

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

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Is the World Flat?

NATIONAL BESTSELLER
The World Is Flat
 A BRIEF HISTORY OF THE TWENTY-FIRST CENTURY
 Thomas L. Friedman

NATIONAL BESTSELLER
The World Is Flat Broke
 A BRIEF HISTORY OF THE TWENTY-FIRST CENTURY
 Thomas L. Friedman

THE WORLD IS FLAT

Or is it Open?

The MIT Press

OPENING UP EDUCATION
 The Collective Advancement of Education Through Open Technology, Open Content, and Open Knowledge
 Edited by Jane B. Bonk and M. S. Vignati

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UCLA Summer Digs Program

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

UCLA Archaeology Blog

Special feature of the blog: access to dig site

David Thomas, Archeologist, La Trobe University, Australia (Discovery News)

Discovery News

Archeologist Finds New Archaeological Sites by Digging

July 26, 2006 - David Thomas, an archaeologist at La Trobe University, has discovered a new archaeological site in Australia. The site is a large stone structure, possibly a temple or a palace, and is located in a remote area of the country. Thomas says the site is one of the most important archaeological discoveries in Australia in many years.

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; August 21, 2010: 14 year-old Dutch girl)

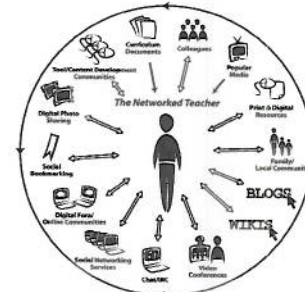
Dutch teen sets sail on solo world trip

Sunderland, 16, reportedly in trouble

Let's rename the Web: The Web of Learning



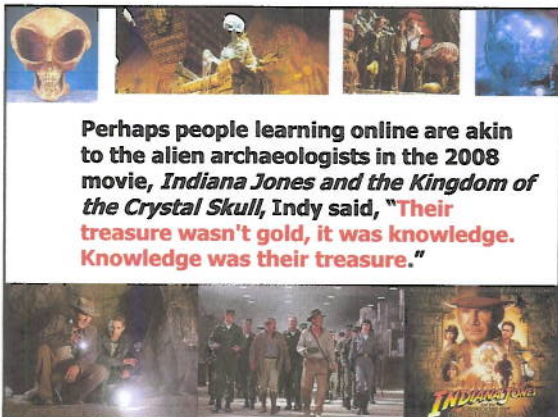
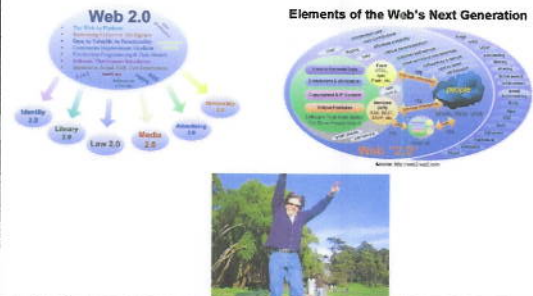
The Web of Learning



Today we have the Web 2.0



We are entering a jumping off point...



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

- **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"

- Pipes:** The availability of tools and infrastructure for learning.
- Pages:** The availability of free educational content and resources (OER—Open Educational Resources).
- 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

Whether a surge in e-book sales can be sustained and what effect it could have on traditional bookstores remains to be seen.

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




July 23, 2010
India unveils \$35 computer for students,
CNN World, Harmeet Shah Singh
http://www.cnn.com/2010/TECH/07/23/india.35.dollar.laptop/index.html?hpt=hp_tech-skin
<http://www.cnn.com/video/#/video/india/2010/07/23/india.35.dollar.laptop>

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>

Salmon Khan (Khan Academy) (videos on math, bio, trig, chemistry, money and banking, economics, statistics, etc.; <http://www.khanacademy.org/>)

A Grain of Rice: A Bloomington man's computer vocab game feeding the world (John Breen)

Adora Svitak, age 13, World's Youngest Teacher

**Florida Virtual School (71,000+ students);
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.coe.uh.edu/mycoe/CIUN/math/iSMART%20fyer4.pdf>
<http://www.coe.uh.edu/mycoe/CIUN/math/iSMART.cfm>

