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

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Is the World Flat?

Or is it Open?

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

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

Michael Perham & Zac Sunderland,
Summer 2009 (such age 17, youngest person to sail solo around the world and blog on it, use Skype, YouTube, take videos, post pictures, Minori Bally, age 78, oldest solo sailor; August 23, 2010: 14-year-old Dutch girl)
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...

Elements of the Web's Next Generation

WEB 2.0

PBWORKS
e Blogger

WE-ALL-LEARN:
Ten Forces that Opened the Learning World

- Web Searching in the World of e-Books (e.g., 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 (e.g., Facebook and asyncc)
- Alternate Reality Learning (e.g., Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- Real-Time Mobility and Portability (e.g., iPhone)
- Networks of Personalized Learning (e.g., Blogs, RSS)

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."
**Audience Participation!**

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

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**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.

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

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

**WE**

**ALL**

**LEARN!!!**

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


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

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**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**

[Image of USA Today article](image-url)
July 23, 2010
India unveils $35 computer for students,
CNN World, Harmeet Shah Singh

Opener #2. E-Learning and Blended Learning

Letter from Bill Gates about online learning (January, 2010)
https://www.gatesfoundation.org/Blog/4061/Project-education-learning-online.aspx

Salman 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.es.ua.edu/~gallard/131/131tf4/131tf4yr4.htm

You see the big picture. You find the connections. Make it official: become ISMART.

Jen Chauvet 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)

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

Open Yale
Charles Wedemeyer, University of Wisconsin

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

Peer2Peer University and University of the People (free!)

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. CNi.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, ExploTV, NASA TV, ClipChef, TV Lesson, BookTV, Edutopia videos, MonkeySee, doFlick, the Research Channel, iVideosing

How TED Connects the Idea-Hungry Elite, Fast Company, Anya Kamenetz, September 1, 2010
https://www.fastcompany.com/1557576/anyaka/player/fastco_idea精英s_ideas兩個
Chris Anderson: The entrepreneur bought TED in 2001. "It felt like something you could devote your life to," he says.

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

Ida (a transitional species)
47-Million-Year-Old Darwinius Masillae Fossil the Missing Link? (wowowow, May 20, 2009)
The Complete Works of Charles Darwin

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

Eartheducation, Aaron Doering and Charlie Miller, The University of Minnesota
http://lt.umn.edu/eartheducation/

THE LAST OCEAN, The Last Ocean Project
http://www.lastocean.com/ and http://lastocean-project.org/
Cassandra Brooks

Sharing Repositories and Referatories
MERLOT.org: 80,000 members, 15,300 free materials, Jan, 2011
Connexions: 2.2m unique users, 17,500 modules, 4 million page views, 100 million hits, >1m users, 200 countries, Jan, 2011
Corrib: 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)
Opener #7. Electronic Collaboration and Interaction (synchronous & asynchronous)

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

Synchronous Conferencing Presentations

Flat Classrooms Project and Global Nomads Group

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)

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

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

June 9, 2010

TwitterPeek:
Restricted to Twitter.

WikiReader:
Updating can be a pain.
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.