E-Learning:
An Update to the Future Worldwide

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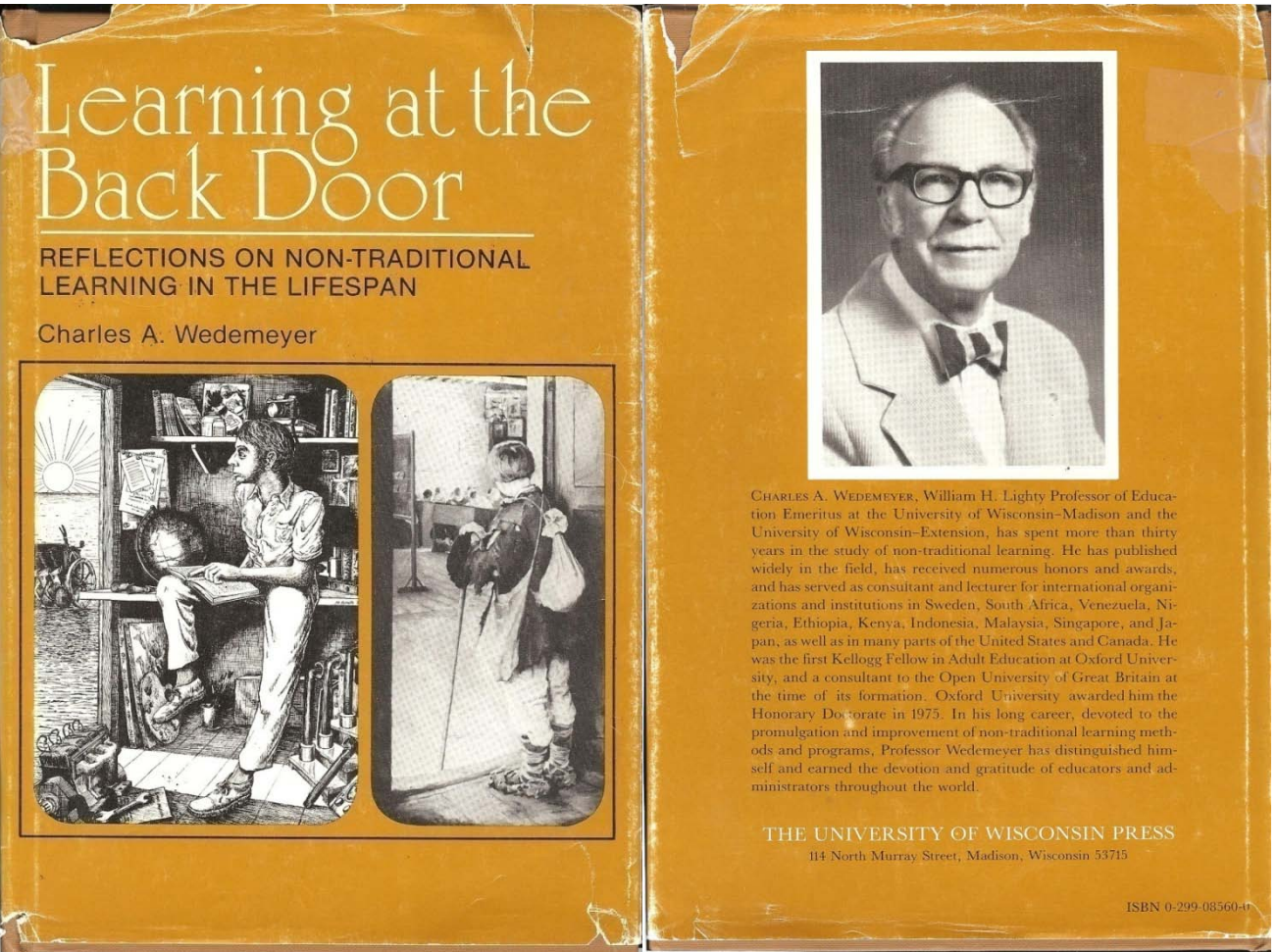
cjbonk@indiana.edu

http://mypage.iu.edu/~cjbonk/

Took Correspondence & TV Courses

(thanks to Bob Clasen and Charles Wedemeyer, the University of Wisconsin)



