

Focus Paper written by Julie Lindsay for the Education Technology Leadership MA degree with the George Washington University.

Topic: A Tool for Learning, Not Another Subject to Teach

My Position

Technology used in an educational setting should be evolving towards a hands-on approach to learning. Focus must be on the integration of technology with a content-rich curriculum instead of the learning about technology approach that tends to take over. Information Technology does not need to be a separate subject except perhaps at the pre-tertiary level. Staff development focused on changing pedagogical beliefs and practices is needed to ensure engaged learning experiences. Evidence of best practice and innovation in technology integration is needed to support international development standards. In other words, let's get the philosophical approach to educational computing sorted out in terms of its uses, values and expectations and then integration, staff development and improved learning will naturally follow.

Supporting evidence

Unfortunately too many schools are still putting the 'cart before the horse' in terms of purchasing hardware and networking before planning what they really want to do with it all. This is also supported by the Benton Foundation 1997 Learning Connection report where they state that access to hardware is only one component of providing quality education to schools. The emphasis should be on professional development – 25% - 35% of overall technology budget (Carvin), a figure that has not been realised by many schools yet.

The constructivist trend has a view of learning that points towards a number of different teaching practices such as encouraging students to use active techniques to create more knowledge. The Becker report found that the majority of teachers who used their Internet computer regularly considered themselves constructivist, with a heavy focus on student-centred learning. The term techno-constructivist (as discussed by W.Mckenzie) refers to shifting from a technology of teaching to a technology of learning and portrays a techno-constructivist teacher as one with an attitude to open up to new possibilities and on a journey of assimilating new technologies.

Some Australian examples of best practice where a constructivist method has been adopted include MLC and the Victorian Education Department. During the 1990's, the Methodist Ladies College in Melbourne, led by David Loader implemented a laptop program and embraced technology integration and curriculum design. The Victorian Government implemented a Navigator Schools program in the mid 1990's. Selected schools were funded to implement technology across the curriculum and develop programs for professional development. They have found that learning technologies have challenged all teachers to reflect on their teaching philosophy and practice. "Learning technologies are not an end in themselves....they are a vehicle for facilitating stronger thinking and engaged learning" (Deighton and Hocking).

The introduction of computers into the classroom promotes a greater emphasis on projects with teachers acting as guides and students taking on a central role in their own learning. As Starr reported, the computer lab, typically set up for computer literacy and programming courses (didactic, CAI), is evolving into a general purpose computer work area where students do projects of all kinds – including the Internet.

Conclusion

'Because of all they make possible, we must make computers part of education. Then they should 'disappear'.' (Starr)
Let's get past the technical issues and the novelty value. Let's learn from innovative practices and use educational computing as a tool and focus on the real learning material and the student centred learning environment.

References:

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