Living in the Clouds.

Or, why your school district should invest in the iCloud today.

ETEC 522 Assignment # 3

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Where does your school district stand right now in the ongoing education computer revolution? How can your school board benefit from this ongoing technology change? I personally believe that we are in a technological in-between stage. Books are still the predominant form of literature, but we know that they are on its way out. Writing and literature are still and always will be an integral part of our education system, however the way that we access and use these tools are changing and it is important to stay on the cutting edge. “All the ancient arts and crafts had this in common: that the craftsman must develop a skill, a technical state of mind in using tools and materials (Ong, p.15).” As a school district it is important to acknowledge this change and adjust as needed.

I propose that we are still developing the proper skills and technology to continue the evolution of writing and education. One only has to look at the first generation of extremely clunky and awkward electronic book readers. Their evolution has been consistent but not necessarily ground breaking. Current readers, which include more advanced devices such as the iPad and modern smartphones, are starting to become more functional, but realistically it will be a lengthy time until they completely replace books, papers and pencils. It is changing though and an evolution is happening. “Second, a technology does much more than realize the goal toward which it is put; it always helps to shape the context in which it functions, altering the actions of human beings and the relation between them and their environment (Verbeek, p.43).” Now is the time for school districts to invest in the future, and in the upcoming transformation to a predominant digital workplace environment.

The cloud is an interesting opportunity and many believe that it is the way of the future in terms of assessment, writing and literature in the classroom. It provides unlimited storage and the potential to save time and increase the connectivity of a classroom. It stores all information on a remote server, and is accessible from any internet connected computer. Apple has recently introduced its own cloud program, called the iCloud. It claims to revolutionize the existing cloud and it is already on the market. How does this benefit education? It is important before investing a piece of software or new technology to understand its societal implications. I propose that this technology is on the cutting edge of modern educational technology and will revolutionize many aspects of the online classroom, while saving IT costs at the same time.

Despite what many educators may think, there are many tangible benefits in teaching in the cloud. It is an evolution of our modern culture and the need to be constantly plugged in. “Computers continue the tradition of representing print as a form of cultural storage... (Bowers et al, p.188).” If we think about educational practices and teaching basic writing in this context there is much that can be learned about our teaching practices. Some modern internet writing technologies are frowned upon. Why is this? All students are going to need computers in the upcoming years, why not simplify this process and start early. By giving them this heads up we are only assisting them in their integration into modern society.

Educators tell our students that Facebook is a waste of time, and we do not encourage the use of online forums, but why? Could it be that educators are worried about losing their grip on the power of text technology? “Some societies of limited literacy have regarded writing as dangerous to the unwary reader, demanding a guru-like figure to mediate between reader and text (Goody and Watt taken from Ong, p..92).” It seems that educators might be engaged in a power struggle to maintain their control over the education system. We need to step back and examine the cloud in this context. Food for thought; what if this new technology simplified educators work and allowed them to concentrate on the teaching process, not the bureaucratic overflow that seems to hang over them constantly. Imagine increasing your staff production while lowering IT costs at the same time. This is what the iCloud can do.

Some of the benefits in using the cloud in education are easy and obvious to pinpoint. It is systematically easier for the educator to create and distribute coursework and monitor student progress (especially if one is using an e-portfolio type system). This ultimately leads to increased productivity and lower IT costs. All of the information is on one central server and is easy to access from anywhere. “Syncing information across devices has great appeal. It means that students and teachers will be able to access their documents, their projects, their videos anywhere, whether they’ve created them at home or in the computer lab or on their mobile phones. (Waters, p.1)” This can create a culture of needing to always being prepared. There are fewer excuses to not being able to access information and to submit assignments. This is a huge benefit to students that may not do all of their work on computers, it teaches them that it is an essential tool. If cloud computing is the way of the future, then why are we not teaching them in our schools? “Similarity, it is the nature of the computer that determines which patters of thinking, communication, or experiencing will be reinforced as well as which patterns will be marginalized or represented as nonexistent (Bowers, et al, p.186).”

As an administrator of a school board, or as someone involved in the financing of a school board it must be noted that cloud computing can offer a substantial and notable savings. Instead of having to invest in a multitude of computer parts, hard drives, web space, etc, all that is needed is the cloud software. Of course students are required to have their own access to the cloud. This is where things get interesting. The actual computer processing power that is required is relatively low, thus if new computers are required, smaller and cheaper alternatives such as netbooks and tablet computers are ideal. This too can be a large cost saving for school boards.