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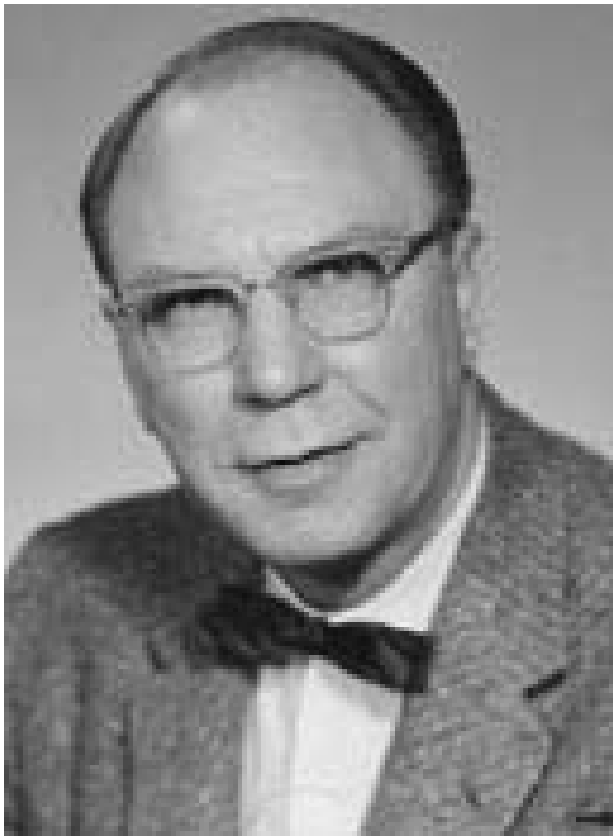


Audience Poll #1:

Has learning technology has ever transformed your life.

1728: 1st correspondence course advertised Boston

(learn shorthand from Caleb Phillips thru weekly mailed lessons)

The First University Correspondence Course (University of London, External Program, 1858)

1728-1990s – Generally postal system based

1930s – phonograph and radio

1950s and 1960s – television

1970s and 1980s – VHS tapes

1980s and 1990s – DVD

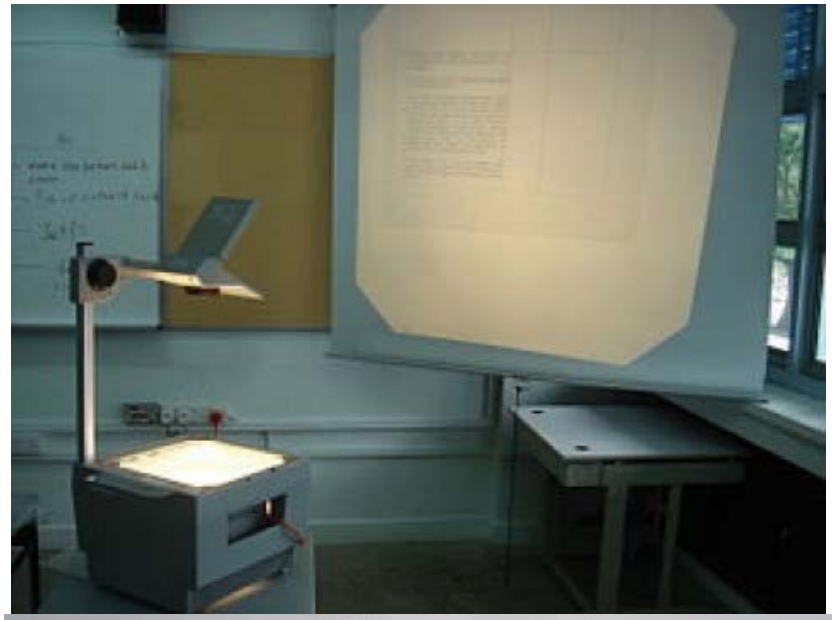
THE
Boston-
AND
COUNTRY
Gazette,
JOURNAL.
MONDAY, January 1, 1770.

