting (Higgins et al, 2012) but its impact on the creation of digitally based school ecology than can enhance learning is becoming increasingly apparent (Lee, 2014)
- schools now have a decade plus research on the educational and ecological impact of the IWB to draw upon, with the boards having moved beyond the Gartner hype stage to the plateau position
- the digital evolution of the pathfinder schools which has fundamentally changed the nature of the schooling they provide owes much to the IWB
- the immense and increasing variability that now exists between schools in their use of the digital technology, and importance of each school adopting solutions appropriate to its context, evolutionary stage and shaping educational mission
- when the hype associated with a new technology is over and its the use is normalised is when the technology begins to impact (Shirky, 2008).

What is now clear is that the vital role played by the IWB in the evolution of schooling over the last decade is just as important today – albeit using the current equivalent/s of the IWB technology.

However the critical elements of that role need to be better understood. Significantly most are not those that immediately come to mind when teachers and their ICT experts contemplate buying IWBs, but rather they are those that have emerged from a decade of experience and research.

- **Critical importance of having an interactive large screen facility in every classroom**

It is now a given that if schools are to normalise the use of the digital school wide every teaching room must have the requisite large screen digital presentation and integration facility. Where a decade ago that idea was novel and the 'computer lab' thinking held sway today there would be very few

educators who don't recognise the imperative of every teacher having in their room a digital presentation facility that readily interfaces with the children's technology and the Net.

The role of the interactive large screen – whatever form it takes - in transforming every classroom into an evermore sophisticated digital teaching hub is probably even more critical today than a decade ago.

- **Role within digital teaching hub**

That hub, that integrates in the one classroom all manner of ever evolving digital instructional technologies (Lee and Winzenried, 2009) and which allows the teacher and the students to readily create what they wish and immediately harness the digital riches of the school, local education authority or the wider networked world ought be the norm in every school K-12.

That hub not only provides the teacher and the children a highly attractive, exciting and relevant teaching and learning environment but educationally also allows immediate access to the burgeoning digital resources of the world. It obviates the time wasted in moving the class to the technology.

Initially the IWB was the focal point of that hub, but as its use became normalised, newer technologies also took the stage and teachers increasingly, and rightly chose to use a suite of digital instructional technologies the IWB receded into the background, used when apposite. Notwithstanding all digital teaching hubs, all teaching rooms still need a whole of class presentation and interaction facility. One wonders why some schools are removing fully functioning IWBs and not choosing to replace them with a comparable facility.

- **Critical role in facilitating whole school digitally based teaching**

As discussed in previous articles crucial to 'digital take off', the movement of schools to a digital operational base, their on-going evolution and digital normalisation was having all teaching digitally based. The research underscores the imperative of having all teachers using the digital technology in their everyday teaching. Until that happens the school will basically remain operating within the traditional paper based mode.

It was the astute introduction of IWBs into every teaching room from around 2003 – 2004 that first occasioned that successful whole school uptake (Lee and Winzenried, 2009) (Lee, 2010). In the next 8-10 years the surge in the global uptake of IWBs occasioned a similar successful movement of schools worldwide to a digital operational base.

In researching the evolutionary journeys of the schools globally that have or nearly have normalised the use of the digital technology in all their operations all but one of the schools had in the 2000's used IWBs in every classroom as a critical part of their strategy to move go digital. The one that didn't, which as the principal indicated promoted itself as a 'non-Smart school', on reflection admitted it made a mistake and didn't appreciate the importance for the school's on-going evolution in using a digital instructional technology that would assist the full spectrum of teachers to use the digital technology in their teaching.

In interviewing one of the original designers of the Promethean IWB software Peter Lambert he made it clear that the intention was to provide software and boards that would make it very easy for all manner of teachers to readily transition from their old boards to the digital variant (Lee and Winzenried, 2009). The plan was not so much to change the teacher's pedagogy, simply to shift them to a digital teaching base.

