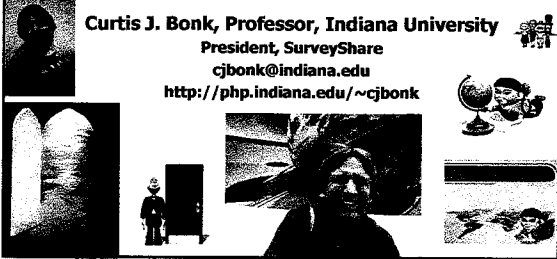
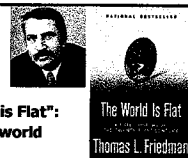



How the Learning World Became Flat (Open): Ten Knowledge Sharing and Technology Trends Equalizing Access to Learning

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

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

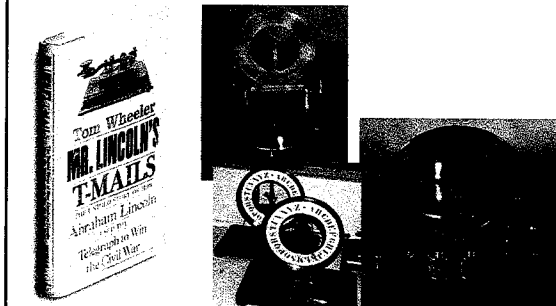


The Ten Forces that Flattened the World

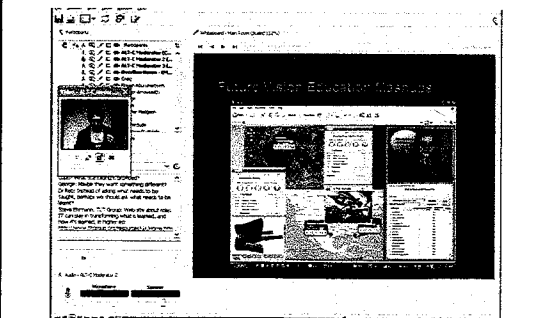
1. 11/9/89: Berlin Wall came down
2. 8/9/95: Netscape went public
3. Work Flow Software (e.g., PayPal and eBay)
4. Open-Sourcing (Self organizing collaborative communities; Mosaic, Apache, Wikipedia, Linux, Mozilla/Firefox,)
5. Outsourcing (Y2K)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply-Chaining (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)



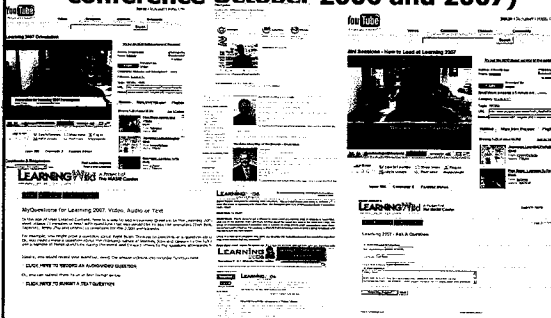
Telegraph: Flattening the world in 1860



Conference Attendance from Anywhere (e.g., Michelle Selinger, ALT-C Keynote, September 2007, Univ of Nottingham)



Conferences Participation from anywhere (Elliott Masie, Learning conference October 2006 and 2007)



Conference to Conference (You Ustreamed my Ustream: Now that's a Twitter of an Idea)

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)

The Learning World is Flat
Thomas L. Friedman

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 Learning World is Flat

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 Learning World is Flat

Next, we need new ways to search for that info in those pipes!

Jeff Han on TED Talks

What if every early elementary kid could have a terabyte (1,000 gigabytes or 1 trillion bytes) of data on a thumb drive? (Wired Magazine, October 26, 2007 says it will be possible in a few years; research from Arizona State)

Wired Magazine

Magic Pens! (The Pulse from Livescribe) Second, we need new ways to record info: Smartpens: "Never Miss a Word"

The collage features several images: a hand holding a smartpen, a close-up of the pen's tip, a digital interface showing recorded text, and the 'PULSE' logo. The text 'NEVER MISS A WORD' is prominently displayed.

Need new ways of representing & accessing info (e.g., Google is working on Timeline and Map Views)

The screenshot shows a Google search interface with a list of search results. A 'Timeline' and 'Map' view option is visible, indicating Google's efforts to provide alternative ways to access information.

New ways to read information (e.g., Thinner, Crisper, and Cheaper eBooks; Kindle = \$400-500)

The collage displays several e-readers and digital devices, including a Kindle and a tablet, illustrating the variety of ways to read digital information.

