

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

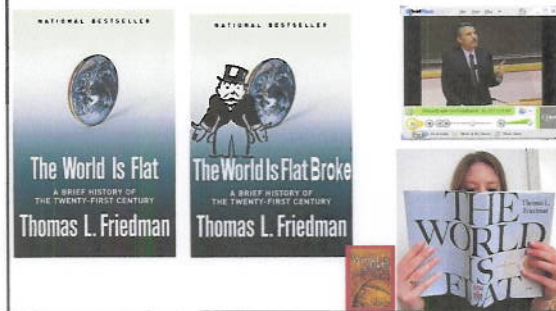
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 President, SurveyShare
 cjbonk@indiana.edu
<http://php.indiana.edu/~cjbonk>



Do you know the shape of the world?



Is the World Flat?

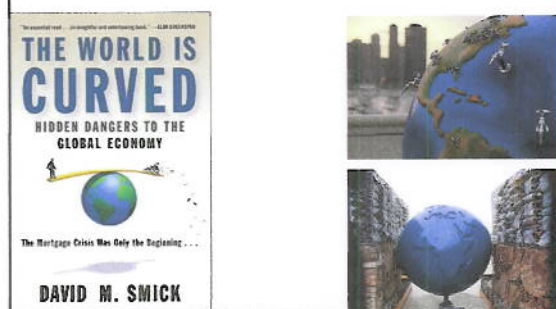


The Ten Forces that Flattened the World

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?



Is it spiky?



Or is it Open?

The MIT Press website showing the book 'Opening Up Education' by Tony Bates and M. S. Vign Koster. The page includes a search bar, navigation links, and a list of chapters with their authors and page numbers.

OPENING UP EDUCATION
The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge
Edited by Tony Bates and M. S. Vign Koster




Question: What is the Web?


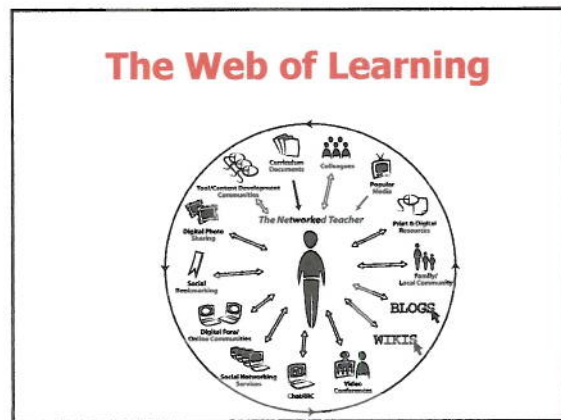
- An entertainment system?
- A writing aid?
- A communications system?
- A means to handle commercial transaction?
- A social networking device?

=====

No, it is a learning tool!



Answer: The Web of Learning

The Explosion of the Web 2.0

We are entering a jumping off point...

Web 2.0

Elements of the Web's Next Generation

The diagram illustrates the evolution of the web. 'Web 2.0' is shown as a central concept with arrows pointing to 'Web 1.0', 'Web 2.0', and 'Web 3.0'. 'Elements of the Web's Next Generation' includes icons for 'Web 2.0', 'Web 3.0', 'Web 4.0', and 'Web 5.0'. A person is shown jumping over a hurdle, symbolizing a 'jumping off point'.

Oregon Scientific Smartglobe 2008

A collection of various smartglobes and educational devices, including a globe on a laptop, a globe on a tablet, a globe on a smartphone, and a globe on a desktop monitor.

Yonsei University, Seoul, Korea

A collage of images showing students in a classroom setting, interacting with a large screen displaying a presentation. The text 'Yonsei University, Seoul, Korea' is overlaid on the images.

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

The book cover for 'Learning at the Back Door: Reflections on Nontraditional Learning in the Lifespan' by Charles A. Wedemeyer. The cover features a portrait of the author and a photograph of a person sitting at a desk. A portrait of Charles Wedemeyer is also shown on the right side of the slide.

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

A collage of images showing archaeological digs, artifacts, and a person smiling. The text 'UCLA Summer Digs Program' and 'Dig in, archaeology fans! UCLA blogs to offer front-row seat at archaeology digs, Meg Sullivan, 6/25/2008' is overlaid on the images.

**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)**

A collage of images showing people sailing, using technology, and interacting. The text '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)' is overlaid on the images.

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's blog

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

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."

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)

Audience Participation!

1. WE

2. ALL

3. LEARN!!!

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.)

The Learning World is Open

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

WE

ALL

LEARN!!!

