

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

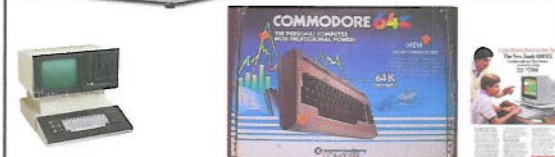
Curtis J. Bonk, Professor, Indiana University
 President, CourseShare, LLC
 cjbonk@indiana.edu
<http://php.indiana.edu/~cjbonk>



Technology of the 1980s



Radio Shack TRS-80 Model III
 Introduced: July 1 1980
 Price: US \$699 base model
 US \$2495 w/ 32K, dual drives
 CPU: Z80 2.86, 2.03 MHz
 RAM: 4K, 8K, 16K
 Ports: Cassette tape, expansion, serial
 Display: 12-inch B&W monitor, 64 K x 16 text
 Storage: 0, 1, or 2 internal 1.78K floppy drives
 External cassette @ 500 1.500 baud
 OS: BASIC in ROM, TRS-DOS on disk



21 Things That Became Obsolete This Decade

December 11, 2009, Silicon Alley Insider



15 Gadgets that Changed Everything This Decade

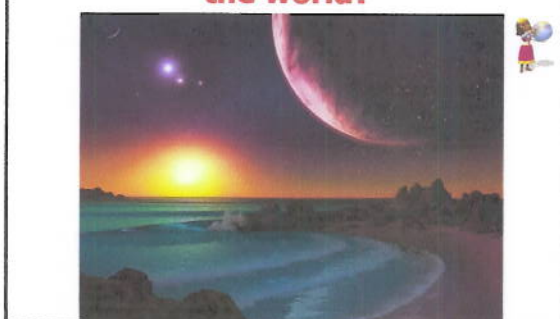
December 9, 2009, Jay Yarow, Silicon Alley Insider



Where are we headed?



Do you know the shape of the world?



Is the World Flat?

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

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

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; Mosaic, 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)

Is the World Curved?

THE WORLD IS CURVED
HIDDEN DANGERS TO THE GLOBAL ECONOMY
The Mortgage Crisis Was Only the Beginning...
DAVID M. SMICK

Is it spiky?

WHO'S YOUR CITY?
RICHARD FLORIDA

Or is it Open?

Opening Up Education
The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge
Edited by Tony Bates and M.S. Vijay Kumar
Foreword by John Seely Brown

OPENING UP EDUCATION
The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge
Edited by Tony Bates and M.S. Vijay Kumar
Foreword by John Seely Brown

Mercedes-Benz SLS AMG TV (June 17, 2010)

http://www.youtube.com/watch?v=E6t_LXpcLY



Traveled across the street to the Venetian...

Oregon Scientific Smartglobe

College technology 'catching up' with students. By Kathleen Gray and Robin Erb, USA TODAY, October 6, 2009

Vannevar Bush, the memex

SOME NOTABLE MOMENTS IN RECORDED LIFE

- 1930s: The memex camera makes photography available to the masses.
- 1945: President Franklin D. Roosevelt signs recording copyright legislation that sets the standard.
- 1945: Vannevar Bush, a pioneer in rocket research, predicts a form of artificial intelligence called "memex" that will soon put every man's mind at the disposal of "himself."
- 1945: President John F. Kennedy and Lyndon B. Johnson signed recording and playback legislation that is probably what you're looking at now.

Charles Wedemeyer, University of Wisconsin

Learning at the Back Door
REFLECTIONS ON NON-TRADITIONAL LEARNING IN THE LIFESPAN
Charles A. Wedemeyer

August 9, 2010, Bill Gates Predicts Technology Will Make 'Place-Based' Colleges Less Important in 5 Years

By Jeff Young, Chronicle of HE

<http://chronicle.com/Story/Full-Text/2010-08-09/Bill-Gates-Predicts-Technology-Will-Make-Place-Based-Colleges-Less-Important-in-5-Years>


Wired Campus

August 9, 2010

Bill Gates Predicts Technology Will Make 'Place-Based' Colleges Less Important in 5 Years

Bill Gates predicts that technology will make "place-based" colleges less important in 5 years. He says that the future of education is online and that colleges should focus on providing a high-quality education that is not tied to a specific location.

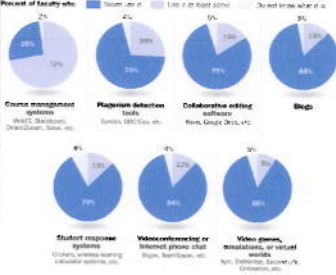
Bill Gates on in-person vs. online edu...



July 25, 2010, Professors' Use of Technology in Teaching, Jeffrey Young, Chronicle of Higher Education

Percent of faculty who:

- Never use it
- Use it at least 50%
- Do not know what it is



Course management systems
Blackboard, Canvas, FutureLearn, Moodle, etc.

Plagiarism detection tools
Turnitin, iParagon, etc.

Collaborative editing software
Peer Review, etc.

Blogs

Student response systems
Clicker, etc.

Videoconferencing or Internet phone chat
Zoom, etc.

Video games, simulations, or virtual worlds
Second Step, etc.

