

# introduction

## let's start with a pop quiz

**Q YES OR NO:**  
Have you ever blogged, podcasted, wikied, showed photos or commented online?

If you said *yes*, you're among an increasing number of people who have tried these new tools (Horrigan, 2006). If you said *no* but are still reading this, you obviously are curious about these latest technological innovations.

Welcome to the New Web, most often called Web 2.0. It is all about the free new tools such as blogs, wikis, photo and video sharing, and social networking that people are talking about and that many are using already.

What do they mean for education? These tools are changing how people, including our students, interact with the world. The changing nature of information and the new ways our students understand and make sense of the world signal that we need new strategies and new tools for teaching and learning. The challenges of the new millennium require that students be adaptable and analytical, and that they have the skills to identify and use the best tools in a rapidly changing environment.

Why should you care about these new tools and methods? After all, in spite of all the hype, technology has not yet changed schools very much. So why now—in an era of No Child Left Behind and high-stakes testing—should we care?

As you will see, the world has changed; our students have changed, and traditional schools are no longer up to the task of educating young people for the future.

You may say that the web as we have known it is good enough, that these new tools are uncontrollable and students are venturing into uncharted territory. What was so bad about last year's tools?

## new world

We live in a wired, globalised world in which communication and collaboration are possible 24/7. Corporations have become multinational and their workers can be anywhere and work at any time. Fast connections and standardised software link these corporations with workers wherever they are, and some members of this workforce live in parts of the world where salaries are low and benefits are unheard of. Technology is the driving force that created this environment. Technology makes people in remote locations viable employees who are eager to have the jobs.

Companies use technology to become lean and efficient. They can track their goods and services from point of origin to delivery and at every step along the way. They know what they need at any moment and can make adjustments to the supply flow in real time using technology from a distance. They trim expenses, including worker

costs. When workers in Asia are as well educated as Western graduates, are just as well versed in using new tools, and require significantly smaller salaries, it is clear where the jobs will go.

By the early 2000s, the notion of interactivity went from linking and clicking to creating and sharing. Now individuals not only find and read information but also create and share their own in real time. It is a new Web, known as Web 2.0.

The web is changing too. It has morphed from static HTML pages where readers could find and copy information to interactive services, where visitors can create and post information. The transition from using desktop-based applications to new online tools means that we can work differently. We no longer just find and use information; the web is now a participatory, interactive place where we create information collaboratively and share the results. Everyone can participate thanks to social networking and

collaborative tools and the abundance of websites that allow us to post journals, photos, movies, and more. The web is no longer a one-way street where someone controls the content. Anyone can control content in a Web 2.0 world.

So what does this mean for teaching and learning? As educational leaders, we should understand changes in the web and how they reflect changes in the world around us.

## using the tools

The rest of this chapter will explore many of the Web 2.0 tools that educators have implemented and found useful. Chapter 4 will provide examples of how people are using the tools in classrooms and schools. There are so many ways to work with Web 2.0 tools that we can cover only a small portion of these creative ideas. Detailed lessons are beyond the scope of this book. However, in the spirit of Web 2.0, we hope you'll take these tools and ideas, put them to use, then tell the world. We have plans for a companion book that will be a practical guide to Web 2.0. This resource will showcase real-world lessons, classroom narratives and tutorials.

## basic web 2.0 tools: blogs, podcasts and wikis

Three of the most commonly used Web 2.0 tools are blogs, podcasts and wikis, and there are many examples of each. Bryan Alexander (2006), director for research at the National Institute for Technology and Liberal Education (NITLE), talks about the unique nature of these inventions:

Blogs are about posts, not pages. Wikis are streams of conversation, revision, amendment, and truncation. Podcasts are shuttled among Web sites, RSS feeds, and diverse players. These content blocks can be saved, summarized, addressed, copied, quoted, and built into new projects. Browsers respond to this boom in microcontent with bookmarklets in toolbars, letting users fling something from one page into a Web service that yields up another page. (n.p.)