New Ways to Find Lectures

The screenshot shows a website titled 'Lecture Browser' with a search bar and a list of lecture titles, including 'The Wonders of Electricity and Magnetism' and 'Solving the Traveling Problem in Computer Science'.

Autonomy, Choice: B. Read, Listen, etc. to online books (e.g., "An International Episode" by Henry James)

The screenshot shows the Open Content Alliance website, featuring a search bar and a list of books, including 'An International Episode' by Henry James.

Global Text Project (free textbooks for those in less developed countries) <http://globaltext.org/>

The screenshot shows the Global Text Project website, featuring a search bar and a list of textbooks, including 'The Wonders of Electricity and Magnetism'.

The Ten Forces that Flattened the World

2. Enormous E-Learning and Blended Learning

EDUCATION with Student's Voice

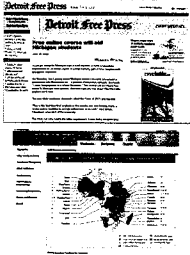
Students prefer online courses

Classes popular with on-campus students

Feb. 13, 2008, Page 3, 10 p.m. EDT (3:30 p.m.)

LAP — Andy Steele lives just a few blocks from the campus of Black Hills State University in Spearhead, South Dakota, so commuting to class isn't the problem. But he doesn't like lectures much, isn't a morning person, and wastes time during the day to restore motorcycles.

So Steele, a full-time senior business major, has been taking as many classes as he can over the South Dakota state system's online offerings. He gets better grades, he says.




The Learning World is Flat

Total and Online Enrollment in Postsecondary Institutions Fall 2002 through Fall 2006 (For Degree-Granting Institutions)

	Total Enrollment	Annual Growth Rate Total Enrollment	Students Taking at Least One Online Course	Annual Growth Rate Online Enrollment	Online Enrollment as Percent of Total Enrollment
Fall 2002	16,811,710	NA	1,502,970	NA	9.7%
Fall 2003	16,930,479	1.7%	1,971,397	23.0%	11.7%
Fall 2004	17,272,043	2.2%	2,329,733	18.2%	13.5%
Fall 2005	17,428,500	0.9%	3,180,050	36.5%	18.2%
Fall 2006	17,647,720	1.3%	3,488,331	9.7%	19.8%

SOURCE: Online Nation: Five Years of Growth in Online Learning (October 2007)


Sara Cordell, professor of English at the University of Illinois-Springfield, says she feels online students become better writers because they get so much practice. NPR Special, Nov 29, 2007, Larry Abramson. (67% of US Colleges and universities offer online courses; 35% offer fully online programs.)



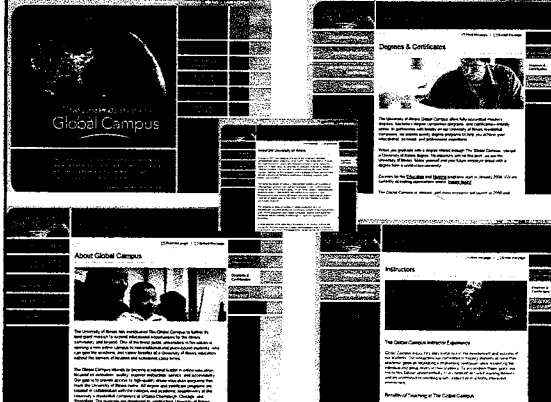
'Distance learning' gets its close-up By G. Jeffrey MacDonald, Special for USA TODAY November 2007

- More than two-thirds of all U.S. colleges and universities offer online courses, and 35% of schools offer programs that are entirely online, according to the Sloan survey, and 20% of the USA's 17 million college students say they have taken at least one course online.

Capella Tower 225 South Sixth Street, Minneapolis Formerly, the "Halo"





Global Campus



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

Moodle

Community Growth
Total Moodle.org users

Registered users total: 22370
New users in the past 24 hours: 834
Registered users accessed in past 24 hours: 2209
Registered users accessed in past month: 3689

The Sakai Project

Location: BL EDKAC P540 20007 Resources

Resource	ACTION	Modified
1. Sakai P540 20007 Resources	Edit Properties Add	06/27/05
2. Moderator Support Sheet	1 Delete	
3. P540 Syllabus Fall of 2005	Edit Properties Add Delete	06/29/05
4. Video Screen Lecture 1: Intro to P540 class and Behavioral Lecture (Starts 20 minutes in and ends early)	Edit Properties Add Delete	

The Ten Forces that Flattened the World

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

OPENING UP EDUCATION
The OER Commons
of Education through Open Technology, Open Content, and Open Knowledge

