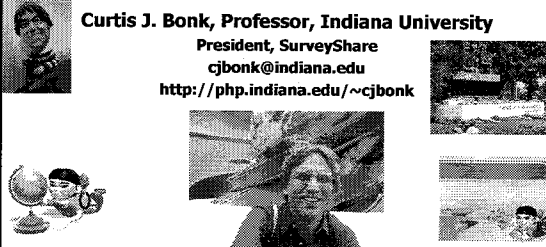
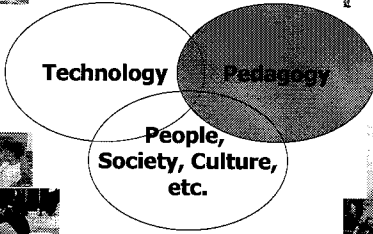
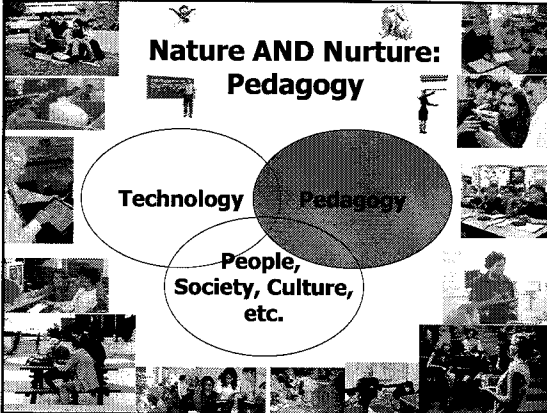


**How the Learning World Became Flat:
Ten Knowledge Sharing and Technology
Trends Equalizing Access to Learning**

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



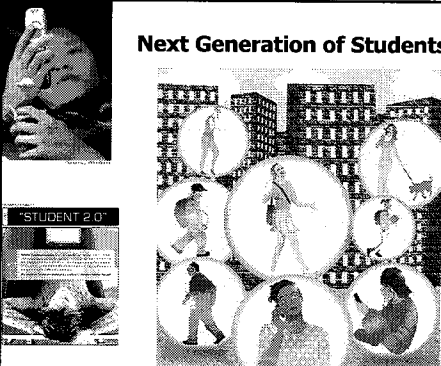
**Nature AND Nurture:
Pedagogy**

**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

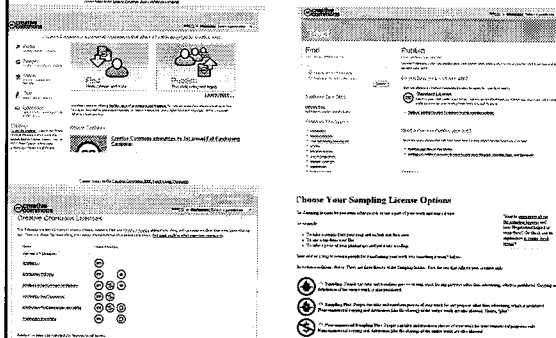
Giti Javidi and Ehsan Sheybani, 2004, In Proceedings of the IASTED International Conference WEB-BASED EDUCATION

"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!!!



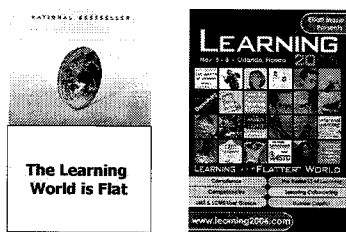
- Thomas Friedman, author of "The World is Flat":
- Tools for collaboration are changing the world
- <http://mitworld.mit.edu/video/266/>



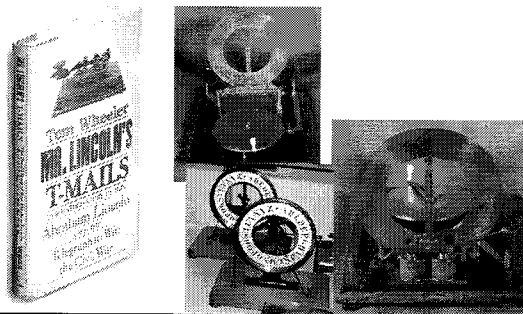
The Ten Forces that Flattened the World

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!