August 2, 2010 Time spent on Facebook, Twitter, YouTube grows, USA Today, Jon Swartz.

http://www.usatoday.com/tech/news/2010-08-02-networking02_ST_N.htm

Time spent on Facebook, Twitter, YouTube grows

Social-network scope expands

Time spent online
Yearly change in share of U.S. Internet time for most heavily used sectors:

Social networks/blogs	43.0%
Games	10.0%
E-mail	-38.0%
Portals	-19.0%
Instant messaging	-15.0%
Videos/movies	12.0%
Search	1.0%
Software info	-0.0%
Music category	-7.0%
Classifieds/auctions	-2.0%


Source: Nielsen, June 2010

Question: What is the Web?


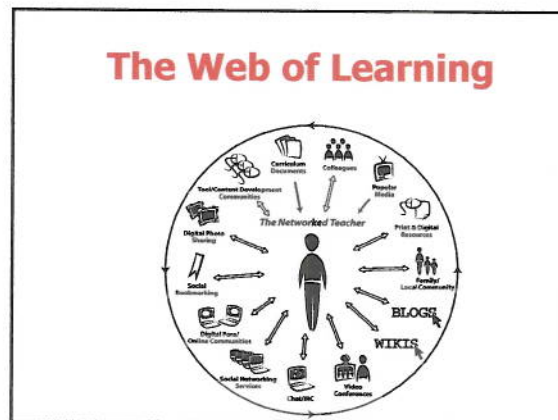
- An entertainment system?
- A writing aid?
- A communications system?
- A means to handle commercial transaction?
- A social networking device?

=====

No, it is a learning tool!



Answer: The Web of Learning

The Explosion of the Web 2.0

Periodic Table of the Internet

This slide illustrates the 'explosion' of Web 2.0 through a 'Periodic Table of the Internet'. The table is filled with logos of various online services, categorized into groups like 'Social', 'Video', and 'Search'. To the right, there is a dense grid of many more logos. At the bottom left, there are small cartoon illustrations of a green alien and a boy with a bucket.

Today we have the Web 2.0

This slide shows a collection of logos for popular Web 2.0 services. The 'WEB 2.0' text is formed by a mosaic of small images. Logos include LiveJournal, Google, Facebook, Ning, Blogger, Slideshare, and Photobucket.

We are entering a jumping off point...

Web 2.0

Elements of the Web's Next Generation

This slide features a central diagram with 'Web 2.0' at the top, branching into four categories: 'Social 2.0', 'Library 2.0', 'Law 2.0', and 'Media 2.0'. To the right is a circular diagram titled 'Elements of the Web's Next Generation' showing various web services. The background includes a photo of a person in a blue shirt and a small cartoon character.

UCLA Summer Digs Program

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

This slide is a collage of images related to an archaeological dig. It includes a photo of a skeleton, a person working at a site, a building, and a person smiling. The text at the top reads 'UCLA Summer Digs Program' and 'Dig in, archaeology fans! UCLA blogs to offer front-row seat at archaeology digs, 6/25/2008'.

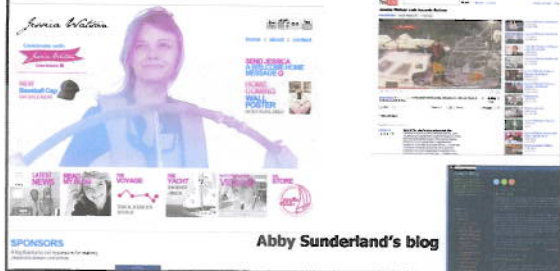
David Thomas, Archeologist, La Trobe University, Australia (Discovery News)

This slide shows a screenshot of a Discovery News article. The headline reads 'David Thomas, Archeologist, La Trobe University, Australia (Discovery News)'. The article text is partially visible, mentioning 'Archaeologists have discovered...' and 'The dig...'.

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)

This slide is a collage of photos showing people sailing and using technology. It includes photos of a person sailing, a person using a laptop, and a person using a camera. The text at the top reads '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)'.

May 2010, Jessica Watson became the youngest person ever to sail solo, non-stop and unassisted around the world.
<http://www.jessicawatson.com.au>



Abby Sunderland, 16, reportedly in trouble. ESPN, June 10, 2010
<http://sports.espn.go.com/oly/news/story?id=5272149>



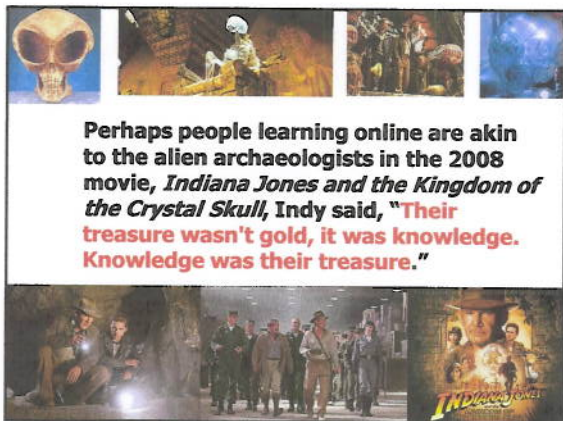
Fox Sports News, August 21, 2010,
 14-year-old Dutch female sailor

<http://www.foxsports.com/other/story/dutch-teen-sails-solo-around-world-11-38002>

Dutch teen sets sail on solo world trip



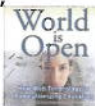
Associated Press
 PORTSMOUTH, N.H. (AP) — A 14-year-old Dutch sailor departed to venture from Gibraltar to Seattle, on her quest to become the youngest person to sail solo around the world — avoiding the usual teenage sea monster.



