Educational technology

A guide to resources on the Web

by Betzi L. Bateman

O f particular interest to academic librarians is the field of educational technology. As educators themselves, they have been using technology for quite some time to educate faculty, staff, and students in information literacy. College and university librarians have also expanded their roles and have enhanced the faculty-librarian relationship by providing faculty support in the use of educational technology. (For example, TWIST: Teaching with Innovative Style and Technology at the University of Iowa is a team of librarians that collaborates with faculty in the creation of course Web sites.[1]) Finally, as providers of resources to those in education and business departments, sites geared toward the K–12 and adult education or vocational training communities may also be of interest.

But, what is meant exactly by the term *educational technology*? Also called *instructional technology,* it refers to the use of technology to support or provide education. Many are currently focusing on "e-learning" or "online education," but these are actually subsets. Educational technology can also be used in the classroom and is not limited to distance learning or the Web.

Systems used by places of higher learning that automate administrative tasks, such as course enrollment, may also be referred to as educational technology, but the sites selected for this guide mainly present best practices, research articles, and how-tos for those with pedagogical goals.

Ownership of the site was taken into account—it is my opinion that the site's owners or sponsors do not harm the content they provide. These sites also provide up-to-date content, some of which is provided without a subscription or membership dues.

Getting started in educational technology

These sites provide information for those who would like to learn more about educational technology in general. However, seasoned users of technology to enhance learning may also find them useful.

• **eLearn Magazine: Education and Technology in Perspective.** Published by the Association for Computing Machinery, this online periodical focuses on online education or education disseminated via the Web. There is a section of articles on e-learning basics as well as tutorials on specific uses of technology, for example, the use of threaded discussion boards. These tutorials will not, however, teach you how to implement the technology, i.e., write the code for a discussion board, but they will provide the framework for how to plan and use these technologies in education. *Access:* http://www.elearnmag.org/.

• **ERIC Clearing House on Information Technology: Educational Technology.**

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This great metasite, part of a larger one devoted to computing in general, provides links to associations, journals, and discussion groups in the field. In addition, educational technology is defined and an ERIC Digest on educational technology, written by Donald P. Ely, founding director of the ERIC Clearing House, provides an excellent primer on the subject. *Access:* http://ericit.org/educationaltechnology. shtml.

• **UMUC—Verizon Virtual Resource Site for Teaching with Technology.** This site, created by the University of Maryland University College, contains two online modules to teach faculty how to implement technology into their teaching. Module 1 provides a great introduction to the various ways in which the Web can be used in education. Under the "Technologies" heading, specific types are given according to their ease of use. Examples of their use can be found by clicking on the heading "Teaching/Learning Activities." Module 2 builds on the information about the different types of technologies and provides realistic ways to plan and implement their use. This Web site is very easy to navigate and won an honorable mention in a Web design contest. *Access:* http://www.umuc.edu/virtualteaching/

• **Web Based Learning Resource Library.** The content for this large list of links is written by Robert H. Jackson, assistant dean for technology and director of distance education at the University of Tennessee-Knoxville. Three pages of information are provided, one on general resources that defines what Web-based learning is. The second page covers software tools such as Blackboard, while the third page provides links to distance learning places online, e.g., places to get an online degree. *Access:* http://www.knowledgeability.biz/ weblearning/.

General organizations and publications

These sites cater to all educators using educational technology, including K–12 teachers, higher education faculty, and vocational training.

• **AACE: Association for the Advancement of Computing in Education.** Founded in 1981, this nonprofit organization has been publishing numerous journals in the field, including the *International Journal on E-Learning* and the *Journal of Interactive Learning*

Research. Two publications are included on the Web site for free: *CITE (Contemporary Issues in Technology and Teacher Education)* and *Educational Technology Review,* which contains descriptive and opinion articles. This organization also sponsors three conferences every year and has a general discussion list called EDUTECH. *Access:* http://www.aace.org/.

• **AECT: Association for Educational Communications and Technology.** Around since 1923, this organization has kept up with the times. Members can join one or more of several divisions, including Design and Development and Research and Theory. AECT publishes *Educational Technology Research and Development,* which is only available by subscription, but several publications are available for free online, including the current issue of *TechTrends,* a magazine focusing on the practical application of technology in education, and some occasional papers. *Access:* http:// www.aect.org/.

• **CIT Infobits.** An electronic service of the University of North Carolina-Chapel Hill's Center for Instructional Technology, this site provides current awareness in the field of educational technology. Each month CIT's information resources consultant provides brief synopses on some of the latest educational technology advancements and issues. *Access:* http://www.unc.edu/cit/infobits/.

• *Converge* **magazine.** Supported by advertising, this trade publication provides free subscriptions to the print version and free access to the online version. The *Converge* editorial staff works with vendors to produce special publications highlighting the use of these technologies in education. In addition, *Converge* has two free e-mail newsletters. Both called *Technology Roundup,* one is geared toward the K–12 community and the other focuses on postsecondary education. *Access:* http://www. convergemag.com.