Eric Brink and M. Vito, 2004

Cape Town Open Education Declaration December 2007

<http://www.capetowndeclaration.org/>

THE CAPE TOWN OPEN EDUCATION DECLARATION

Read the Declaration

Cape Town Open Education Declaration: Unlocking the promise of open educational resources

We are on the cusp of a global revolution in teaching and learning. Educators worldwide are developing a vast pool of educational resources on the Internet, open and free for all to use. These educators are creating a world where each and every person on earth can access and contribute to the sum of all human knowledge. They are also planting the seeds of a new pedagogy where educators and learners create, share and evolve knowledge together, deepening their skills and understanding as they go.

This emerging open education movement combines the established tradition of sharing good ideas with fellow educators and the collaborative, interactive culture of the Internet. It is built on the belief that everyone should have the freedom to use, customize, improve and redistribute educational resources without constraint. Educators, learners and others who share this belief are gathering together as part of a worldwide effort to make education both more accessible and more effective.

The expanding global collection of open educational resources has created fertile ground for this effort. These resources include open source course materials, lesson plans, textbooks, games, software and other materials that support teaching and learning. They continue to make education more accessible, especially where

OpenCourseWare Projects

Tufts OpenCourseWare

Tufts OpenCourseWare

Tufts OpenCourseWare

National Repository for Online Courses (NROC) Commons

200 Free Online Classes to Learn Anything

Published on Thurs, 11/11/05

By **LearningSpace**

A high quality video course from the University of Utah, Life in the Paleozoic

Keywords: LearningSpace, All Online, Science and Nature, STEEL

1. **Introduction to the History of Life**
2. **Evolution of the Vertebrates**
3. **Evolution of the Mammals**
4. **Evolution of the Birds**
5. **Evolution of the Reptiles and Amphibians**
6. **Evolution of the Fishes**
7. **Evolution of the Invertebrates**
8. **Evolution of the Plants**
9. **Evolution of the Fungi**
10. **Evolution of the Protists**
11. **Evolution of the Bacteria**

**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."

Opensource Opencourseware Prototype System (OOPS) funded by, the Foundation of Fantasy, Lucifer Chu, Chairman and Janitor of OOPS, Taipei)

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

OOPS
Opensource Opencourseware Prototype System
開放式課程計劃

MIT OPENCOURSEWARE
Highlights for High School

MIT OpenCourseWare:
Highlights for High School

MIT OPENCOURSEWARE
AP Biology

The Ten Forces that Flattened the World

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

The Learning World is Flat

Pubcasts!

NSF, the Public Library of Science, and the San Diego Supercomputing Center created a YouTube for scientists to help demystify important research papers. See SciVee <http://www.scivee.tv/>

What if K-2 teachers could have free reading instruction at their fingertips? See free-Reading.net

http://free-reading.net/index.php?title=Main_Page

Free online materials could save schools billions

Letter Sound and Letter Combination Accuracy Sound Search Game

A Grain of Rice: A Bloomington man's computer vocab game feeding the world

Herald Times, Wednesday
February 6, 2008
Mike Leonard

A GRAIN OF RICE

For each word you get right, we donate 10 grains of rice through the United Nations to help end world hunger

CONNECT!
Incorporate means:
Unwaxed
In love
Sweet
Concurrent

Office DEPOT
RL
biz daboone

Referatory: MERLOT.org

MERLOT
What is MERLOT?
MERLOT is a free and open online digital library of teaching materials, including videos, audio, and interactive content, for use in higher education. It is a collaborative effort of faculty and librarians from various institutions.

Search Results
1-20 of 100 results

1. Introduction to Psychology
2. The History of Psychology
3. The Science of Psychology
4. The Biological Basis of Psychology
5. The Development of Psychology

Repository: Connexions (Rice University) <http://cnx.rice.edu/>

Connexions is a freely growing collection of free textbooks materials and a powerful set of free software tools to help authors publish and collaborate.

Get started
Learn more
Take a tour
Explore the Connexions and Connexions Commons -- no need to create a module or build a course -- first get a tour!

Connexions is growing
Connexions is internationally focused, multilingual, and peer-reviewed. More than 150 countries are teaching over 2,000 modules and 40 courses developed by a world-wide community of authors in fields ranging from grammar classes to music and from mathematics to biochemistry. Modules and courses are also being translated into several languages, including Chinese, Thai, and Japanese.

