

The Seventh Annual Look at Leading Edge E-Learning Technologies

“Innovation is the secret to bringing good old things some new life.”
Comment in *Wall Street Journal*, 1/11/07, on [“The Myth of Commoditization”](#)
by Michael Schrage, in *MIT Sloan Management Review*, Winter 2007

For the first time since BEEP's initial compilation of leading edge e-learning technologies, there is hardly an innovation listed here that does not in some way build on or improve existing hardware, software or other inventions. In fact, this issue's subject headings are nearly identical to those of [BEEP's sixth annual issue](#), and, as been the case before, cell phone advances take center stage.

However, read on and marvel at the leaps in technologies with e-learning potential that have been made in just twelve months. When you're finished, be sure to check out BEEP's Best Bets and the annual calendar of major upcoming educational technology conferences.

Hardware and Gadgets, Mobile and Otherwise

Cell Phones and Related Technologies

- [Apple iPhone](#). Innovative phone by U.S., if not foreign, standards. It will feature a touch screen, 4-8GB of storage for music, wi-fi, a camera and more. Release date is June, price \$499-\$599. (See [related article](#) on the reaction to Apple's iPhone announcement in Japan, a country where mobile phone technology has long been far more advanced than in the U.S.)
- [“Cell Phone Cameras That Zoom.”](#) Article by Kate Greene in *Technology Review*, 2/06/07, about the development of a telephoto lens using a folded optical system found in telescopes.
- [“Cell Phone of the Future Saves Lives.”](#) Article on Physorg.com, 10/20/06, about work at the University of South Florida to develop a Wireless Safety/Security System (Wi-Via), which can gather immediate security information and distribute it via the Web and mobile phone channels.
- [“Companies Tap Power of Cell Phones to Deliver Podcasts, Scan Documents and Spruce Up Photos.”](#) Associated Press release, 9/28/06, about many new services, like those in the title.
- [“Gadgets Galore at Wireless Conference...”](#) Associated Press release, 2/15/07, about a Barcelona conference that unveiled mobile phone technologies focusing on integrating programs like instant messaging, blogs and mapping to blur the line between desktops, laptops and cell phones. (One example was [software](#) for [Second Life](#) users to communicate sans computers.)
- [“PicoP Projector.”](#) A microprojector under development by the Microvision company that can be embedded in a cell phone or iPod to enable a laptop-size, full-color projection.
- [“Students’ New Best Friend: ‘MoSoSo.’”](#) Article by Gloria Goodale in *The Christian Science Monitor*, 1/22/07, on cell phones as “Mobile Social Networking Software” (MoSoSo). Sites like MySpace, combined with a phone's GPS capabilities, greatly expand students' social contacts.

Everything Else

- [“Brainchips Give Paralyzed Patients New Powers.”](#) Article by Emily Singer in *Technology Review*. 7/13/06, on an implant that lets paralyzed patients control computers and robotic arms. (An [update](#) to this article appeared in *Technology Review* on November 30, 2006.)
- [“Invisibility Cloak Sees Light of Day.”](#) Article by J. R. Minkel, Scientific American.com, 10/19/07, about an artificial mirage that can hide objects from observers in any direction.
- [“Plastic Sheet of Power.”](#) Article by Kate Greene in *Technology Review*, 12/14/06, about a prototype being developed at the University of Tokyo, made of plastic and flexible electronics, that can supply power wirelessly to any device that touches its surface.
- [“The Year in Infotech.”](#) Article by Kate Greene in *Technology Review*, 12/26/06, which lists major advances like flash memory, electronics without silicon, and new content creation tools.

Software Applications and Innovative Trends

- **[“GameBoy Fills New Niche – Education.”](#)** Article by Brice Wallace, *Deseret Morning News*, 1/9/07, about Pocket Direct LLC, a company that produces [KwikNotes](#), cartridges with educational information on a variety of subjects that can be used in [GameBoys](#). (Read more in [The Game Is On: Applying Computer Gaming Principles to E-learning](#), BEEP 54, 1/1/07.)
- **[“Internet2 Gets High-Speed Upgrade.”](#)** Report in *eSchool News*, 12/11/06, about a 10X increase in bandwidth capacity (100 gigabits/second) to meet needs of research and education.
- **[“Six Ed-Tech Trends to Watch in 2007.”](#)** Article by Gregg W. Downey, *eSchool News*, 12/22/06, listing important trends, including development of the [Partnership for 21st Century Skills](#), a group of educators and businesses who feel U.S. students are falling behind globally.
- **[“Software on the Low-Cost Laptop...Could Be More Revolutionary Than Its Economics.”](#)** Associated Press release, 1/1/07, about a highly intuitive software like no other developed for use with MIT’s \$150 [XO machine](#), developed for use by students in underdeveloped countries.
- **[“Specs for ‘Ideal’ School Laptop Released.”](#)** Article by Corey Murray, *eSchool News*, 1/15/07, about [Project Inkwel](#), a collaboration of educators and technology companies that has devised minimum standards (e.g., <4 lbs., >4 hours battery life, carrying case) it feels should be followed in the manufacture of all one-to-one computing devices for students in developed nations.

Upcoming Major Educational Technology Conferences

[Emerging Technologies Conference at MIT](#) - April - Cambridge, MA

[InfoComm 2007](#) - June - Anaheim, CA

[Distance Learning Administration Conference](#) - June - St. Simons Island, GA

[National Educational Computing Conference](#) - June - Atlanta, GA

[Campus Technology 2007](#) - July - Washington, DC

[Merlot Annual Conference](#) - August - New Orleans, LA

[E-Learn 2007](#) - October - Quebec City, Canada

[Technology and Learning Conference](#) - October - Nashville, TN

[Educause 2007](#) - October - Seattle, WA

[League for Innovation Conference on Information Technology](#) - November - Nashville, TN

BEEP’s Best Bets

Assistive Technologies

- **[“Programmers Try to Keep Disability Access Up to Date with the Web’s Dynamic Advances.”](#)** Associated Press release, 1/16/07, on the need for and development of new systems like [iAccessible2](#) to handle new and dynamic Web 2.0 features.

Free Information Sources

- [OldMagazineArticles.com](#). New website with free access to magazine articles back to the early 20th century, presented in the same format in which they first appeared, including illustrations.
- [Open Content Alliance \(OCA\)](#). A recent competitor to Google’s controversy-plagued digital library project. OCA sees the Google project as a threat to universal access to literature and is seeking funding to build a more open collection of literature or great documents.
- **[“Annotating the Earth.”](#)** Article by Wade Roush in *Technology Review*, 9/26/06, about plans to expand [Google Earth](#) to include links to resources on places. (In January 2007, Google has also announced [plans](#) to provide digital footage of images in space as well as on earth.)
- **[“Samaritans with Keyboards: On the Internet, Helping Strangers Is a Form of Fun.”](#)** Associated Press release, 1/10/07, about the growing popularity of [Yahoo Answers](#), where anyone can post a question, which is often responded to by hundreds of would-be helpers.

Laws and Legislation

- **[“Questions and Answers on Copyright for the Campus Community.”](#)** Website maintained by the National Association of College Stores with the latest higher-ed copyright information.

www.spcollege.edu/eagle/research/BEEP/BEEP55.htm

For a subscription to BEEP, contact the project manager: lechnerj@spcollege.edu

The contents of BEEP were developed under a grant from the U. S. Department of Education (DOE). However, those contents do not necessarily represent the policy of the DOE, and you should not assume endorsement by the Federal Government.