

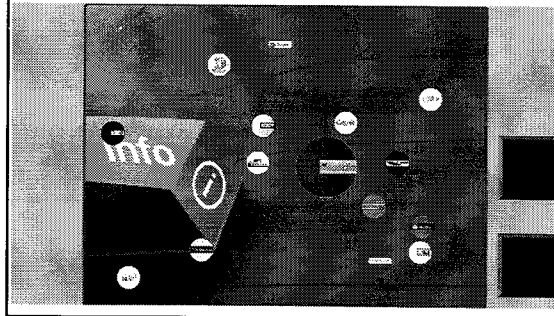
How the Learning World Became Flat: Ten Knowledge Sharing and Technology Trends Equalizing Access to Learning



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



<http://ella.slis.indiana.edu/~aenkim/iconping.html>



Phases of Technology in Education

1. Technology to enhance learning/knowledge
2. Technology to extend learning/knowledge
3. Technology to transform learning/knowledge
4. Technology to share learning/knowledge

Knowledge Sharing (Fuji Xerox, p. 9)

"Knowledge sharing is the way (social) and means (technical) by which an individual, team, organization and/or community connects and communicates, to continually create, innovate, learn and act."

**Poll #1: Should e-learning
courses and material be shared?**

- Yes
- No
- Not sure



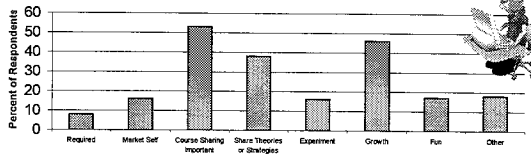
Most are Scared to Share!!!



Why Share?

Bank, C. J. (2002, January). *Executive Summary of "Online teaching in an online world."* United States Distance Learning Association (USDOLA). http://www.usdla.org/html/journal/JAN02_Issue/article02.html.

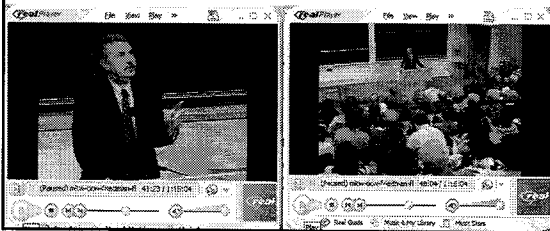
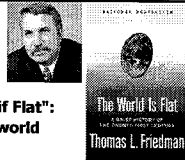
Figure 11. Reasons Why Respondents Posted to the WLH or MERLOT*



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 Jorum?

- 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)

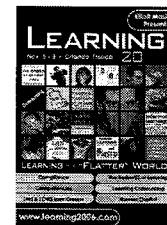
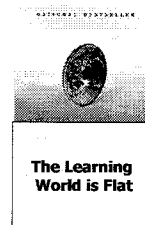


Effects of interactive multimedia in distance learning

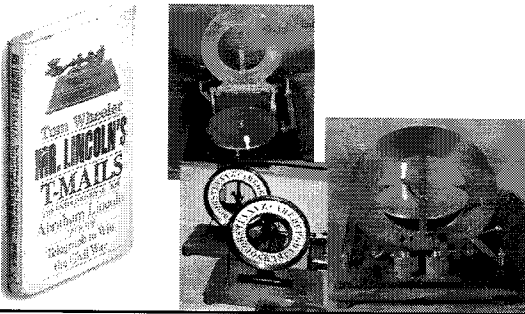
Giti Javidi and Ehsan Sheybani, 2004, In Proceedings of the IASTED International Conference WEB-BASED EDUCATION

"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."

The Learning World has become Flat!



Telegraph: Flattening the world in 1860



How Lincoln won the Civil War *Mr. Lincoln's T-Mails: The Untold Story of How Abraham Lincoln Used the Telegraph to Win the Civil War*

by Tom Wheeler; Collins, 227 pages, \$24.95.