Free Online Books and now the Blio (a free e-book platform to run on any device)

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>

http://teachertube.com/members/ViewVideo.php?video_id=105496&title=Digital_Textbook_in_Korea

In a Digital Future, Textbooks Are History, ny Times, August 9, 2009

http://www.nytimes.com/2009/08/09/education/09textbook.html?_r=1&emc=eta1; <http://beyondtextbooks.org/>

Imagine

First iPad buyers excited, curious
By Brandon Griggs and John D. Sutter, CNN, April 3, 2010

Seton Hill University, 2,100 students. All fulltime students get an iPad and Incoming freshmen will also receive a 13-inch MacBook laptop, April 2010.

An iPad for Everyone
Seton Hill University will give a new Apple iPad to every full-time student in fall 2010.

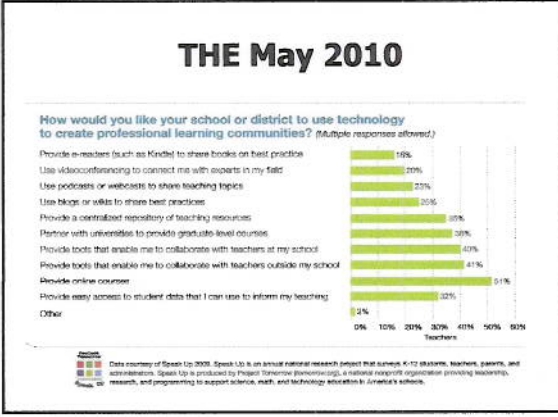
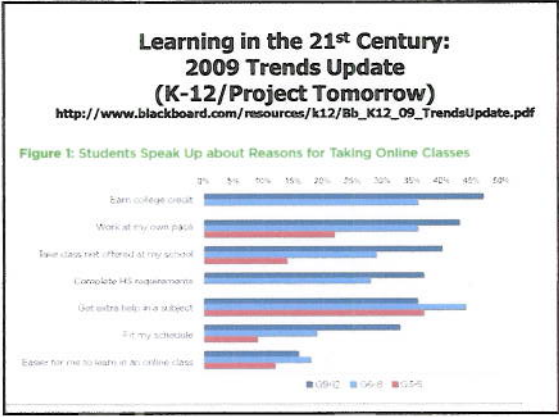
Why is this? The iPad is a new way of thinking about technology in the classroom. The new program is designed to help students learn more effectively and efficiently. By using the iPad, students will be able to access all the content they need for their classes in a way that is easy to use and easy to carry.

For more information on the iPad Technology Advantage Program, please visit the website www.setonhill.edu/technology.

Continued on next slide

Opener #2. E-Learning and Blended Learning

The Learning World is Open



Letter from Bill Gates about online learning (January, 2010)

<http://www.gatesfoundation.org/annual-letter/2010/Pages/education-learning-online.aspx>

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

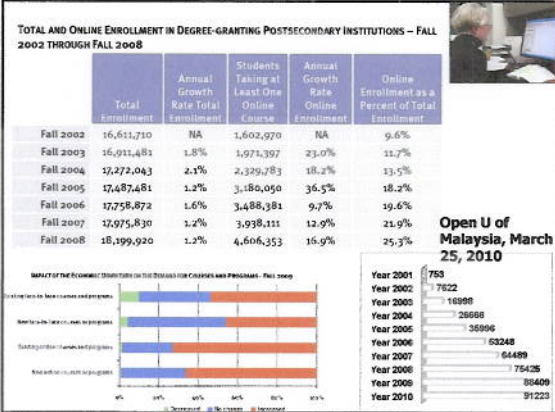
Adora Svitak, age 12, World's Youngest Teacher



A Grain of Rice: A Bloomington man's computer vocab game feeding the world



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



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)



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

The screenshot displays the Moodle website's main page. At the top, it features a navigation menu and a large grid of user avatars. Below this, there are two line graphs: 'Moodle sites' showing a steady upward trend and 'Moodle downloads' showing a similar growth pattern. The bottom section includes a list of featured Moodle sites and a portrait of a man, likely a community member or developer.

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

This collage represents various OER and OCW initiatives. It includes the MIT OpenCourseWare logo, the Open Yale logo, and a book titled 'Esc Traditional Textbooks'. There are also images of a pirate character, a person sitting at a desk, and a group of people holding a sign that says 'We Remix Open Textbooks!'. The background features a grid of small images and icons.

MIT OCW Highlights for High School

The screenshot shows the MIT OpenCourseWare website with a focus on high school resources. It features a video player with a man speaking, a list of course highlights, and various navigation options. The layout is clean and professional, with a mix of text and visual elements.

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

The screenshot displays the Berkeley OpenCourseWare website. It features a prominent video player showing a woman speaking, with a list of course titles and descriptions below it. The website has a yellow and blue color scheme and includes navigation links for search and course categories.