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 2000+ open books accessible through the Open Content Alliance, which is displayed on the University Library's website as the first part of a digital archive of Open Access books collection. View the full list of books digitized at: <http://www.opencontentalliance.org/>

From *Open Access* January 25, 2007

The University of Pittsburgh Library 2.0 Open Access project is a digital archive of open access books available on the Open Access Library. The library features one of the best open access book collections available on the Internet. The collection features primarily open access books, especially in the fields of Education, Health, and the Social Sciences. For example, the University of Pittsburgh Library 2.0 Open Access project is available at: <http://www.library.pitt.edu/>

Digital Books

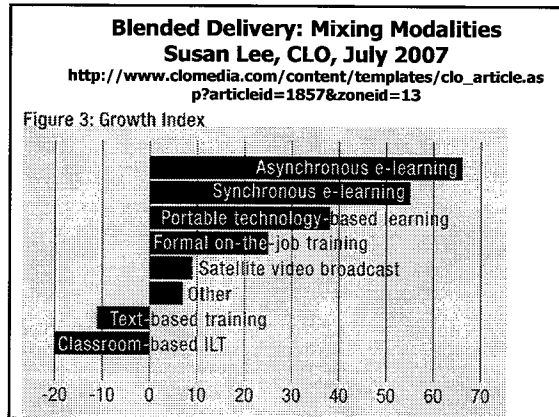
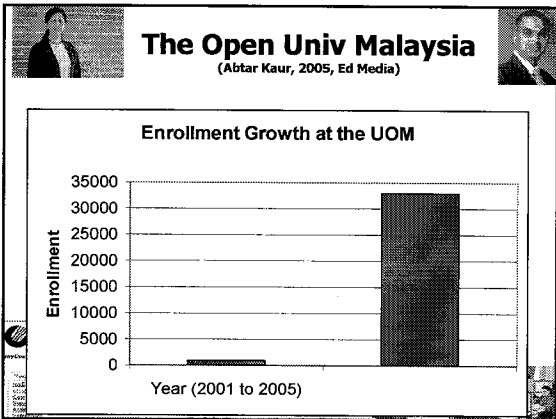
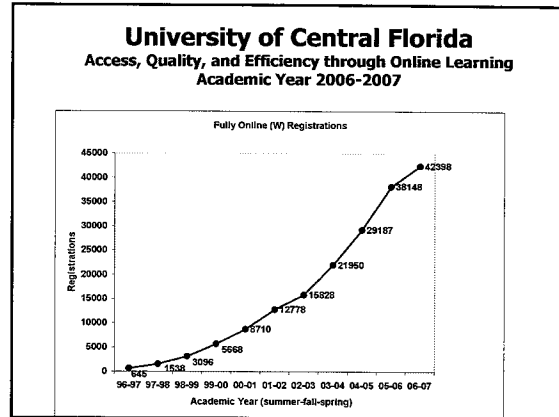
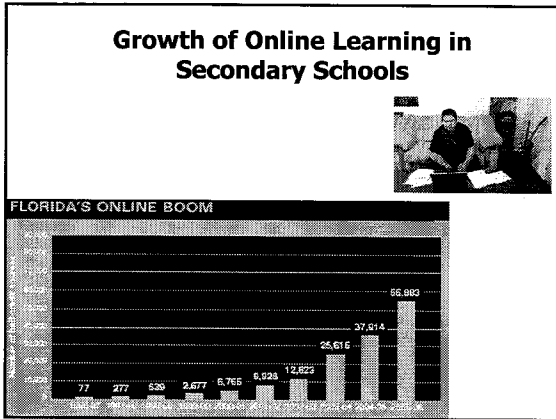
By Kim Rahn, March 7, 2007, Digital Textbook to Debut Next Year, The Korea Times