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**real-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.



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

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

August 9, 2010, Jaron Lanier (USC and Microsoft researcher), The First Church of Robotics. NY Times.
August 29, 2010, Jaron Lanier, The End of Human Specialness. Chronicle of Higher Education

Audience Participation!

1. WE

2. ALL

3. LEARN!!!

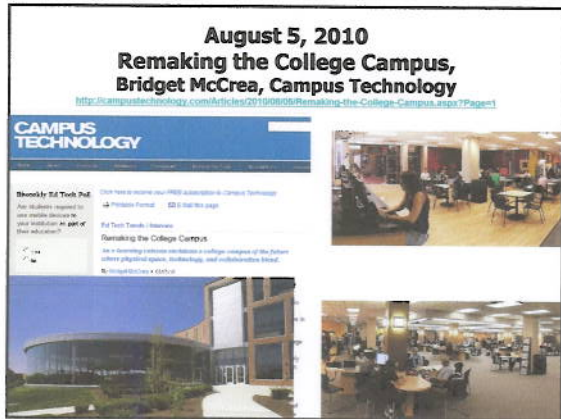
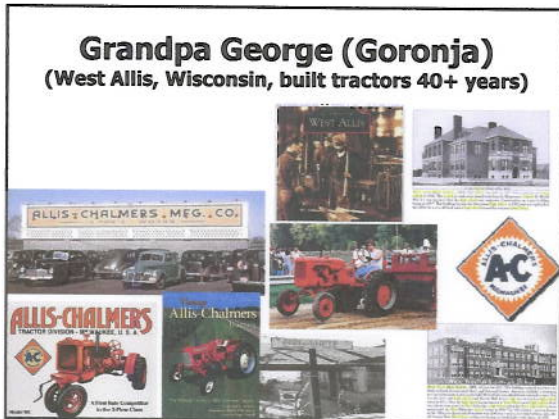
Opener #1. Web Searching (e.g., Google, MSN, Yahoo!) in the World of e-Books (i.e., Darwin, Shakespeare, etc.)

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

WE

ALL

LEARN!!!





Yonsei University, Seoul, Korea



Yonsei University, Seoul, Korea



Yonsei University, Seoul, Korea



Yonsei University, Seoul, Korea



Yonsei University, Seoul, Korea



Sydney Centre for Innovation in Learning

<http://www.scil.nsw.edu.au/>

Saltire Centre (Glasgow Caledonian University; <http://www.gcu.ac.uk/thesaltirecentre/>)

Tim Berners-Lee, MIT

Christopher Null, PC World
Updated: 10/10/2007 10:07 AM EDT

[View on Facebook](#)
[View on Twitter](#)
[View on LinkedIn](#)

Important People #44 through #52

#44 Sir Tim Berners-Lee
 Director, World Wide Web Consortium (W3C)

What do you do after you invent the World Wide Web and give it away for free? Start a consortium that works on making it better. The British scientist designed the first Web browser, editor, and language protocol (HTML) which evolved as a standard at CERN, the European Organization for Nuclear Research, and he founded the W3C in 1994. He has received numerous awards in honor of the invention. And like the old franchise for E.F. Hutton, what Berners-Lee sells, people listen.

19. Jerry Yang, David Filo, and Terry Semel
 Executives, Yahoo

The 50 Most Important People on the Web

1. Eric Schmidt, Larry Page, and Sergey Brin
 Executives, Google

When your stock price can top \$500 a share, you're collectively worth \$13 billion in cash, and you run the most trafficked search engine on the Internet, you can afford to do, well, pretty much whatever you want. Sergey Brin and Larry Page's little project from Stanford has grown into the Web's most talked-about powerhouse, and one of the few names on this list to have morphed into a verb. Schmidt left Hawaii to join the board of directors at Google in 2001 and soon became the company's CEO. Having conquered the online advertising world, Google seems to be gearing up for an acquisition spree, its headline-grabbing purchase of YouTube making a big step toward complete domination of the Web.

Brewster Kahle, the Internet Archive

Aaron Swartz, Open Library

At age 14, he was a co-author of the RSS 1.0 specification.

