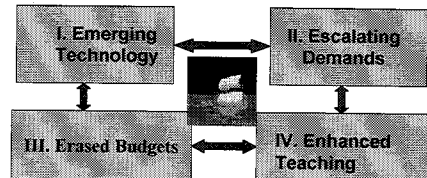


The Perfect E-Storm: Emerging Technology, Enhanced Pedagogy, Enormous Learner Demands, and Stagnant Budgets



Dr. Curtis J. Bonk
 Professor, Indiana University
 President, SurveyShare, Inc.
<http://php.indiana.edu/~cjbbonk>
cjbbonk@indiana.edu

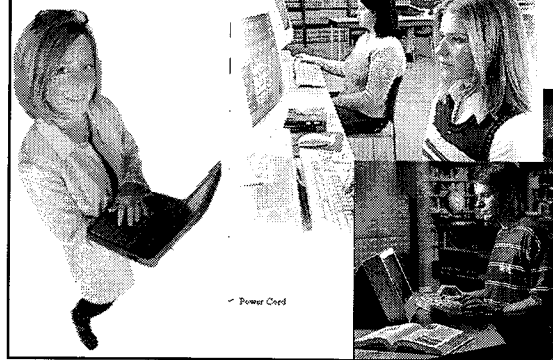
Four Storms are Approaching



Some are scared of the storm!!!



I'm a librarian

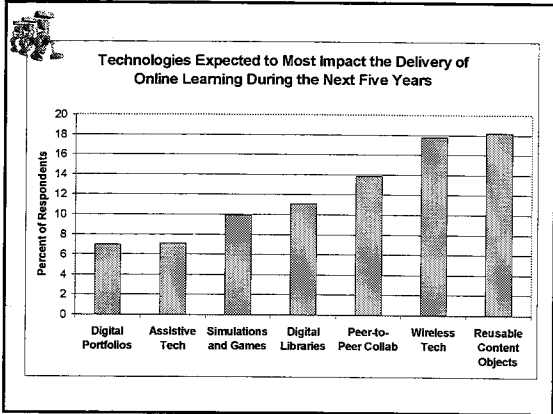


Ok, Million Dollar Question: Which technology will impact schools the most?

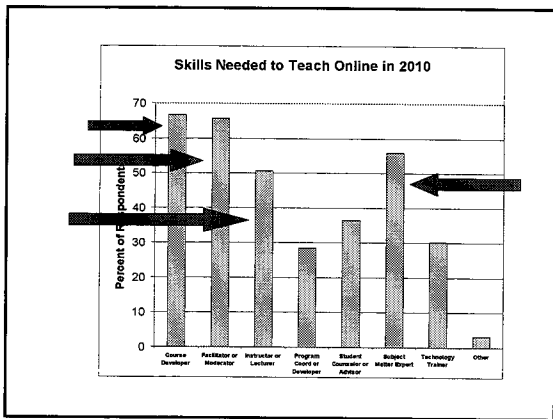


Storm 1. Emerging Learning Technologies

1. Assistive Technologies & Talking Computers
2. Blogs and Online Diaries
3. Digital Portfolios
4. Electronic Books
5. Online Communities and Learning Portals
6. Intelligent Agents
7. Online Exams and Homework
8. Online Games and Simulations (Massive Multiplayer Gaming)
9. Online Translation Tools & Language Lrng
10. Course Management Systems
11. Peer-to-Peer Collaboration
12. Reusable Content Objects
13. Videostreaming, IP Videoconferencing
14. Virtual Worlds/Reality
15. Wearable Computing
16. Wireless Tech: Tablet PCs, Handheld Devices



Myth #1. I must have a technology background to use effectively.



Trend #1. Course Management Systems

Trend #2: Wireless Technology

Handheld Computing

MOST (UN)WIRED SCHOOLS?

ENET and U.S. News and World Report put the top 50 universities' tech specs and asked their white computers they recommend to students and faculty.

Using the local News Enterprise

Trend #3: Mobile Technology

msn Tech & Gadgets

- Home
- Product Reviews
- Deals & Tips
- News & Trends
- Mobile
- Music & Security
- Games
- Business & IT
- Shopping

Next hot trend for cell phones: Reading?

Mobile technology meets the novel in Japan

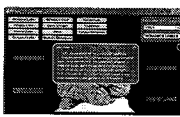

A modern reader's mobile phone screen while the change in government takes place.

The gadget is an all-in-one handheld device that allows users to view full-motion video, listen to music, record voice messages in real time, take images and play games.