By Russ Juskalian, Special for USA TODAY

Updated 11/26/2006 5:29 PM ET

http://www.usatoday.com/money/books/reviews/2006-11-26-lincoln-book_x.htm

- Wheeler argues that the use of the telegraph by Lincoln and his Union generals may have provided the advantage necessary to win the war.
- The telegraph was a killer app for its use along rail lines, enabling more efficient scheduling of trains— which, in turn, increased traffic, and profits.
- With this breakthrough, telegraph lines exploded across the Northern parts of the USA. The Southern states, afraid that industrialization would change their way of life dramatically, moved far more slowly in establishing both railroads and telegraph lines.



Blogging now begins young

By Ashley Bleimes, USA TODAY, November 15, 2006, 12D). http://www.usatoday.com/life/2006-11-14-blogs-education_x.htm

Eighth-grade students Tayler Bernholtz, left, Amy Lostron 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

The Ten Forces that Flattened the Learning World



1. Tools for Searching/Finding Media and Information Resources
2. Availability of Quality Online and Blended Learning Environments
3. Free and Open Source Software for Learning
4. Open CourseWare
5. Online Learning Object Repositories and Portals
6. Virtual Collaboration Software
7. Online Massive Gaming, Simulations, and Virtual Worlds
8. Learning Mobility and Portability
9. Personalized Learning Tools
10. Open Information Communities

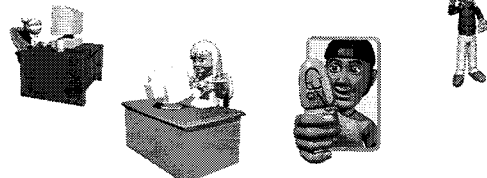
Three Larger Trends

- 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.


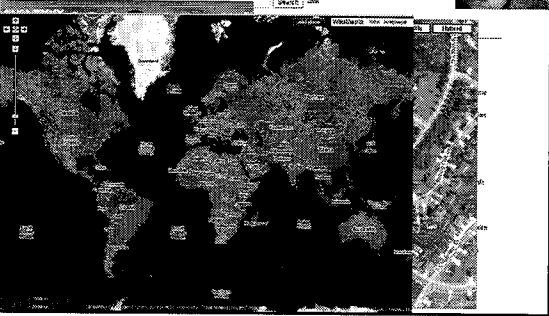


The Ten Forces that Flattened the World

1. Tools for Searching/Finding Media and Information Resources: (e.g., Google, Yahoo!)



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

Google Print Project



Google Print Project

Search the full text of books & other documents over new engines.

Google Print Project inspires fans, fear

The complete plays of Shakespeare. Now at your fingertips.

Google Video Project


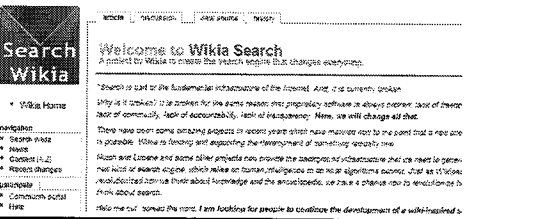


Google Video Project

Extraordinary People - The Boy with the Incredible Brain

Download by The Internet

Wikiasari - Wikipedia Founder Launching a Google Rival

Wikia Search

Welcome to Wikia Search

A search engine to create the search engine that changes everything.

Search is said to be the fundamental infrastructure of the Internet. And it is currently broken.

Why is it broken? It is broken for the same reason that proprietary software is always broken: lack of community, lack of accountability, lack of transparency. Here, we will change all that.

There have been some amazing projects in recent years that have managed to do a part that is now sorely needed. Here is looking and engaging the development of something really new.

Search and content are some other projects that provide the infrastructure and the tools to create. Search and content are some other projects that provide the infrastructure and the tools to create. Search and content are some other projects that provide the infrastructure and the tools to create.