Marissa Mayer leads the company's product management efforts on search products – web search, Images, news, books, products, maps, Google Earth, Google Toolbar, Google Desktop, Google Health, Google Labs and more. She joined Google in 1999 as Google's first female engineer and led the user interface and web server teams at that time. Her efforts have included designing and developing Google's search interface, internationalizing the site to more than 100 languages, defining Google News, Gmail, and Orkut, and launching more than 100 features and products on Google.com

TERMINATING TEXTBOOKS

California Governor Arnold Schwarzenegger Speaks

RECOVERY

Cory Doctorow

Free Online Books and now the Blio
(a free e-book platform to run on any device;
Bright Spots: **Canada, Korea, and California**)

Doctorow

eSCHOOL NEWS

California considers open digital textbooks

July 29, 2010
Amazon unveils 3rd-generation Kindle e-book reader, USA Today, Edward C. Baig

Amazon unveils 3rd-generation Kindle e-book reader

amazon

Steve Jobs, Apple

Old companies teach new tricks

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

USA TODAY, June 7, 2010
Does iPad have the magic to bring people together?

July 23, 2010
India unveils \$35 computer for students, CNN World, Harmeet Shah Singh
http://www.cnn.com/2010/07/23/india.computer.students/index.html?hpt=hp_1#hpt=hp_1
http://www.cnn.com/2010/07/23/india.computer.students/index.html?hpt=hp_1#hpt=hp_1

India unveils \$35 computer for students

Samsung: Galaxy Tab has leg up on Apple iPad, By Stephen Shankland, CNET, September 3, 2010

Samsung: Galaxy Tab has leg up on Apple iPad

Opener #2. E-Learning and Blended Learning

The Learning World is Open

Bill Gates

Bill Gates

Letter from Bill Gates about online learning (January, 2010)
<http://www.gatesfoundation.org/annual-letter/2010/Pages/education-learning-online.aspx>

ALL LIVES HAVE EQUAL VALUE

Annual Letter from Bill Gates: Online Learning

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 12, World's Youngest Teacher

Florida Virtual School, 71,000 unique students

This is half credit completions, which means all included have successfully completed a half credit enrollment (per Julie Young, June 2, 2010)

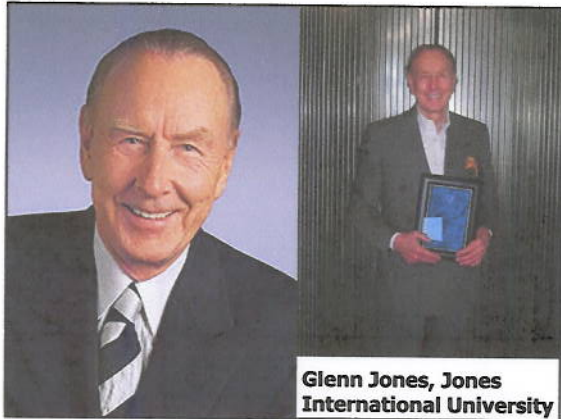
Year	Half Credit Completions
2001-2002	30,050
2003-2004	33,763
2005-2006	24,350
2004-2005	36,479
2005-2006	56,130
2006-2007	94,943
2007-2008	114,805
2008-2009	154,133

North Carolina, The enrollment figures are based on half-credit enrollments, and assumes an average growth of 50% per year (actual has been 79%). (per Dr. Bryan Setser, Executive Director, North Carolina Virtual Public School Learn and Earn Online, July 6, 2010)

NCVPS Predicted Growth

Academic Year	Actual Enrollment	Projected Enrollment at 50% Growth Rate
2004-05	~10,000	~10,000
2005-06	~15,000	~15,000
2006-07	~25,000	~25,000
2007-08	~40,000	~40,000
2008-09	~60,000	~60,000
2009-10	~90,000	~90,000
2010-11	~135,000	~135,000
2011-12	~200,000	~200,000
2012-13	~300,000	~300,000
2013-14	~450,000	~450,000
2014-15	~675,000	~675,000

Indiana University High School (4,000 students and 1,400 enrolled in diploma programs)



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

Mike Offertman, Capella University

U. of California System Proposing Online Ed
Chronicle of HE, May 14, 2010, Josh Keller and Marc Perry
"The university plans to spend about \$250,000 on each course. It hopes to raise the money from external sources like foundations or major donors."

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%20 flyer4.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.

Jen Chauvoit and Mimi Lee, Univ of Houston

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

Year	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%	3,180,950	36.5%	18.2%
Fall 2006	17,258,872	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%	4,666,353	16.9%	25.3%

Open U of Malaysia, March 25, 2010

Year 2001	763
Year 2002	7622
Year 2003	19999
Year 2004	26866
Year 2005	35996
Year 2006	53348
Year 2007	64489
Year 2008	78426
Year 2009	88400
Year 2010	91225

Mexico's Monterrey Tech Pushes E-Learning, as Some Worry It Won't Solve Region's Burgeoning Need
June 16, 2010, Chronicle of Higher Ed, Marion Lloyd

"A decade ago, only one in 50 Mexicans had access to the Internet. Today that figure is one in four, a staggering cultural transformation that is fueling a boom in online degree programs in the country."

Monterrey Institute of Technology and Higher Education...has allowed it to reach more than 35,000 new students

U.S. DEPARTMENT OF EDUCATION

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

Research Institute for Teaching Effectiveness

David Wiley, BYU

Tom Reeves imitating Samson. I'm glad to report the museum did not collapse.

