The Flat World Swung Open: How Web Technology Is Revolutionizing Education

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Where are you headed?

Do you know the shape of the world?

Is the World Flat?

The Ten Forces that Flattened the World

Triple Convergence: (1) new economic players, (2) playing fields, and (3) processes.
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 organ collab communities; Mosaic, Apache, Wikipedia, Linux, Mozilla)
5. Outsourcing (Y2K)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply-Chainning (e.g., Walmart)
8. Insourcing (UPS using Toshiba laptops)
9. In-forming (e.g., Google, Yahoo!, MSN Web Search)
10. The Steroids: Digital, Mobile, Personal, and Virtual (wireless, file sharing, VoIP, video camera in phone)

Is the World Curved?

The World is Curved

David M. Smick
Is it spiky?

Or is it Open?

Question:
What is the Web?
- An entertainment system?
- A writing aid?
- A communications system?
- A means to handle commercial transaction?
- A social networking device?

No, it is a learning tool!

Answer:
The Web of Learning

The Web of Learning

The Explosion of the Web 2.0
We are entering a jumping off point...

Michael Perham & Zac Sunderland,
Summer 2009 (each age 17, youngest person to sail solo around the world...and blog on it, use Skype, YouTube, take videos, post pictures, now Abby Sunderland age 16, Minoru Saito, age 75, oldest solo sailor)

UCLA Summer Digs Program
Dig in, archaeology fans! UCLA blogs to offer front-row seat at archaeology digs, Meg Sullivan, 6/25/2008

May 2010, Jessica Watson became the youngest person ever to sail solo, non-stop and unassisted around the world.
http://www.jessicawatson.com.au

Sunderland, 16, reportedly in trouble. ESPN, June 10, 2010

David Thomas, Archeologist, La Trobe University, Australia (Discovery News)
Perhaps people learning online are akin to the alien archaeologists in the 2008 movie, "Indiana Jones and the Kingdom of the Crystal Skull," Indy said. "Their treasure wasn't gold; it was knowledge. Knowledge was their treasure."

WE-ALL-LEARN:
Ten Forces that Opened the Learning World
- Web Searching in the World of e-Books (i.e., Darwin)
- 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)

Audience Participation!
1. WE
2. ALL
3. LEARN!!!

Triple Learning Technology Convergence of "WE-ALL-LEARN"
2. Pages: The availability of free educational content and resources (OER—Open Educational Resources).
3. Participatory Learning Culture: A move towards a culture of open access to information, international collaboration, and global sharing.

Opener #1. Web Searching (e.g., Google, MSN, Yahoo!) in the World of e-Books (i.e., Darwin, Shakespeare, etc.)
What happens then?

WE
ALL
LEARN!!!

Free Online Books and now the Blio
(a free e-book platform to run on any device)

Seton Hill University, 2,100 students. All fulltime students get an iPad and Incoming freshmen will also receive a 13-inch MacBook laptop, April 2010.

Does iPad have the magic to bring people together?
Marco R. della Cava, USA TODAY, June 7, 2010

Opener #2. E-Learning and Blended Learning

Letter from Bill Gates about online learning (January, 2010)
Florida Virtual School, 71,000 unique students
This is half credit completions, which means all included have successfully completed a half credit enrollment (June 2, 2010)

Indiana University High School
(4,000 students and 1,400 enrolled in diploma programs)

Adora Svitak, age 12, World’s Youngest Teacher

Capella Tower
225 South Sixth Street, Minneapolis
Formerly, the “Halo”

U. Of California System Proposing Online Ed
Chronicle of HE, May 14, 2010, Josh Keller and Marc Perry
“The university plans to spend about $250,000 on each course. It hopes to raise the money from external sources like foundations or major donors.”
Mexico's Monterey Tech Pushes E-Learning, as Some Worry It Won't Solve Region's Burgeoning Need
June 16, 2010, Chronicle of Higher Ed, Marion Lloyd

"A decade ago, only one in 50 Mexicans had access to the Internet. Today that figure is one in four, a staggering cultural transformation that is fueling a boom in online degree programs in the country. Monterey Institute of Technology and Higher Education... has allowed it to reach more than 35,000 new students.