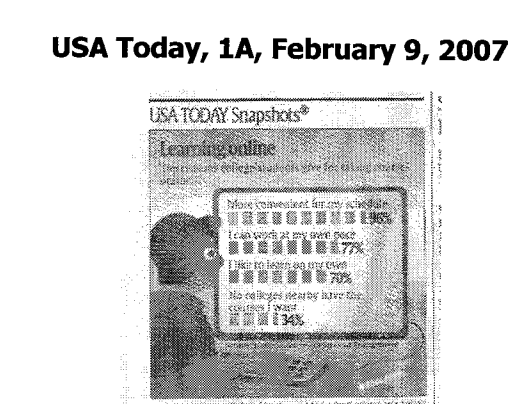
The Ten Forces that Flattened the World

2. The Availability of Quality Online and Blended Learning Environments



The Learning World is Flat

USA Today, 1A, February 9, 2007



USA TODAY Snapshots®

Learning online

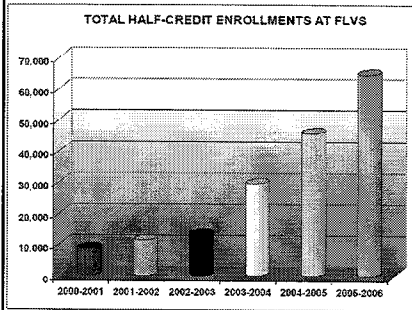
More convenient for my schedule

I can work at my own pace

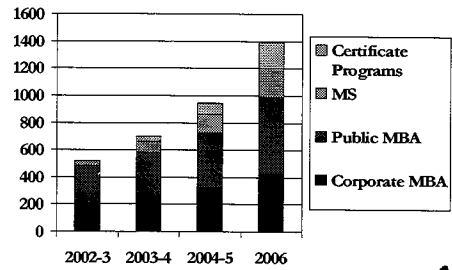
I like to learn on my own

No colleges nearby have this

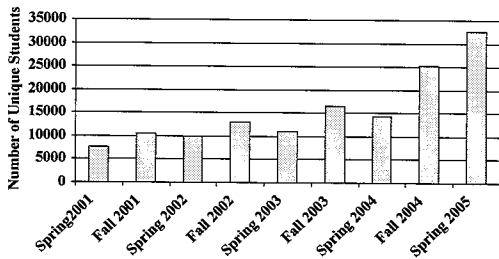
Growth of Online Learning in Secondary Schools



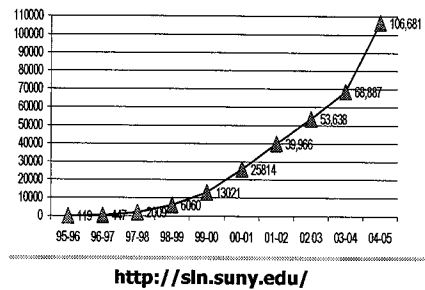
Growth in Student Enrollments



Enormous Learner Demand in Maryland WebCT@Maryland (March 2005)



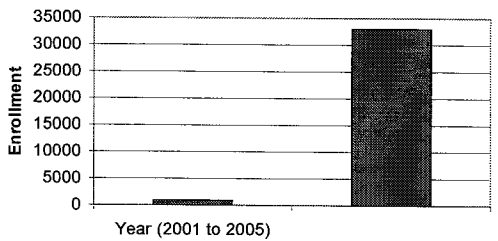
SUNY Learning Network (SLN) Online course enrollments



<http://sln.suny.edu/>

The OUM (Abtar Kaur, 2005, Ed Media)

Enrollment Growth at the UOM



Chronicle of Higher Ed, January 5, 2007, Employers Often Distrust Online Degrees. By DAN CARNEVALE

CHICAGO SUN-TIMES January 5, 2007

Employers Often Distrust Online Degrees.
By DAN CARNEVALE

WORLD: How often would you trust an online degree with a job application? Would you trust an online degree with a job application? Would you trust an online degree with a job application?

Survey: 40% of employers would not trust an online degree with a job application. 40% of employers would not trust an online degree with a job application.

40% of employers would not trust an online degree with a job application. 40% of employers would not trust an online degree with a job application.

By **SAM DILLON**, February 11, 2007
Troubles Grow for a University Built on Profits, NY Times



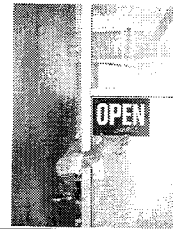
President William J. Pepicello says the university meets the needs of working students.