- 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

The Ten Forces that Flattened the World

2. Enormous E-Learning and Blended Learning



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](#)

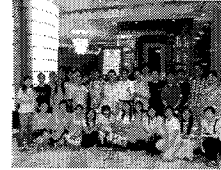
eduCommons is an OpenCourseWare Management System designed specifically to support OpenCourseWare projects like MIT.OCW and UCL.OCW. eduCommons provides the functionality necessary to successfully develop and manage an open access collection, including a workflow process that steps users through uploading 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 CourseWeb - 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.

Per David Wiley, Utah State University
(October 2005)

"This is a message that should probably get out, also - not only is this movement worldwide and gaining momentum every day, it is also becoming a key part of international strategy to achieve equitable access to education for people everywhere."

The Biggest OCW Localization Volunteer Group in the World



OOPS! Opensource Opencourseware Prototype System
The Foundation of Fantasy Culture and Arts

What's their Beliefs? (Chu, Jan 1, 2007)

- Collective Minds is better than a single genius translator.
- Perfect Translation doesn't exist.
- 2,012 Volunteer translators
1,125 courses adopted
639 courses near completion (level 1)
- 126 courses already finished

OOPS
Opensource Opencourseware Prototype System
開放式課程計劃
www.oops.net

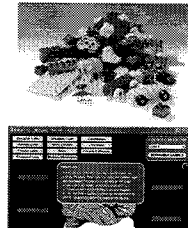


Lucifer Chu, Chairman and
Janitor of OOPS, Taiwan

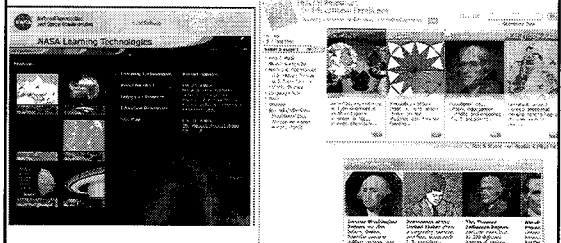


The Ten Forces that Flattened the World

5. Online Learning Object Repositories and Portals (shared content)



Free Government Resources!





D. Google School Resources
such as Google Docs and Spreadsheets, an open alternative to Microsoft's Word and Excel

Google enrolls teachers in online software crusade

Dec 3, 2006, USA Today
Michael Liedtke, Associated Press
Google enrolls teachers to spread work online software crusade
Palo Alto High School journalism teacher Esther Wojcicki helps student Allison Wyndham at a computer during journalism class in Palo Alto, Calif. Wojcicki is helping Google bring its online suite of software applications to classrooms across the country