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

**Jen Chauvot and
Mimi Lee, Univ
of Houston**

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

**Moodle (35+ million users (930,000
registered) in 213 countries, nearly 50,000 sites,
3.5+ million courses, June 27, 2010)**

Country	Registrations
United States	2,940
Spain	4,262
Brazil	3,177
United Kingdom	3,170
Germany	2,927
Portugal	2,804
Mexico	2,756
Australia	1,901
Colombia	1,642
Italy	1,176

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

Charles Wedemeyer, University of Wisconsin

The image shows a book cover titled "Learning at the Back Door: Reflections on Non-Traditional Learning in the Lifespan" by Charles J. Wedemeyer. To the right of the book cover are two black and white portraits of Charles Wedemeyer, one above the other.

Open Educational Resources (OER) Post Courses in YouTube and iTunes (e.g., Berkeley)

A collage of screenshots from the University of California, Berkeley's Open Educational Resources (OER) platform. It includes a YouTube channel page for Berkeley, several video thumbnails, and an iTunes U page showing course listings.

Sample OpenCourseWare Projects (Tufts, Johns Hopkins)

Two screenshots of OpenCourseWare (OCW) websites. The left one is for Tufts University, showing a course page for "IDP200 Pathophysiology of Infectious Diseases, Fall 2004/2005" with a large image of a green insect. The right one is for Johns Hopkins University, showing a course page for "JHSPH 631 COURSEWARE: Global Health: The Making of Public Health".

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

The OOPS (Opensource Opencourseware Prototype System) logo and website. The logo features the acronym "OOPS" in a stylized font with the Chinese characters "開放式課程計劃" below it. The website screenshots show course listings and a photo of a group of people.

Peer2Peer University and University of the People (free!)

Neeru Paharia is behind Peer2Peer University, Fast Company, September 2009, How Web-Savvy Edupunks Are Transforming American Higher Education

Sawell Entrepreneur Plans a Free Global University That Will Be Online Only

A collection of articles and photos. On the left is a photo of Neeru Paharia. In the center is a screenshot of a "Technology Review" article from Fast Company. On the right is a screenshot of an article from Entrepreneur magazine about a free global university.

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.

A world map showing the geographic distribution of open-access journals by continent. The map is color-coded: North America (blue), South America (green), Europe (yellow), Africa (orange), Asia (red), and Australia (purple). To the right is a screenshot of a journal page from the Public Knowledge Project.

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, Exple.TV, NASA TV, ClipChef, TV Lesson, BookTV, Edutopia videos, MonkeySee, doFlick, the Research Channel, iVideosong



How TED Connects the Idea-Hungry Elite, Fast Company, Anya Kamenetz, September 1, 2010
<http://www.fastcompany.com/magazine/148/how-ted-became-the-new-harvard.html>

The screenshot shows a webpage from Fast Company with the title "How TED Connects the Idea-Hungry Elite". It features several images of TED speakers, including Chris Anderson, and a quote: "Chris Anderson: The entrepreneur bought TED in 2001. 'It felt like something you could devote your life to,' he says".

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

The image shows two screenshots of online video portals. On the left is "THE ROYAL CHANNEL" featuring a video titled "Kylie Minogue collects her OBE at Buckingham". On the right is a YouTube page showing a video titled "The Queen visits Google London".

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

The image shows screenshots of academic video portals. The top part shows a video from "FORA.tv" titled "Transforming the Systems: An Interview with Michelle Rhee". Below it are screenshots of "TV Lesson" and other educational content.

Tracking Live Internet Thawing:
A Colossal of an Idea

A collage of six images showing the process of thawing fossils. It includes a person holding a large fossil, a group of people in a lab, a close-up of a fossil being examined, and several small, round fossil specimens.

Ida (a transitional species)
47-Million-Year-Old *Darwinius Masillae* Fossil
the Missing Link? (wowOwow, May 20, 2009)

The image shows a collage of website screenshots related to the fossil "Ida". It includes a "horizons blog" post, a "Man's World" article, and various images of the fossil and related scientific content.