THE CHRON

Half an Hour

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

The Learning World is Open

INFORMATION TECHNOLOGY

Chion from Blackboard Will Put the Dots in Open Learning

Blackboard

Linus Benedict Torvalds

Mitch Kapor
President of the Open Source Applications Foundation

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)

The Learning World is Open

Open Yale

MIT OPEN COURSEWARE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

OOPS

Exc. Traditional Textbooks

We Really Open Textbooks!

Professor Richard Yue, MIT

Design: The Conservation of Angular Momentum

Walter Lewin, MIT

Lucifer Chu from OOPS

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

OOPS 開放式課程計劃

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

Berkeley University of California

Sample OpenCourseWare Projects (Tufts, Johns Hopkins)

Tufts OpenCourseWare

Home > IDP200 Pathophysiology of Infectious Diseases, Fall 2004/2005

Home > IDP200 Pathophysiology of Infectious Diseases, Fall 2004/2005

Home > IDP200 Pathophysiology of Infectious Diseases, Fall 2004/2005

CORE (Chinese Online Resources in Education)

<http://ocw.core.org.cn/CORE/>

CORE OPENCOURSEWARE

Welcome to CORE OpenCourseWare

CORE OpenCourseWare is a free and open educational resource for faculty, students, and educators throughout the world. Please visit our page for more information, and don't forget to check out our new mobile app for your smartphone or tablet.

National Repository for Online Courses (NROC) Commons

NROC Commons

Welcome to a worldwide learning network

NROC Commons is a free and open educational resource for faculty, students, and educators throughout the world. Please visit our page for more information, and don't forget to check out our new mobile app for your smartphone or tablet.

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

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

July 23, 2010 Online Course Construction Gets a 'Do-It-Yourself' Web Site, Sophia Li, Chronicle of HE, Nixty (<http://nixty.com/>)

THE CHRON
of Higher Education

NIXTY
empowering edupunks for everyone

Welcome to Nixty

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

The Learning World is Open

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.

North America (blue), South America (green), Europe (red), Africa (yellow), Asia (orange), Australia (purple)

College 2.0: More Professors Could Share Lectures Online. But Should They?, Chronicle of HE, Jeffrey R. Young, March 7, 2010

"The introduction of video into almost every aspect of our learning and work tasks is profound and "disrupting." As designers, we must experiment with these formats – looking for evidence and appropriate use cases and examples of when not to use video." (Video blogs, Webinars, Webcasts, keynotes, etc., Elliott Masie, Learning Trends, March 2, 2010)



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, Explo.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>

Chris Anderson: The entrepreneur bought TED in 2001. "It felt like something you could devote your life to," he says

Link TV: Global Link of World Educators (GLOWE)

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

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)

This collage features a central image of the 47-million-year-old fossil of *Darwinius Masillae*. Surrounding it are various news snippets and blog posts, including one from 'horizons blog' and another from 'wowOwow' dated May 20, 2009. The images show the fossil in different contexts, such as being held by a scientist and in a museum setting.

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/?id=pm&utm_source=pm&utm_medium=en

The screenshot shows the top of a web page from 'THE CHRONICLE of Higher Education'. The main headline reads 'Human Brain Dissected Today in a Live Webcast'. Below the headline, there is a sub-headline: 'In 1955, Henry Gurton Mohr was agreed to undergo experimental brain surgery in hopes of stopping the epileptic seizures and convulsions that had plagued him since age six. The neurosurgeon William Fisher Stoville, at Hartford Hospital in Connecticut, conducted one hour of Mohr's brain surgery.' The page also features a 'Tweed' section and a 'Life with ATAT' sidebar.

Oceanographer touts deep sea web surfing (e.g., Nautilus Live allows people to not only learn about the expeditions but watch them live and listen to the scientists in the control rooms as discoveries are made, eSchool News, June 2010)

This block contains a collage with the 'NAUTILUS LIVE' website interface on the left, showing a live video feed of a submarine. On the right is a photograph of an oceanographer wearing a cap and a jacket, speaking. The text describes how Nautilus Live allows people to watch deep-sea expeditions live and listen to scientists in control rooms.

Deep-sea images reveal colorful life on ocean's floor, Featured Site of the Week, E-School News Sep 1st, 2010 (50 new plant and animal species found in 3 weeks) <http://e-schoolexplorer.mesa.gov/oknews/web.ome.html>

The collage features several deep-sea images, including a large red shrimp-like creature, a white fish, and various other colorful organisms. A ship is also visible in one of the images. The text describes the discovery of 50 new plant and animal species in three weeks, highlighting the vibrant life on the ocean floor.

The Complete Works of Charles Darwin

The screenshot shows the homepage of 'The Complete Works of Charles Darwin Online'. It features a yellow header with the title and a portrait of Charles Darwin. Below the header, there are sections for 'Contributors and Acknowledgments', 'Contributors', and 'Research Associates'. The website lists various contributors and their affiliations, such as the University of Cambridge and the University of Oxford.

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)

This block contains a collage with the website 'The Carlyle Letters' on the left, which explores the Victorian world through letters and diaries. On the right is a portrait of Samuel Pepys, with a small inset image of a man speaking. The text lists various authors and historical events, including the Great Plague, Great Fire, and the works of Charles Dickens, Erasmus Darwin, and others.