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

The Biggest OEW Localization Volunteer Group in the World

This collage promotes the OOPS project. It includes the OOPS logo, a group photo of volunteers, and several text-based graphics. One graphic says 'The Biggest OEW Localization Volunteer Group in the World'. Another graphic features the OOPS logo and the text 'OOPS: Opensource Opencourseware Prototype System The Foundation of Fantasy Culture and Arts'. The bottom right corner has the Chinese text '開放式課程計劃'.

National Repository for Online Courses (NROC) Commons

The screenshot shows the NROC Commons website. It features a search bar, a list of course titles, and a grid of course thumbnails. The website has a blue and white color scheme and includes navigation links for search and course categories.

Free Degrees and Universities

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 (Note: Apps due March 1st).


Neeru Paharia is behind Peer2Peer University

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 5,100 open-access academic journals around the world. Below is their geographic distribution, by continent, as of last month.



Elliott Masie, Learning Trends, March 2, 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, capture conference keynotes, flipcams, etc.

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**

Link TV: Global Link of World Educators (GLOWE)

Link TV, 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)

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)

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 celebration by making its archive freely available online for the first time.

Online Referenceware

Online Reading Programs (See free-Reading.net)

http://free-reading.net/index.php?title=Main_Page

The screenshot shows the free-reading.net website. The main headline reads "Free online materials could save schools billions". Below it, there's a video player with the title "Letter Sound and Letter Combination Accuracy, Sound Search Game". The website has a navigation menu and various educational resources listed.

Curriki (free K-12 curriculum resources)

The screenshot displays the Curriki website, which is a platform for sharing and finding free K-12 curriculum resources. It features a search bar, navigation tabs for "Home", "About", "Help", and "Contact", and a grid of resource categories like "Lesson Plans", "Activities", and "Assessments".

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

This block is a collage of screenshots from three major Open Educational Resources (OER) repositories: MERLOT, Connexions, and OER Commons. It highlights their membership and usage statistics as of early 2010.

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

The Learning World is Open

This block features a collage of images representing open information communities. It includes a person wearing a hat with the text "this is me...", the "flatworld KNOWLEDGE" logo, and a group of people smiling. A small box in the top right corner says "The Learning World is Open".

Wikis: Wikipedia and Wikibooks

The Wikipedia police: Encyclopaedia site recruits 20,000 editors to stop malicious tampering with entries

The screenshot shows the Wikipedia and Wikibooks websites. A prominent article headline reads "The Wikipedia police: Encyclopaedia site recruits 20,000 editors to stop malicious tampering with entries". Below the headline, there are images of people and a globe.

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

The screenshot shows a Ustream video conference interface. It displays multiple video feeds of participants, including one labeled "LEBOW-MADRELL PRESENTATION". The interface includes a chat window and various control buttons.

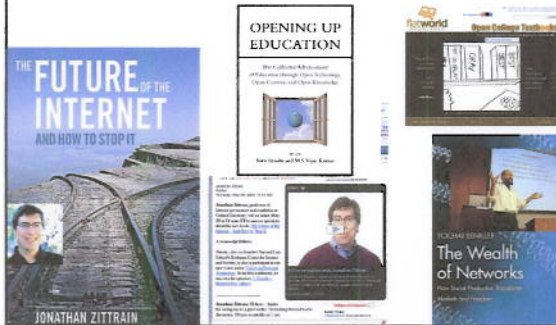
**Shared Online Video
(e.g., YouTube and the Royal Channel)**



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



Participatory E-Books



**Scribd: Documents on Web
(<http://www.scribd.com/>; 50 million unique visitors per month, 10's of millions of documents, April 2010)**



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



**Global Nomads Group
<http://www.gng.org/home.html>**



Flat Classroom Projects!!! (combine blogs, videoconferencing, chat, async discussion, etc.)



Survey reveals gaps in school technology perceptions

District administrators more likely to support certain technologies than teachers; pre-service teacher education lagging in 21st-century instructional methods
By Dennis Pierce, Editor, eSchool News, May 5, 2010

"majority of aspiring teachers (82 percent) said collaborative tools such as blogs and wikis are important instructional tools, only one in four are learning how to use these technologies in their courses on teaching methods"...instead taught productivity tools such as word processing, spreadsheet, and database software, the survey revealed.

67 percent of admin ideal school of the future includes online collab tools, just 27 percent of teachers agreed.



Synchronous Conferencing Presentations



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



Ice Stories Project from Antarctica



Room to Read and 1kg

<http://www.roomtoread.org/programs/schools.html>
<http://www.1kg.org/>



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

09/04/21/2009
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 videoconferencing sessions in a virtual world.