• **Online Learning Update.** Blogs are often used as personal diaries and diatribes on esoteric subjects, but they can also be used for disseminating information "pearls" to specific communities. This blog, updated daily by Ray Schroeder, director of the office of technology-enhanced learning at the University of Illinois-Springfield, culls the latest news on educational technology from such sources as the *Chronicle of Higher Education.* Also included are how-to articles and calls for papers and presentations. Why peruse the many information sources available when someone else has already done so? This site is a great way to stay up-to-date on the latest in educational technology. *Access:* http://people.uis.edu/rschr1/onlinelearning/blogger.html.

• ***T.H.E. Journal.*** Technological Horizons in Education is a privately held publishing and services company and the T.H.E. Journal is the main Web site for this company. This magazine publishes articles on both administrative and educational uses of technology. Through the T.H.E. Institute, users can take professional development courses online. Three e-mail newsletters can also be found at this site. *Access:* http://www.thejournal.com.

• ***The Technology Source.*** Since October 2001, this peer-reviewed bimonthly online journal has been published by the Michigan Virtual University. It has a couple of unique features in that each article contains a link to related articles from the journal and a link to a discussion forum on the article. Each issue has opinion articles, case studies, reports on faculty and staff development, reviews of tools of the trade, and spotlight sites on the Web. The homepage contains the most recent issue, and archived articles are available at the bottom of the page and are organized by topic and date. *Access:* http://ts.mivu.org/.

• **U.S. Department of Education Office of Educational Technology (OET).** From the OET site, you will have easy access to numerous programs sponsored by the U.S. government, divided by topics such as "Digital Divide" and "Distance Learning." Federal grants for educational technology initiatives are given as well as governmental reports and conferences. *Access:* http://www.ed.gov/Technology/.

Higher education sites

• **EDUCAUSE: Transforming Education Through Information Technologies.** More than 1,800 colleges and universities are members of this nonprofit organization. At the Web site, you will find an Effective Practices and Solutions (EPS) database and access to the peer-reviewed publication *Educause Quarterly* and the bimonthly magazine *Educause Review.* Also, the Educause Information Resources Library includes campus documents such as policies, RFPs, and conference papers. *Access:* http://www.educause.edu/.

• **MERLOT TWO.** Part of the larger MERLOT (Multimedia Educational Resource for Learning and Online Teaching) site that provides peer-reviewed examples of online education, MERLOT TWO (Teaching Well Online) presents a peer-reviewed collection of materials on how to engage in online education effectively. Browse the collection using such terms as "Instructional Material Design" and "Selecting Technology." *Access:* http://www.merlot.org/Home.po?discipline=TWO.

• **NYU Center for Online Learning and Pedagogy.** Everyone seems to be creating online learning now, but how can you do it right? This site presents a model for developing online learning using sound educational theories and design practices. Under the heading "Pedagogy" a review of several pedagogical theories are presented while under "Applied Pedagogy," is a tutorial on how to incorporate these theories into online education. *Access:* http://www.nyucolp.org/.

• ***Syllabus: Technology for Higher Education.*** Covering both administrative and educational uses of technology in postsecondary education, this free magazine is published by the commercial company 101 Communications. All content, as well as subscription information for the print version and archives of past issues, is available online. You can also learn about the *Syllabus* conferences and sub-

scribe to their e-mail newsletter. *Access:* http://www.syllabus.com.

• **TLT Group.** The nonprofit Teaching, Learning, and Technology group provides information resources and services to institutions of higher learning to help them implement information technologies to enhance learning. Under "Resources," case studies and workshop materials on topics such as collaboration and distance education are provided. Learn about the different programs available for purchase such as the Flashlight program which is designed to aid in the evaluation and assessment of educational technology. *Access:* http://www.tltgroup.org/.

K–12 sites

• **American School Board Journal (ASBJ).** In the past, ASBJ published a supplement called *Electronic School.* Though this supplement is no longer being produced, you can browse past issues and still get the latest information on the use of technology in K–12 education by clicking on the link "asbj.com indepth." There you will find content by category, one being "school technology." *Access:* http://www.asbj.com/.

• **Network of Regional Technology in Education Consortia (R*TEC).** These 10 R*TECs, funded by the U.S. Department of Education, are designed to help the K–12 community successfully implement educational technologies, especially in underserved populations. At this site, there is a current information awareness tool, a research repository, information on grant opportunities, and links to the Web sites of each R*TEC. *Access:* http://rtec.org/.

• **Preparing Tomorrow's Teachers to Use Technology.** Institutions of higher learning have been receiving grants from the U.S. Department of Education to educate the educators in the instructional uses of technology. This Web site presents the projects that have been developed under "Stories and Strategies." Information on grants is also given. *Access:* http://www.pt3.org/.

E-training sites

• **Designing Web-based Training.** A companion site to the book of the same name by William Horton, here you will find tools and templates to use in the design of an online course. Learn how to create organized, easily accessible Web-based courses, implement active-learning principles, and increase learner motivation. *Access:* http://www.designingwbt.com/.

**Designing
Web-Based Training**

• **The eLearning Guild.** Sponsored by three service and consulting companies, this Web site provides a gathering place for developers and managers of online education initiatives in the business sector. Through free membership, users can get access to the *eLearning Developer's Journal* and discounts on professional development courses. An extensive and organized resources section provides links to other Web sites. *Access:* http://www.elearningguild.com/.

Note

1. For more information about the University of Iowa Libraries, TWIST: Teaching with Innovative Style and Technology, visit http://twist.lib.uiowa.edu/. ∎

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