

# E-Learning: Past, Present, and Future

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# Looking to the Past...



**Some Notable Moments in Recorded Life**

- 1888: The first commercial photograph is made in New Haven.
- 1908: President Theodore Roosevelt signs recording copyright and patent legislation.
- 1945: Vannevar Bush, a prominent inventor, scientist, jurist, and four-time wartime cabinet member, publishes 'As We May Think' in the Atlantic Monthly, laying out the idea of the memex.
- 1956: President John F. Kennedy and Lyndon B. Johnson announce the creation of the National Aeronautics and Space Administration.

**Vannevar Bush, the memex**

# Charles Wedemeyer, University of Wisconsin

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

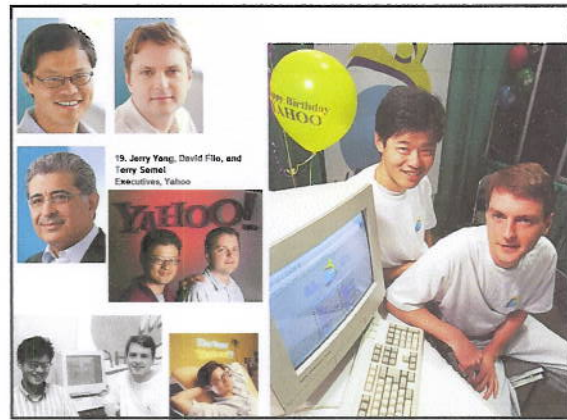
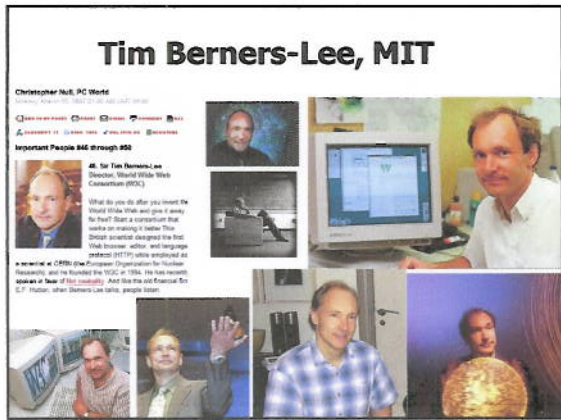
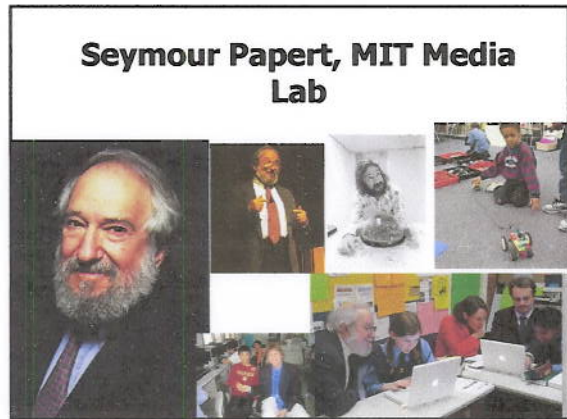
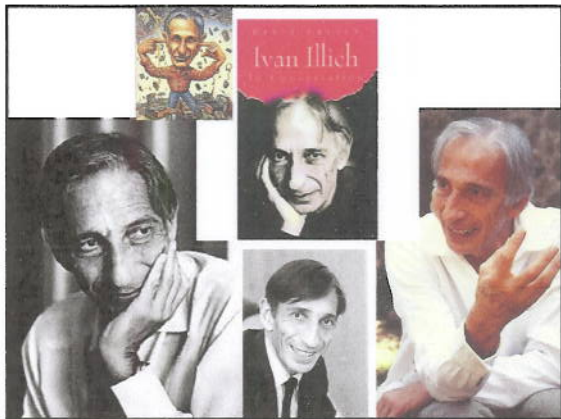
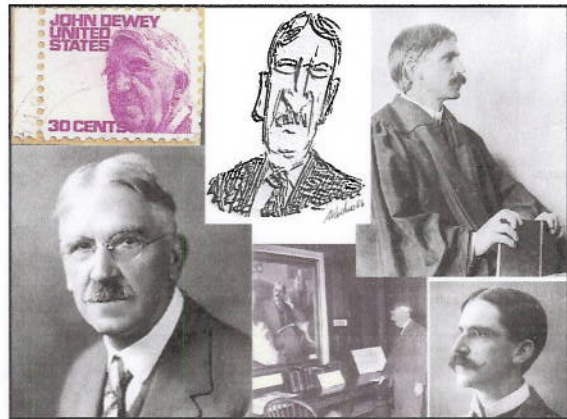
**Technology 40 Years Ago**