Trend #4: Reusable Content Objects

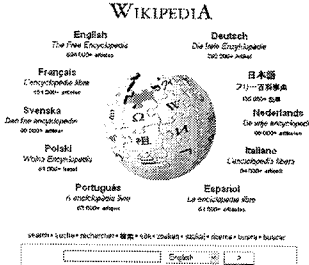
- "Learning Objects are small or large resources that can be used to provide a learning experience. These assets can be lessons, video clips, images, or even people. The Learning Objects can represent tiny "chunks" of knowledge, or they can be whole courses."

Claude Ostyn, Click2Learn

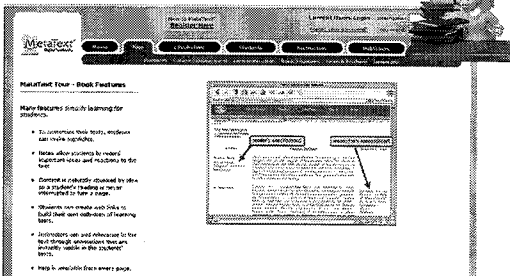



Trend #5. Wikipedia (Jimmy Wales, Founder)



Trend #6. Electronic Books



Mendeley Four - Book Features

- To customize this text, click on the text box.
- Notes allow you to record important notes and references to the text.
- Content is automatically checked by the system to ensure that it is not a duplicate of any other content in the library.
- Authors can create and edit content, but they are not allowed to delete content.
- Authors can add and remove content to the list through the content list page.

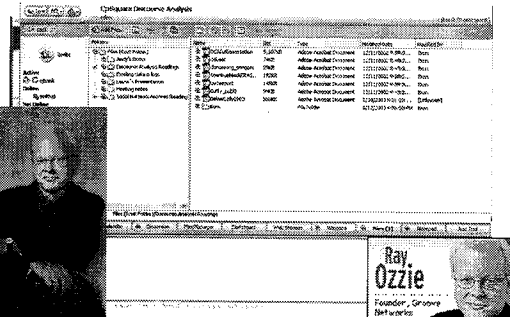

Trend #7: Blogging

Quarter	Blog Population
Q1 2000	29,500
Q2 2000	66,100
Q3 2000	115,000

Hosted Blog Growth

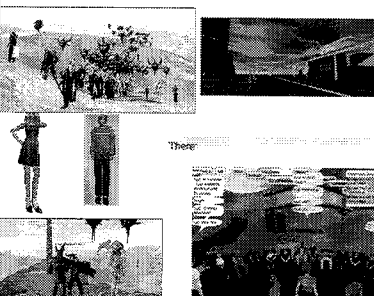
Category	Site	Growth Rate
Challengers	• MSN Spaces	606%
	• BlogSpot	126%
Leaders	• Xanga	131%
	• LiveJournal	105%
Upstarts	• TypePad	
	• Blurty	
Niche Players	• Greatest Journal	
	• AOL Journals	
Longevity	• DeadJournal	
	• DiaryLand	
Momentum	• Blog	
	• Blog	

Trend #8. Collaborative Tools

Ray Ozzie
Founder, Groove Networks

Trend #9: Virtual Worlds/Virtual Reality/MMOG



Virtual gaming

Online games are one of the many ways the Web has changed the way young people socialize and entertain themselves.

Percentage of visitors and users to game Web sites by age, September 2004

Age Group	Percentage
12-17	10.5%
18-24	13.2%
25-34	17.9%
35-44	20.3%
45-54	19%
55-64	6.4%
65+	3.9%

SOURCE: ComScore Media Metrix

Trend #10: Synchronous Conferencing

The screenshot shows a web-based interface for synchronous conferencing. It includes a chat window on the left, a video feed in the center, and a document viewer on the right. The interface is designed for real-time collaboration and discussion.

#11. Computer Grading

(New York Times, May 19, 2004, Latent Semantic Analysis, Thomas K. Landauer, UC Boulder)

Indiana Essays Being Graded by Computers

By SOL HERWITZ
Published May 19, 2004

INDIANAPOLIS - In the computer lab at Warren Central High School in west May, Craig Butler, a junior, squinted at the questions on his screen, pained to ponder his answer and began typing.

One time out of 48,530 Indiana juniors gathered in high schools across the state to take the end-of-year written English essay test. Unlike most essay tests, however, this one is being graded not by a teacher but by a computer.

