Be SMART - IWB's in education

Interactive WhiteBoards, like the SmartBoard, have become commonplace in many schools over the past decade. IWB's afford access to a variety of learning styles and can support inclusion according to Universal Design for Learning theory (Pellerin, 2013). They promise the ability to increase student engagement by providing a focal point for instruction, interactivity, gaming and animations. This increased focus and engagement can improve student learning (Troft and Tirotta, 2009)

Still, barriers to this potentially valuable technology include the price tag (a system must include a dedicated computer, projector and the IWB), and time. Teachers report that initial planning and preparation time are increased when using IWB's. Further, time spent on troubleshooting, including 'orienting' the board, is seen as a disadvantage to implementation (Gursul and Tozmaz, 2010).

In order to justify the costs – both monetary and opportunity – one must ensure Interactive White Boards, like other technologies, are being utilized effectively. Effective technology integration should "support and enhance pedagogical practices" (Krug, 2004) rather than simply reinforcing teacher-led, whole group instruction (Kershner & Warwick, 2008). Educators who wish to utilize IWB's in meaningful ways must become critical consumers of this, and other, digital technologies.

References:

Gursul, F., & Tozmaz, G. B. (2010). Which one is smarter? teacher or board. *Procedia - Social and Behavioral Sciences*, 2(2), 5731-5737.

Krug, D, (2004). Leadership and Research: Reimagining electronic technologies for supporting learning through visual arts. *Studies in Art Education: A Journal of Issues and Research.* 46(1), 3-5.

Troff, B. & Tirotta, R. (2009). Interactive whiteboards produce small gains in elementary students' self-reported motivation in mathematics. *Computers & Education*, 54, 379-383.

Pellerin, M. (2013). E-inclusion in early french immersion classrooms: using digital technologies to support inclusive practices that meet the needs of all learners. *Canadian Journal of Education*, *36*(1), 44+. Retrieved from http://go.galegroup.com.ezproxy.library.ubc.ca/ps/i.do?id=GALE%7CA323659495&v=2.1&u=ubcolu mbia&it=r&p=CPI&sw=w

Warwick, P. & Kershner, R. (2008) Primary teachers' understanding of the interactive whiteboard as a tool for children's collaborative learning and knowledge-building. *Learning, Media and Technology*, 33:4, 269-287, DOI: 10.1080/17439880802496935

Weston, Tim (2004). Formative evaluation for implementation: evaluating educational technology applications and lessons. *American Journal of Evaluation March 2004 25: 51-64, doi:10.1177/109821400402500104*

SCARFE Digital Sandbox - Come Play!

Evaluate as your explore. Whether you create a lesson or find one on-line, be sure to participate in some formative assessment as you go (Weston, 2004). Try asking yourself critical questions as you explore:

Does the lesson or interactivity:

- 1. Support and/or meet the learning targets, current curriculum or the needs of the students and/or the teacher?
- 2. Provide a transformative experience rather than simply replacing existing technology? i.e. is there some affordance you have with this technology/interactivity/lesson that you would not otherwise have?
- 3. Reflect the pedagogy of the classroom teacher and/or current educational philosophy?
 - Does it allow for active learning? student knowledge creation? small group work? hands-on interactivity? Do students USE the IWB or simply watch it? Do students CREATE with the IWB, App or software?

Resources:

SMART Exchange - http://exchange.smarttech.com/#tab=0

Scholastic - http://teacher.scholastic.com/whiteboards/learninggames.htm

ELL/Language Learners - http://iwblanguagelessons.com/

Planning for Smartboards/IWB (a White paper by SMART Technologies) http://bit.ly/1aLny0f

Create your own games - http://www.classtools.net/_mobileQuiz/index.php

Sandbox Session - September 2013 Cyvonnedtechtalk

http://blogs.ubc.ca/scarfesandbox/