In hindsight that strategy worked exceptionally well. Chris Betcher and I (2009) wrote very consciously of the IWB revolution, and in 2010 in *Education, Pedagogy and Technology* (Lee, 2010) amplified that thinking and documented the revolutionary role IWBs as a technology had played in assisting astute school leaders move a vast number of teachers from a paper to digital teaching base. In 2013 Hennessy and London writing on behalf of the OECD, affirmed the importance of the IWB in facilitating that crucial change.

In recent years appreciably more sophisticated interactive 'IWBs' have been playing that role as have an array of emerging digital technologies.

That said while IWBs of some form are now in approximately 60% of Australia's classrooms (Messenger, 2014) there is 40% without some interactive large screen facility.

More tellingly while there might be a 60% install there is likely, particularly in the secondary sector a very sizeable number of Australia's teachers who in 2015 have not moved to a digital teaching base. In workshops and my consultancy work I'm still encountering schools where 60%-70% of the teaching is paper based.

While the technology alone won't change that situation without the contemporary equivalent to the IWB being available in every classroom change is impossible.

- **Adopt the solution that best fits your school's context**

The growing school variability underscores the importance of choosing the desired interactive large screen facility that befits your school's evolutionary stage today, and indeed each teacher's needs.

Tailor your solution.

The 'one size fits all' approach to choosing instructional technology ought have long been consigned to the bin. That said if the one solution meets all teachers' needs go with it.

Don't be afraid not to follow the current fashion.

Do however understand that chosen solution will have a long life.

- **Contribution to enhanced student learning**

A decade plus of extensive research reveals that at best there is at best minimal linear connection between the use of the IWB and enhanced student learning (Lee, 2014a). It is appreciated that was a perceived major selling

point for IWBs. As indicated in the article on 'Digital Technology and Student Learning' (Lee, 2014a) there appears to be a marked impact of a more deep seated, non-linear use of the digital that emanates from an ever evolving, digitally based, tightly integrated school ecology that simultaneously addresses all the variables that impact each child's learning.

Core to that integrated ecology is the IWB or its contemporary equivalent that facilitates the integration in the classroom of the instructional technologies and resources.

- **Financial 'savings'**

In the longer term quality interactive large screens indirectly save schools money.

Throughout the 2000's schools, and in particular their 'ICT experts' railed at the cost of IWBs, claiming they could not afford them and they thus sought out cheaper variants. The same continues today.

What is now apparent is that digital schools with their markedly increased efficiencies and synergies, ready access to the riches of the networked world and the pooling of their resources with those of their parents and communities (Lee, 2014 b) are significantly cheaper and more efficient to operate and have access to considerably greater resources than the traditional paper based counterpart.

The key is to consider the totality the technology is helping create and not the individual parts.

With the advantage of hindsight the \$6000 dollars outlaid per room on a quality IWB was a remarkably small sum for a school or education authority to pay for facilitating fundamental school change and evolution. For the previous half-century governments globally had literally spent billions of dollars trying to bring about that change, all to no avail.

The same return on investment is to be had today with quality interactive large screen technology. While in isolation \$7500 per classroom for a quality, simple to use highly reliable 70' flat screen technology might seem expensive when considered in totality, as a portion of the school's total budget and with the school's shaping educational vision in mind it is a small price to pay for the school's on-going digital evolution.

The likely reality is that most schools will phase out the older IWBs and phase in the new, while at the same time making ever greater use of the student's own personal technology, the Cloud and rationalising the school's investment in its own servers. To that understanding should be added the knowledge that quality large screen interactive technology, with its free software upgrades has already proven long lasting, and that the contemporary equivalents are projected to last ten years or more.