#12. Free Online Resources: Public Library of Science

The screenshot shows the PLOS website homepage. It features a navigation menu, a main content area with various articles and resources, and a sidebar with additional information. The site is dedicated to providing free access to scientific research and education.

Museum of Online Museums

BECOME A MEMBER

Laguna

California Art from the Permanent Collection

Port I, San Buenaventura, 1822-1925

July 20, 2005 - February 19, 2005

Calendar of Events

November

Digital Libraries (LibraryShare)

The screenshot shows the LibraryShare website interface. It features a search bar, a navigation menu, and a main content area with various digital library resources. The site is designed to provide easy access to digital books, articles, and other educational materials.

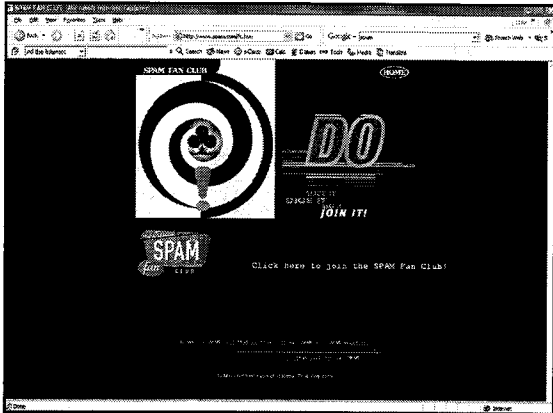
Tufts OpenCourseWare Project

Tufts OpenCourseWare

SEARCH

IDP200 Pathophysiology of Infectious Diseases, Fall 2004/2005

Course Faculty:
Susan Hadley
Michael Guroy
Shamshad Ghorban
Linda He
Laura Kogutman
Deena O'Rourke
John Pless
David Sordani
Chelise Thorne
Miguel Vazquez
Cristina L. Hsu
17 Hours
Lived
2nd Year



What can we say about emerging technology then???

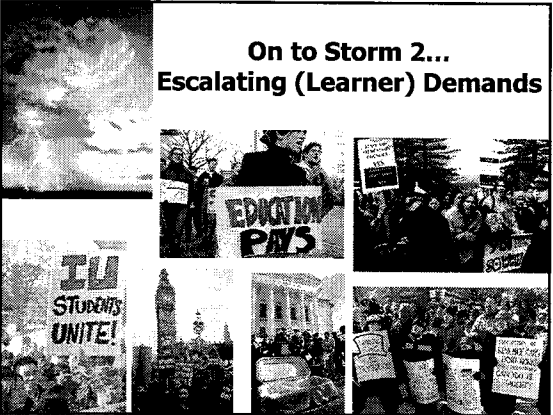
- It is everywhere!!!!!!!
- Resistance is futile!!!!!!!



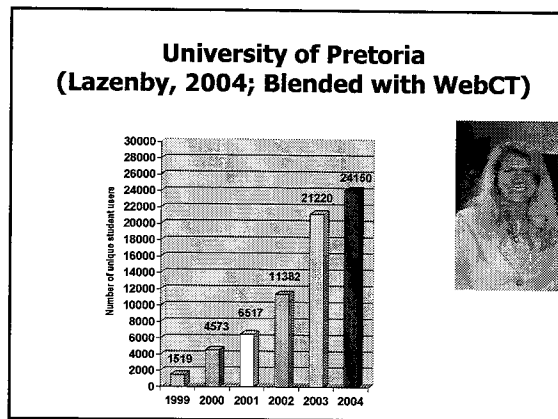
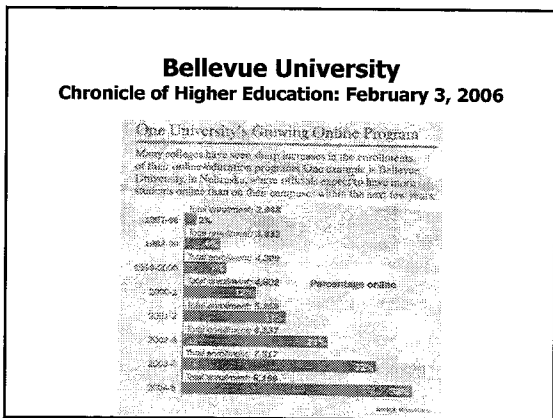
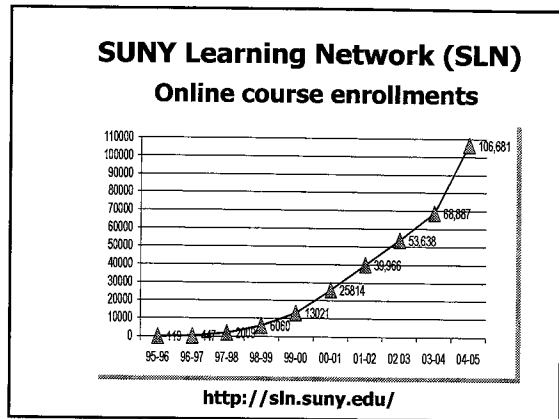
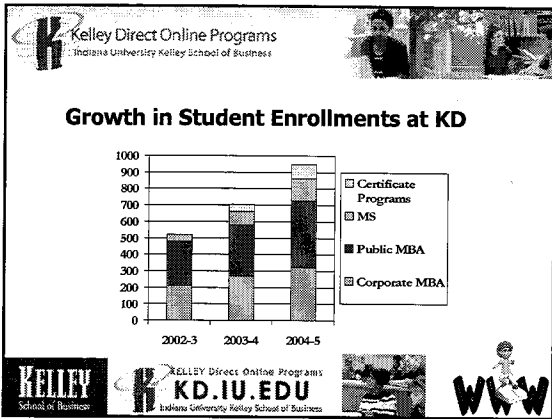
How many have ever felt that they hit the wall as far as teaching online?