May 10, 2013

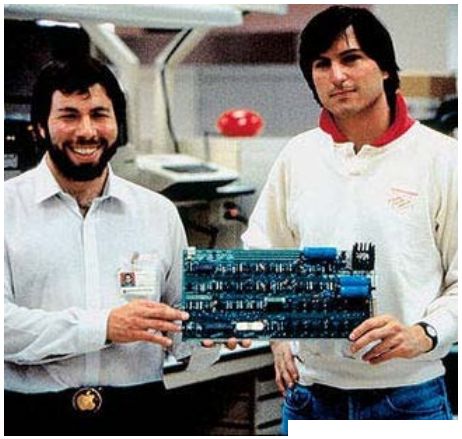
10 ed-tech tools of the 70s, 80s, and 90s

eSchool News, Meris Stansbury

http://www.eschoolnews.com/2013/05/10/10-ed-tech-tools-of-the-70s-80s-and-90s/print/



Looking to the Past...



Life as an accountant/CPA in a high tech company in the 1980s…

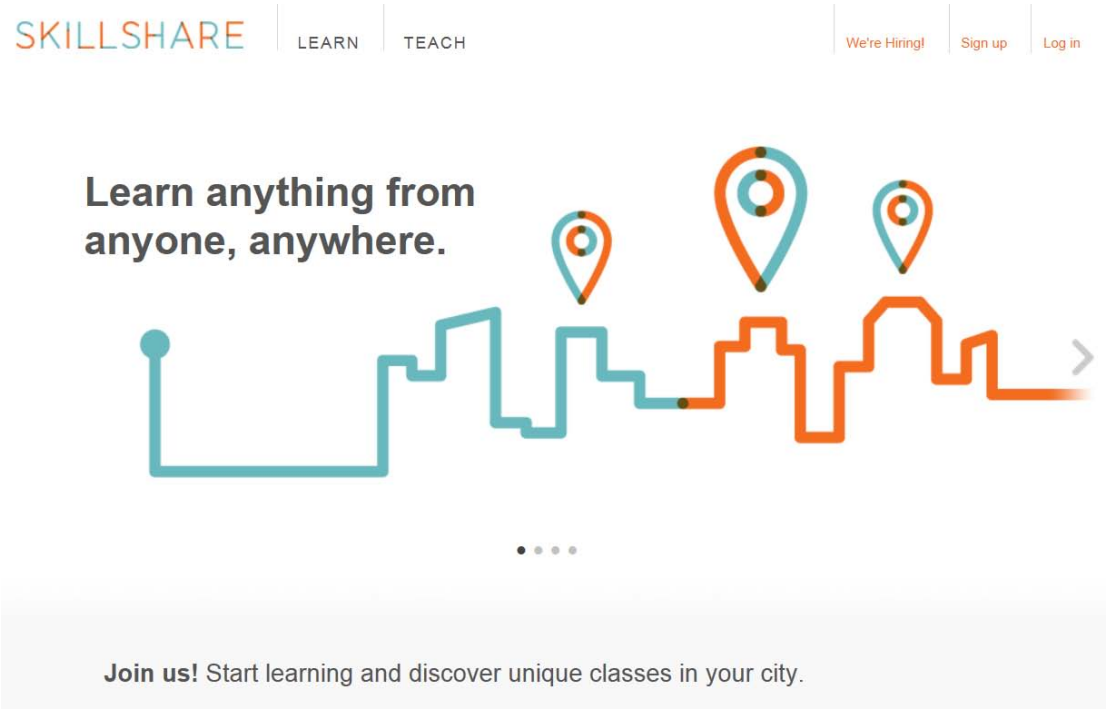
Knowledge Navigator (1987)

Apple Computer

http://www.youtube.com/watch?v=hb4AzF6wEoc

Fast Forward 25+ Years…

“Anyone can now learn anything from anyone at any time.”