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 world's oldest science academy, The Royal Society in London, is marking its 350th anniversary by making the public have open-access to copies of its most important papers. Digitized manuscripts by figures such as Captain Cook, Sir Isaac Newton and Benjamin Franklin are being made available online. This is a first in the world's scientific history, with the Society based in London. Read More.

Richard Baraniuk, Rice Univ.

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

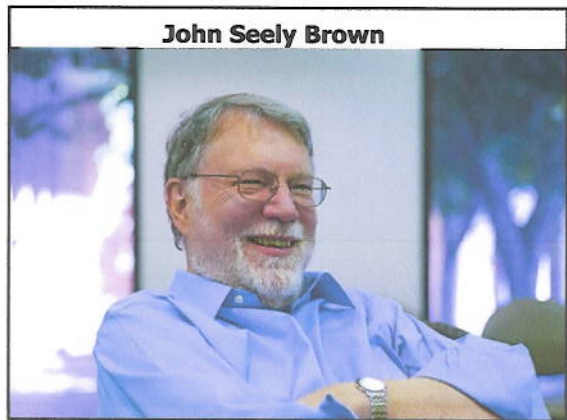
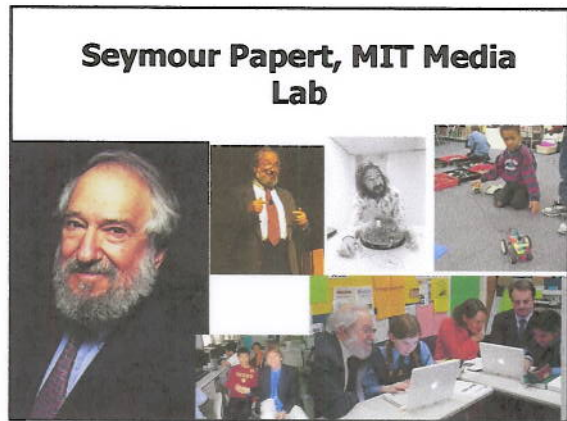
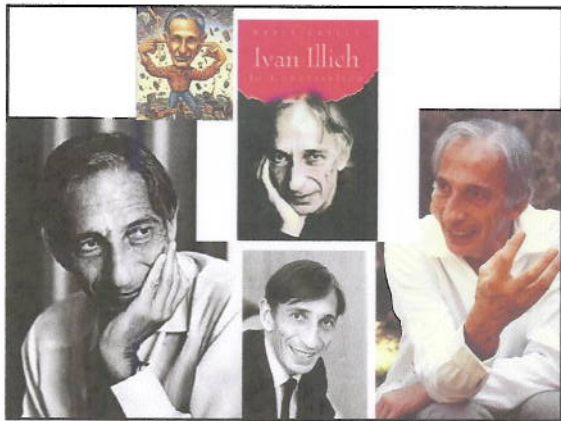
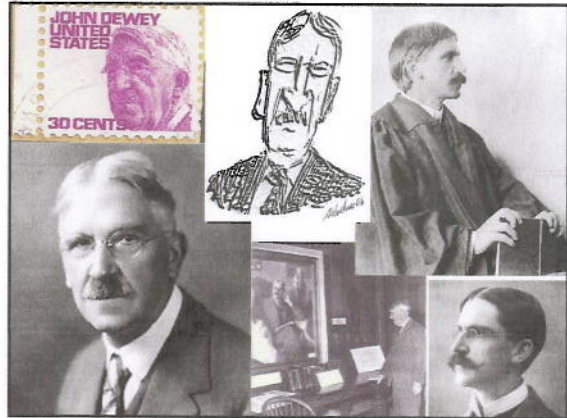
Scott McNealy

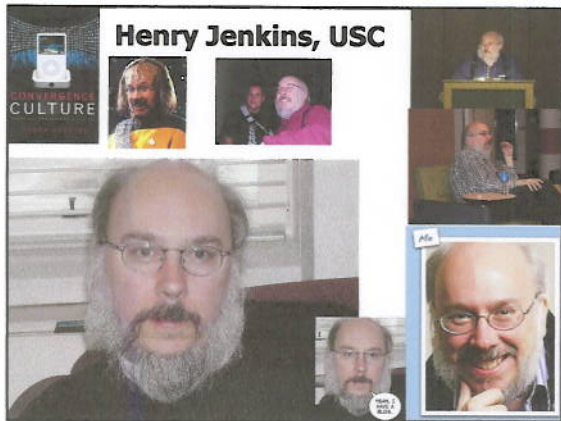
Opener #6. Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)

The Learning World is Open

A bit of me...

this is me...