BONK!

When your body stalls mid-run, it's called bonking.



Myth #2. We can just wait it out—it will go away



Canadian Virtual University

(<http://www.cvu-uvc.ca/english.html>)

CVU-UVC
EDUCATION ONLINE FROM CANADA'S LEADING UNIVERSITIES

CATHOLIC VIRTUAL UNIVERSITY

MEMBERS

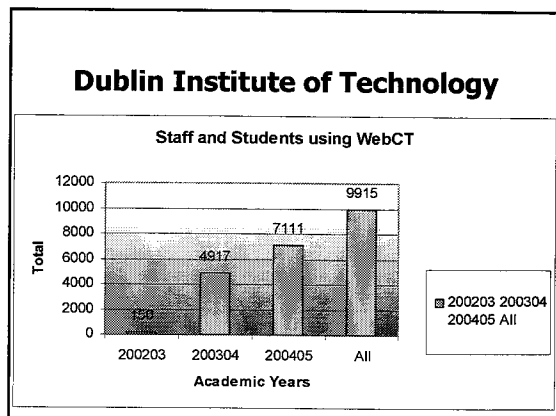
- ACARIA
- CARLETON UNIVERSITY
- MEMORIA
- NIPISSING

Our universities offer 200 complete degrees, diploma or certificates, and 2,000 individual courses available completely online or through distance education.

Our universities are all accredited Canadian universities.

This means you that your education will be recognized by employers and by other universities.

WHAT OUR STUDENTS SAY



African Virtual University

The African Virtual University website features a navigation menu with links for Home, About Us, Academic Programs, Virtual Institute, Technology, AAVU Leadership, Leadership Resources, News and Events, and Email. The main content area includes a video player and text about the university's mission to provide quality education to African students through virtual learning.

Even Shaq is taking courses online!

2005 NBA Playoffs

ESPN | NFL | NBA | NHL | MLB | Soccer | Golf | Tennis | Sports Illustrated

Updated: June 23, 2005, 9:12 AM ET

Shaq joins University of Phoenix grad

Associated Press

IRVING, Calif. -- Shaquille O'Neal returned to the Forum on Saturday, not for an NBA game, but to pick up his MBA.

The man who once called himself the Big Aristotle was the tallest and most famous of the 2,200 University of Phoenix graduates at the arena. But O'Neal said he was simply getting ready for the real world.

"It's just something to have on my resume [for] when I go back into coaching the Lakers," O'Neal said.

We're in the Midst of Storm 3: Erased Budgets

Myth #3. My school or university cannot afford online learning.

