

access to technology in transition

The time seems right in 2009 as school districts face a downturn in the economy to take a look at the progress that has been made in allowing students access to Internet resources and to various types of Web 2.0 collaborative tools that enhance learning.

At this juncture, three groups seem to have emerged:

- **The Just Say No Crowd:** These schools and school districts operate out of fear and lock down access with heavy Internet filters and no access to cloud computing/Web 2.0 tools (no access to wikis, blogs, nings, YouTube, and most Google Apps).
- **The Inside the Firewall Group:** These districts create a strong firewall but try to pull inside the internal space selected web sites, multimedia resources, and Web 2.0-type tools such as internal wikis, blogs, and internal communication tools.
- **The Wide Open Group:** These are the districts or schools that apply a light filter and are friendly to teachers and teacher-librarians who want access to almost any tool or system that has the potential for teaching and learning. They concentrate on teaching responsible use of all technologies and tools, trying to take advantage of the best of the best wherever it can be accessed. They experiment with many technologies and systems that are free, open source, or for a fee.

Teacher-librarians express disdain for the No policies, tolerate the Insiders, and dream of the open environment. Students, at least those with any tech savvy, know how to get around any of the barriers put in their way. The net result is that only the teachers and teacher-librarians are the frustrated groups.

Two commercially commissioned studies cast some light on the status of technology. The first, commissioned by netTrekker (for a summary report visit http://ntdi.nettrekker.com/?page=study_2007), studied hundreds of teacher-librarians and discovered this group was interested in access to high quality information sources but was concerned with the mischief students could get into on the open Internet. netTrekker and other commercial companies responded with the creation of virtual learning commons of sorts where those high quality resources reside within the district's firewall. These services are charged out per student in a school or district; quality and safety are the selling points. This kind of commercial solution along with access to state-wide databases is popular as long as the funding is forthcoming.

As financial pressures mount, teacher-librarians are being asked to justify these expenditures in terms of student learning. In some cases, no matter what evidence is supplied, these services will be cut.

In a second and more recent study commissioned by netTrekker and Lightspeed Systems, we get a picture of what the technology directors in the United States say is happening to access. (To receive both the summary report and the full study "National Online Survey of District Technology Directors Exploring District Use of Web 2.0 Technologies," you must request a copy at <http://www.lightspeed-systems.com/ResearchSurvey> or <http://new.nettrekker.com/surveyreport>.) Some very interesting findings emerge:

- Teachers and students are demanding more and more access to both the Internet and to Web 2.0 tools.
- More and more teachers are learning about technology tools because more professional development is being conducted using these tools.
- More tech directors say they have plans to enlarge access to the technology tools for teaching and learning.
- Major barriers to the widespread utilization of Web content and Web 2.0 tools still exist. Tech directors feel that many faculty members are not prepared and do not understand the significance of Web 2.0 tools (see Table 10 of the full report).

Reading both reports provides some interesting implications for policies and practices at the local level. Here is our beginner list of issues to confront.

As a teacher-librarian, be the expert in your school in the ways technology can affect teaching and learning. Become known as the person who makes technology deliver on its potential.

- The trend across the U.S. and hopefully in Canada is to move toward more open access although this seems impossible in many districts across the country.

- More tech directors are becoming interested in having an effect on teaching and learning rather than just networks and systems. As they do so, they are more likely to realize there is a major difference between administrative computing (locked up tight) and instructional computing that must be much more open. Welcome opportunities to involve tech directors in actual instructional experiences so that they begin to understand the possibilities, the problems encountered by users, and the excitement they can participate in creating.

- If teachers, students, and you as teacher-librarians are part of the groundswell demanding more access, keep up the pressure, marshal the forces, demonstrate the possibilities created by the effects on student learning, which is a result of using high quality information resources and Web 2.0 tools. To do this, get dispensations or do the work-arounds needed to make your point.

- As a teacher-librarian, you probably already know and can demonstrate the use of higher-quality information on student projects and assignments. If not, make it a practice to assess what students produce and document the impact of what you have taught them.

- Since most Web 2.0 tools are collaborative in nature, demonstrate learning gains when tools are used successfully to deepen understanding of both groups and individuals.

- As a teacher-librarian, be the expert in your school in the ways technology can affect teaching and learning. Become known as the person who makes technology deliver on its potential.

- As the research suggests, integrate both the potential of high quality information resources and Web 2.0 tools into every professional development opportunity you

can. The more teachers actually participate in high-tech learning experiences themselves, the more likely they are to use it with their classes.

- Assemble a "Geek Squad" of tech-savvy students as your classroom ambassadors who help both teachers and students adopt the idea that "I help you, you help me, and we all learn together."

- Integrate lessons on responsible and ethical behavior in both real and virtual worlds at every opportunity. Better yet, have students help develop the rules of behavior and assist in policing their own policies.

- Create a virtual learning commons that replaces the old library web site/one-way stream of information that is usually ignored. Transform it into a giant conversation where students, teachers, parents, and the teacher-librarian are contributing to the success of the total school learning community. Demonstrate that everyone owns this place.

- To combat the fear factor, broadcast success stories of high tech learning experiences that are memorable and demonstrate the responsibility of the students.

- Create an internal "YouTube" museum of student creations and products—something akin to the school yearbook. Encourage the community to congratulate the best of the best. Investigate the open source program, Kete, at: <http://kete.net.nz/>.

If Steven Johnson (2009), *Wall Street Journal* writer, is only half correct about the emerging world of Kindles and other devices that disseminate textbooks, eBooks, and personal writings in a totally collaborative world, then it is teacher-librarians who can help the school come to terms with this new information world rather than delay the inevitable. This would be true, particularly if the Texas state legislature bucks the major textbook lobby and allows materials other than textbooks to be purchased with textbook funds, and if initiatives such as

the Amazon.com initiative on scanning books continues, or the announcement from the Library of Congress about the World Digital Library succeeds (<http://www.loc.gov/today/pr/2009/09-082.html>).

The point of course, in our transition strategy is not the devices, the networks, the glitz; it is the demonstrated impact of technology on teaching and learning that really matters. We enter the conversation that deep learning of some fewer topics rather than the race to "cover" stuff may be, as some research indicates (Cavanaugh, 2009), the better way to prepare learners for college and the real world.

REFERENCES

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