May 20, 2013

The New Greatest Generation: Why Millennials will Save Us All, Time, Joel Stein

http://www.time.com/time/magazine/article/0,9171,2143001,00.html

Audience Polls #2:

I. Who remembers where they were when they found out that Steve Jobs died?

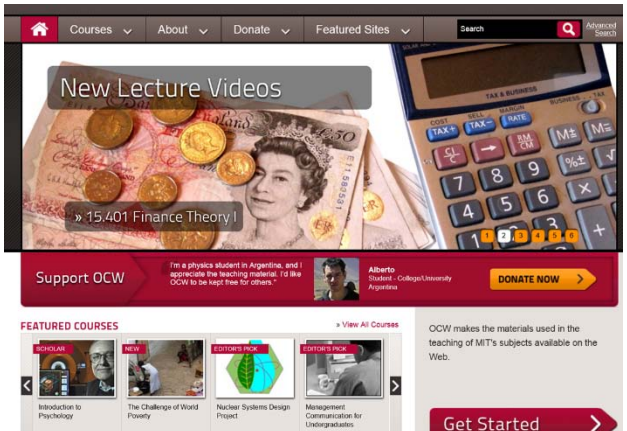
II. Who remembers what they were doing on 911?

III. Who remembers what they were doing on 441 (i.e., April 4, 2001)?

Charles Vest (April 4, 2001)

http://web.mit.edu/newsoffice/2001/ocw.html

“This is about something bigger than MIT. I hope other universities will see us as educational leaders in this arena, and we very much hope that OpenCourseWare will draw other universities to do the same. We would be delighted if -- over time -- we have a world wide web of knowledge that raises the quality of learning -- and ultimately, the quality of life -- around the globe."



Fast Forward to February 2014

MIT OCW and the OpenCourseWare Consortium

MIT OpenCourseWare (OCW)

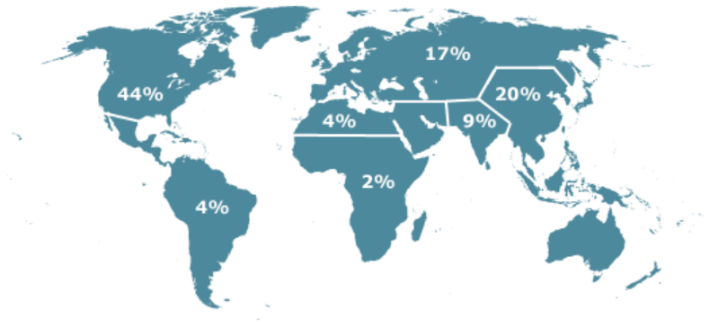
http://ocw.mit.edu/index.htm

World Impact
Download our evaluation report (PDF - 15MB)

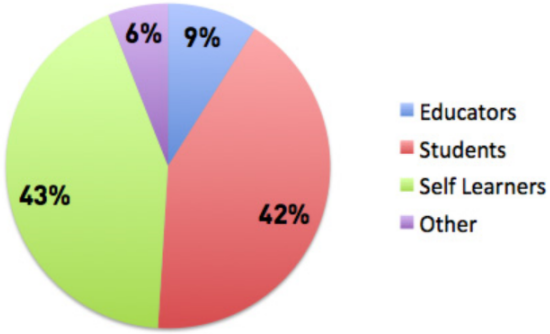
OCW is accessed by a broadly international population of educators and learners.

MIT OpenCourseWare averages 1 million visits each month; translations receive 500,000 more.