Due to the nature of the cloud minimal information is needed to be saved on the computer. The benefit of this is that IT costs will be kept down due to the lack of maintenance that is required. All that is needed to be installed on school computers is the OS of choice (which most districts already have installed, and are able to get at a sizeable discount if purchasing more than one) and a login password. All information is saved online which can lead to increased group collaboration and supervision. Students can edit each other’s work and view the progress as it happens.

I am aware that most school boards are faced with declining budgets. The Cloud can help this. The reason I use this reference to the cloud is that by providing the district with a plan that involves teaching and monitoring the most students possible at a low expense, there is a greater chance that it will be approved. Once the start-up is paid, the cost increases over time become minimal, and easily predicted. This will help both the school board and individual schools with budgeting issues. “Similarly, there are costs in teaching the course once the course is developed. These tend to be variable costs in that they increase as class size increases. (Bates and Poole, p.94)”

One aspect of education that the Cloud can help with is student progress, especially in terms of the e-portfolio, which is becoming a more standard assessment practice. In providing feedback to the reflective process, the educator is able to assess a variety of student progress. It is important that educators in this situation understand that we are empowering the students by allowing them to work in a setting that they are comfortable in. This with assist them in their future endeavours. “Paramount to this discussion is that students are developing dual digital literacies in the modern networked environment (Alexander, p.3)”

One huge negative with iCloud, is that it is a mac centric program. It was designed for Mac OSX and can have some compatibility issues with other computers. This is being worked upon, but is not final yet. One (pricey) walk around is that you can use iPads (which is the cheapest Mac platform) as the school computers. The size of their hard drives is perfectly adequate for cloud computing and the lack of moving parts and flash drives makes it fairly robust and portable. However it may be difficult to write sizable projects on the iPad without a tactile keyboard.

One concern that I have heard when it comes to the iCloud in education is the consideration of privacy. This is wholly overstated according to Apple. Although when one uses iCloud the default settings allow the backing up of text messages, emails and practically all personal information, this can be turned off. In this day and age of social analytics where a typical website will have multiple trackers watching each breath you take and every move you make, having a backup in the cloud is not seen as obtrusive. If your school district or office were to purchase this service, all extra superfluous backup options can and will be removed. What this means is that email, texts and personal information are only backed up if you want them to be. Thus there are no extra tracking services or privacy invasions involved.

In conclusion, purchasing the iCloud is a very good investment for your school board. It will save the district or business capital and hardware costs. There will be less software needed to install and troubleshoot, thus saving you money both in start-up and maintenance costs. There are privacy concerns and concerns about less advantaged students being able to access this service; however the cost benefit savings can assist in facilitating this. It offers educators a fantastic way to create universal e-portfolios and chart student achievement. However if one takes into account that by saving the hardware and software costs you can redirect that capital into extra computers for less advantaged students, everyone comes out a winner.

Epilogue – The Reflective Process

Initially I have been very much against cloud computing, mainly because of privacy concerns. I am an open source advocate, who does not believe that Apple has your best interests in heart (unless you are a stockholder). I would still not use the iCloud (or any cloud for that matter) for my own personal uses. Although they claim that it is secure I still do not want my personal files available to be perused by others. However, I do use Google docs, quite often in collaboration on projects, but it does not have access to my hard drive and to my personal documents. Through my research into the iCloud I have (grudgingly) accepted that the benefits outweigh the negatives for school boards, or even for business that require collaborative efforts.

Works Cited

Ong, Walter. (1982.) Orality and literacy: The technologizing of the word. London: Methuen.

Bolter, Jay David. (2001). Writing space: Computers, hypertext, and the remediation of print [2nd edition]. Mahwah, NJ: Lawrence Erlbaum. ISBN: 0-8058-2919-9

Waters, Audrey. (2011). Does Apple’s New iCloud Offer Anything New For Education. Published by Mindshift.KQED.org. Retrived Nov 25th from http://mindshift.kqed.org/2011/06/does-apples-new-icloud-offer-anything-nww-for-education/

Bowers, et al. (2000) Native People and the Challenge of Computers: Reservation Schools, Individualism, and  
Consumerism in American Indian Quarterly, Vol. 24, No. 2 (Spring, 2000), pp. 182-199

Bates, A., & Poole, G. (2003). Effective Teaching with Technology in Higher Education: Foundations for Success. New York: Jossey-Bass, An Imprint of Wiley.

Alexander, B. (2006) "Web 2.0: A new wave of innovation for teaching and learning?" Educause Review, 41(2), 34-44. Retrieved, Nov 25th , 2011, from <http://www.educause.edu/ir/library/pdf/ERM0621.pdf>

Peter-Paul Verbeek, *What Things Do: Philosophical Reflections on Technology, Agency, and Design*, Pennsylvania State University Press, 2005.