No Stopping This Train: 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; Mosiac, Apache, Wikipedia, Linux, Mozilla)
5. Outsourcing (Y2K)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply-Chaining (e.g., Walmart)
8. Insourcing (UPS fixing Toshiba laptops)
9. In-forming (e.g., Google, Yahoo!, MSN Web Search)
10. The Steroids: Digital, Mobile, Personal, and Virtual (wireless, file sharing, VoIP, video camera in phone)

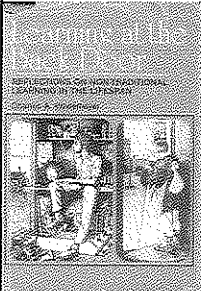## Oregon Scientific Smartglobe 2008

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)

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

Slide 1

Charles Wedemeyer
Learning at the Back Door (1981)
Nontraditional Learning

Slide 2

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**eal-Time Mobility and Portability (e.g., iPhone)
- **N**etworks of Personalized Learning (Blogs, RSS)

Slide 3

Audience Participation!

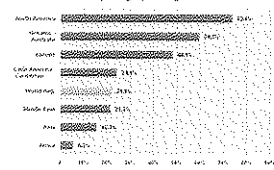**1. WE**

2. ALL

3. LEARN!!!

Slide 4

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.**

Slide 5

World Internet Penetration Rates by Geographic Regions

World Internet Users by World Regions

Slide 6

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!!!

This Could Be the Year of e-Textbooks
Many titles are available, but students are wary.
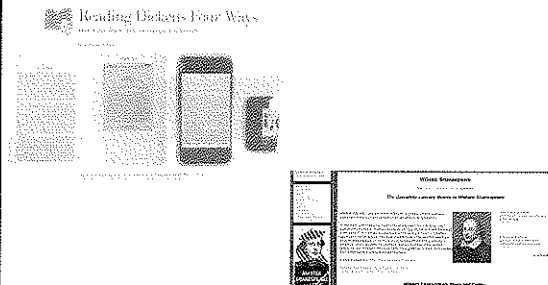Jeffrey Young, September 7, 2009

Sign of the times: At the San Diego State U. bookstore, a poster exhorts students to "Buy This Textbook as an eTextbook."

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

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
The Learning World is Open

Capella Tower
225 South Sixth Street, Minneapolis
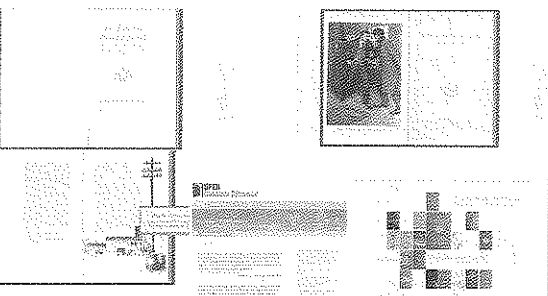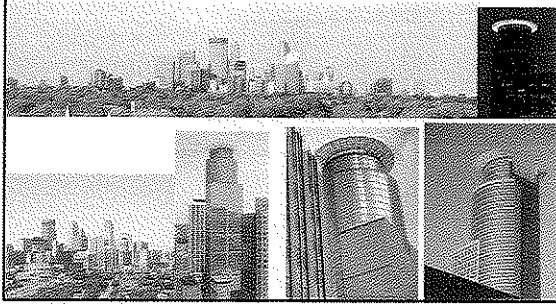**Formerly, the "Halo"**

Indiana University High School
(4,000 students and 1,400 enrolled in diploma programs)
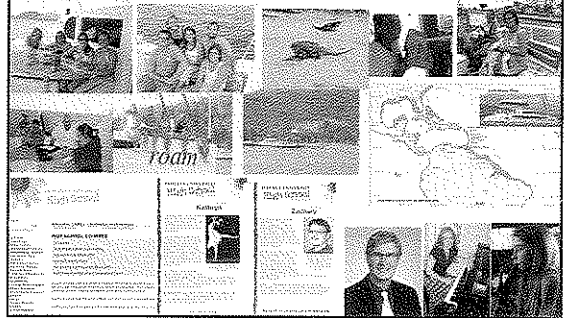
Adora Svitak, age 11, World's Youngest Teacher
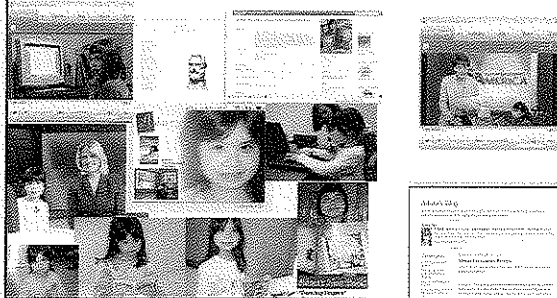
Total and Online Enrollment in Postsecondary Institutions
Fall 2002 through Fall 2006

