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

Curtis J. Bonk, Professor, Indiana University
President, CourseShare, LLC
cjbonk@indiana.edu
http://php.indiana.edu/~cjbonk

Do you know the shape of the world?

Is the World Flat?

Is the World Curved?

The World Is Flat
Thomas L. Friedman

The World Is Flat Broke
Thomas L. Friedman

Is it spikey?

Or is it Open?

David M. Smick

The World Is CURVED
HIDDEN DANGERS TO THE GLOBAL ECONOMY

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

Response: No, it is a learning tool!

Answer: The Web of Learning

The Web of Learning

Today we have the Web 2.0

We are entering a jumping off point...
I'm an Armchair Indiana Jones...

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, Minoru Saito, age 75, oldest solo sailor)

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."

Charles Wedemeyer,
University of Wisconsin

Some Educational and Psychological Heroes:
John Dewey, Seymour Papert, John Seely
Brown, Ivan Illich, Stephen Heppell, Henry
Jenkins

Our New Heroes are not
Theoretical or Psychological
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 (e.g., YouTube)
- Electronic Collaboration and Interaction (async 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)

Audience Participation!

1. WE
2. ALL
3. LEARN!!!
Week after holidays, e-book sales outdo print, USA Today, January 5, 2011, Bob Minzelsheimer and Carol Memmott

Pocket Dictionaries and Digital Textbook Projects (Korea), July 6, 2011:

Inkling opens textbooks on the iPad
USA Today, Jefferson Graham, August 3, 2011

Opener #2. E-Learning and Blended Learning

Who is demanding fully online and blended learning?

Those Preparing for Exams and Needing Remediation
NBC Special, March 11, 2011
Those in hurricanes!

Those in earthquakes!

Those where there are diseases and outbreaks...

Those effected by volcanos...

Those in blizzards and ice storms...
February 4, 2011
New Enrollment History Chart: Florida Virtual School (Julie Young, President & CEO)

February 21-24, 2011
Graphic Facilitation, E-Learning and Distance Learning (ELI) Conference in Riyadh (Sir Tim Berners-Lee and Jimmy Wales)

April 12, 2011
NCTM Conference Session, Free Online Degrees; iSMART: Integration of Science, Mathematics, and Reflective Teaching (iSMART), University of Houston

Departments Stay Afloat with new Online Ventures
(e.g., http://iuconnected.iu.edu/, April 2011)

Training Courses: Reaching the Workforce
Opener #3. Availability of Open Source and Free Software (e.g., Linux, Apache, Moodle, Sakai)

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

Moodle (41+ million users (1,060,000 registered) in 211 countries, 54,000 sites, 4.4+ million courses, April 27, 2011)

August 2, 2011
Sample OpenCourseWare Projects (Tufts, Johns Hopkins)

National Repository for Online Courses (NROC) Commons

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

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. MSNBC.com
4. Google Video, Yahoo Video
5. Current TV
6. Fox TV
7. MIT World
8. YouTube, YouTube: Edu
9. TeacherTube
10. Link TV, Explore, Global Pulse, Latin Pulse
11. Howcast, Big Think, WonderHowTo, Explo.TV, NASA TV, ClipChat, TV Lesson, BookTV, Edutopia videos, MonkeySee, dChick, the Research Channel, iVideostory

April 29, 2011 (e.g., YouTube and the Royal Channel)
More Shared Online Video: TED, Academic Earth, TV Lesson, and Fora TV

July 22, 2011
GETideas Channel, Cisco (Education Thought Leader Series uploaded to YouTube)
http://www.youtube.com/user/GETideasFp ie

July 10, 2011
The Virtual Zoarchaeology of the Arctic Project (VZAP) is a virtual, interactive, osteological reference collection for the study of northern vertebrates. VZAP is a dynamic natural history archive which allows students and researchers to examine the complete skeletal anatomies of multiple bird, mammal, and fish species in both 2D and 3D.
(Anthropologist Puts an Idaho Museum’s Many Bones Within Virtual Reach, Peter Norvig, June 13, 2011, Chronical of HE)