Robert Wancha, who is pursuing a bachelor's degree at the University of Phoenix, has criticized its standards.

The Ten Forces that Flattened the World

3. Free and Open Source Software for Learning



1. eduCommons

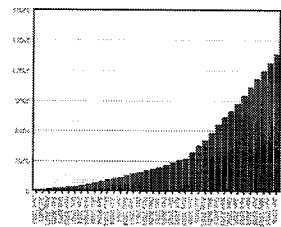


[View eduCommons in Action](#) | [Download the Source Code](#) | [Get the Installation Instructions](#)

eduCommons is an OpenCourseWare Management System designed specifically to support OpenCourseWare projects like MIT OCW and JPL OLCW. 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, backing copyright clearance, transferring of materials into courses, a quality assurance process, and final publication of the materials. While the term use of "eduCommons" is designed to visually align with other OCW's, the back end architecture is actually closer to something like Commons - 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](#).

Moodle sites



Moodle 1.5 sites: 10914 (of 14050)

Courses:	465218
Users:	5039211
Teachers:	879515
Enrolments:	7578325
Forum Posts:	5439185
Resources:	293706
Quiz questions:	3452107



3. Sakai Project

course.in.edu

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4. Learn from MIT

MIT OpenCourseWare

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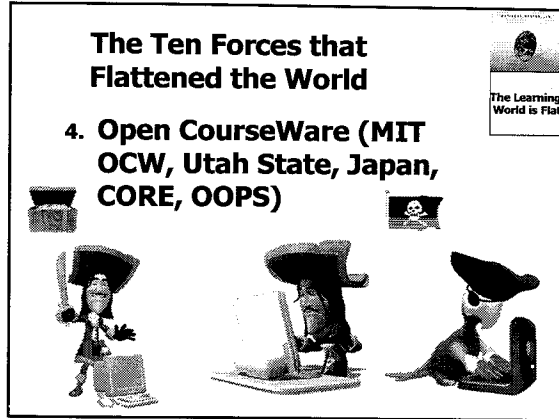
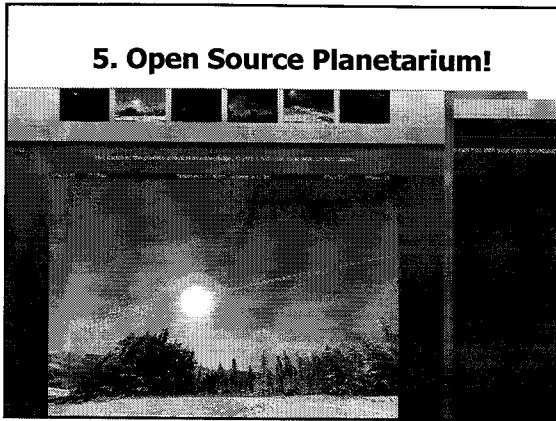
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Jan 4, 2007
How to go to M.I.T. for free
Online 'intellectual philanthropy' attracts students from every nation on earth.

By Gregory M. Lamb, *The Christian Science Monitor*

- By the end of this year, the contents of all 1,800 courses taught at one of the world's most prestigious universities will be available online to anyone in the world, anywhere in the world. Learners won't have to register for the classes, and everyone is accepted. The cost? It's all free of charge.
- The OpenCourseWare movement, begun at the Massachusetts Institute of Technology (MIT) in 2002 and now spread to some 120 other universities worldwide, aims to disperse knowledge far beyond the ivy-clad walls of elite campuses to anyone who has an Internet connection and a desire to learn.

Open Source Courseware

Open University of UK

Per David Wiley, Utah State University
 (October 2005)

"The first thing you should know is that there are many more schools than just MIT doing OCW now, including Johns Hopkins (ocw.jhsph.edu), Tufts (ocw.tufts.edu), Utah State University (ocw.usu.edu), and Foothill-DeAnza in California (sophia.fhda.edu).