Open Teaching
(Tom Reeves Evaluation Course at Georgia; David Wiley's Web 2.0 courses at BYU; Connectivism from George Siemens and Stephen Downes, 24 enrolled, 2,000+ sitting in)

A Grain of Rice: A Bloomington man's computer vocab game feeding the world
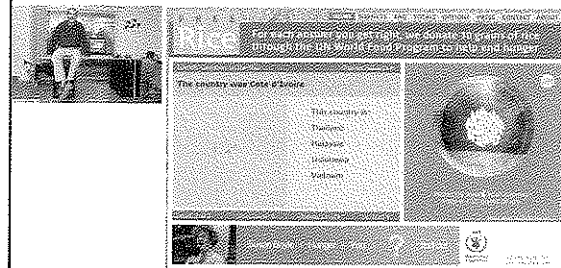
Opener #3. Availability of Open Source and Free Software (e.g., Linux, Apache, Moodle, Sakai)

Moodle (620,000 registered users in 204 countries speaking 78 languages, 2/10/2009)

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?

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

Sample OpenCourseWare Projects
(Tufts, Johns Hopkins)
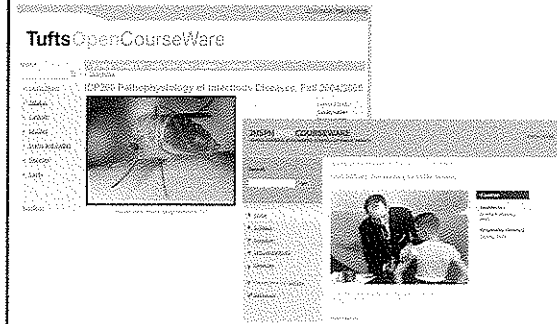
Indian Institutes of Technology (IIT)
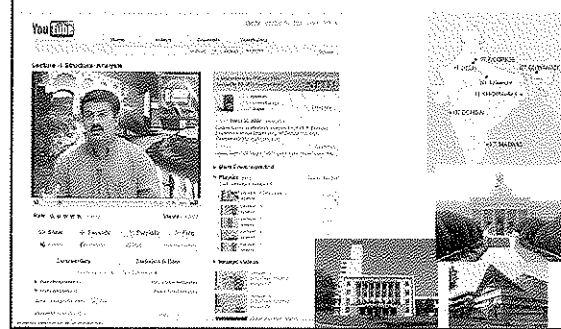
National Repository for Online Courses (NROC) Commons
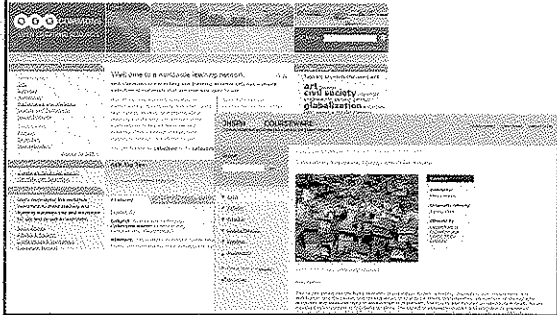
Cape Town Open Education Declaration, Dec 2007
http://www.capetowndeclaration.org/
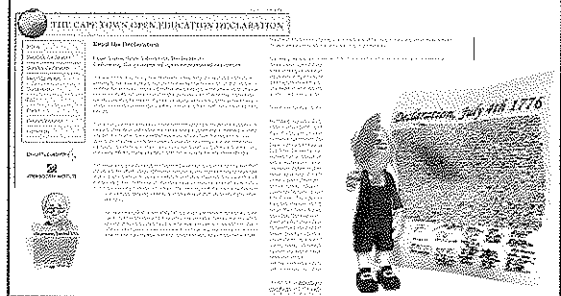
Peer2Peer University and University of the People (free!)

