

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

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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



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, now Abby Sunderland age 16, Minoru Saito, age 75, oldest solo sailor)



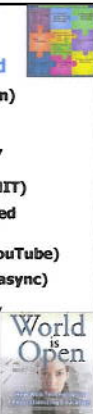
David Thomas, Archeologist, La Trobe University, Australia (Discovery News)



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)



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.)

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

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.

Free Online Books
(Terry Anderson and Fathi Elloumi, eds. *Theory and Practice of Online Learning*; Canada: Athabasca University. 2004),
http://cde.athabascau.ca/online_book/, 55,000 downloads in first year)

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>

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/CUIN/math/iSMART%20flyer4.pdf>
<http://www.coe.uh.edu/mycoe/CUIN/math/iSMART.cfm>

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

TOTAL AND ONLINE ENROLLMENT IN DEGREE-GRANTING POSTSECONDARY INSTITUTIONS - FALL 2002 THROUGH FALL 2008

	Total Enrollment	Annual Growth Rate Total Enrollment	Students Taking at Least One Online Course	Annual Growth Rate Online Enrollment	Online Enrollment as a Percent of Total Enrollment
Fall 2002	16,611,710	NA	1,602,970	NA	9.6%
Fall 2003	16,911,481	1.8%	1,971,397	23.0%	11.7%
Fall 2004	17,272,043	2.1%	2,329,783	18.2%	13.5%
Fall 2005	17,487,481	1.2%	3,180,050	36.5%	18.2%
Fall 2006	17,758,872	1.6%	3,488,381	9.7%	19.6%
Fall 2007	17,975,830	1.2%	3,938,111	12.9%	21.9%
Fall 2008	18,199,920	1.2%	4,606,353	16.9%	25.3%

UIS Online & Blended Enrollment

Learning on Demand: Online Education in the United States, 2009

http://www.sloan-c.org/learning_on_demand_sr2010

IMPACT OF THE ECONOMIC DOWNTURN ON THE DEMAND FOR COURSES AND PROGRAMS - FALL 2009

What does the research say?

U.S. DEPARTMENT OF EDUCATION

Evaluation of Evidence-Based Practices in Online Learning
 A Meta-Analysis and Review of Online Learning Studies

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

The Learning World is Open

Moodle (32+ million registered users in 208 countries, 3+ million courses, 2/6/2010)

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

The Learning World is Open

MIT OPEN COURSEWARE
Massachusetts Institute of Technology

Open Yale

Exc. Traditional Textbooks

We Remix Open Textbooks!

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

Berkeley
UNIVERSITY OF CALIFORNIA

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

OOPS
Opensource OpenCourseware Prototype System
The Foundation of Fantasy Culture and Arts

開放式課程計劃

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

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

Technology Review

Israeli starts 1st tuition-free online university

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

The Learning World is Open

SPARKNOTES

40 MILLION

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

Transforming the System: An Interview with Michelle Rhee

FORA.TV

FORA.TV

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

The image shows a collage of scientific content related to the fossil of *Darwinius Masillae*. It includes a main title, a sub-header, and several smaller images and text snippets. One prominent image shows a fossil of a small insect, likely a fly, with the text "THE LEVEL DISCOVERING NEW FAMILIES OF ANCESTRAL". Another image shows a close-up of the fossil. The layout is typical of a science blog or news site from that era.

The Royal Society 350th anniversary celebrations puts historic papers online (Captain Cook, Sir Isaac Newton and Benjamin Franklin), BBC, Nov 30, 2009 <http://news.bbc.co.uk/2/hi/science/nature/8381425.stm>

Audio slideshow: 350 years of discovery

The image is a screenshot of a BBC news article. The main headline is "The Royal Society 350th anniversary celebrations puts historic papers online (Captain Cook, Sir Isaac Newton and Benjamin Franklin), BBC, Nov 30, 2009". Below the headline is a sub-headline "Audio slideshow: 350 years of discovery". The article text is partially visible, mentioning "The Royal Society in London, is celebrating its 350th anniversary...". There are several images, including a portrait of a man and a document titled "ACCOMPT Underthings, and Labour OF THE INGENIOUS IN MYANT CONSIDERABLE".