Center for Ed Tech Interoperability Standards, Nov. 24, 2003

<http://www.cetis.ac.uk/content2/20031124150257>
<http://www.sakaiproject.org/sakaiproject/>

SAKAI Overview

The SAKAI Overview diagram shows a timeline from January 2002 to December 2003. Key milestones include the release of SAKAI 1.0 in January 2002, the release of SAKAI 1.1 in May 2002, and the release of SAKAI 1.2 in December 2003. A central box labeled 'SAKAI 1.2' lists features like 'Single Sign-On', 'User Profiles', 'Content Management', 'Social Networking', and 'Collaboration'. A photo of a woman is shown on the right side of the diagram.

eSchool News, January 1, 2004 Average Budget Slashed from \$13.9 to \$10.4

eSCHOOL NEWSonline™

Where K-12 Education and Technology Meet

State funding shortfalls slam ed tech

SETDA survey reveals state programs suffer

From eSchool news staff and wire service reports

January 1, 2004

As states and local education leaders swap words from Washington, D.C., on how much money the federal government will spend on education in 2004, a new survey from the State Educational Technology Directors Association (SETDA) paints a troubling picture of school technology funding at the state level.

SETDA's survey of budget data from 31 states reveals that the average budget for a state education technology office dropped from \$13.9 million in 2002 to \$10.4 million in 2003, with more cuts expected for 2004. More than half of the responding states say they had to reduce the number of ed-tech office staff members during the last year as well.

The news isn't good for local school technology leaders, who themselves are being asked to do more than ever before with fewer resources at their disposal. Even worse, federal government spending isn't likely to make up the gap, as Congress struggles to pass a 2004 education budget.

Tight Budget Nippones Out College Issues for Bush

Internet degrades a disgraceful waste, say MPs

Rebecca Smithers, education editor
Thursday March 3, 2005
The Guardian

A government initiative to offer British university degree courses over the internet is condemned by MPs today as a "disgraceful waste" of public money after it recruited just 500 students at a cost of £50m.

An investigation by the Commons education select committee found that studying at the UK e-University, which folded last year six months after the launch of its first courses, cost an average of £44,000 per student - more expensive than going to Oxford or Cambridge.

Schools 'failing to tap e-cash'

Schools are failing to spend a larger part of money provided by government for e-learning, according to a report, as providers of electronic learning tools.

Only half of the £200m budget for government set aside in 2002 for e-learning projects was spent, it says.

In the Midst of Budget Cutbacks, there are Technology Giveaways

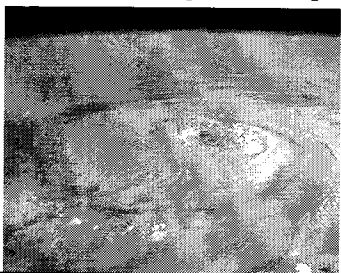
Gateway M275 tablet PC, Winona State University, Mayville State University

The schools will provide the tablet computers to full-time students who do not have laptops from previous programs.

BlackBerry 7510 PDA, University of Maryland

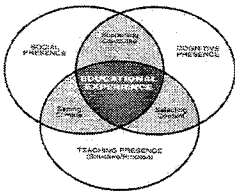


The school is giving away the PDA to full-time graduate students in the Smith School of Business.

On to Storm 4: Enhanced Teaching (and Excellent Retention) (a swirling storm)




Myth #4. There are no models or best practices for teaching with technology.

COMMUNITY OF INQUIRY

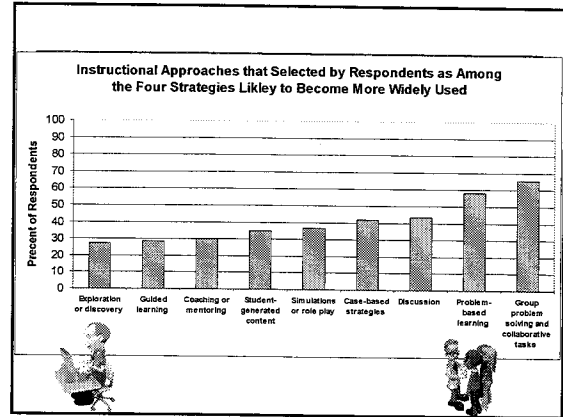





Three Most Vital Skills
The Online Teacher, TAFE, Guy Kemshat-Bell (April, 2001)

- Ability to engage the learner (30)
- Ability to motivate online learners (23)
- Ability to build relationships (19)
- Technical ability (18)
- Having a positive attitude (14)
- Adapt to individual needs (12)
- Innovation or creativity (11)



Myth #5.
Teachers can just teach the same way they always have.



24 Online Pedagogical Examples that are not boring!

Experience. The difference.

1. Educational Simulations, Scenarios, and Manipulations

2. Financial Accounting (University of Calgary)

3. Link Book and Field: Internships/Field Experience Job Interviews

- 1. Instructor provides reflection or prompt for job related or field observations**
- 2. Reflect on job setting or observe in field**

