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## A Compendium of Web 2.0 Tools and

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One solution to the engagement problem involves incorporating appropriate technological tools in instruction to foster and facilitate active learning. Many such tools are available, and the best among them support and encourage collaborative learning. Collaborative learning mirrors students' innate desire for connection not only with interesting, relevant content but also with other students. Depending on the learning activity, such technological tools can include anything from cell phones to webcam communications through Skype to computer-based academic chats and interactive e-classrooms in which students share learning activities with peers in other cities, regions, or countries.

## The Teacher's Role

What is the teacher's role in an active-learning classroom? Is there still a place, for example, for teacher-directed instruction?

Yes, there are appropriate times for teacher-directed instruction, even in an active-learning classroom. Teacher-directed, whole-group instruction may be the most effective choice, for example, when initiating a lesson, building enthusiasm, or checking for understanding. However, to be effective, direct, teacher-led instruction must be balanced by small-group collaboration and individual exploration.

Recently, I had the experience of redesigning a face-to-face professional development presentation as an online class. What a learning experience that was! I had delivered the face-to-face presentation some thirty times, but it still took me more than twenty hours to replicate the content for the online version. The guidelines said that interactivity with the participants in the online class needed to take place every four to five minutes. This challenge subsequently made me rethink my face-to-face teaching. Interactive "breaks" are important to refocus learners, to re-engage them with the content, and to encourage everyone in the class—whether online or face to face—to participate.

This experience brought home a key point about the teacher's role in an active-learning classroom. Learning is social, and it should be fun. The teacher should not be the one doing all the work, which often seems to be the case with the "stand and deliver"

And the best part is that most of the digital resources included in this chapter require little beyond what is now normally available in most schools: a computer, high-speed access to the Internet, an LCD projector, and audio speakers.

## Rethinking Curriculum Planning

I am convinced that all teachers can be a source of change for their students, colleagues with whom they collaborate, and even the leaders who support them. Business blogger Seth Godin (2008), author of ten international best-selling books, is an expert on the effects of social media. He has written,

The first thing you need to know is that individuals have far more power than ever before in history. One person can change an industry. One person can declare war. One person can reinvent science or politics or technology. The second thing you need to know is that the only thing holding you back from becoming the kind of person who changes things is this: lack of faith. Faith that you can do it. Faith that it's worth doing. Faith that failure won't destroy you. (p. 71)

Each teacher must be a force for change, and each has the potential to be a leader by exposing colleagues to new ideas and technologies and supporting efforts to incorporate them in curriculum.

Fundamentally changing the curriculum will be difficult, and few school systems have the capacity to accomplish it with the urgency that is needed. According to Godin (2008),

Our culture works hard to prevent change. We have long had systems and organizations and standards designed to dissuade people from challenging the status quo. We enforce our systems and call whoever is crazy enough to challenge them a heretic. And society enforces the standards by burning its heretics at the stake, either literally or figuratively. (p. 71)

With a master's degree in curriculum and a teaching career that spans more than twenty-five years, I have served on many curriculum committees. I have found that they often turn into

## Desirable Technological Tools for Students

A number of additional technological tools are desirable for educational purposes but not yet essential—though they may well be the must-haves of the future.

### *Ebook Readers*

The ebook reader market is booming. Various devices are available to allow users to read books electronically. Amazon's Kindle, for example, comes in a couple of sizes, has substantial capacity to hold a large number of downloaded books, and supports other handy features, such as bookmarks and note-taking. Thousands of books are available, and most are considerably lower in price than their paper counterparts.

The Sony Reader and the Barnes & Noble nook are other recent entries. There are ebook reader apps for Apple's iPhone and iPod touch (and the iPod touch's big brother, the iPad). Future developments are likely to include greater cross-platform availability.

### *iPod Touch or iPad Devices*

More versatile than stand-alone ebook readers, Apple's iPod touch and larger iPad devices offer app-based ebook readers as well as a number of other applications that would be useful in the classroom, among them:

- Calendar
- Calculator
- Notepad
- Email
- Music

### *Wireless Slates*

Wireless slates are like individualized interactive whiteboards. Slates are different from the student laptop computers discussed earlier in this chapter. The wireless slate enables the teacher to walk around the room and still manipulate the computer that is