Learning World Is Open: How Web Technology is Revolutionizing Education
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The Ten Forces that Flattened the World
Triple Convergence: (1) new economic players, (2) playing fields, and (3) processes.
1. 11/9/89: Berlin Wall came down
2. 8/9/95: Netscape went public
3. Work Flow Software (e.g., PayPal and eBay)
4. Open-Sourcing (Self organ collab communities: Mozilla, Apache, Wikipedia, Linux, Mozilla)
5. Outsourcing (Y2K)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply-Chaining (e.g., Walmart)
8. Insourcing (UPS firing Toshiba laptops)
9. Ex-farming (e.g., Google, Yahoo!, MSN Web Search)
10. The Steroids: Digital, Mobile, Personal, and Virtual (wireless, file sharing, VoIP, video cameras in phone)

Oregon Scientific Smartglobe 2008
UCLA blogs to offer front-row seat at archeology digs
By Meg Sullivan, 6/25/2008
THURSDAY, JUNE 11, 2009
Another Sleepless Night

Position: 06/11/09 17192 15 20.858N 97 04.512W

I managed to get everything sorted out in Hantalo and was out of the marina by about 1:00 in the afternoon. I weaved my way out of the tricky entrance by following my old track on the chart plotter. When I got out of the harbor I got slammed by 15 knots on the nose once again keeping me from where I wanted to go.

I tacked out to sea and picked out some way points to route me around the maze of sea mounts about 8 miles offshore. After a couple of hours of sailing alone, my radar started to pick up a huge patch of squalls about 10 miles off of my bow. I went into the cockpit to take a look and the whole horizon was blackened by the approaching squalls and the lightning was lighting up the sky.
Audience Participation!

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

Triple Learning Technology
Convergence of "WE-ALL-LEARN"

2. Pages: The availability of free educational content and resources (OER—Open Educational Resources).
3. Participatory Learning Culture: A move toward 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!!!

E-books: 4 choices (Paperback,
Kindle, iPhone, or iPod listening)

Digital Textbook in Korea
dictionary, email and forums, games, simulations,
hyperlinks, multimedia, authoring, data search,
study aids, evaluation, etc. (112 schools as of 2009;
free for all schools by 2013)
http://www.dtbook.kr/eng/index.jsp
California works to become the first state to offer free, open digital textbooks for use in math and science. Thu, May 21, 2009, eSchool News

Global Text Project (free textbooks for those in less developed countries) 
http://globaltext.org/

Read, Listen, etc. to online books (e.g., "An International Episode" by Henry James)

Free Online Books 
(Terry Anderson and Fatih Elibolwi, eds. Theory and Practice of Online Learning, Canada: Athabasca University, 2004), 
http://ode.athabascau.ca/online_book/, 55,000 downloads in first year

Opener #2. E-Learning and Blended Learning 
2 Million People Sign up for Part I of Oprah's Course on Spirituality (Skype 500,000 simultaneous video streams, March 2008)
Trend #2. E-Learning and Blended Learning. What happens then?

WE ALL LEARN!!!

Learning in the 21st Century: 2009 Trends Update (K-12/Project Tomorrow)
http://www.blackboard.com/resources/k12/09_trendsupdate.pdf

Growth of Online Learning in Secondary Schools
(Florida Virtual School; AP American History)

Capella Tower
225 South Sixth Street, Minneapolis
Formerly, the "Halo"
Trend #3. Availability of Open Source and Free Software. What happens then?

WE

ALL

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

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

OpenCourseWare (OCW)
Cute Kitten or Transformation? (per George Siemens)

Wendy Ermold, University of Washington, scientific programmer and field technician for the Polar Science Center since 1998; with Mike Steele in the study of Arctic Circulation, and the mechanisms controlling it.

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

The Beyond NUTS Localization Volunter Group In The World
Sample OpenCourseWare Projects
(Tufts, Johns Hopkins, ITT)

National Repository for Online Courses
(NROC) Commons

Cape Town Open Education Declaration, Dec 2007
http://www.capetowndeclaration.org/;
Wendy Ernold, is a scientific programmer and field technician for the Polar Science Center

University of the People (free!)

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

Tracking Live Internet Thawing:
A Colossal of an Idea

Deep-Sea Behemoth
Captain John Bennett examines the world's first intact adult male colossal squid on board his New Zealand fishing boat in February, 2007, in the Ross Sea near Antarctica. The gigantic sea creature weighs a world record 1,689 pounds. After being frozen whole for over a year, scientists at New Zealand's national museum will thaw the squid for further study.
Ida (a transitional species)
47-Million-Year-Old Darwinius Masillae Fossil the Missing Link? (wowOwow, May 20, 2009)

Japanese fishermen brace for giant jellyfish
7/18/2009, CNN Radio, By Shelby Lin Brown
Tiny T. rex, CNN.com, September 17, 2009

USA Today, July 21, 2009
Tech Confab With a Conscience Global
Bill Gates speaks at this year's TED conference