Neeru Paharia is behind Peer2Peer University, Fast Company, September 2009, How Web-Savvy Edupunks Are Transforming American Higher Education
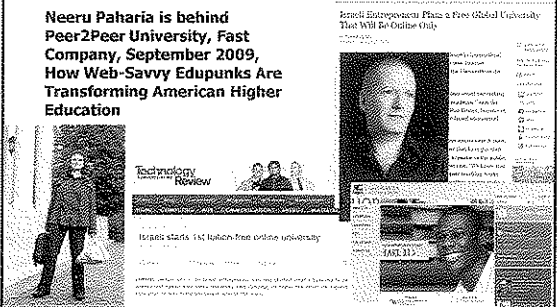
Opener #5. Online Learning Object Repositories and Portals (shared content)

The Learning World is Open
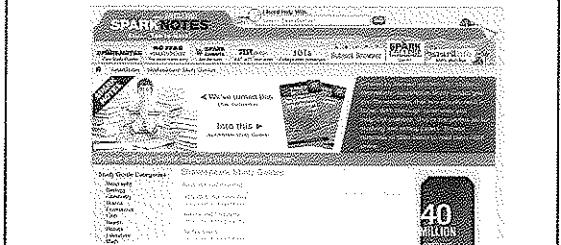
Tracking Live Internet Thawing:
A Colossal of an Idea

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 Plague, Great Fire, Charles Dickens, Erasmus Darwin, Mary
Wollstonecraft Shelley, Robert Browning, John Stuart Mill, Ralph Waldo
Emerson, Elizabeth Barrett Browning, and Alfred Tennyson)

Academic Earth
http://academicearth.org/

Thousands of video lectures from the world's top scholars.

Link TV and Fora TV

Referatory: MERLOT.org
(74,500 members, 21,300 learning materials, October 6, 2009)

Connexions 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*

Usage October 2008
45 million hits
2m page views
1m unique users
from 200 countries

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

The Learning World is Open

flatworld
KNOWLEDGE

Wikis: Wikipedia and Wikibooks

WIKIPEDIA

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)

THE ROYAL CHANNEL

The Queen visits Google London

Kylie Minogue collects her OBE at Buckingham

Individual Produced Videos
(e.g., African School Dream in Current TV)
http://current.com/items/77146082_african_school_dream

TV Lesson (How-to lessons from experts:
1,000's of instructional videos and articles;
http://www.tvlesson.com/)

Participatory E-Books

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

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

Iran after the June Election
http://www.cnn.com/video/#/video/world/2
009/06/17/amanpour.uk.covering.iran.cnn

Synchronous Conferencing Presentations
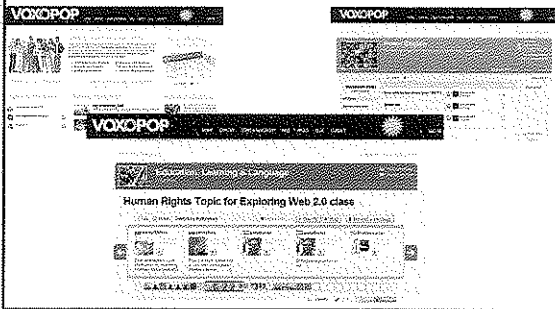

The Next Generation of Videoconferencing
Chronicle of HE, October 21, 2009
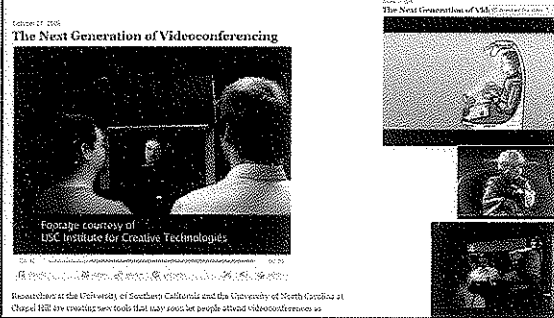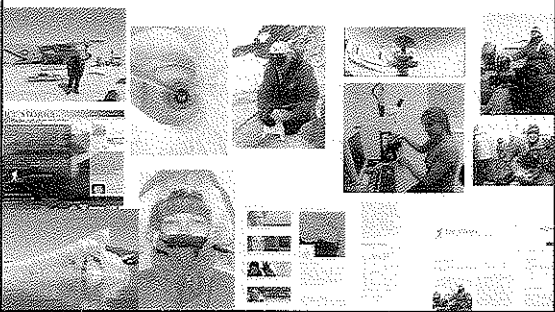

Voxopop (audio threaded conversations)
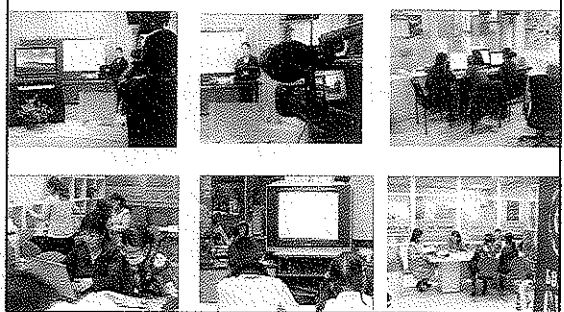### http://www.voxopop.com/