# Technology of the 1980s

**Radio Shack TRS-80 Model III**

Introduced: July 1980  
 Price: US \$209 base model  
 US \$2495 w/ 32K, dual drives  
 CPU: Zilog Z-80, 2.03 MHz  
 RAM: 4K, 48K max  
 Ports: cassette tape, expansion, serial  
 Display: 12-inch BW monitor, 64 X 16 text  
 Storage: 0, 1, or 2 internal 5.25" floppy drives  
 External cassette @ 500/1500 baud  
 OS: BASIC in ROM, TRS-DOS on disk

**COMMODORE 64**  
 NEW! 64K  
 THE NEW LOOK 64K  
 THE BEST VALUE 64K





### The 50 Most Important People on the Web



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

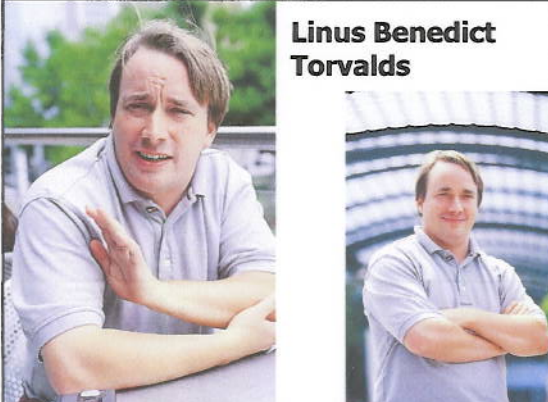
When your stock price can top 500 a share, you're collectively worth \$33 billion in cash, and you run the most trafficked search engine on the internet, you can afford to do... well, pretty much whatever you want. Sergey Brin and Larry Page's little project from Stanford has grown into the Web's most called-upon powerhouse, and one of the few names on this list to have morphed into a verb. Schmidt left Google 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 headlining purchase of YouTube marking a big step toward complete domination of the Web.

### Shovelware

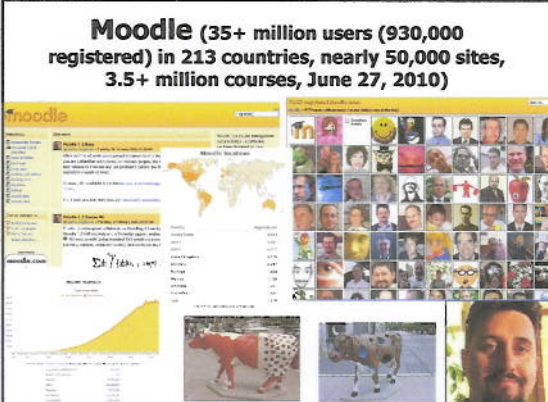


SHOVELWARE  
You paid \$200 to play gimmicky parts of low online flash games. How dumb are you?


### Linus Benedict Torvalds



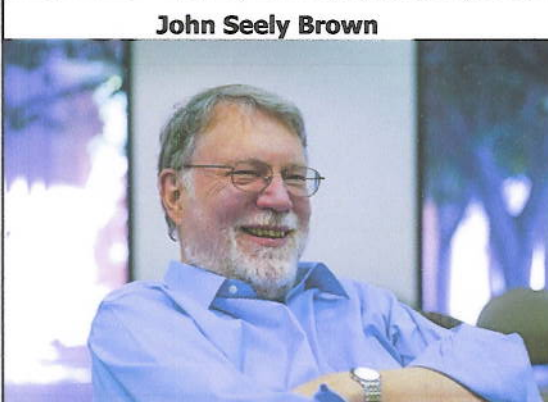
### Moodle (35+ million users (930,000 registered) in 213 countries, nearly 50,000 sites, 3.5+ million courses, June 27, 2010)