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

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

For social networks, it's game on

Quick, single tap buttons on Facebook, MySpace

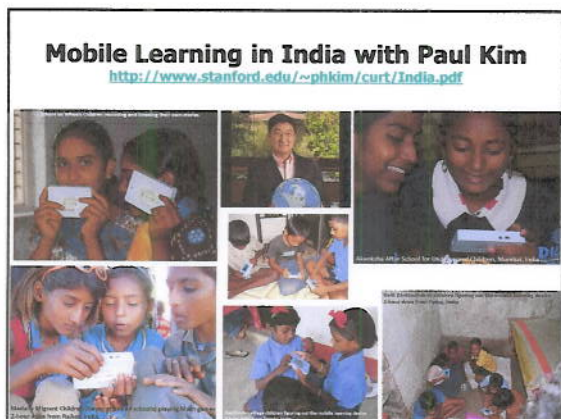
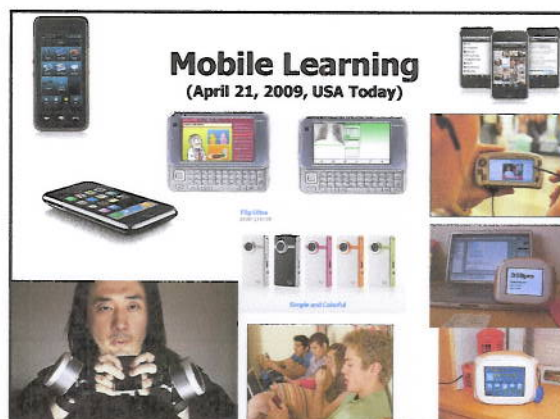
Quick, single tap buttons on Facebook, MySpace

Quick, single tap buttons on Facebook, MySpace

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

TwitterPeek: Restricted to Twitter.

WikiReader: Updating can be a pain.

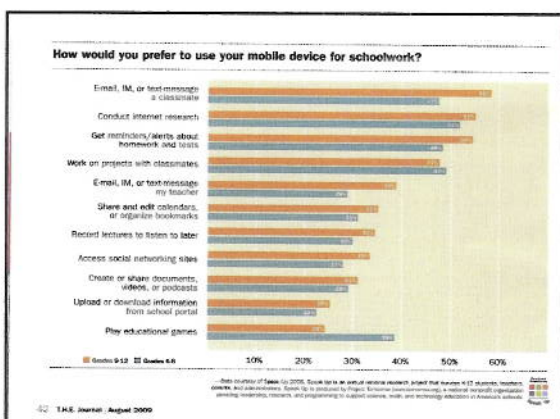


We Are Going Mobile!

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/20090309/us_afp/indiaeconomy/telecom



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

The Learning World is Open


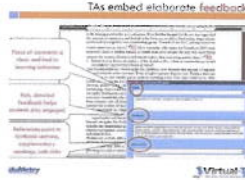




September 30, 2009
the Samsung DualView TL225




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

Some Papers Are Uploaded to Bangalore to Be Graded, Chronicle of Higher Education, April 4, 2010, Audrey Williams June


Lori Whisenant, who teaches business law and ethics at the U. of Houston, has outsourced the grading of students' papers to a private company.

Sociable Professors First-of-its-Kind Survey Finds College Faculty Increasingly Using Social Media

Boston, MA (PRWEB) May 4, 2010
<http://www.prweb.com/releases/2010/05/prweb3960844.htm>


"More than 80 percent of college faculty are using social media, with more than half using these tools as part of their teaching." Pearson Social Media Survey 2010

Social Networks Are Not Equally Popular



| Platform | Awareness (%) | Use (%) |
|--------------|---------------|---------|
| Facebook | ~95 | ~85 |
| Twitter | ~85 | ~75 |
| MySpace | ~80 | ~65 |
| LinkedIn | ~75 | ~60 |
| Google+ (G+) | ~70 | ~55 |
| Other | ~65 | ~50 |

Facebook: The New Classroom Commons?, Chronicle of HE, Harriet L. Schwartz, Sept. 28, 2009



SOCIAL NETWORKING


Top social networking sites
Take a look at what's hot in August (from home, work, college)

| Site | Users (million) |
|----------------------|-----------------|
| Facebook.com | 32.2 million |
| MySpace.com | 24.2 million |
| Twitter.com | 20.8 million |
| Orkut.com | 17.4 million |
| Classmates.com | 12.9 million |
| Bebo.com | 12.5 million |
| MyAOL.com | 11.4 million |
| Windows Live Profile | 10.3 million |

Growth of social networking sites

Social networking site seen (as a percentage of total Internet audience)

| Month | Percentage |
|------------|------------|
| August '08 | 65.6% |
| August '09 | 77% |



Learn Spanish on Your Terms! Sign Up Now!


Learn Italian on Your Terms! Sign Up Now!

243 free lessons & 7,787 conversations. Take the first 7.

243 free lessons & 7,787 conversations. Take the first 7.






Learn Spanish on Your Terms! Sign Up Now!

Learn Italian on Your Terms! Sign Up Now!




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

■ 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!!!**