E. National Repository for Online Courses (NROC) Commons

The Ten Forces that Flattened the World

6. **Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)**

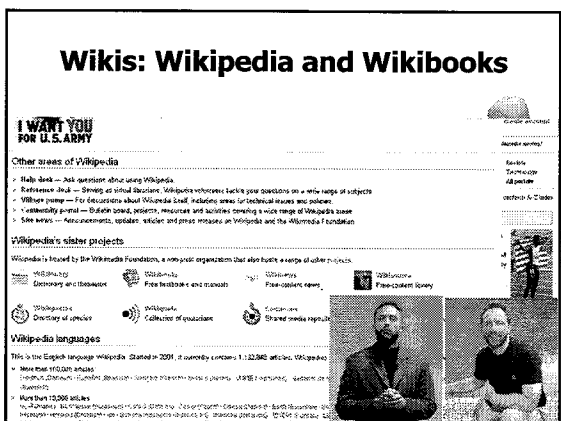
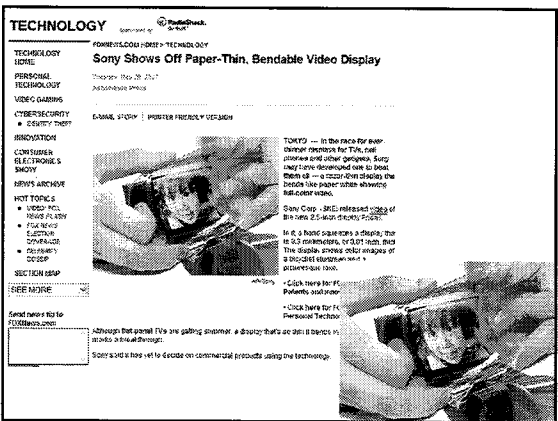
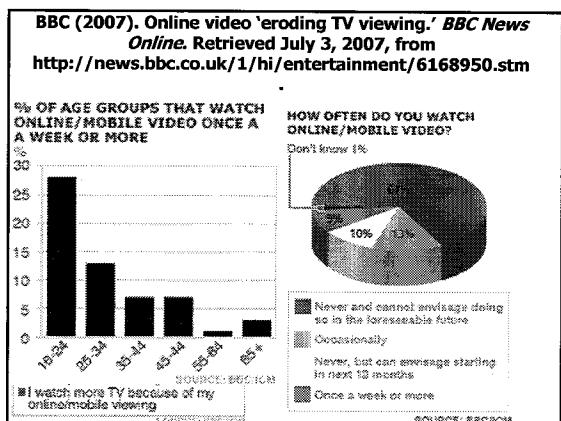
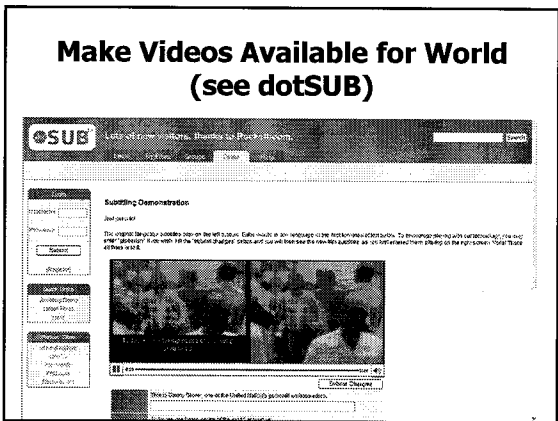
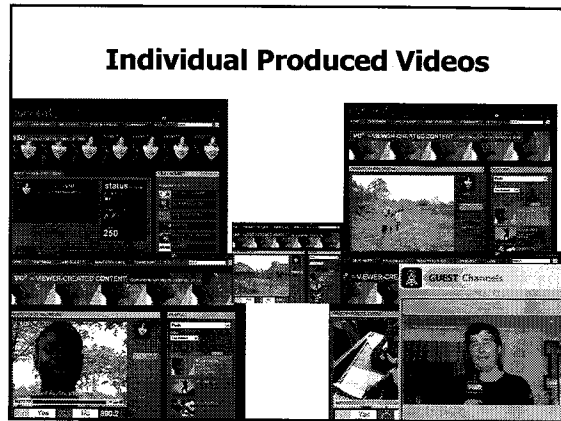
The Learning World is Flat

Slashdot (News for nerds, stuff that matters)
<http://slashdot.org/>

Digg (all about user powered content. Everything is submitted and voted on by the Digg community. Share, discover, bookmark, and promote stuff) <http://digg.com/>

Choose '06

California Governor Arnold Schwarzenegger Speak



Wiki Questions

1. Who regularly reads Wikipedia articles just for fun?
2. Who regularly reads Wikibooks?
3. Who seeks Wikipedia for content?
4. Who has edited or written new articles on Wikipedia or Wikibooks?
5. Who thinks it is ok for college students to cite from Wikipedia?