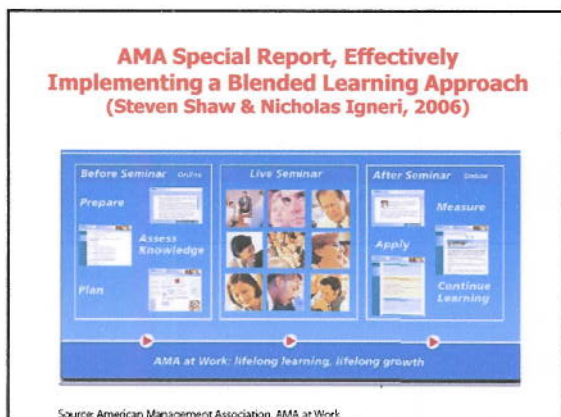
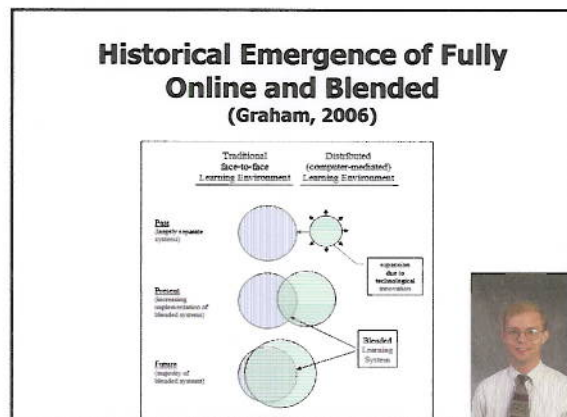
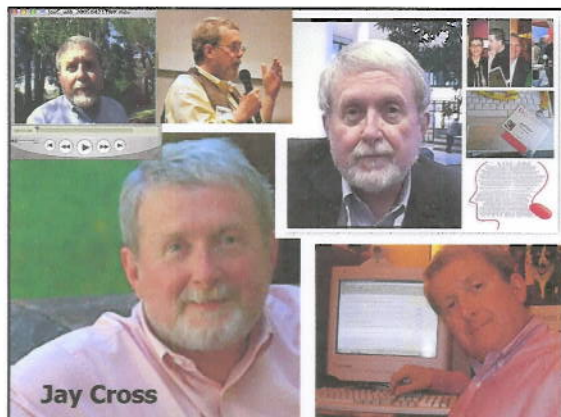
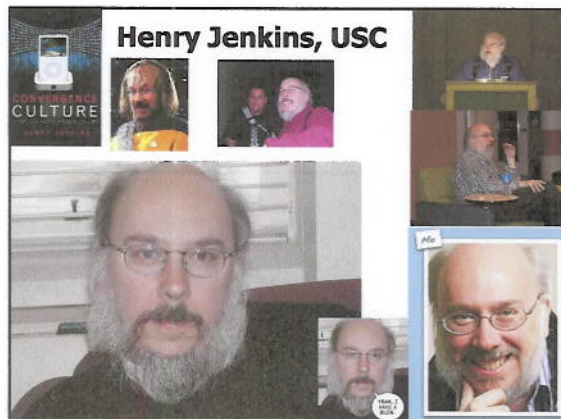


### Stephen Heppell, Notschool.net, the ULTRALAB



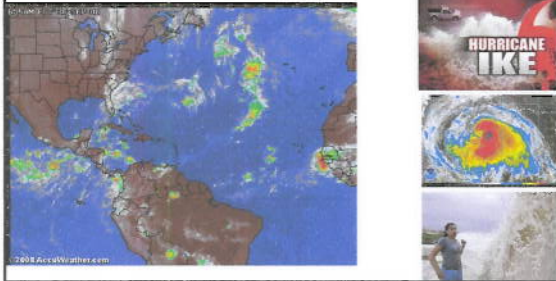
### John Seely Brown







## Those in hurricanes!



## Those in earthquakes!



## Those affect by volcanos...



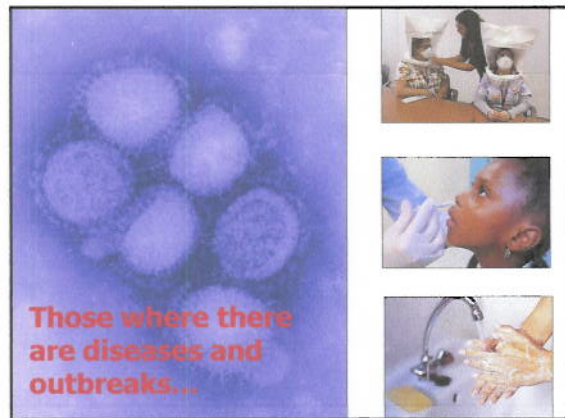
## Those in blizzards and ice storms...

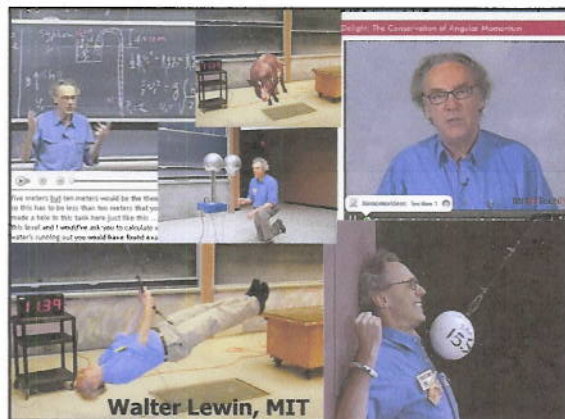
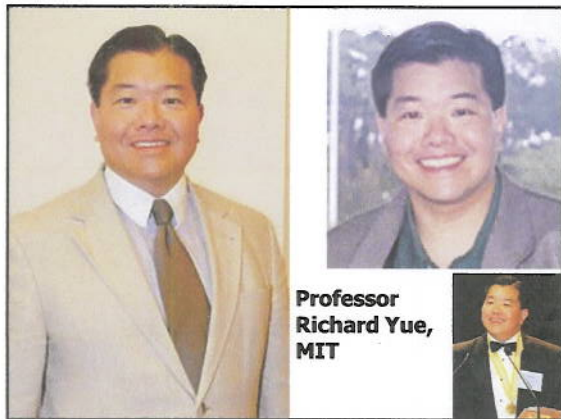


