



## The Sixth Annual Look at Leading Edge E-Learning Technologies

***“Cell phones will rule the future of communications...”***

[Matt Lindoff](#), Chief Technology Officer, Sony Ericsson, in *Technology Review*, 9/16/05

***“Three-dimensional memory could dramatically change how we use microelectronics.”***

[Gregory T. Huang](#), in *Technology Review*, September 2005

***“This year promises to be big for mobile technology.”***

[Robert Brumfeld](#) in *eSchool News*, 1/17/06

***“Open Source is set to become a major trend for schools and universities in the next few years.”***

[Distance-Educator.com](#), 9/26/05

There seems to be no shortage of predictions about the potential impact of innovative technologies on e-learning. This annual look at what's hot and what will be can only sample some of the many new developments that fill the headlines nearly every day. As usual, it also includes a list of educational technology conferences for the rest of 2006.

If you doubt the speed at which technology has changed, take a trip through [BEEP's first five annual looks](#). Then marvel at how far things have come and how quickly what was once leading edge has become mainstream, if not obsolete.

### Hardware and Gadgets, Mobile and Otherwise

- **[“Bigger Than the Internet.”](#)** Article by David Talbot in *Technology Review*, 11/16/05, about the future of global mobile communications as predicted by the chief technology officer of [Sony Ericsson](#). Within five years he expects cell phones to be the primary worldwide means for communicating, getting information (e.g., Internet) and being entertained (e.g., movies or games).
- **[“Curling Up with a Good E-Book.”](#)** Article by Burt Helm in *Business Week*, 12/29/05. Announcement by [Sony](#) that this year it will try to revive the heretofore failed concept of the e-reader by producing a device that lets users store and view digital books in an iPod-like manner.
- **[Fly Pentop™ Computer.](#)** An amazing combination of toy and computer, presently marketed for older children and young teens, this pen contains a small camera aimed along the ballpoint tip that reads, calculates and more. Educational add-ons teach math, language skills and science.
- **[“Holographic Memory.”](#)** Update by Gregory T. Huang in *Technology Review*, 9/05, on the use of a holographic memory disk that will increase the storage capacity of a DVD-sized disk 60 times and record data 10 times faster. Maker [InPhase Technologies](#) aims for a late 2006 release.
- **[“How to Scan Without a Scanner.”](#)** Article by Kenji Hall in *Business Week*, 10/24/05, about a device under development by [NEC](#) that will allow a cell phone to scan documents by taking a series of snapshots when waved across a page in a zigzag pattern. To be released by 2007.
- **[iPods and Wikis and Blogs \(Oh My!\)](#)** Almost half of BEEP #48, 11/1/05, was devoted to a look at the Apple iPod, a device that has fast become assimilated into the e-learning process via podcasts, both audio and video, with even more uses sure to be emerging this year.
- **[“A Low-Cost Laptop for Every Child.”](#)** Article by Christa Case of the *Christian Science Monitor*, 9/16/05, on MIT's realization of its intent to create and sell a **[\\$100-\\$200 laptop computer](#)** to students in both the United States and developing countries. Production will begin in late 2006. For criticism of the project by competitors, see **[“World's Poorest Don't Want '\\$100 Laptop' – Intel.”](#)** by Peter Apps, Reuters AlertNet, 12/9/05, or **[“Gates Sees Cellphones As Way to Help Third World.”](#)** by Kevin Maney, *USAToday.com*, 1/31/06.
- **[3-D Printing in Education: How High Schools, Colleges and Universities Leverage 3D Printing Technology.](#)** Article by Terry Wohlers in *Time-Compression Technologies*, 9-10/05, about 3D printing, a really not-so-new technology in industry that is now being increasingly embraced by academic institutions as part of engineering, fine arts, and architectural education.