Henry Jenkins, USC



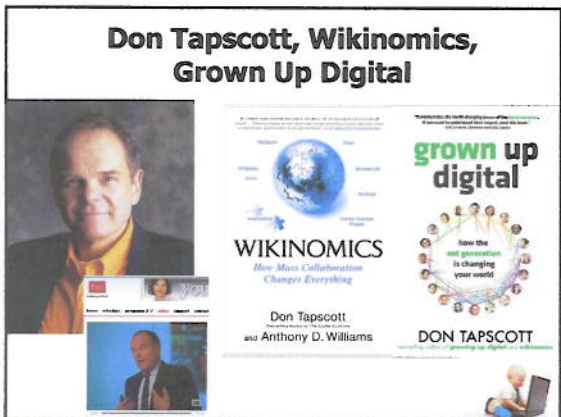
Chad Hurley and Steve Chen



Kevin Rose, Digg



Jimmy Wales



Don Tapscott, Wikinomics, Grown Up Digital



Social Learning Unleashed
Chief Learning Officer, April 2010

Driving greater collaboration: **With 17,000 internal blogs and 53,000 employees on Social Blue**, IBM's version of Facebook, and **500,000 participants** in the company crowdsourcing jams, IBM's social media usage has become big business. As of 2008, IBM's jams identified **10 incubator businesses** with the potential of reaching \$100 million.

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

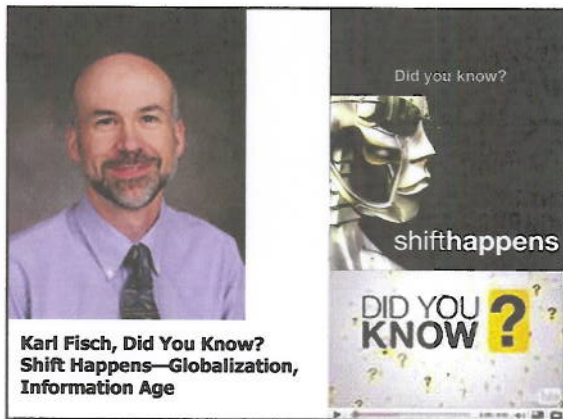


**Shared Online Video
(e.g., YouTube and the Royal Channel)**



TravelinEdMan (YouTube)

<http://www.youtube.com/user/TravelinEdMan>



**Karl Fisch, Did You Know?
Shift Happens—Globalization,
Information Age**

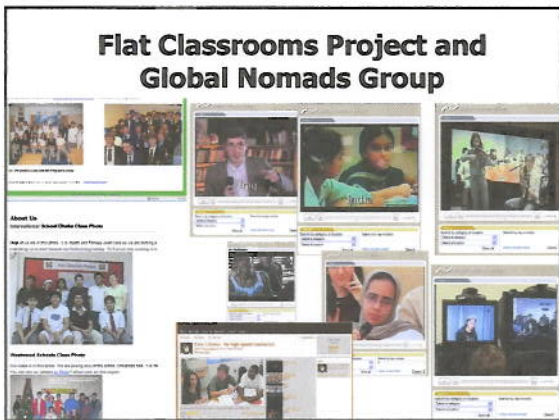
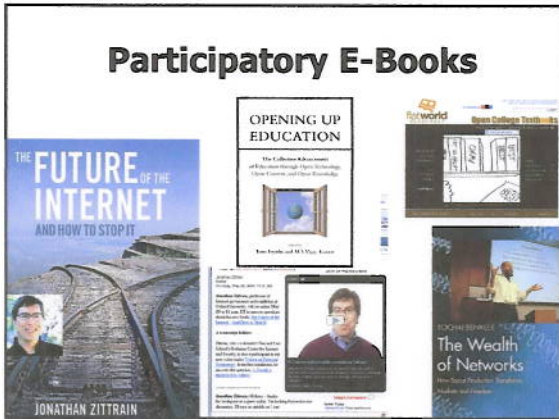


**Alexandra Juhasz,
Pfizer College**

**Individual Produced Videos
(e.g., African School Dream in Current TV)**

http://current.com/items/77146082_african_school_dream





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

Welcome to International Studies for Indiana Schools

Deb Hutton, Indiana University
Mimi Miyoung Lee, Univ of Houston

On Wisconsin, Fall 2010

Dissolving Borders

Course puts distances aside to explore the dairy industries in Wisconsin and Mexico.

Michel Wattiaux (2010) must perform some major technological gymnastics during the hour before his students arrive. He battles with the laptop, projector, and video-conferencing software needed to establish live, two-way video feeds with a handful of other classrooms in Mexico. As each new link is made, he gives a wave and a quick "Hola. ¿Cómo está?"

To Wattiaux, the extra effort is well worth it. By the time students start to brayce in, the Paley Center conference room has been transformed into a truly international lecture hall, with dairy science professors and students from across Mexico in virtual attendance, projected on the large screen at the front of the room. Dairy Science 215: Evaluation of Dairy Agreements in Wisconsin and Mexico is now in session. "This class offers a window into a different world," says

Window into a different world: Mike's in two-way video feed... and two languages — Michel Wattiaux's dairy science class explores similarities and differences in dairy operations.

Paul Kim, Rwanda, August 2010, Kigali Institute of Education linking up with universities in India and Cameroon through Satellite Internet video conferencing system. They were discussing Java programming.

Synchronous Conferencing Presentations

Sugata Mitra, Hole in the Wall

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 videoconferen...