Adventure Learning, GeoThentic, GoNorth (National Geographic)
(Aaron Doering, Univ of Minnesota)

Ice Stories Project from Antarctica

Mongolia teachers addressing H1N1
(Otgo Okhidoi, Nov 10, 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)

University of Texas: 50 Islands, Nov 2009
http://archive.treet.tv/metanomics-campus-life

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
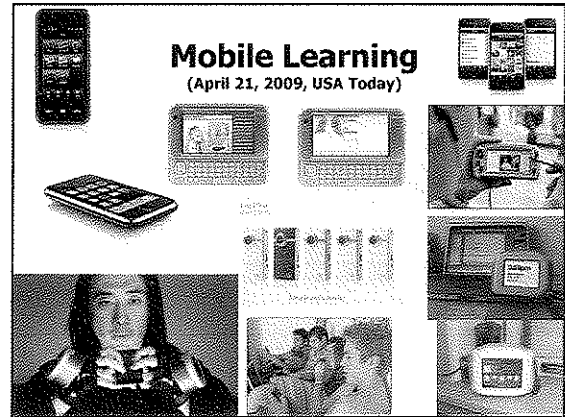http://news.yahoo.com/s/afp/20090308/bs_afp/indiaeconomytelecom

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

TwitterPeek, WikiReader not worth the loot, USA Today, Edward Baig, November 5,2009

TwitterPeek:
Restricted to Twitter.

WikiReader:
Updating can be a pain.
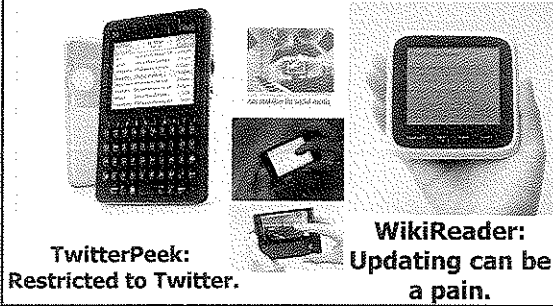
Mobile Learning
(April 21, 2009, USA Today)

Mobile Learning in India with Paul Kim
http://www.stanford.edu/~phkim/curt/India.pdf
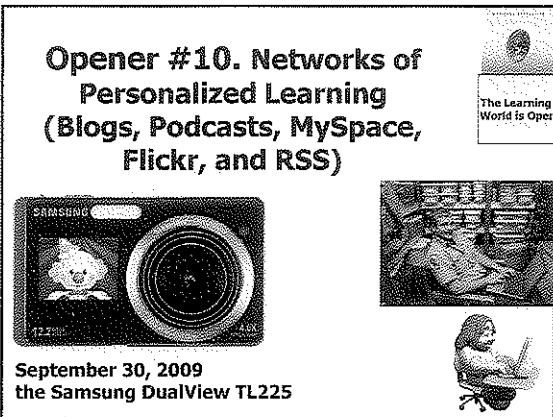
'One Laptop Per Child' program collides with reality
GEOFFREY YORK, Toronto Globe and Mail, Oct 15, 2009
Bhutan, Khendum Gyabak (University of Texas at El Paso)

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

The Learning World is Open

September 30, 2009
the Samsung DualView TL225

Facebook: The New Classroom Commons?, Chronicle of HE, Harriet L. Schwartz, Sept. 28, 2009
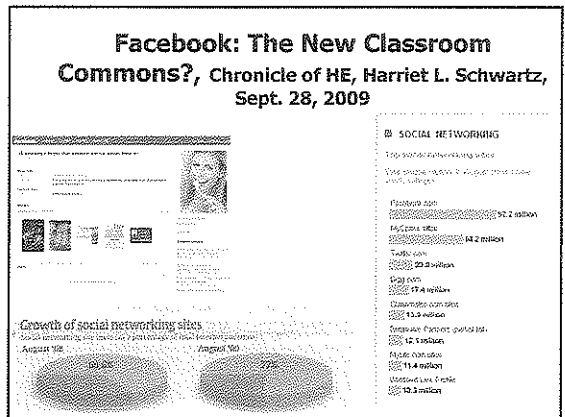
Podcast Shows
(subscribe to ShakespeareCast.com)

Learning Towns are Popping up!

Livemocha (29 languages, 160 hours of lessons, over 2 million users, FREE!)

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!!!

kentucky learning depot

kentucky learning depot

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kentucky learning depot