## Software Applications and Innovative Trends

- **Croquet Project.** Complex combination of computer software and network architecture that supports resource sharing among many users with different operating systems. Also capable of delivering 3D visualizations, it is a creation of [Viewpoints Research Institute](#). For a related but more modest approach toward the breakdown of using specific operating systems, see **“Virtual Software: The Future for Schools?”** by Robert Brumfeld, *eSchool News*, 1/9/06,
- **“Educators Take Serious Look at Video Gaming.”** Article by Robert Brumfeld in *eSchool News*, 11/8/05, on the growing awareness of the educational value of gaming technology. See also **“Game-Informed Learning: Applying Computer Game Processes to Higher Education”** by Michael Begg, David Dewhurst and Hamish Macleod in *Innovate* (1:6), 8-9/05.
- **The Google Pack.** Associated Press release, 1/9/06, about [Google](#)’s distribution of a free software startup kit, part of the trend toward increasing use of open source software
- **Horizon Report 2006** by [New Media Consortium \(NMC\)](#) and [Educause Learning Initiative \(ELI\)](#), identifying “social computing” (e.g., [Facebook](#)) and “personal broadcasting” (e.g., podcasting/video blogging) as hot in 2006. Looking ahead, it predicts more academic cell phone and video game use, plus “enhanced visualization” (way to bring to life complex data sets).
- **“‘Intelligent’ Tools Lead to Smarter Searches.”** Article by Corey Murray in *eSchool News*, 10/3/05, about the emerging concept of “intelligent searching,” which lets users search multiple online databases at once and customize interfaces to define their own search criteria. One example of a step in that direction is [Oases](#), an open access toolbar for students, academicians and scientists, created Shahul Ameen, an Indian medical doctor.
- **“Tomorrowland: When New Technologies Get Newer.”** Article by Bonnie Neas and the Educause Evolving Technologies Committee in *Educause Review* (40:6), 11-12/05, identifying five evolving technologies selected by Educause: wireless, portals, outsourcing, gaming in higher education, and student collaboration tools.
- **“Wireless Technology About to Get a Boost.”** Article by Robert Brumfeld in *eSchool News*, 1/17/06, about a proposed new standard for wireless, 802.11n, that will triple the fastest Wi-Fi speeds now available. Also expected are technologies that allow for the convergence and interoperability of devices that run on different platforms, like cell phones, PDA’s, and laptops.

### Upcoming Major Educational Technology Conferences

**Emerging Technologies Conference at MIT** - April - Cambridge, MA

**InfoComm 2006** - June – Orlando, FL

**Distance Learning Administration Conference** - June - Jekyll Island, GA

**National Educational Computing Conference** - July - San Diego, CA

**Syllabus 2006** - July - Boston, MA

**Merlot Annual Conference** - July - Ontario, Canada

**Educause 2006** - October - Dallas, TX

**League for Innovation Conference on Information Technology** - October - Charlotte, NC

**E-Learn 2006** - October - Honolulu, HI

**Technology and Learning Conference** - November - Dallas, TX

### BEEP’s Best Bets

#### ***Administration***

- **“Changing a Cultural Icon: The Academic Library As a Virtual Destination.”** In-depth article by Jerry D. Campbell in *Educause Review* (41:1), 1-2/06, on the accepted obsolescence of the traditional academic library, with suggestions for an electronic future.
- **Educating the Net Generation.** Free collection of essays by [Educause](#), 2006, on the concept of “Net Gen” students and implications for their education. Downloadable chapter by chapter.
- **Top 10 Ed-Tech Stories of 2005.** Two-part report, [1/4/06](#) and [1/5/06](#), by *eSchool News* staff, about the most noteworthy stories that have made headlines and will continue to do so in 2006.

#### ***Free Information Sources***

- **AskMeNow.** Online service that fields questions of all kinds from cell phones and other mobile devices. “Auto answers” using a form-entry method are given free; others cost \$.49 per question.
- **3DScience.com.** Website offering visuals of medical/scientific items. Low-resolution images free.

[www.spcollege.edu/eagle/research/BEEP/BEEP49.htm](http://www.spcollege.edu/eagle/research/BEEP/BEEP49.htm)

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