Unleash the Power of Technology in Education

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There have been a plethora of reports about technology in education during the last decade, the latest one, entitled *Unleashing the Power of Technology in Education* done by The Boston Consulting Group, is available at: http://www.bcg.com/documents/file82603.pdf.

It notes the slowing of spending on technology in K-12 education. The various patterns in schools are easy to discover and the downturn in educational spending has had an immediate impact on how much technology will be purchased by school districts in the immediate future.

What are the patterns you see around you? Let us recount what we are seeing:

1. Progressive school districts are forging ahead. Districts doing this are like the Gwinnett County Schools in Georgia who are pushing toward total digitalization of both devices and textbooks; or the Osseo School District near Minneapolis, MN, which is opening. school networks successfully to student-owned devices.
2. Schools that have one-to-one programs furnish every student with a computing device. A few districts have done this for many years. The Quaker Valley School District in Pennsylvania does this annually; the Kearns High School in Salt Lake City, UT, has just completed a full year with an iPad in the hands of every high school student. There also are the districts that have tried one-to-one devices but have ended the experiment when the computers were lost or stolen in short order.
3. There are schools that rely on a few computers in the classroom, the computer lab, and the library/learning commons but ban the use of personal devices from school networks.
4. Other school districts concentrate their spending providing access to networks and the cloud and require students to bring their own devices to school.
5. Still others act as if technology does not exist; or, they have the illusion of having technology.

The trend over the last five years seems to have been more and more access and the beginnings of a breakthrough in allowing personal devices on networks. Cloud computing is flourishing because it brings down the cost of computing to the school and district. Google Apps for Education, a safe and free environment, now reaches over ten million students.

Teacher librarians and teacher technologists are in the best position in the school to watch the development and impact of technology in the lives of the teachers and students. We see these people as the best informed who can chart a clear path forward. In our minds, the path includes two major issues in every school:

1. **Access, access, access until computers and networks fade into the background.** Every child and teen needs access 24/7 to fast networks via reliable devices. To create this, tech directors need to build bandwidth, wireless access to any device, and open those networks to all possibilities of instructional computing. Ownership of devices seems to be transferring to the client with assists to those families who really cannot afford a device. Smart phones, network capacity, and devices with solid state drives allow the "computer" to always be waiting on the user rather than the user waiting on the device. When reliability goes up and wait time goes down, there is a direct impact on the efficiency of the entire organization and on the individual learners. The connection is always there. It is no longer an issue. It fades into the background and allows the focus to be squarely on the next issue.
2. **Maximize learning, maximize learning, maximize learning.** In every report we have seen, there is a constant call for everyone in the school community to learn how to learn in a rich information and technological environment. The speed at which technology has been used to boost teaching and learning has been agonizingly slow in most schools. In schools where we see the most progress there is a grand alliance between tech directors, teacher librarians, teacher technologists, classroom teachers, and, most importantly, the students. When a collaborative culture arises spurred by sound technology infused learning strategies, everything changes. We actually have been in a school, the Science Leadership Academy in Philadelphia, PA, where such a learning environment exists. Inquiry reigns and is coupled with transparent and ubiquitous technology, creating a culture of excitement about learning that is simply infectious. It becomes a culture of building personal expertise and collaborative intelligence. Remember, the students in your school are competing for careers and colleges with these advanced learners.