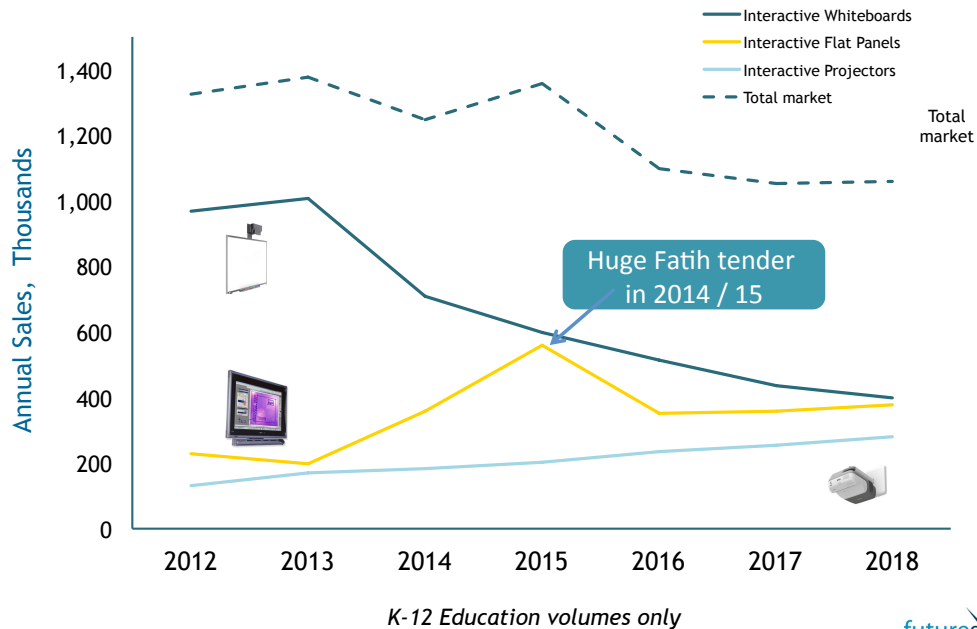
Nature of current IWB usage

In considering the desired role for IWBs in your school today and the years ahead it bears noting the August 2014 global industry figures and trends below and remembering that the surging power and sophistication of the

technology will in large be accommodated by the evermore powerful personal technology and Cloud based computer systems and not by the large screen.

THE THREE INTERACTIVE DISPLAY TECHNOLOGIES - EDUCATION

IWB and IFPD Markets to be a Similar Size in 2018

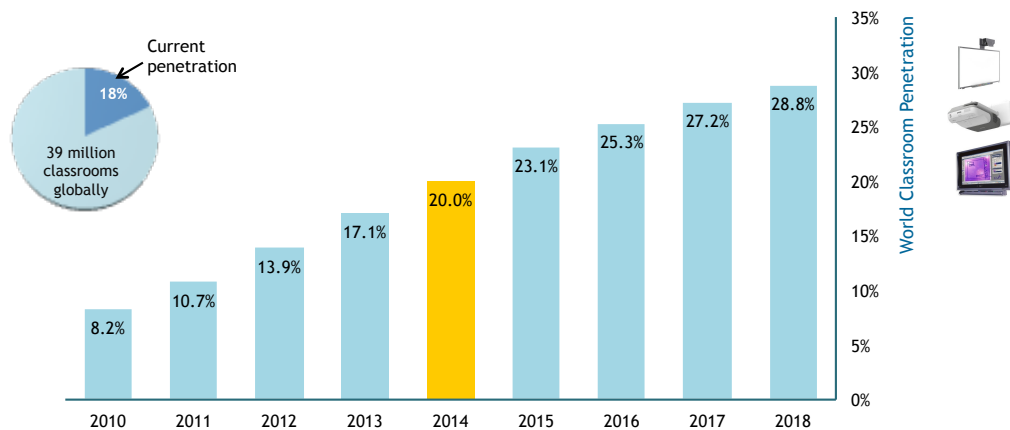


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Includes Interactive Projectors



| Today almost 1 in 5 classrooms across the world have an Interactive display, by 2018 1 in 3.5 will have.

Includes Interactive Projectors

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Compulsory K-12 education ONLY.
Classroom is defined as any "teaching space"



(Figures courtesy Colin Messenger, Futuresource Consulting)

Conclusion

Clay Shirky astutely observed that it is when a popular technology moves past its initial hype stage and its use becomes normalised that the technology have its greatest impact.

That is what is happening today with the contemporary forms of the IWB. In the technologies quiet acceptance it is continuing to play a vital role in the digital evolution of schooling.

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