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

Moodle (32+ million registered users in 208 countries, 3+ million courses, 2/6/2010)

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

Open Educational Resources (OER) Post Courses in YouTube and iTunes (e.g., Berkeley)
Opensource OpenCourseware Prototype System (OOPS) funded by the Foundation of Fanyon, Lucifer Chu, Chairman and Janitor of OOPS, Taipei

Sample OpenCourseWare Projects (Tufts, Johns Hopkins)

National Repository for Online Courses (NROC) Commons

Peer2Peer University and University of the People (free!)

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

Elliott Masie, Learning Trends, March 2, 2010

"The introduction of video into almost every aspect of our learning and work tasks is profound and "disrupting." As designers, we must experiment with these formats—looking for evidence and appropriate use cases and examples of when not to use video."

Video blogs, Webinars, Webcasts, capture conference keynotes, flipcams, etc.
How about rich video portals?
Most of the Websites below did not exist 5 or 10 years ago.

1. BBC News Video and Audio
2. CNN.com Video
3. MSN/BBC.com
4. Google Video, Yahoo Video
5. Current TV
6. Fora TV
7. MIT World
8. YouTube, YouTube Edu
9. TeacherTube
10. Link TV, Explore, Global Pulse, Latin Pulse
11. Howcast, Big Think, WonderHowTo, ExploTV, NASA TV, ClipChef, TV Lesson, BookTV, Edutopia videos, MonkeySee, doFlick, the Research Channel, IVideosong

Link TV: Global Link of World Educators (GLOWE)

Link TV, Academic Earth, TV Lesson, and Fore TV

Tracking Live Internet Thawing: A Colossal of an Idea

College 2.0: More Professors Could Share Lectures Online. But Should They?, Chronicle of HE, Jeffrey R. Young, March 7, 2010

"The latest Campus Computing Survey, which gathers data on classroom technology nationwide, found that 28 percent of colleges have a strategic plan to provide coursecasting equipment, and 35 percent more are working on a plan now."

Ida (a transitional species)
47-Million-Year-Old Darwinius Masillae Fossil the Missing Link? (wowOwow, May 20, 2009)
Human Brain Dissected Today in a Live Webcast, Chronicle of Higher Education, December 02, 2009, 02:30 PM ET

The Carlyle Letters Exploring Victorian World Through Letters and The Diary of Samuel Pepys
(Great Plague, Great Fire, Charles Dickens, Emerson Darwin, Mary Wollstonecraft-Shelley, Robert Browning, John Stuart Mill, Ralph Waldo Emerson, Elizabeth Barrett Browning, and Alfred Tennyson)

Sharing Repositories and Referatories
MERLOT.org: 76,472 members, 21,839 learning materials, Jan 3, 2010
Connected: Dec 2009, 1.8m unique users, 4 million page views, 72 million hits, More than 1m users, 250 countries
National Repository of Online Courses, OER Commons

The Complete Works of Charles Darwin

The Royal Society 300th anniversary celebrations puts historic papers online (Captain Cook, Sir Isaac Newton and Benjamin Franklin), BBC, Nov 30, 2009
http://news.bbc.co.uk/1/hi/sci/tech/851425.stm

Opener #6. Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)
Wikis: Wikipedia and Wikibooks

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

Shared Online Video
(e.g., YouTube and the Royal Channel)

Individual Produced Videos
(e.g., African School Dream in Current TV)
http://current.com/items/77146082_african_school_dream

Participatory E-Books

Scribd: Documents on Web
(http://www.scribd.com/; 50 million unique visitors per month, 10's of millions of documents, April 2010)
Opener #7. Electronic Collaboration and Interaction (synchronous & asynchronous)

