

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?

Is it spiky?

Or is it Open?




Question: What is the Web?

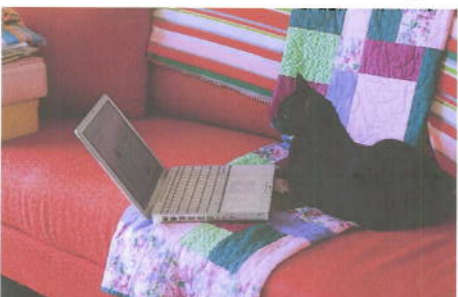
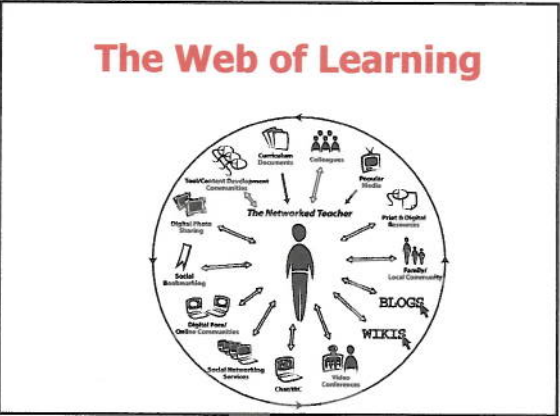
- An entertainment system?
- A writing aid?
- A communications system?
- A means to handle commercial transaction?
- A social networking device?

=====

No, it is a learning tool!




Answer: The Web of Learning

Today we have the Web 2.0

Logos include: LVEJOURNAL, Google, facebook, PBWORKS, Blogger, slideshare, Ning, flickr/wiki, photobucket, and WIKIPEDIA.

We are entering a jumping off point...



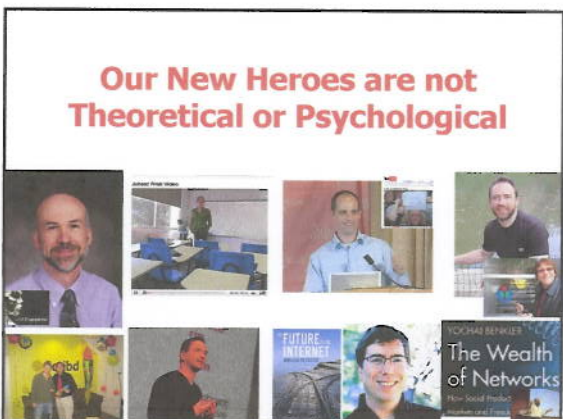
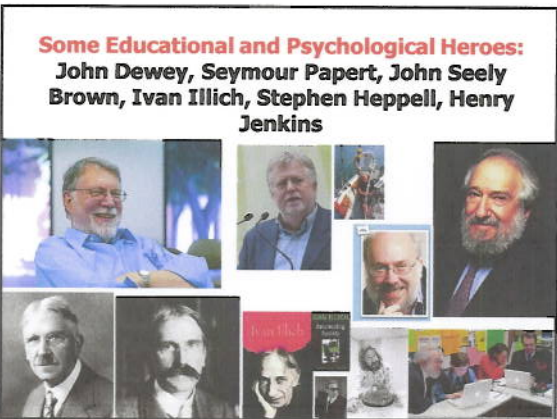
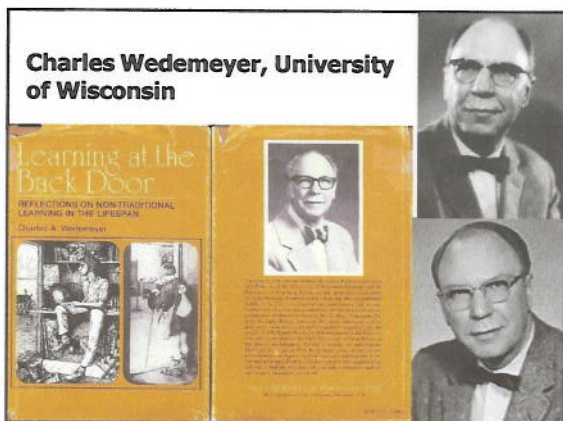
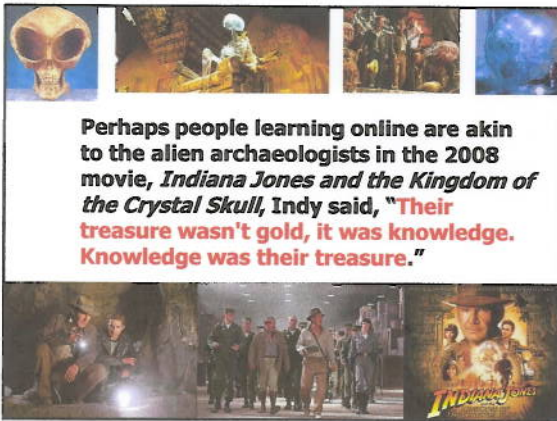
The 'Web 2.0' diagram lists the following fields:

- Identity 2.0
- Library 2.0
- Law 2.0
- Media 2.0
- Advertising 2.0
- Education 2.0

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)



WE-ALL-LEARN:

Ten Forces that Opened the Learning World

- **W**eb Searching in the World of e-Books (i.e., Darwin)
- **E**-Learning and Blended Learning
- **A**vailability of Open Source and Free Software (e.g., Moodle)
- **L**everaged Resources and OpenCourseWare (e.g., MIT)
- **L**earning Object Repositories and Portals (i.e., shared content)
- **L**earner Participation in Open Info Communities (YouTube)
- **E**lectronic Collaboration and Interaction (sync and async)
- **A**lternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- **R**ead-Time Mobility and Portability (e.g., iPhone)
- **N**etworks of Personalized Learning (Blogs, RSS)



Audience Participation!

1. WE


2. ALL

3. LEARN!!!





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!!!

Week after holidays, e-book sales outdo print, USA Today, January 5, 2011, Bob Minzesheimer and Carol Memmott

http://www.usatoday.com/life/books/news/2011-01-05-1Aebooksales05_ST_N.htm




April 10, 2010: Seton Hill University, 2,100 students an iPad and freshmen a 13-inch MacBook laptop.
August 10, 2010, Can college students learn as well on iPads, e-books?, USA Today, Beth Marklein

Opener #2. E-Learning and Blended Learning

The Learning World is Open

E LEARNING

Adora Svitak, age 13, World's Youngest Teacher

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

Those Who Need Remediation
NBC Special, March 11, 2011
<http://www.msnbc.msn.com/id/21134540/vp=42018991�>

Departments Stay Afloat with new Online Ventures

(e.g., <http://iuconnected.iu.edu/>, April 2011)



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

You see the big picture. You find the connections.
Make it official - become iSMART.



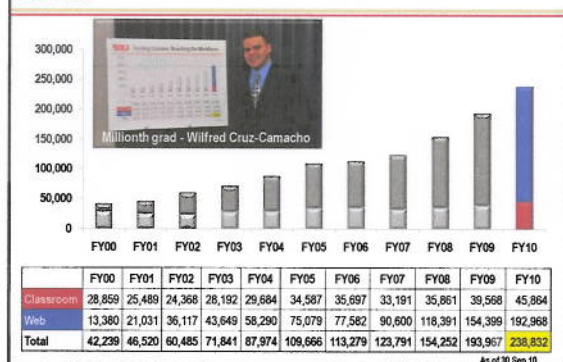
DAU Formal Training Courses (May 2011)

107 Courses

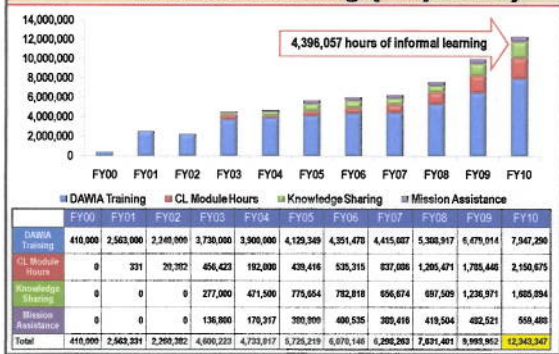
DAWA and Core Plus Courses	24	Level I
	54	Level II
	17	Level III
12 - Executive & Leadership Support		

Functional Area	ACQ	BOF	CON	DOR	FE	GR	IND	IRM	LOG	FM	POM	RQM	SAM	STM	SYS	TST
# of Courses	15	17	23	1	2	1	3	3	11	11	7	3	3	2	4	3

DAU Training Courses: Reaching the Workforce



Results: Growing formal & informal learning (May 2011)



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

The Learning World is Open

INFORMATION TECHNOLOGY
Come, Test Blackboard With Pre-Release, Open Learning

Blackboard
Transforming the way we learn

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

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

Sample OpenCourseWare Projects (Tufts, Johns Hopkins)

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

The Biggest OCW Localization Volunteer Group in the World

National Repository for Online Courses (NROC) Commons

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

A Single Group Helps Trigger an Online-Publishing Explosion

The Public Knowledge Project, a nonprofit group, estimates that the online-publishing software it offers free has given rise to more than 5,000 open-access academic journals around the world. Below is their geographic distribution, by continent, as of last month.