K-12 Content: Global Education and Learning Community (GELC)

(Kirkpatrick, Dec 22, 2006, CNN Money)

- The Global Education and Learning Community (GELC) aims to bring the principles of open source to education. Scott McNealy, former CEO of Sun Microsystems, is working to create a free universal curriculum from Kindergarten to 12th grade in every major subject. Any educator/researcher can contribute and it will be in any language.

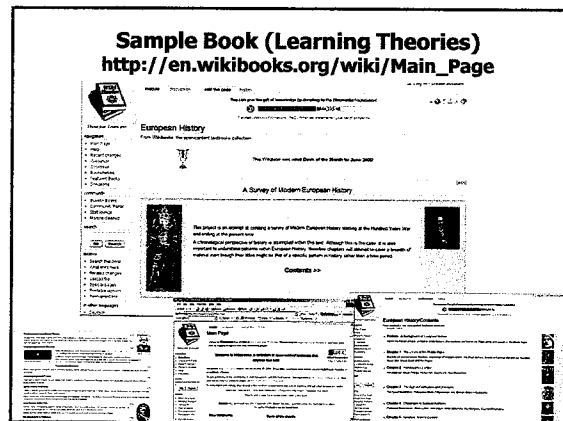
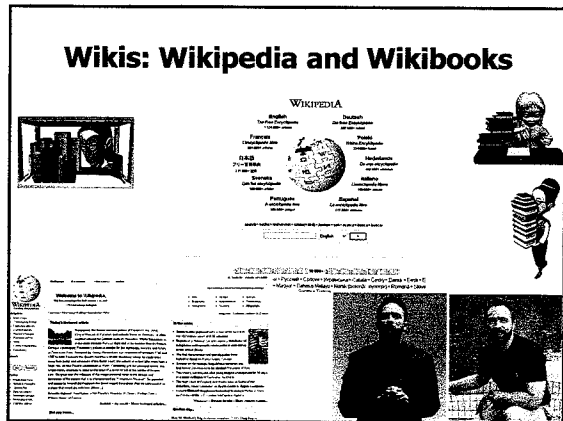
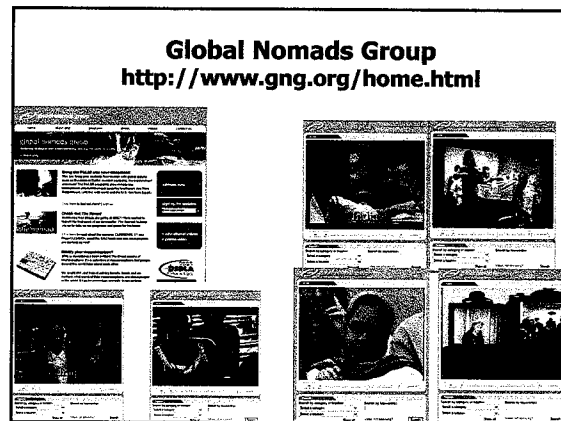
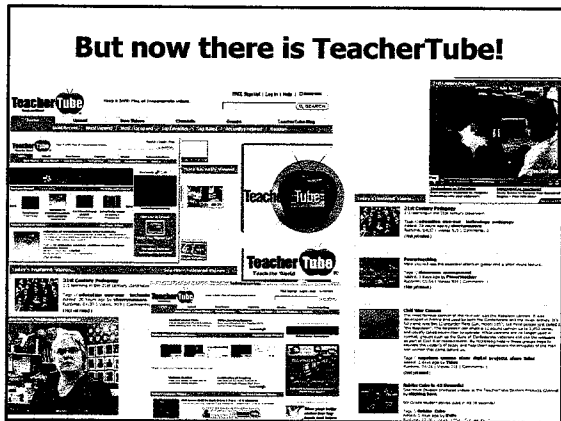
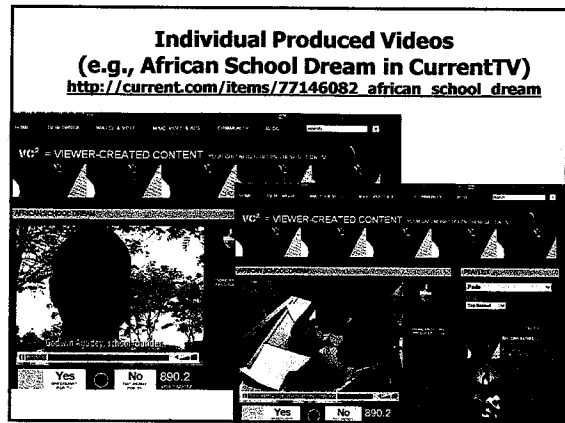
The Ten Forces that Flattened the World

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

The Learning World is Flat

Indexing Sounds in Cities with Google Maps

Unlogged sounds on this screen...