## Snowmegeddon, DC winter of 2010



## Those where there are diseases and outbreaks...









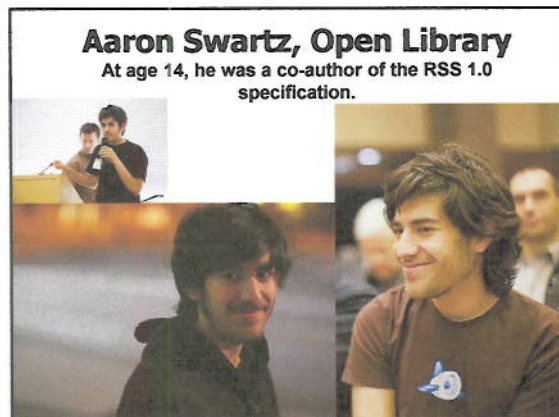
**Chad Hurley and Steve Chen**



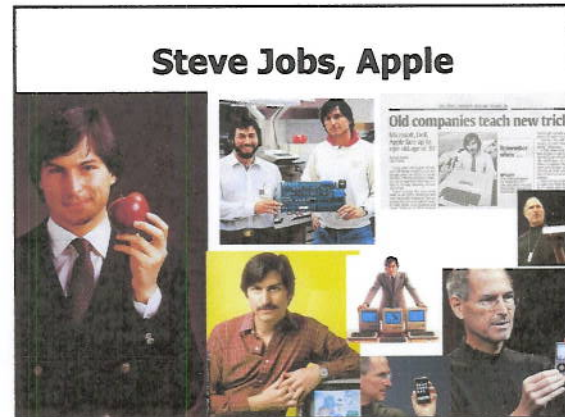
**Marissa Mayer** leads the company's product management efforts on search products – web search, images, news, books, products, maps, Google Earth, Google Toolbar, Google Desktop, Google Health, Google Labs and more. She joined Google in 1999 as Google's first female engineer and led the user interface 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



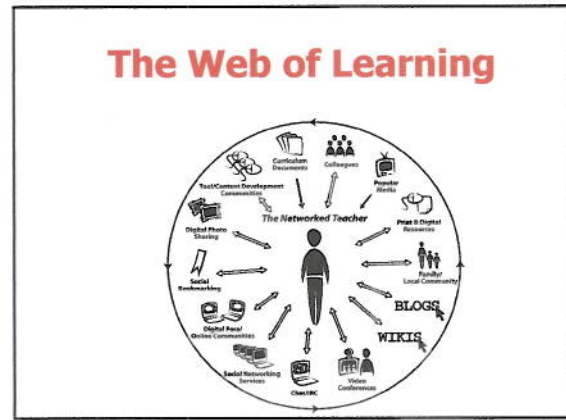
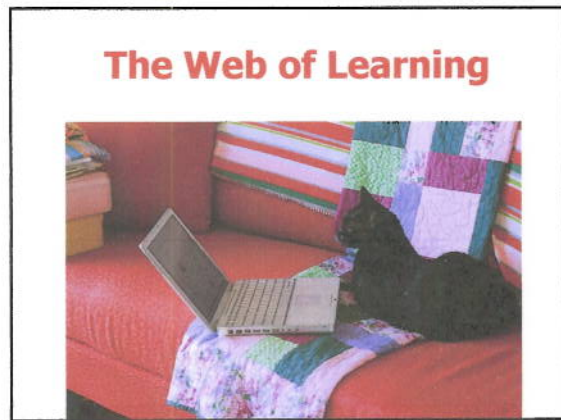
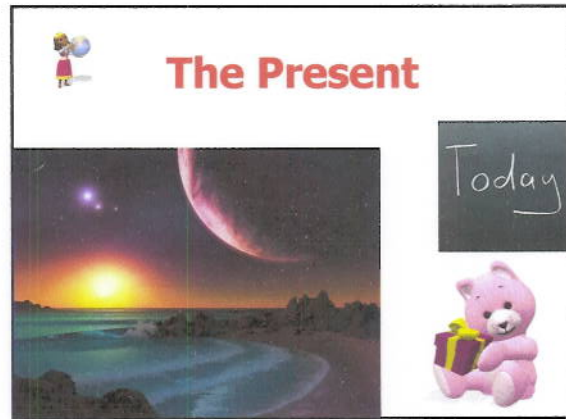
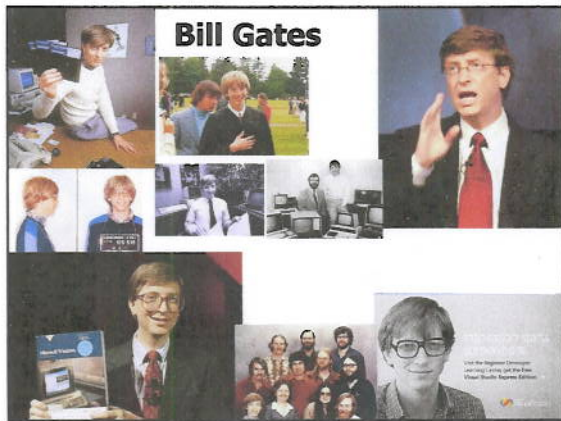
**Brewster Kahle, the Internet Archive**



