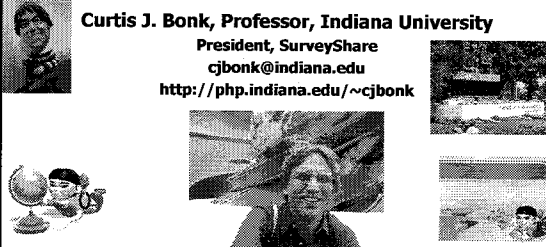
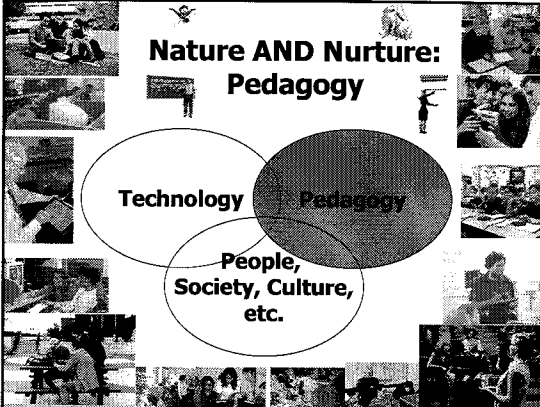


**How the Learning World Became Flat:
Ten Knowledge Sharing and Technology
Trends Equalizing Access to Learning**

Curtis J. Bank, Professor, Indiana University
President, SurveyShare
cjbonk@indiana.edu
<http://php.indiana.edu/~cjbonk>



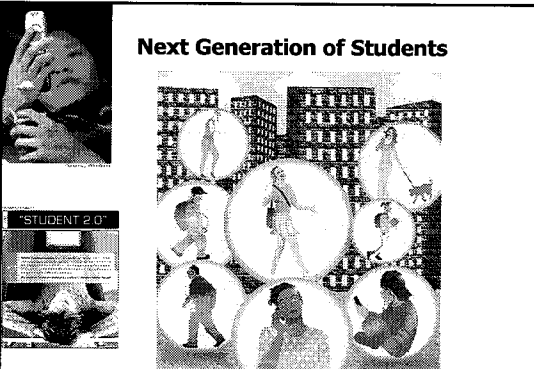
**Nature AND Nurture:
Pedagogy**



**Monday April 30, 2007, USA Today
Top 25 Things that Shaped the Internet**

- 747 Million adults logged on in Jan, 2007
- 97 billion e-mails are sent each day
- Google had 500 million visitors in Dec, 2006
- USA: 1% broadband in 1998; 78% in 2007
- YouTube bought by Google for \$1.7 billion
- Adobe's Flash player on 98% of machines
- There are 75 million blogs!!!
- 19 million people play MMOG!
- 173 million personalized pages in MySpace

Next Generation of Students



Tech Creates Bubble for Kids
Alejandro Gonzalez, USA TODAY, Updated 6/20/2006 10:34 AM ET

INFORMATION TECHNOLOGY

E-Mail is for Old People



Yahoo News
Love me, love my blog," as Netorati couple-surf
BY SARA LEDWITH Thu Aug 3, 8:30 AM ET

- Nick Currie and his girlfriend Shizu Yuasa (R) surf the internet over breakfast in Tokyo in this handout photo. As the Internet evolves -- with its webcams, iPods, Instant Messaging, broadband, wi-fi and weblogs -- its image as a relationship-wrecker is changing. Now a sociable habit is emerging among the Netorati: couple-surfing. (Nick Currie/Handout/Reuters)
- "For my birthday, he upgraded my RAM and I thought it was incredibly romantic," writes Jess.

Effects of interactive multimedia in distance learning

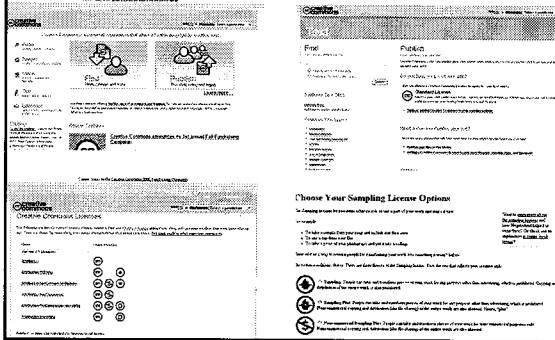
Giti Javidi and Ehsan Sheybani, 2004, In Proceedings of the IASTED International Conference WEB-BASED EDUCATION

"The advancement in technology is shaping every aspect of our life, including education. One decade ago, the Internet was not critical to education. However, now, it has become an integral part of learning process. Internet technology is having a dramatic effect on colleges and universities, producing what may be the most challenging period in the history of higher education."

