Young Canadians in a Wired World, Phase III

Teachers' Perspectives
Executive Summary

This report sets out the findings of an exploratory qualitative research study conducted with a purposive sample of teachers who are recognized by their peers for being successful in engaging their students positively and creating an excellent learning environment in the classroom. Using a semi-structured interview guide, we interviewed one elementary teacher and one high school teacher from each of five regions: the North; the West; Ontario; Quebec; and the Atlantic. Three of our informants were francophones teaching in French schools outside of Quebec, and seven were Anglophones teaching in English schools.

Not So Savvy Surfers

All of the teachers we talked to indicated that their students loved working – and playing – with smart phones, iPods, iPads, computers and networked devices of all kinds. But they also agreed that simple access to networked technologies has not made their students better learners. In spite of the fact that young people demonstrate a facility with online tools, many students lack the skills they need to use those tools effectively for learning. There is also a real propensity on the part of students to take what they find online as "given".

Identifying Problems and Solutions

The teachers we talked to identified five factors that work to limit students' proficiency with digital content, and provided solutions for each.

Teaching Tech vs. Using Tech to Teach

Many Canadian school boards continue to focus on training students how to use technology instead of providing students with learning opportunities that are enhanced through the use of technological tools. Instead, our informants spent little to no time teaching students *how* to use a particular piece of software or hardware; instead, they focused on teaching them *why* the technology would be useful to their learning.

"Drill and Kill" Experts vs. Facilitators and Co-Learners

The "drill and kill" approach to teaching, where the teacher is the classroom expert who talks at students from the front of the room and gives all students the same exercises at the same time, does not work well with networked learning tools because the technology entails a certain loss of control over what the students are doing at their desks. On the other hand, a teacher who is willing to share responsibility with the student, learn from students' technical proficiency, and facilitate the learning process is more likely to be comfortable with networked learning tools.

Younger Teachers vs. Older Teachers

Many teachers are cautious about tech because it can be disruptive. Networked devices can also easily distract students from the task at hand. Accordingly, strong classroom management skills are paramount to the effective use of technology in the classroom. This gives older teachers an advantage over younger teachers, primarily because they are more experienced and have stronger classroom management skills.

Tech Training vs. Curricular Training

There are few in-course and professional development training opportunities to help teachers, young and old, learn how to use technology to meet curriculum outcomes. Training tends to focus on how to use a particular piece of software or hardware, so teachers are largely on their own when it comes to figuring out how to use technology to support and enhance learning.

Online Filters vs. Letting Students Make Mistakes

School filters and policies that ban or restrict networked devices in the classroom make it difficult or impossible for teachers to use networked tools to enhance learning. They also imply that schools do not trust their teachers to exercise good judgment, which is out of step with the fact that teachers are

frequently required to teach students how to deal with offline content and conflict. Learning how to exercise good judgment and act as good citizens is central to the development of digital literacy skills. Ironically, however, restrictive policies designed to protect students from online content take away the very opportunities they need to acquire these skills.

Turning Technological Access into Enhanced Learning

Our informants identified four ways in which networked technologies can enrich students' learning.

A Wealth of Learning Resources

Networked technologies give teachers easy access to a world of learning resources that provide information in interesting or engaging ways. Online interactivity also provides an opportunity to interact with that information in order to test skills and apply new knowledge.

Communicating with Others outside the Classroom

The ability to connect with the world outside the school in real time is the single most powerful benefit of technology enhanced learning. Communicating their own ideas and connecting with others down the street or around the world deepens students' engagement with their learning and helps them to think more critically about the world around them.

New Opportunities for Collaborative Learning

The ability to communicate with others brings new opportunities for collaborative learning. Students who discuss issues and share their knowledge with others online are able to learn from each other and participate in the kinds of public debates that are central to lifelong learning and the exercise of democratic citizenship. The technology also makes that collaboration visible, so students can see their own contribution to the group. This enhances their sense of connectedness, which deepens and enriches their learning by making it both more personal and more social. Collaborating with students from different cultural backgrounds help students develop compassion, understanding and appreciation for different cultures.

Working with Individualized Learning Styles

Networked devices help teachers provide learning materials matched to the various learning styles of their students. For example, podcasts and online auditory dictionaries are helpful for auditory learners, and iPads and touch-sensitive smart boards are helpful for visual, tactile and kinaesthetic learners. Networked technologies are also particularly helpful for special needs students; students who have difficulty concentrating often work better when they are listening to music on an iPod, and students who have trouble sitting still respond well to tools that enable them to engage their bodies and move

while they are learning. Technological tools can also provide special needs students with an opportunity to demonstrate their knowledge in new ways.

Managing Technologized Spaces

Technology can enhance learning when the focus is on pedagogy and the students' needs. However, networked devices can also complicate the learning experience when students use them to open up the privacy of the classroom for their own purposes. Not only does this interrupt the learning process, it also affects the social relationships that are at the core of learning by dissolving the boundary between the classroom and the outside world and making it more difficult to create the trust that is central to learning. The potential embarrassment of being exposed on the Net is enough to make many students disengage from the learning process itself, and teachers are more likely to censor fun activities with students in case their actions are taken out of context. The end result is that it is more difficult to build community and trust in the classroom because the learning and interaction that takes place in that private space is coaxed into the wider public sphere.

Maximizing the Benefits – Digital Literacy and Online Citizenship

Technology can only enhance learning if students are taught to think critically about online content and to evaluate their own behaviour against a set of shared social values. Digital literacy is not about technical proficiency, but about developing the critical thinking skills that are central to lifelong learning and citizenship. To meet the challenge, schools must focus on pedagogy, and provide training and support to help teachers incorporate technologies into all elements of the curriculum in ways that facilitate individualized learning and teach students how to collaborate with learners both within and outside the school community.