For examples of how to use these tools, take a look at the tutorials in chapter 10.

### Blogs

A web log, usually shortened to *blog*, is a set of personal commentaries on issues the author deems important. It contains text, images and links to related information on other blogs, web pages and media. Readers can reply easily and thus participate in a discussion in which they share knowledge and reflect on the topic. Blogs promote open dialogue and encourage community building in which both the bloggers and commenters exchange opinions, ideas and attitudes. Entries are posted in reverse chronological order. According to *Business 2.0* magazine, by the summer of 2006,

## technology literacy training

Many schools require their new and practising educators to demonstrate basic competencies in using and teaching with technology, and Web 2.0 tools will take those educators a bit further. Assisting educators in this task will require a concerted effort on the part of administrators. As mentioned, it is unfortunate, but most typical professional development activities have not been successful in changing behaviour, for many reasons. Without significant school level commitment, ongoing support and organised efforts, that reality is not likely to change. To chart a new course, administrators must agree that the use of technology is a fundamental goal, and faculty members must participate in identifying it as a shared goal.

Once the goal of enhancing teaching and learning through technology is agreed upon, there are many ways to accomplish it. One of the most successful is to use the technology to learn how to use the technology, or some might say, not just talk the talk, but truly walk the walk. Many studies of educators' lack of technology implementation have found that the lack of accountability from administrators on their actually accomplishing technological goals has been the most influential in practice (Schrum, 1999). One administrator said he had success by changing two simple things in his evaluation of the educators in his building. He required that one of the lessons he observed each year had to be in integrating technology into the curriculum and one of each educator's annual goals had to be focused on improving technology proficiency.

Schools have adopted several different approaches to preparing their educators for using and learning with technology. Some use a central model in which a wide variety of productivity and workplace skill programs are offered to interested teachers. Others have a requirement that educators attend a certain number of sessions each year. Still others poll their faculty each year and offer programs that meet specific needs. Another group of schools offers special designations to teachers who complete a specific number of training sessions and demonstrate acquired skills. A small number of schools have invested in videoconferencing technology to allow remote experts to present information and provide training without the expense and time normally required for travel.

With these possibilities for Web 2.0 tools, educators can weave in the potential for building a "learning community" as they become familiar with blogs, wikis, podcasting and social bookmarking. Not only can educators connect with their peers, but they can have access to experts in a variety of content or process areas.

## Instant Messaging

Initially designed for conducting one-on-one personal chats, instant messaging (also referred to as IM) has made its way into schools and offices. Many people use text-based IM over phone calls and email—preferring its immediacy and efficiency in getting real-time information from others. Young people in particular have adopted this technology as their own.

IM is different from other types of Internet applications in that it involves direct connections between computers—either within a school or across the Internet. While it is a popular way to send text messages, files, audio and video for collaborative work, IM's lack of basic security features opens the door to hackers and viruses and perhaps to data capture.

IM is one of the most difficult applications to control because it attempts to hide within other network services, borrowing assigned TCP port numbers for its own communication. This stealthy approach makes traditional firewalls ineffective. Regaining control and security over this type of service is a challenge to district IT departments. Their solution is often to block access.

New Hampshire's Monadnock Community High School, for example, allows students, teachers and parents to communicate using an internal IM. Most of the conversation revolves around students collaborating on projects, but parents can contact teachers about their students' work, and students can ask questions of their teachers with instant messages. By allowing IM in schools, implementations such as this take advantage of the benefits. Keeping it behind a firewall avoids harmful interactions, though IM use still requires careful management.

## Social Networking

It is easy to understand why social-networking sites have become so compelling. Just how compelling can be seen in MySpace's astonishing growth: Estimates indicate that 5 million new members join each month. They can craft their personas and change them at will; they can be daring, popular and attractive if they want. They can even claim accomplishments they may want to retract later.

While in real life, many teens would welcome anonymity, online they can assume an identity and be the sort of person they imagine would be fun. They can stand out and be recognised and have a shot at fame.