**Aaron Swartz, Open Library**  
At age 14, he was a co-author of the RSS 1.0 specification.



**Steve Jobs, Apple**





## Today we have the Web 2.0

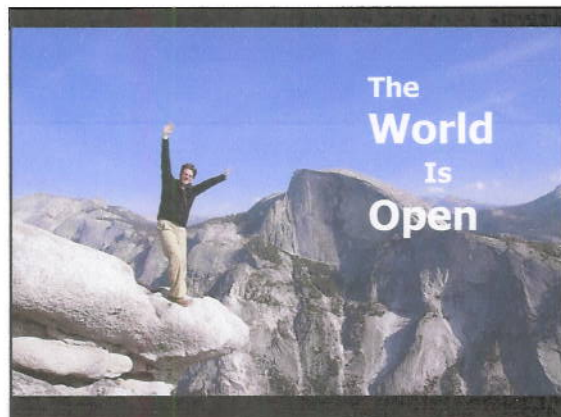
Logos shown: LIVEJOURNAL, Google, facebook, NING, PBWORKS, slideshare, Blogger, photobucket.

## We are entering a jumping off point...

**Web 2.0**

- Participatory design
- Flat or Shallow vs. Hierarchical
- Collaborative vs. Top-down
- Open vs. Closed
- Dynamic vs. Static
- Personal vs. Institutional
- Individual vs. Community
- Local vs. Global
- Open vs. Closed
- Individual vs. Community
- Local vs. Global

**Elements of the Web's Next Generation**



### 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](http://www.ted.com/talks/clay_shirky_how_cognitive_surplus_will_change_the_world.html)

Clay Shirky: How cognitive surplus will change the world

**COGNITIVE SURPLUS**

**HERE COMES EVERYBODY**

**CLAY SHIRKY**

### May 24, 2010

#### Author Nicholas Carr, The Web Shatters Focus, Rewires Brains, Wired

[http://www.wired.com/magazine/2010/05/ff\\_nicholas\\_carr/](http://www.wired.com/magazine/2010/05/ff_nicholas_carr/)

**Wired** MAGAZINE

Author Nicholas Carr: The Web Shatters Focus, Rewires Brains

**Atlantic**

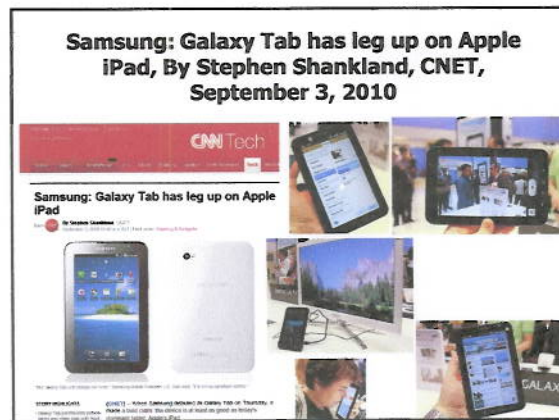
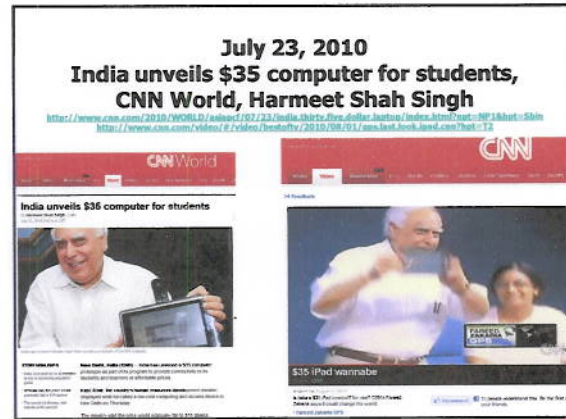
**Google** MAKING STOOPID?