The Complete Works of Charles Darwin

Charles Darwin
The Complete Works of Charles Darwin Online
(Publications: Miscellaneous, Lectures, Journals)

Contributors
and
Acknowledgements

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Dr. Robert STONE

The Carlyle Letters Exploring Victorian World Through Letters and The Diary of Samuel Pepys

(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)

Earthducation, Aaron Doering and Charlie Miller, The University of Minnesota

<http://lt.umn.edu/earthducation1/>

THE LAST OCEAN, The Last Ocean Project

<http://www.lastocean.com/> and
<http://lastocean-project.org/>

Cassandra Brooks

Sharing Repositories and Referatories

MERLOT.org: 90,000 members, 26,400 learning materials, Jan, 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.

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

The Learning World is Open

John Dewey, Seymour Papert, John Seely Brown, Ivan Illich, Stephen Heppell, Henry Jenkins

Clay Shirky, NYU: How cognitive surplus will change the world, TED, June 2010
http://www.ted.com/talks/clay_shirky_how_cognitive_surplus_will_change_the_world.html

TED Ideas worth spreading

TALKS
 Clay Shirky: How cognitive surplus will change the world

COGNITIVE SURPLUS
 EVERYTHING WE DON'T DO CONNECTS US

CLAY SHIRKY

HERE COMES EVERYBODY

May 24, 2010
Author Nicholas Carr, The Web Shatters Focus, Rewires Brains, Wired
http://www.wired.com/magazine/2010/05/ff_nicholas_carr/

Wired MAGAZINE

Author Nicholas Carr: The Web Shatters Focus, Rewires Brains

Atlantic Google MAGAZINE **Stoopid?**

WHAT THE INTERNET IS GOING TO DO TO OUR BRAINS

THE SHALLOWS

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

Participatory E-Books

THE FUTURE OF THE INTERNET AND HOW TO STOP IT
 JONATHAN ZITTRAIN

fitworld **Open Culture**

THE WEALTH OF NETWORKS
 How Social Production Revolutionizes Markets and Society

Scribd: Documents on Web
 (<http://www.scribd.com/>; 50 million unique visitors per month, 10's of millions of documents, April 2010)

Scribd Publish Yourself Online

Upload Documents

Share with the World

Explore Our Library

The Republic

Opener #7. Electronic Collaboration and Interaction (synchronous & asynchronous)

The Learning World is Open

Voices from Israel and Palestine

Collaboration Generation

edutropia: The Collaboration Age

Israel and the West Bank Final Report
March 13 - March 23, 2010

Skype for iPhone adds two-way video calling, CNet Reviews, December 20, 2010

WATCHING VIDEO ONLINE

Google's YouTube dominates online video viewing, here's how competitors compare that month

Top video content streams	Views
Google (YouTube)	94.1 billion
Hulu	707 million
Yahoo	656 million
Vevo	616 million
Viacom	497 million
Microsoft	465 million
AOL	345 million
Bleko	247 million
For Interactive (iQSpace)	200 million
CS2	197 million

* Includes Comedy Central and MTV. Source: ComScore Data Studio, November

Free music video site Vevo eyes iPad, other mobile possibilities

Synchronous Conferencing Presentations

Flat Classrooms Project and Global Nomads Group

About Us

International School Online Class Photo

Meet all of us in this photo. It is Heidi and Frances with her on her laptop at meeting at to visit towards our forthcoming holiday. To find us out at doing this

Workshop Schools Class Photo

Our class is in a photo. We are excited for the school Christmas tree. It is the You can see our photos. If you see us on this project

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

October 21, 2009

The Next Generation of Videoconferencing

Footage courtesy of USC Institute for Creative Technologies

Researchers at the University of Southern California and the University of North Carolina are creating new tools that may soon let people attend videoconferencing

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

The Learning World is Open

CIVILIZATION

Second Life

(business, law, education, English, medicine)

Social Networking Gaming (e.g., Farmville)

For social networks, it's game on, USA Today, Jon Swartz, Thursday October 15, 2009

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

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)

Mark Zuckerberg, Time Meg Person of the Year, Dec 15, 2010



Language Learning Online (Livemocha and ChinesePod, SpanishPod, EnglishPod, 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?
- Students 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!!!