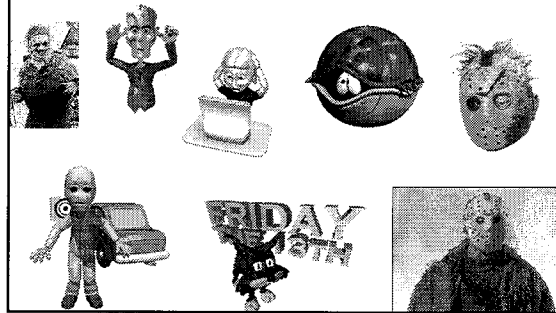
Do You Share?

1. Who has shared music in an iPod or MP3?
2. Who has used collab software? (Google Groups, Yahoo Groups, Sharepoint)
3. Who has used online phone services such as Skype or Google Talk?
4. Who has assigned teams online?
5. Who has embedded international exchanges or expert guests?
6. Who has used MERLOT, Connexions, or the MIT open courses?
7. Who has used Wikipedia?

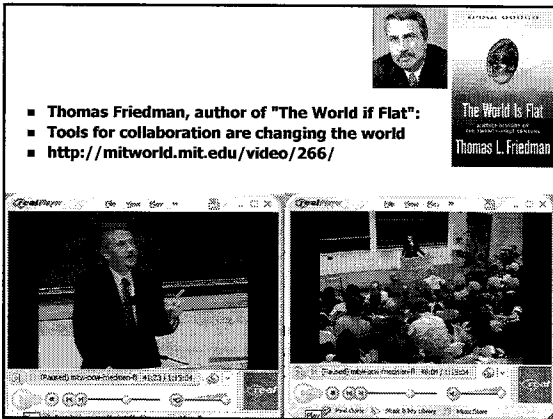
Creative Commons



Most are Scared to Share!!!



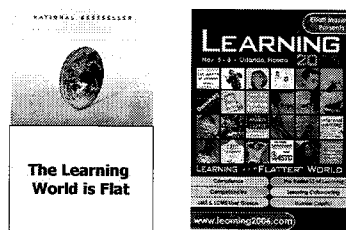
- Thomas Friedman, author of "The World is Flat":
- Tools for collaboration are changing the world
- <http://mitworld.mit.edu/video/266/>



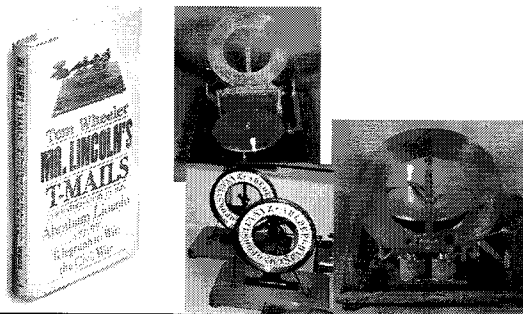
The Ten Forces that Flattened the World

1. 11/9/89: Berlin Wall came down
2. 8/9/95: Netscape went public
3. Work Flow Software (e.g., PayPal and eBay)
4. Open-Sourcing (Self organizing collaborative communities; Mosaic, Apache, Wikipedia, Linux, Mozilla/Firefox,)
5. Outsourcing (Y2K)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply-Chaining (e.g., Walmart)
8. Insourcing (UPS fixing Toshiba laptops)
9. In-forming (e.g., Google, Yahoo!, MSN Web Search)
10. The Steroids: Digital, Mobile, Personal, and Virtual (e.g., wireless, file sharing, VoIP, video camera in phone)

The Learning World has become Flat!



