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

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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-organizing communities; Mozilla, Apache, Wikipedia, Linux, Mozilla)
5. Outsourcing (e.g., China, Mexico, Thailand)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply-Chaining (e.g., Walmart)
8. Insourcing (UPS using Toshiba laptops)
9. In-forming (e.g., Google, Yahoo, MSN Web Search)
10. The Starlets: Digital, Mobile, Personal, and Virtual (wireless, file sharing, VoIP, video camera in phone)

Is the World Curved?
Perhaps those learning online are akin to the alien archaeologists in the 2008 movie, "Indiana Jones and the Kingdom of the Crystal Skull." We are seeking the knowledge nuggets of our planetary past and present. As Indy said, "Their treasure wasn't gold, it was knowledge. Knowledge was their treasure." If that is true for us as well, then today pretty much all the world's known treasures can be found online.

Audience Participation!

1. **WE**
2. **ALL**
3. **LEARN!!!**

**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 (asyn and asyn)
- 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)

**Triple Learning Technology Convergence of "WE-ALL-LEARN"**

1. **Pipes:** The availability of tools and infrastructure for learning.
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.)

Trend #1. Web Searching in the World of e-Books. What happens then?

WE

ALL

LEARN!!!

This Could Be the Year of e-Textbooks
Many titles are available, but students are wary.
Jeffrey Young, September 7, 2009

Blio: Kurzweil Reinvents the Book
Charlie Sorrel, Dec 29, 2009, Wired

- Blio is a free platform...run on any device.
- Blio is in color.
- Blio lays pages seen on paper, with typography and illustrations; uses video.
- More than a million library of titles.
- The end of the book?

Sign of the times: At the San Diego State U. bookstore, a poster exhorts students to "Buy This Textbook as an eTextbook."

Tablet May Help E-Textbook Market, Publishers Hope
Chronicle of HE, Jeffrey Young
January 31, 2010

Free Online Books
(Terry Anderson and Fatih Bilgili, eds. Theory and Practice of Online Learning; Canada: Athabasca University. 2004).
http://ode.athabasca.ca/online_book/ 55,000 downloads in first year

Guests play with Apple's new iPad at an event announcing its debut in San Francisco. At least one college is considering giving iPads to new students, but the jury on whether the device will revolutionize learning will be out for a while.
Read, Listen, etc. to online books (e.g., "An International Episode" by Henry James)

Opener #2. E-Learning and Blended Learning

Letter from Bill Gates about online learning (January, 2010)
http://www.gatesfoundation.org/annual-letter/2010/Pages/education-learning-online.aspx

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

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

iSMART: Integration of Science, Mathematics, and Reflective Teaching (iSMART) is a FREE 2-year online graduate program for middle school science and mathematics teachers in Texas, University of Houston
http://www.cox.smu.edu/ACCT/SMART%20Brochure.pdf
http://www.cox.smu.edu/academic/courses/SMARTSMART.htm

You see the big picture. You find the connections. Make it official - become iSMART.
Moodle (32+ million registered users in 208 countries, 3+ million courses, 2/6/2010)

OpenTeaching
(Tom Reysco Evaluation Course at Georgia, David Wiley’s Web 2.0 course at BYU, Connectivism from George Siemens and Stephen Downes, 24 enrolled, 2,000+ sitting in)

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

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)

Sample OpenCourseWare Projects
(Tufts, Johns Hopkins)
Cape Town Open Education Declaration, Dec 2007
http://www.capetowndeclaration.org/

Peer2Peer University and University of the People (free!)

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

Link TV, Academic Earth, TV Lesson, and Fora TV

Tracking Live Internet Thawing: A Colossal of an Idea

Ida (a transitional species) 47-Million-Year-Old Darwinius Massillae Fossil the Missing Link? (wowowow, May 20, 2009)
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
Opener #7. Electronic Collaboration and Interaction (synchronous & asynchronous)

Synchronous Conferencing Presentations

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

Adventure Learning, GeoThentic, GoNorth (National Geographic) (Aaron Doering, Univ of Minnesota)

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

Second Life (business, law, education, English, medicine)
University of Texas:  
50 Islands in Second Life, Nov 2009  
http://archive.treat.tv/metanomics-campus-life

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

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

Mobile Learning  
(April 21, 2009, USA Today)

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

India: In January, 2009, the number skyrocketed to 15.4M  
Globally: 60,000 new mobile subscriptions every hour!!!  
(par Paul Kim, Stanford, 2005); Nokia Research Lab  
http://news.ycombinator.com/item?id=6045846

Terabyte thumb Drives and Magic Pens!  
(The Pulse from Livescribe, $129-$169)
TwitterPeek, WikiReader not worth the loot, USA Today, Edward Balg, November 5, 2009

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

Podcast Shows
(subscribe to ShakespeareCast.com)


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

Suzie Chabrier, a professor of consumer sciences and retailing at Purdue University, has welcomed Twitter into the lecture hall, even though the service lets students engage in back-channel discussions. The questions submitted via Twitter for the professor and guest speakers are projected for all the students to see.
Livemocha (29 languages, 160 hours of lessons, over 2 million users, FREE!)

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 Perpetuities
10. Teachers, Teachers
11. The Rise of the Super Blends
12. Self-Determined Humans
13. Free Learning Zones
14. Authentic Learning Ambiguations
15. Alexandrian Aristocrats

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!