Human Brain Dissected Today in a Live Webcast, Chronicle of Higher Education, December 02, 2009, 01:00 PM ET http://chronicle.com/BlogPost/Human-Brain-Dissected-Today-in/9053/7eId=pmAutm_source=pmAutm_medium=en

The image is a screenshot of an article from "THE CHRONICLE of Higher Education". The headline is "Human Brain Dissected Today in a Live Webcast, Chronicle of Higher Education, December 02, 2009, 01:00 PM ET". Below the headline is a URL. The article text starts with "December 02, 2009, 01:00 PM ET" and "Human Brain Dissected Today in a Live Webcast". There are several images, including a person in a lab coat and a brain dissection. A "Tweed" section is also visible on the left side of the page.

Sharing Repositories and Referatories MERLOT.org: 78,472 members, 21,690 Inrg materials, Jan 3, 2010 Connexions: Dec 2009, 1.6m unique users, 4 million page views, 72 million hits, More than 1m users, 200 countries National Repository of Online Course, OER Commons

The image is a presentation slide with a white background. The title is "Sharing Repositories and Referatories". Below the title are three lines of text: "MERLOT.org: 78,472 members, 21,690 Inrg materials, Jan 3, 2010", "Connexions: Dec 2009, 1.6m unique users, 4 million page views, 72 million hits, More than 1m users, 200 countries", and "National Repository of Online Course, OER Commons". There are several small images, including a screenshot of the MERLOT.org website and a photo of a man speaking at a podium.

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

The image is a presentation slide with a white background. The title is "Opener #6. Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)". There are several images, including a person in a red jacket, a person in a blue shirt, and the "flatworld KNOWLEDGE" logo. A small box on the right says "The Learning World is Open".

Wikis: Wikipedia and Wikibooks

The image is a presentation slide with a white background. The title is "Wikis: Wikipedia and Wikibooks". Below the title is a globe with the word "WIKIPEDIA" above it. The globe is surrounded by various language names and their corresponding Wikipedia/Wikibooks links. There are also two photos of men, one in a blue shirt and one in a red shirt.

**Conference to Conference
(You Ustreamed my Ustream: Now that's
a Twitter of an Idea)**



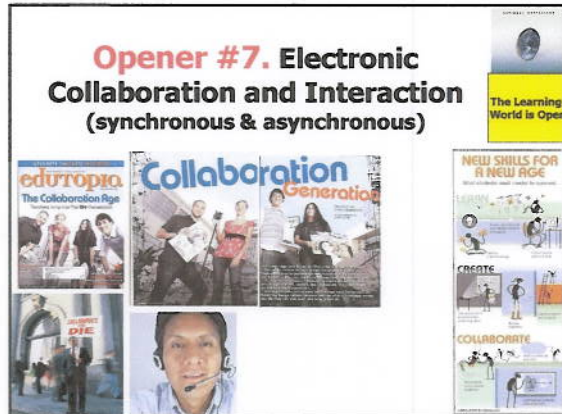
**Shared Online Video
(e.g., YouTube and the Royal Channel)**



**Scribd: Documents on Web
<http://www.scribd.com/>; 21 million unique
visitors per month, May 2008**



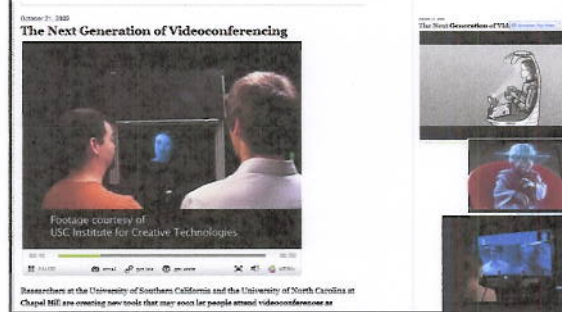
**Opener #7. Electronic
Collaboration and Interaction
(synchronous & asynchronous)**



**Synchronous Conferencing
Presentations**



**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)

The Learning World is Open

Second Life
(business, law, education, English, medicine)

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

The Learning World is Open

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 sky rocketed to 15.4M
 Globally: 60,000 new mobile subscriptions every hour!!!




(per Paul Kim, Stanford, 2009); Nokia Research Lab
http://news.yahoo.com/s/afp/20090308/bs_afp/Indiaeconomytelecom

Terabyte thumb Drives and Magic Pens!
(The Pulse from Livescribe, \$129-\$169)

Mobile Learning
(April 21, 2009, USA Today)

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

The Learning World is Open






September 30, 2009
the Samsung DualView TL225

Podcast Shows (subscribe to ShakespeareCast.com)




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 Hotsafe 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!)

"A powerful opportunity for people around the world to connect with language partners"

The New York Times


Social Language Learning - Online!

Language Learning on Livemocha

Livemocha Challenge

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



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

The World is Open.
What happens then?

WE ALL LEARN!!!

