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://jphp.indiana.edu/~cjbonk

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: Mozilla, Apache, Wikipedia, Linux, Mozilla/Firefox, )
5. Outsourcing (7/28)
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)

Telegram: 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)

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.)

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

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

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

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

New Ways to Find Lectures

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

Global Text Project (free textbooks for those in less developed countries)
http://globaltext.org/
2. Enormous E-Learning and Blended Learning

'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"

The Ten Forces that Flattened the World
3. Availability of Open Source and Free Software (e.g., Linux, Apache, Moodle)
The Ten Forces that Flattened the World

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

Cape Town Open Education Declaration
December 2007
http://www.capetowndeclaration.org/

OpenCourseWare Projects

National Repository for Online Courses (NROC) Commons
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, Taipai

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

Pubcasts!

NSF, the Public Library of Science, and the San Diego Supercomputer 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

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Published by the American School Board Journal, Eagle Rock, Colorado. Reprinted by permission.
A Grain of Rice: A Bloomington man's computer vocab game feeding the world
Herald Times, Wednesday
February 6, 2008
Mike Leonard

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

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)

Indexing Sounds in Cities with Google Maps
Individual Produced Videos
(e.g., African School Dream in CurrentTV)
http://current.com/item/77146882_african_school_dream

But now there is TeacherTube!

Global Nomads Group
http://www.gng.org/home.html

Wikis: Wikipedia and Wikibooks

Sample Book (Learning Theories)
http://en.wikibooks.org/wiki/Main_Page
The Ten Forces that Flattened the World

7. Electronic Collaboration and Interaction (synchronous and asynchronous)

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

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

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)

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)
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/