U.S. senator: It's time to ban Wikipedia in schools, libraries

June 7, 2007

By Preston Gralla on Wed, 02/14/2007 - 7:08pm

ABOUT THIS BLOGGER
Here's the newest from Sen. Ted Stevens, the man who described the Internet as the "newspaper of the 21st century." [Preston Gralla](#), Preston Gralla is a contributor to *Entrepreneur*, and the author of more than 100 Windows Vista in 3 Minutes.

NEWS
The Senate is 7-6 split

NEWS
Fake professor in Wikipedia storm

NEWS
Belatedly, Britannica lambastes Wikipedia findings

Entrepreneur.com
Presents Technology Resources


http://uncyclopedia.org/wiki/Main_Page

UNNEWS

UnNews: Barney the Dinosaur responsible for death

30 May 2007

At 11:43 AM, Barney the Dinosaur collapsed in the arms of a crowd of 10. They threw all supplies into the air, including orange juice, water, paper, Kleenex, tissues, and a phone. The crowd of spectators has been at the stadium for hours, in an airlocked location. The spectators, who had been watching Barney the Dinosaur perform, began to panic and started shouting. Barney the Dinosaur was the only one who remained calm. He stayed in his cage and watched the chaos from a safe distance. Barney the Dinosaur was the only one who remained calm. He stayed in his cage and watched the chaos from a safe distance.



Sample Book (Learning Theories)

http://en.wikibooks.org/wiki/Main_Page

European History

Four volumes, the open content textbook collection

The Wikibook was voted Book of the Month for June 2007

A Survey of Modern European History

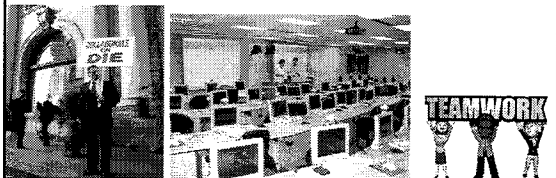
The project is an attempt at creating a survey of Modern European History starting at the Hundred Years War and ending at the present day.

Contents >>

The Ten Forces that Flattened the World

7. Electronic Collaboration and Interaction (synchronous and asynchronous)

The Learning World is Flat



TEAMWORK

Skype says it is used by 136 million people worldwide

AD: THE CAPTURE OF HONOR BONDAGE - DECEMBER 8, 2006



Calling Julian Savory (University) cancelled

Online Mentoring

(1k More project in China; <http://www.1kg.org/>)

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The Ten Forces that Flattened the World

8. Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)

The Learning World is Flat

Virtual Worlds/Virtual Reality/MMOG

The Ten Forces that Flattened the World

9. Real-Time Mobility and Portability (e.g., iPhone, low cost wireless devices)

The Learning World is Flat

Singapore and Taipei (Intel Press Release, 2006)

- Singapore, the island city-state in Southeast Asia, is about to complete a major new public/private project that will see large chunks of the 270 square mile city provided with Wi-Fi access by the end of 2008. The entire city, indoors and out, is due to be covered by 2015.
- In the coldest capital in Canada, the city residents of Iqaluit (pop. 6,000) enjoy free wireless from one free hotspot (with two more due soon to cover the suburbs), while Taipei, Taiwan (pop. 2.6 million) has a few more—over 4,000 hotspots that provide coverage for 90 percent of the city.

\$100 Laptop

SEITECH

Features

A revolution in a laptop
40-2000 Network

Launch: 13 August 2006, 18:49 Makka Time

Just as the Internet has been 15 years ago when Patrick Franzen and Wolfgang Dierker were in their prime, the \$100 laptop is reborn as the legacy of the PC is ubiquitous.

A quarter of a century on, the legacy of the PC is ubiquitous.

Change: 13 August 2006, 18:49 Makka Time

INTELLIGENCE TECHNOLOGY

The CM1: Taking technology to the developing world
A revolution in a laptop
By Greg Norman
Sunday 13 August 2006, 18:49 Makka Time, 15:49 GMT

Negroponete says the new laptop is designed to be kid-friendly

OLPC aims to turn the tide of urban poverty