**WHAT THE INTERNET IS DOING TO OUR BRAINS**

**THE SHALLOWS**

Nicholas Carr









**Yonsei University, Seoul, Korea**



**Yonsei University, Seoul, Korea**



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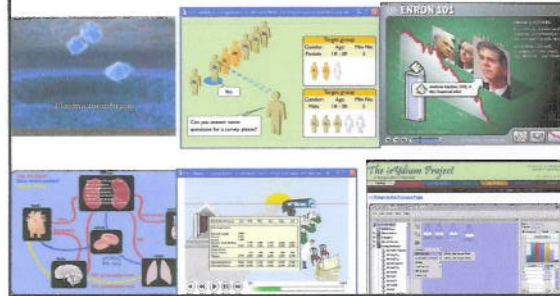
## Adora Svitak, age 12, World's Youngest Teacher



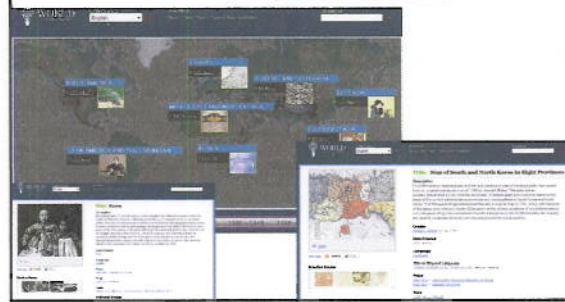
## Dog Get Degree, The Chronicle of Higher Ed, Sept 23, 2009, Unmuzzling Diploma Mills: Dog Earns M.B.A. Online, Marc Parry



## Flash, 3-D Visualization, & Laboratory Software



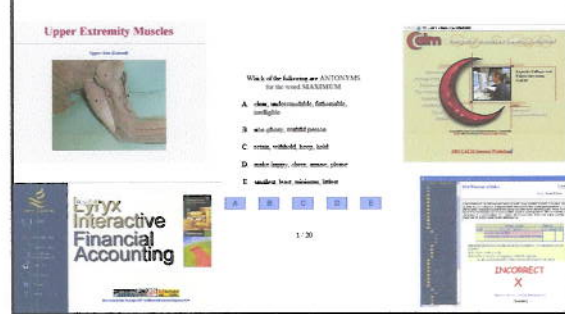
## Portals for the People! United Nations Opens World Digital Library, April 21, 2009 Chronicle of Higher Ed, <http://www.wdl.org/en/>



## Medical Animations and Videos (find anchoring event: YouTube, CNN, BBC, TeacherTube, CurrentTV)



## Online Self-Testing (e.g., self study in vocabulary, anatomy, chemistry, accounting, dissection, etc.)



## Online Cases (e.g., Mark Braun, IU)

**PATHOLOGY CASES - CLINICAL CASES**

Each case has an index so you can track your progress through the cases. The spots at the end of each case will help reinforce the major points in each scenario.

**Case 1: A case of fever**

1. A man with chronic cough
2. A man with chest pain
3. A man with chest pain and cough
4. A man with chest pain and cough
5. A man with chest pain and cough
6. A man with chest pain and cough
7. A man with chest pain and cough
8. A man with chest pain and cough
9. A man with chest pain and cough
10. A man with chest pain and cough
11. A man with chest pain and cough
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25. A man with chest pain and cough
26. A man with chest pain and cough
27. A man with chest pain and cough
28. A man with chest pain and cough
29. A man with chest pain and cough
30. A man with chest pain and cough

Microscopic images showing various cellular structures and tissue morphology, likely related to the clinical cases presented.

## Scenario Learning (Option 6, Bloomington, IN)

The interface displays a central video window showing a person in a lab setting, surrounded by smaller video windows and text panels, likely providing context and information for the learning scenario.

## Tour a Museum (e.g., British Museum, Smithsonian, Louvre)

The interface shows a virtual museum tour with various exhibits, including a large image of the Mona Lisa, and navigation options for exploring different parts of the museum.

## Educational Experiments and Simulations

The website 'PSYCHEXPERIMENTS' features various educational experiments and simulations, including a section for 'Participate in Experiments' and a section for 'Explore'.

## 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](http://chronicle.com/blogPost/Human-Brain-Dissected-Today-in/9053/?id=pm&utm_source=pm&utm_medium=en)

The screenshot shows a news article from 'THE CHRONICLE of Higher Education' dated December 2, 2009. The article is titled 'Human Brain Dissected Today in a Live Webcast' and discusses a live webcast of a human brain dissection performed by neurosurgeon William Tawler Swartz at Hartford Hospital in Connecticut.

## 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)

The screenshot shows the 'NAUTILUS LIVE' website interface, which provides live streaming of deep-sea expeditions. A photo of an oceanographer is also included.