Telegraph: Flattening the world in 1860



Blogging now begins young

Eighth-grade students Tayler Bernholtz, left, Amy Lostroh and Kelsey Cardiff check out a weblog discussion related to the Civil War historical-fiction book 'Guerrilla Season' At South Valley Junior High School in Liberty, Mo. (Blogging now begins young USA Today, By Ashley Bleimes, USA TODAY, November 15, 2006, 12D). http://www.usatoday.com/life/2006-11-14-blogs-education_x.htm

WE-ALL-LEARN:

Ten Forces that Opened the Learning World

- Web Searching in the World of e-Books (i.e., Darwin)
- Enormous E-Learning and Blended Learning
- Availability of Open Source and Free Software (e.g., Moodle)
- Leveraged Resources and OpenCourseWare (e.g., MIT)
- Learning Object Repositories and Portals (i.e., shared content)
- Learner Participation in Open Info Communities (YouTube)
- Electronic Collaboration and Interaction (sync and async)
- Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- Real-Time Mobility and Portability (e.g., iPhone)
- Networks of Personalized Learning (Blogs, RSS)

Three Larger Trends of WE-ALL-LEARN

- The availability of tools and infrastructure for learning.
- The availability of free educational content and resources (OER—Open Educational Resources).
- A move towards a culture of open access to information, international collaboration, and global sharing.

The Ten Forces that Flattened the World

1. Web Searching (e.g., Google, MSN, Yahoo!) in the World of e-Books (i.e., Darwin, Shakespeare, etc.)



The Search is on!

Jeff Men on TED Talk

Jeff Men on TED Talk

Google and Other Search Engines (Sergey Brin, Co-Founder)

OPEN Content Alliance

Building a digital archive of educational content

The University of Illinois Chicago announced the availability of a peer-reviewed collection of eBooks in open access through the Open Content Alliance, which is displayed on the University Library's website as the first part of a digital archive of eBooks from various publishers. The first set of books digitized is:

- From the University of Illinois Chicago
- From the University of Illinois Chicago

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Digital Books

By Kim Rahn, March 7, 2007, Digital Textbook to Debut Next Year, The Korea Times

- Students will be able to interact with teachers regardless of time and space and study according to their ability through computers as the nation plans to adopt the digital textbook.
- provides the multi-functionality of textbook, workbook, exercise book and dictionary.
- The digital textbook...can go beyond conventional paper textbooks by using such features as video clips, animation and virtual reality.

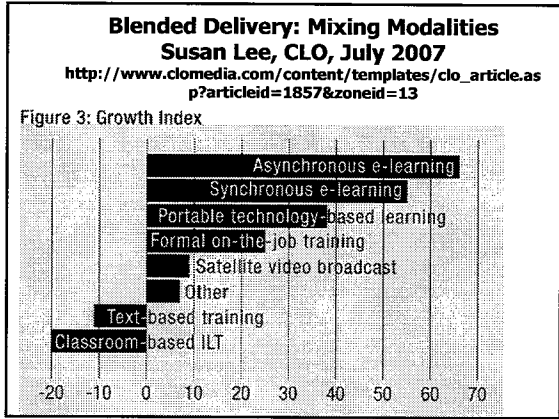
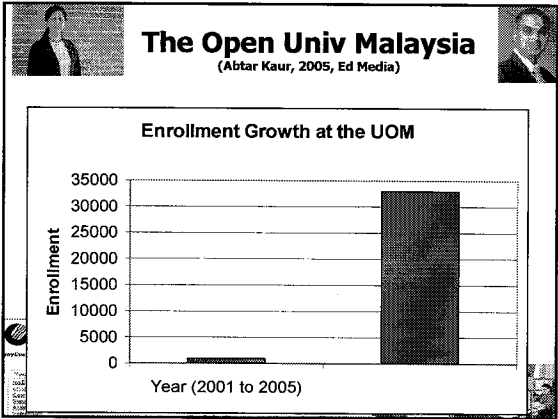
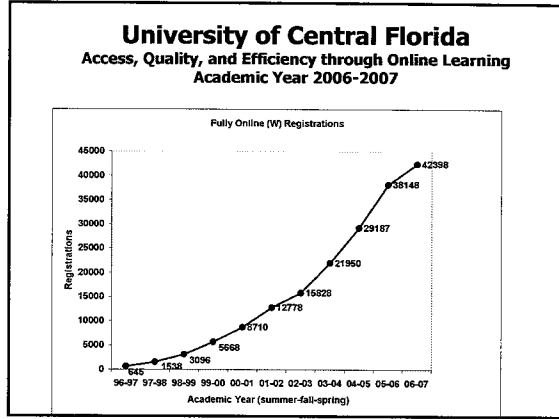
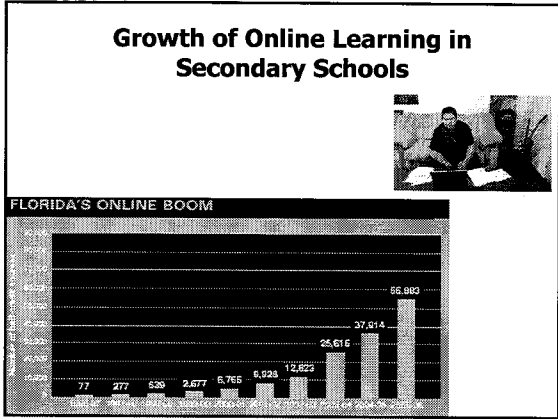
New Forms of Digital Literacy