What if the World was Beyond our World?
NASA's Hubble Space Google Sky)
USA Today, August 22, 2007
http://earth.google.com/sky/index.html

The Complete Works of Charles Darwin and Shakespeare

Online Referenceware
Online Reading Programs
(See free-Reading.net)

Reflection on Online Contents: The Carlyle Letters Exploring Victorian World Through Letters and The Diary of Samuel Pepys, John Evelyn (Great Yarmouth, Great Fries) Charles Dickens, Erasmus Darwin (grandfather of Charles Darwin), Mary Wollstonecraft Shelley, Robert Browning, John Stuart Mill, Ralph Waldo Emerson, Elizabeth Barrett Browning, and Alfred Tennyson

Referatory: MERLOT.org
(67,000 members, 21,000 learning materials, 2/10/2009)

Connections Growth, January 2009
>8,000 modules (3-5 pages)
>425 collections (books and courses)
multiple languages
engineering, computer science,
nanotech, physics, statistics, math,
history, music, bio-diversity, botany,
bio-info, IP, BRIT, UNESCO, UN, Sigma Xi ...
from authors worldwide

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

Conference to Conference (You Ustreamed my Ustream: Now that's a Twitter of an Idea)
Flora TV
http://flora.tv/2009/07/All%20Transformation%20the%20System%20An%20intervi
w%20with%20Michelle%20Pheo

Posting Documents on Web

LibraryThing: The World’s Largest Online Book Club (you can be a "thingamabriari")
500,000 users and 35 million books on member bookshelves

Opener #7. Electronic Collaboration and Interaction
(synchronous & asynchronous)
Flat Classroom Projects!!! (combine blogs, videoconferencing, chat, async discussion, etc.)

Iran after the June Election

Voxopop (audio threaded conversations)
http://www.voxopop.com/

TutorVista has 600 tutors in India and 10,000 subscribers in the United States, including Kenneth Tham in Arcadia, Calif.

EPals has for-profit and nonprofit arms.
Candace Pauchnick, standing, uses its tools in her class.
By STEVE LOHM
Published: February 24, 2008
New York Times
What if your children could interact with explorers in Antarctica?

Room to Read and 1kg
http://www.roomtoread.org/programs/schools.html
http://www.1kg.org

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)

Terabyte thumb Drives and Magic Pens!
(The Pulse from Livescribe)
Second, we need new ways to record info:
Smartpens: "Never Miss a Word"
### Mobile Learning

**April 21, 2009, USA Today**

#### Got that Virtual Glow?

**USA Today, August 3, 2009**

Olivia Barker


- Americans browsed the Web an average of 4.6 hours a month from their smartphones, an 89% increase from 2007.
- Megan Renz, typically sends around 700 texts a day...

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<table>
<thead>
<tr>
<th>How would you prefer to use your mobile device for schoolwork?</th>
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<tbody>
<tr>
<td>Email, IM, or messaging</td>
</tr>
<tr>
<td>Textbooks and notes</td>
</tr>
<tr>
<td>Access to school files</td>
</tr>
<tr>
<td>Chatting with friends</td>
</tr>
<tr>
<td>Music, games, or videos</td>
</tr>
<tr>
<td>Web browsing</td>
</tr>
<tr>
<td>Maps or directions</td>
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<tr>
<td>Social networking sites</td>
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<tr>
<td>News articles or blogs</td>
</tr>
<tr>
<td>Online shopping</td>
</tr>
</tbody>
</table>

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**USA Today, September 8, 2009**

Littlest patients find distraction, comfort in live feeds from zoos

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**60 Second Recap**
[http://www.60secondrecap.com/](http://www.60secondrecap.com/)

Actress to students: Lead me your earbuds!
English major, 24, rambunctiously recap the classics in 60-second Web videos; by Greg Toppo; USA TODAY

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**Mobile Learning in India with Paul Kim**
[http://www.sanford.edu/about/sanford牢记使命/index.html](http://www.sanford.edu/about/sanford牢记使命/index.html)
Video Blogs and Mobile Digital Portfolios

Wireless in Africa and Pocket School in Latin America (Paul Kim, 2008)
http://www.receiver.vodafone.com/mobile-learning-in-developing-countries

Africa is Going Mobile!
40,000 new mobile subscribers a week in Rwanda; Rwanda Newtimes report, January 2009
Africa is the continent with the fastest growth, where penetration has soared from just one in 50 people at the turn of the century to 28% . International Telecommunications Union (ITU), March 2009
India: In 2008, 7M new mobile subscribers a month. In January, 2009, the number sky rocketed to 15.4M (Growth was driven by people in the poorest region)
Globally: 60,000 new mobile subscriptions every hour!!!
(per Paul Kim, Stanford, 2009); Nokia Research Lab

Create a Social Networking Group
(MySpace, Facebook, LinkedIn)

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

Learning Towns are Popping up!
Podcast Shows TWiT
(This Week in Tech)
http://live.twit.tv/

Predictions
1. Five Billion "Have-Not" 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 Articulates

Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/
The World is Open.
What happens then?

WE ALL LEARN!!!