The Ten Forces that Flattened the World

7. Electronic Collaboration and Interaction (synchronous and asynchronous)

The Learning World is Flat

TutorVista has 600 tutors in India and 10,000 subscribers in the United States, including Kenneth Tham in Arcadia, Calif.

Skype, Google Talk, ChinesePod, LiveMocha, VoiceThread, YackPack, Dotsub, Chinswing, and many other Collaborative Language Learning

Presente Perfecto de subjuntivo
espero que tu aprendas mucho

cláusula principal que - cláusula dependiente

Flat Schools and Flat Classroom Projects!!!

Life is a Breeze

Expert Mentoring Online in Art and Design (Omnium Project—online graphics and photomedia project)

1kg More Project for Rural China

(<http://www.1kg.org/>)

The Ten Forces that Flattened the World

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

Philippine President Now Resides In Second Life

The Ten Forces that Flattened the World

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

The Age of Wireless

MOST (UN)WIRED SCHOOLS?

CNET and U.S. News and World Report got the top 50 universities' tech specs and asked them which computers they recommend to students and faculty.

Totally wireless on campus

New York Times reporter Andrew Revkin continues doing compelling multimedia work. He's now not only shooting photos and recording audio -- he's moved on to video and blogging.

In his latest trip, Andrew C. Revkin headed north to chronicle the shifts on Greenland and researchers' efforts to understand them. He periodically posted dispatches in a blog-like diary.

OLPC in Nigeria: School Galadima
One Laptop Per Child foundation (OLPC) provided School Galadima in March 2007 with an XO laptop for each child in Primary 4, 5 and 6 and also for each member of the staff.

The Ten Forces that Flattened the World

10. Networks of Personalized Learning (Blogs, Podcasts, MySpace, Flickr, and RSS)

The Learning World is Flat

YouTube Research Group in Facebook (and advertized in my blog)

Archive Last Lectures (Randy Pausch, Carnegie Mellon University)

Combining The Web 2.0 (e.g., Second Life, Blogging, and Photo Posting) Stephen Mandelbrot

Cluster Maps (who is reading your blog or using your product); Blog of Will Richardson, famous K-12 blogger (left) and Learning Theories Book of Michael Orey, Univ of Georgia (right)

Might all of these red dots on a ClusterMap represent folks who are no more linked to you or at all the same topic that folks merely figuring out from the book and whether they're in this area or not? Well, we're going to do a radio show!

Networks of Learning
 Should schools promote online networking?
 Will Richardson, "The Learning Theories" author, suggests that we use this aspect of the book to help us understand the importance of the social connections that form learning's path.



World Bridges and EdTechTalk

EdTechTalk
 About Us | Community Work Page | Discussion Forums | Listen | Tips | Chat Room | Help for Newbies! | Subscribe | Contact Us | Search

EdTechTalk #79 - A Discussion with Curtis Bank & Steve Kossakowski

Length: 76:21 minutes (24:16 MB)
 Filename: 079 Steve-Kurtis 0405a (320)

EdTechTalk#79
 July 19, 2007

A Discussion with Curtis Bank of Indiana University & Steve Kossakowski of SPOC. Steve's ESDM77 equiments and expertise, members of EdTechTalk are in it. Our guests discuss how educators and learning institutions can adapt to the ever increasing flow of emergent technologies at our disposal.

Download mp3

Participant Links:
 Curtis Bank
 • Curt Bank's E-Learning World
 • EdTechTalk: The Web 2.0 and Participatory e-Learning Syllabus
 • Trivium Edition Blog
 Steve Kossakowski

Get Lectures from Stanford and Berkeley on iTunes

Utah news
Class-conscious: Teachers want tech to enhance — not replace — lectures
 Teachers want tech to enhance — not replace — lectures

Englishpod, Spanishpod, JapanesePod, Koreanpod, Arabic online, etc.

Final Sharing Questions

- For what purpose will people share?
- Who will continue to maintain or update such sites?
- Will online sharing become expected of all faculty members around the planet?
- How will copyright issues be addressed?
- What happens when one did not mean to share his or her course contents or ideas, or, at least, not as widely?
- How will such learning objects of today be viewed in 100 or 200 years?

The End!!!

Learning is Now Flat/Open...

Remember that WE-ALL-LEARN!

Sample papers at: <http://www.publicationshare.com/>
 Archived talks at: <http://www.trainingshare.com/>