February 8, 2011, Chronicle of HE
Google Art Project (new Google project that allows visitors to explore museums around the world and view hundreds of artwork)
http://www.googleartproject.com

The Complete Works of Charles Darwin
(Great Plains, Great Fire, Charles Dickens, Erasmus Darwin, Mary Wollstonecraft Shelley, Robert Browning, John Stuart Mill, Ralph Waldo Emerson, Elizabeth Barrett Browning, and Alfred Tennyson)

Sharing Repositories and Referatories
MERLOT.org: 94,000 members, 38,040 long materials, April, 2011
Connections: 2,2m unique users, 17,500 modules, 6 million page views, 100 million hits, >1m users, 200 countries, Jan, 2011
Carrie: Free K-12 content.
National Repository of Online Course, Jorum, OER Commons, etc.
Opener #6. Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)

Cross-Institutional Wikibook Project (e.g., IU and the University of Houston)

History for Music Lovers
The French Revolution ("Bad Romance" by Lady Gaga)
Trojan Way ("Tainted Love" by Soft Cell)
Charlemagne ("Call Me" by Blondie)

"Video Primers in an Online Repository for e-Teaching and Learning" V-PORTAL, TravelinEdMan (27 free/open YouTube videos), October 2010
http://www.youtube.com/user/TravelinEdMan

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

News for Thursday May 12, 2011
Chronicle of Higher Education
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)

Saltire Centre
(Glasgow Caledonian University;
http://www.gcu.ac.uk/saltirecentrue/)

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

Opener #9. Real-Time Mobility and Portability (e.g., iPhone, low cost wireless devices)
15m people/month India
40,000/week Rwanda
60,000 earthlings/hour

"A" is for App, Anya Kamenetz, Fast Company, April 2010

Dr. Monica Rankin's class, UT Dallas, Cuban Revolution (April/May 2011)
http://www.youtube.com/watch?v=xCDM1kp0DR8

We Are Going Global Mobile!
(Paul Kim, 2010)

Smart phones driving lecture capture growth
eCampus News, July 20, 2011, Dennis Carter
Social Networking Gaming
December 24, 2010: CityVille 16.8 million daily users,
FarmVille's 16.4 million. CityVille: 61.7 million monthly users,
FarmVille: 56.8 million users. Mashable.

"CityVille is Now Bigger than "FarmVille"

iPad Apps for Calculus, Math, Biology, etc.
Chronicle of HE, Ben Wieder, March 13, 2011

At Pepperdine U. Timothy Lucas, an assistant professor of
mathematics, shows a class how to use iPads for calculus.
Linda Johnson, an assistant professor of biology at Chatham U., for her
plant physiology.

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

The Learning World is Open

The Samsung DualView TL225

Zite (Personalized Online News and Magazine on iPad)
http://www.zite.com/ (March 9, 2011, USA Today)

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

Gopi Kottal, a professor of consumer sciences and retailing at Purdue University,
has used Twitter in the lecture hall, even though the service is
to students engage
in text-channel discussions. The questions submitted via Hotseat for the professor and
guest speakers are projected for all the students to see.

July 7, 2011
Facebook says membership has grown to 750
million, USA Today, Jon Swartz


Unique visitors growing, too

Facebook has 184.6 million unique visitors.

750 million users billional Facebook
The Language Learning Explosion
(e.g., Livemocha, ChinesePod, Babbel, Mixter, English Central, Kentalk, etc.)

Predictions
1. Five Billion "Have-Nots" Have at It!
2. Emergence of Lifelong Super E-Mentors/Coaches
3. Quarter-Century Learning Clubs
4. Turboyte 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 Animations
15. Alexandrian Aristotics

Decisions for this Open Ed World?
- Technology & Administrator Decisions:
  - What do to about OER, open sources, E-books, mobile, etc.?
- Instructional Designer & Trainer decisions:
  - Act as Concierge, Counselor, Course facilitator, Credit manager?
- Formal Learner & Informal Lmr decisions:
  - Should I attend traditional university or create your own degree path?
  - How to report use of OER on resumes?

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!

Poll: Is your brain mush?
1. Yes.
2. No.
3. Not sure yet...

Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/

The World is Open. What happens then?
WE
ALL
LEARN!!!