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

The Learning World is Open

Philip Rosendale, Founder of Second Life

Charles Nesson, Harvard Law School, Berkman Center for Internet & Society

Sarah Robbins, Intelligirl

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

Mobile Internet
(source: Dr. Paul Kim, Stanford)

Museum of London's Streetmuseum App Puts Historic Photos in Perspective
Written by Chris Cameron, June 1, 2010
"Hundreds of images from the Museum of London's extensive collections showcase both everyday and momentous occasions in London's history, from the Great Fire of 1666 to the swinging sixties"

iPhone Screenshots

MUSEUM OF LONDON

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/indiaconomytelecom

Force is with new GPS units

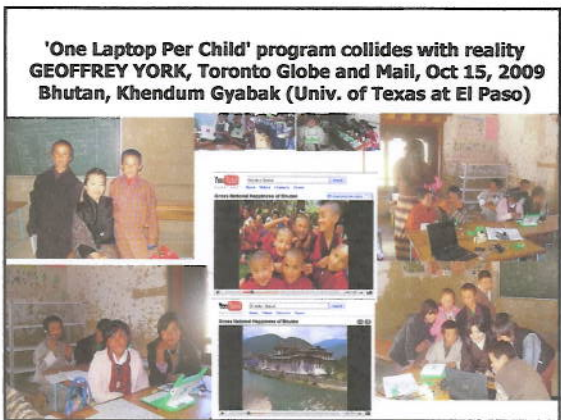
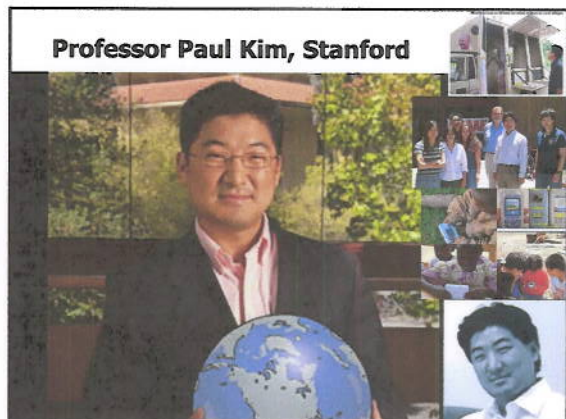
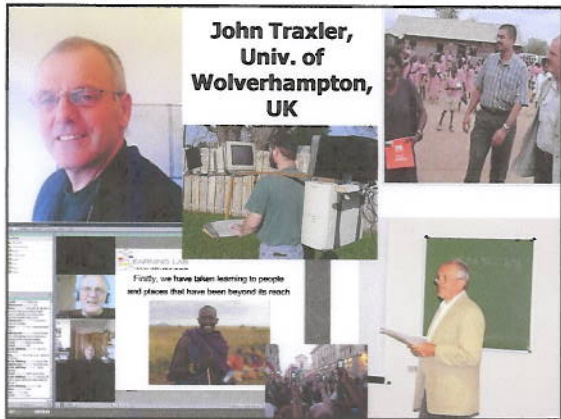
June 9, 2010

TwitterPeek

WikiReader: Updating can be a pain.

AI magazine

Elliot Soloway
Univ. of Michigan



Social Networking Gaming (e.g., Farmville)
 For social networks, it's game on, USA Today, Jon Swartz, Thursday October 15, 2009

Quick, simple fun booms on Facebook, MySpace

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

The Learning World is Open

September 30, 2009
 the Samsung DualView TL225

Jay Cross

The Vision of Learning

Elliott Masie
 March 27, 2008

Visit www.learning2008.com for more details!

LEARNINGTOWN!

LEARNING 2008

Chris McIntyre

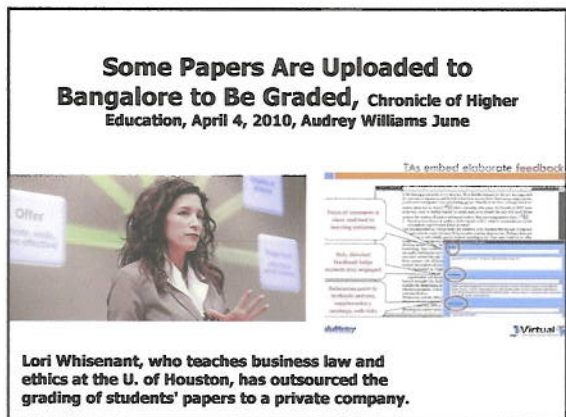
Podcast Alley
 Free the Airwaves

TWIT.TV

TWIT LIVE

TWIT LIVE

Leo Laporte & Friends

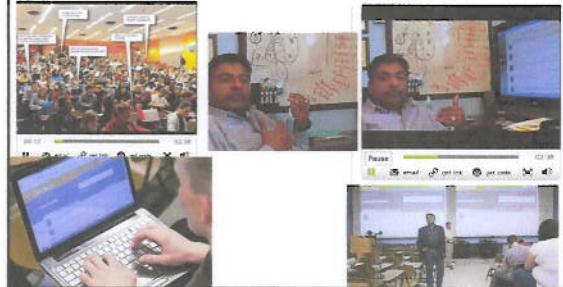


July 21, 2010 vs. Sept 28, 2009
Status update: Facebook logs 500 million members, USA TODAY, Kristin McGrath



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 **Hotseat** for the professor and guest speakers are projected for all the students to see.



Shirish Nadkarni, Livemocha


The next brilliant idea could come from anywhere!






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!!!