Advanced
Upper-level coursework More challenging

The Ten Forces that Flattened the World

2. Enormous E-Learning and Blended Learning

The Learning World is Flat



The Ten Forces that Flattened the World

3. Availability of Open Source and Free Software (e.g., Linux, Apache, Moodle)

The Learning World is Flat

1. eduCommons

[View eduCommons in Action](#) [Download the Source Code](#) [View the Ask@eduCommons](#)

eduCommons is an OpenCourseWare Management System designed specifically to support OpenCourseWare projects like MIT.OCW and UCL.OCW. eduCommons provides the functionality necessary to successfully develop and manage an open access collection, including a workflow process that steps users through uploading materials into a repository, tracking copyright clearance, assembly of materials into courses, a quality assurance process, and final publication of the materials. This is the front end of eduCommons. It is designed to closely align with other OCW's, the back end architecture is actually closer to something like CourseWorks - all resources are stored as individual learning objects in order to facilitate easy reuse downstream. eduCommons is open source software available from SourceForge.

eduCommons is generously funded by The William and Flora Hewlett Foundation and the National Science Foundation.

Community Growth

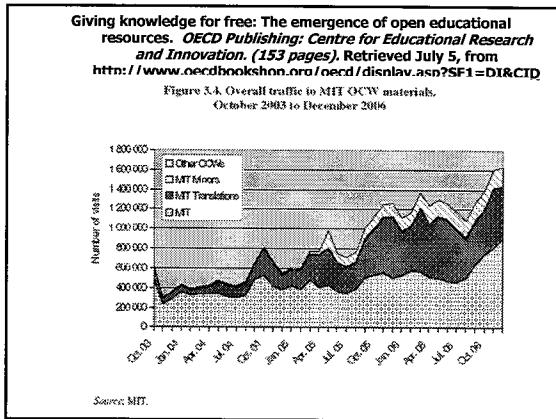
Total Moodle.org users

The screenshot shows the Moodle.org website with a header for 'Community Growth' and 'Total Moodle.org users'. Below the header, there are navigation links and a sidebar with various categories like 'Home', 'About Moodle', 'Getting started', etc. The main content area displays a list of resources, including 'Moodle 1.9.4' and 'Moodle 1.9.5', with details like version numbers and release dates.

The Ten Forces that Flattened the World

4. Leveraged Resources and OpenCourseWare (OCW) (e.g., free courses from MIT, Utah State, CORE, OOPS)

The graphic features several icons representing educational resources: a laptop, a globe, a book, and a person. On the right, there is a book cover for 'Opening Up Education' by Richard D. Woods, published by Harvard University Press. The book cover includes the text 'The Harvard-MIT Program on Learning, Teaching, and the Knowledge Economy'.



Tufts OpenCourseWare Project

The screenshot shows the Tufts OpenCourseWare Project website. The main heading is 'JHSPH OPEN COURSEWARE'. Below it, there is a search bar and a list of courses. The featured course is '222.649.01 International Nutrition'. The page includes a description of the course, a list of staff (Professors Keith West and Peter Christian), and information about originality and feedback.

Vietnam Fulbright Economics OCW

The screenshot shows the Vietnam Fulbright Economics OCW website. It features a header with the title and a navigation menu. The main content area includes a description of the course and a list of faculty members with their photos and names. The website is designed to provide information about the Fulbright program and the economics course.

Open Source Courseware

The screenshot shows the Open Source Courseware website. It features a header with the title and a navigation menu. The main content area includes a description of the course and a prominent 'SHARE' button. The website is designed to promote open source courseware and encourage sharing of educational resources.