Synchronous Conferencing Presentations

7 Tips for Building Collaborative Learning Spaces, Campus Technology, Matt Vilano, June 2010

The Next Generation of Videoconferencing Chronicle of HE, October 21, 2009

Opener #8. Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
Second Life
(business, law, education, English, medicine)

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

We Are Going Mobile!
40,000 new mobile subscribers a week in Rwanda! Rwanda Newstimes report, January 2009
Africa is the continent with the fastest growth, International Telecommunications Union (ITU), March 2009

India: In January, 2009, the number sky rocketed to 15.4M
Globally: 60,000 new mobile subscriptions every hour!!!

(par Paul Kim, Stanford, 2009): Nokia Research Lab

https://www realise.org/real/1500000/subscriptions

“A” is for App, Anya Kamenetz, Fast Company, April 2010

OLPC, Marvell Join Forces, Announce sub-$100 Tablet by December 2010
May 27th, 2010 by Mike Prospero

Social Networking Gaming (e.g., Farmville)
For social networks, it's game on, USA Today, Jon Swartz, Thursday October 15, 2009
June 9, 2010

TwitterPeek:
Restricted to Twitter.

WikiReader:
Updating can be a pain.

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

September 30, 2009
the Samsung DualView TL225

Museum of London's Streetmuseum App Puts Historic Photos in Perspective
Written by Chris Cameron, June 1, 2010

"Hundreds of images from the Museum of London’s extensive collections showcase both everyday and momentous occasions in London's history, from the Great Fire of 1666 to the swinging sixties."

Some Papers Are Uploaded to Bangalore to Be Graded, Chronicle of Higher Education, April 4, 2010, Audrey Williams

Lori Whitman, who teaches business law and ethics at the U. of Houston, has outsourced the grading of students' papers to a private company.

Facebook: The New Classroom Commons?, Chronicle of HE, Harriet L. Schwartz, Sept. 28, 2009

Teaching With Twitter
Chronicle of HE, Jeffrey Young, November 22, 2009

Sophia's Classroom, a professor of computer sciences and art at Purdue University, has integrated Twitter into the classroom, even though the service isn't students engage in back-channel discussions. The questions submitted via #ACCESS are projected onto the professor and guest speakers are projected for all the students to see.
Social Learning Unleashed
Chief Learning Officer, April 2010

Driving greater collaboration: With 17,000 internal blogs and 53,000 employees on Social Blue, IBM’s version of Facebook, and 500,000 participants in the company crowdsourcing jams, IBM’s social media usage has become big business. As of 2008, IBM’s jams identified 10 incubator businesses with the potential of reaching $100 million.

Predictions
1. Five Billion "Have-Nots" Have at It!
2. Emergence of Lifelong Super E-Mentors/Coaches
3. Quarter-Century Learning Clubs
4. Terabyte Learning Access Points
5. The Veneration of Learning
6. Personalization = Portfolios
7. The Selection of Global Learning Partners
8. The Shared Learning Era
9. Teaching-Learning Paradoxes
10. Teachers, Teachers
11. The Rise of the Super Blends
12. Self-Determined Humans
13. Free Learning Zones
14. Authentic Learning Amaigamations
15. Alexandrian Aristotlies

Decisions for this Open Ed World?
- Technology and Admin Folks:
  - What do to about OER, open sources, E-books, mobile, etc.?
- Instructor decisions:
  - Act as Concierge, Counselor, Course facilitator, Credit manager?
- Students decisions:
  - Should I attend traditional university or create your own degree path?
  - How to report use of OER on resumés?

This book is an attempt to reveal a wide range of learning options in front of you while also offering you a framework to make sense of them. As the Grail Knight said in the 1989 movie, Indiana Jones and the Last Crusade, “choose wisely.” If you do, WE-ALL-LEARN. The world is now open to you!

Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/
The World is Open.
What happens then?
WE
ALL
LEARN!!!