**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://oceanexplorer.noaa.gov/oceanos/welcome.html>

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

**Don Tapscott, Wikinomics, Grown Up Digital**

**Participatory E-Books**

**Pubcasts!**  
 (videos of scientific papers and science; SciVee)

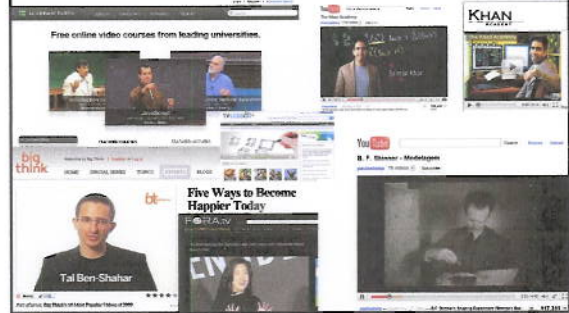
**Shared Online Video**  
 (e.g., YouTube and the Royal Channel)

## TravelinEdMan (YouTube)

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



## Shared Online Video (e.g., For a TV, Big Think, Academic Earth, YouTube, etc.)



## 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>



## Electronic Guests & Mentoring



## Synchronous and Asynchronous Events (e.g., Breeze + Video + Online Forum + Online Papers)





## Observing Expertise Online

(e.g., Psychiatric Interviews, E-Reading First Ohio)

Department: Psychiatry  
 Academics: Prof. Michael Gill, Dr. Brian Fitzmaurice, Katie Armstrong

The screenshot shows a website titled "Psychiatric Interviews: The Interviews". It features a video player with two frames showing a person being interviewed. Below the video, there is a list of interview transcripts with titles like "The 1st. Confronting the Doctor, Michael, I don't know" and "The 2nd. Confronting the Doctor, Michael, I don't know".

## Scribd: Documents on Web

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

The top part shows the Scribd website interface with sections for "Publish Yourself Online", "Upload Documents", "Share with the World", and "Explore Our Library". Below the website screenshot is a photograph of the Scribd office, showing two people standing in a room decorated with colorful balloons.

## Global Game Jams, Electronic Computer War Games, etc.

The collage includes several images: a group of people in red shirts standing in a line outdoors; people gathered around a table playing a board game; a man holding a tablet displaying a game; and a group of people sitting at a table playing a board game. At the bottom, there is a logo for "Global Game Jam" featuring a globe and silhouettes of people.

## Photo Festivals and Competitions

(e.g., COFA at UNSW, Scrapblog, flickr, etc.)

The collage features several images: a screenshot of a Flickr page; a photo of a large pile of stones or rocks; a photo of a man's face; a photo of a woman's face; and a photo of a person playing a musical instrument.

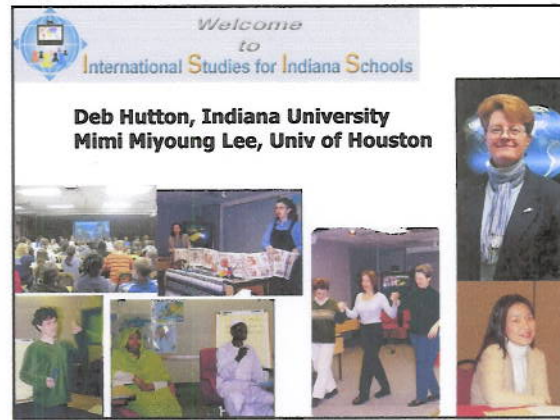
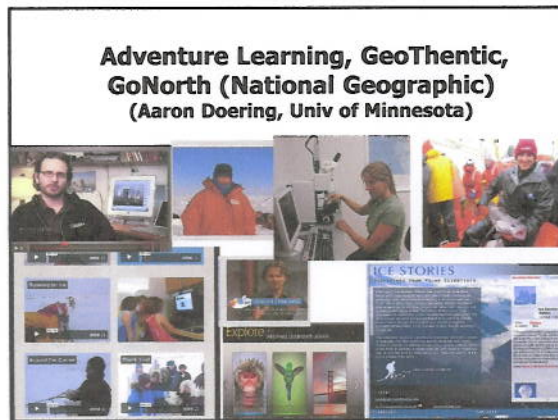
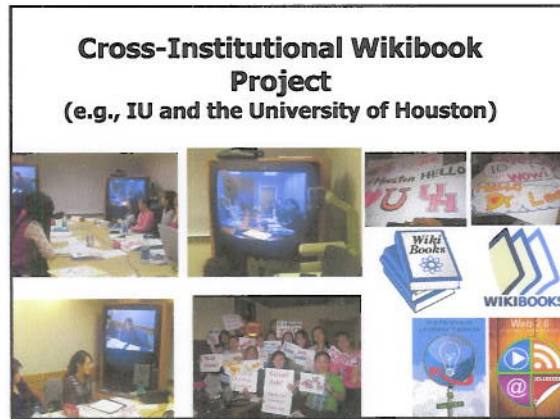
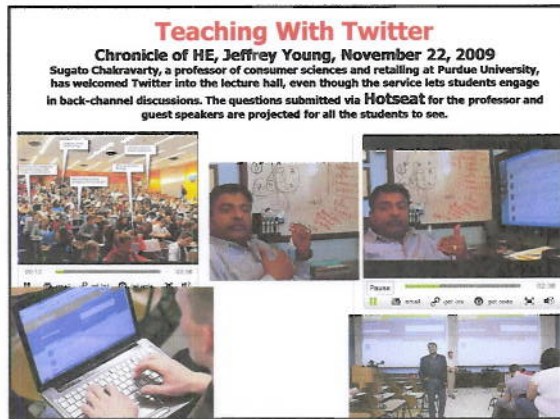
## Online Role Play