College 2.0: More Professors Could Share Lectures Online. But Should They?, Chronicle of HE, Jeffrey R. Young, March 7, 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, keynotes, etc., Elliott Masie, Learning Trends, March 2, 2010)



**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. Fora TV
7. MIT World
8. YouTube, YouTube Edu
9. TeacherTube
10. Link TV, Explore, Global Pulse, Latin Pulse
11. Howcast, Big Think, WonderHowTo, Explor.TV, NASA TV, ClipChef, TV Lesson, BookTV, Edutopia videos, MonkeySee, doFlick, the Research Channel, iVideosong



More Shared Online Video: TED, Academic Earth, TV Lesson, and Fora TV



**Tracking Live Internet Thawing:
A Colossal of an Idea**



**The Complete Works of Charles Darwin
(Great Plague, 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, 28,040 learning materials, April, 2011
Connexions: 2.2m unique users, 17,500 modules, 4 million page views, 100 million hits, >1m users, 200 countries, Jan, 2011
Curriki: Free K-12 contents.
National Repository of Online Course, Jorum, OER Commons, etc.



SAU Acquisition Knowledge Management System
a collaborative environment sustaining acquisition skills & knowledge

DAP / ACC	FY09	FY10
Registered Users	79,065	100,726
Contact Hours	1,236,971	1,695,894
Knowledge Contributions	65,920	70,733
Page Views	181.6M	280M

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

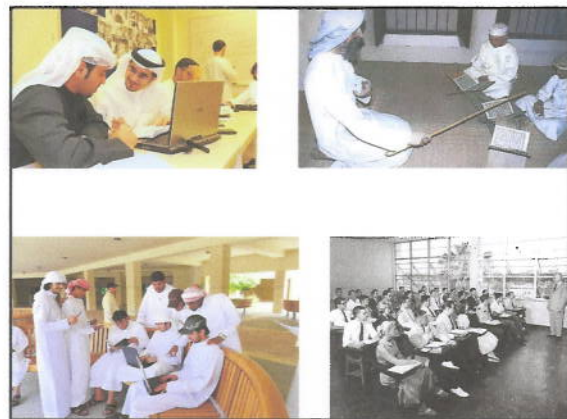
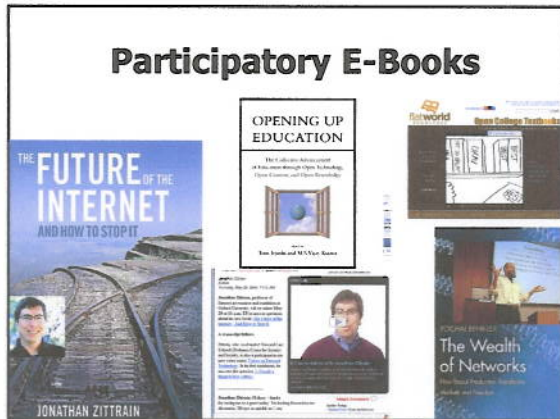
The Learning World is Open

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)

"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



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

The Learning World is Open

Global Collaborations in Virtual Worlds (e.g., Air University in Second Life)

Dr. Monica Rankin's class, UT Dallas, Cuban Revolution (April/May 2011)

<http://www.youtube.com/watch?v=ocQMfikPo98>

Massive Multiplayer Online Games (MMOGs)

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


The Learning World is Open

15m people/month India
40,000/week Rwanda
60,000 earthlings/hour

We Are Going Global Mobile!

(Paul Kim, 2010)

iPads Could Hinder Teaching, Professors Say, Chronicle of HE, Ben Wieder, March 13, 2011
http://chronicle.com/article/iPads-for-College-Classroom-/1266817466-at&utm_source=at&utm_medium=em



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

Force is with new GPS units


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)



The Samsung DualView TL225

The Learning World is Open

SAU Continuous Learning (May 2011)



Module Type	Count
Business	15
Contracting	61
Engineering & Technology	40
Gov't Purchase Card	4
International	5
Logistics	28
Acquisition Management & Program Management	33
Requirements	2
Standard Procurement System	49
Harvard Business Modules	7
Total	242

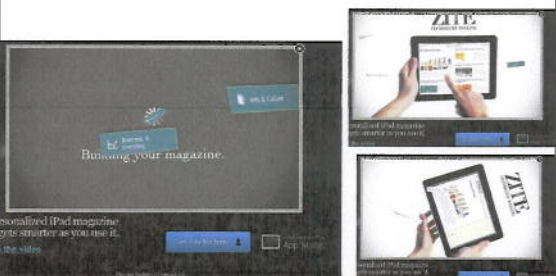
624,854 FY10 Graduates
 26% increase over FY09 (494,568)

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.



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



Personalized iPad magazine: get smarter as you use it.

Teaching With Twitter

Chronicle of HE, Jeffrey Young, November 22, 2009
 Sugato Chakravarty, 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 **Hotseat** for the professor and guest speakers are projected for all the students to see.

The Language Learning Explosion

(e.g., Livemocha, ChinesePod, Babbel, Mixer, English Central, Kantalk, etc.)

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 Amalgamations
15. Alexandrian Aristotles

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?
- **Student 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!

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

The World is Open.
 What happens then?

WE
ALL
LEARN!!!