(Tulane University, Exercise for Renewable Energy, Freeman Sch. of Business)

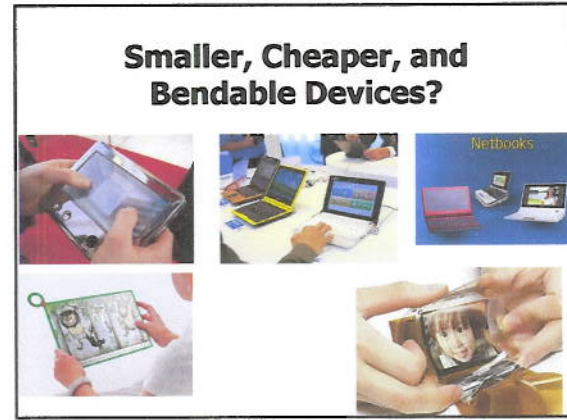
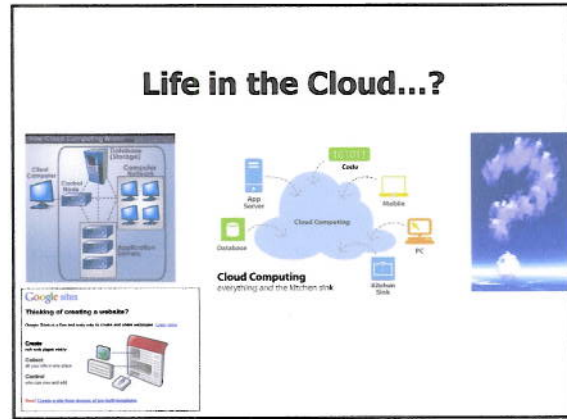
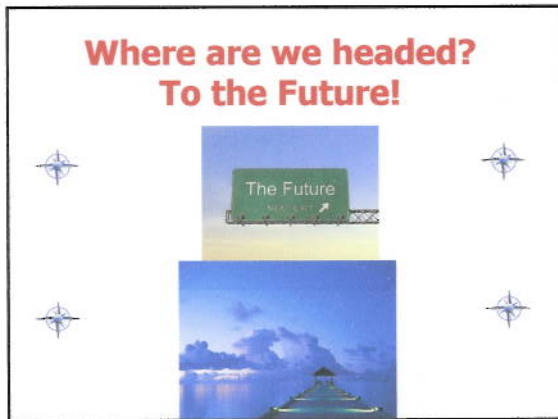
The photograph shows a classroom or computer lab where several students are seated at desks, looking at their laptops. A large screen at the front of the room displays a blue interface, likely related to the online role-play exercise.

The collage includes several photographs: a man in a blue shirt sitting at a table; a woman in a white dress sitting at a table; a man in a black and red costume; a man in a white shirt; a man in a dark sweater; a man in a suit; and a man in a grey jacket.

**Marc Andreessen and Gina Bianchini**







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



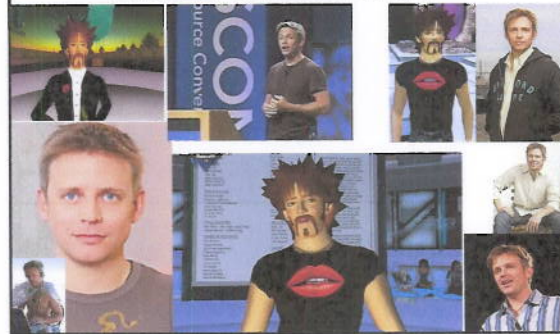
**Broadcast Surgeries**



**Extreme Learning**



**Philip Rosendale, Founder of Second Life**



**Online Performances  
Virtual Worlds/Reality/MMOG  
(e.g., Shakespeare plays reenacted)**