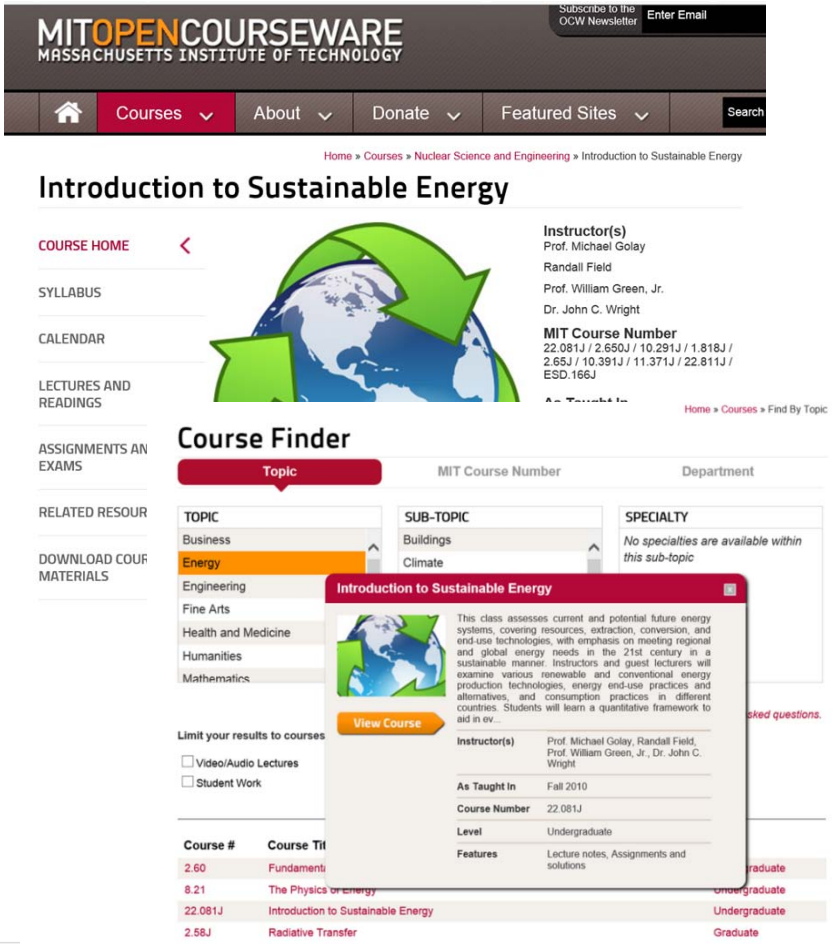
Visitors from all over the world use OpenCourseWare:



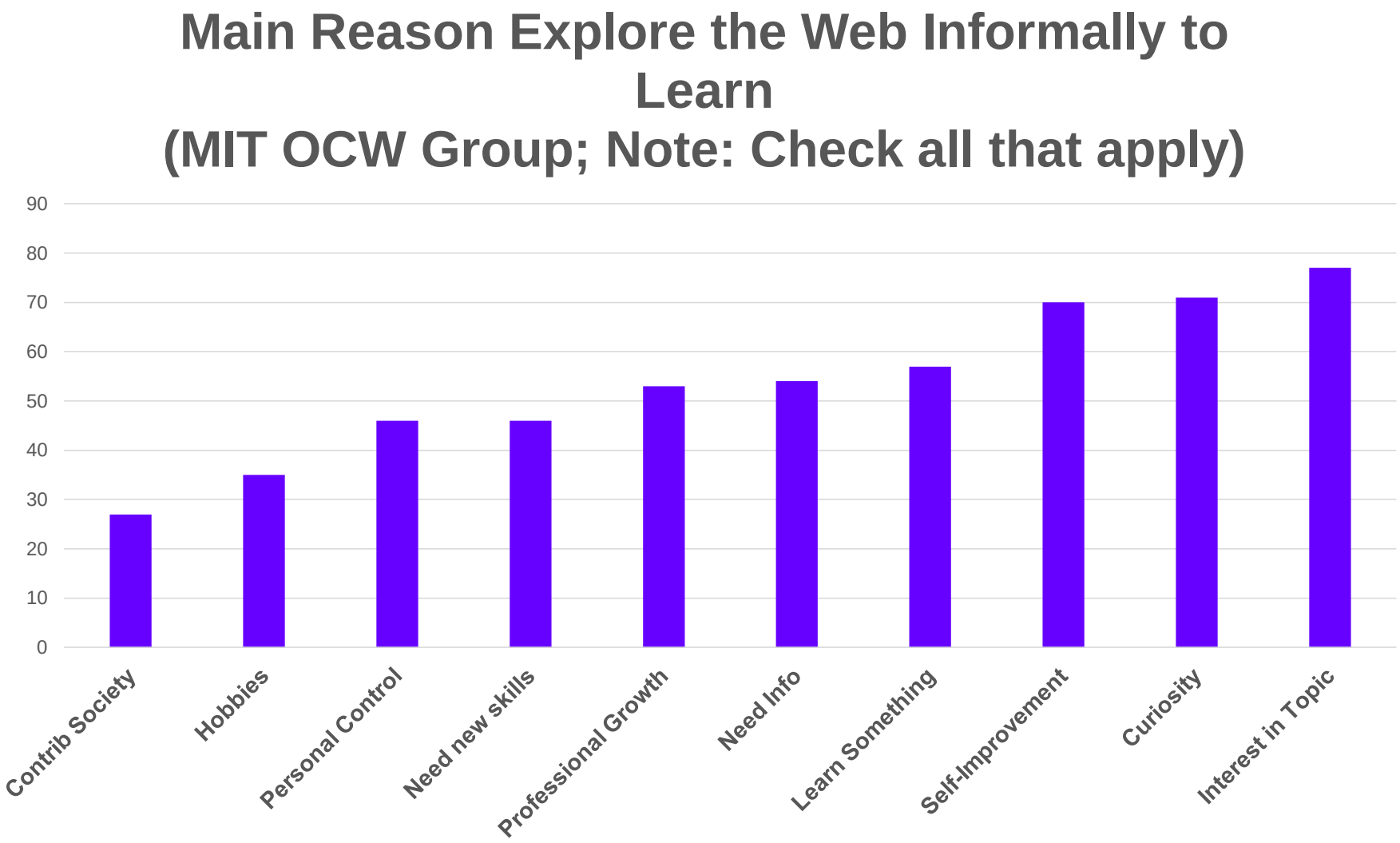
Our audience is divided among students, educators, and self-learners:



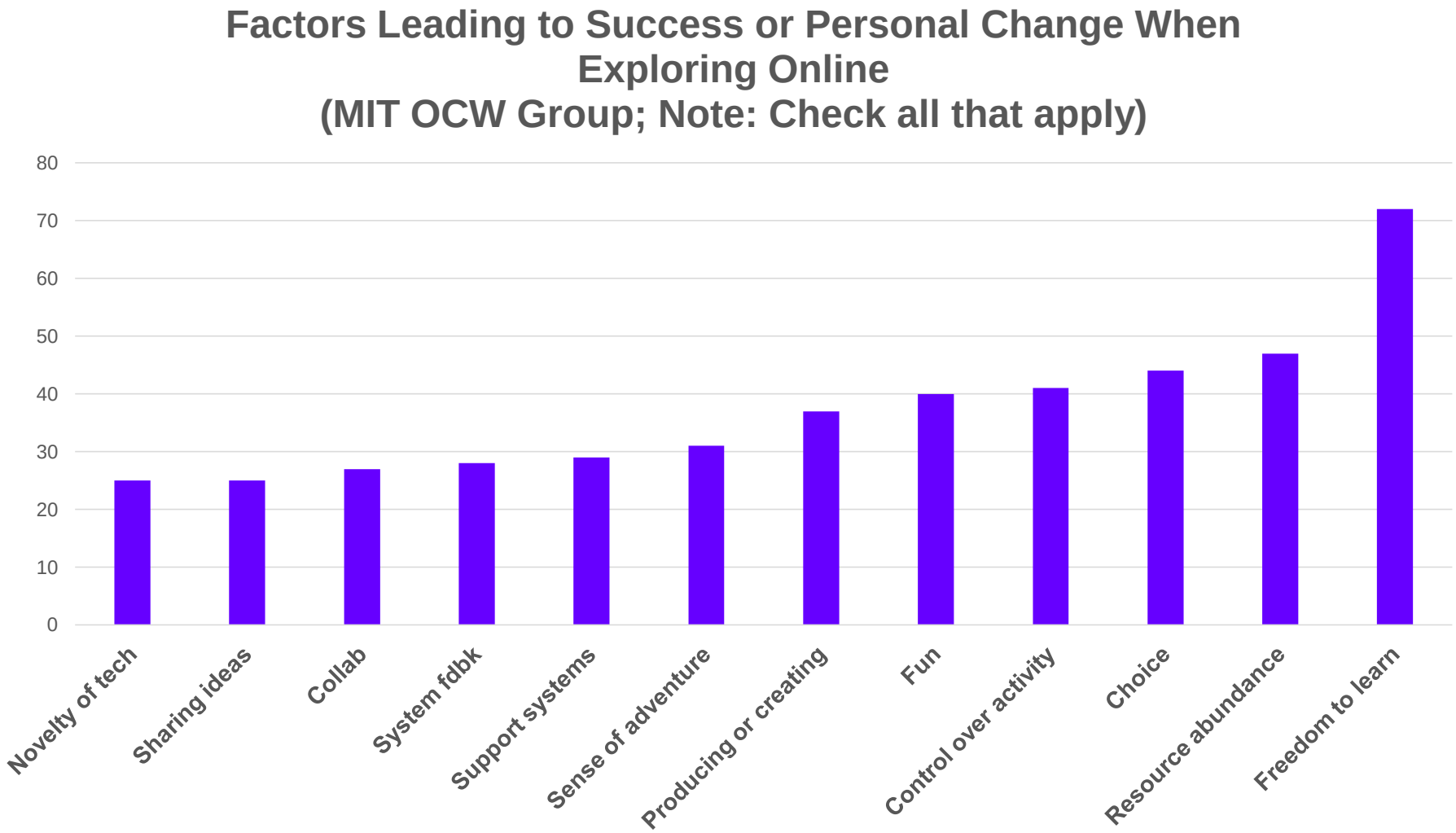
MIT OpenCourseWare is being successfully used for a wide range of purposes.



Reasons to explore?



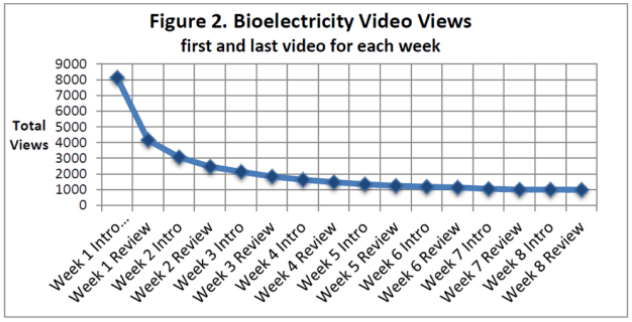
Factors leading to success or personal change?

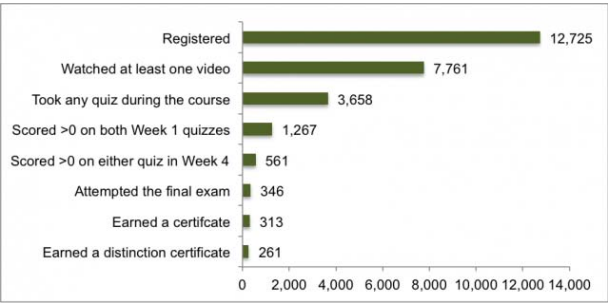


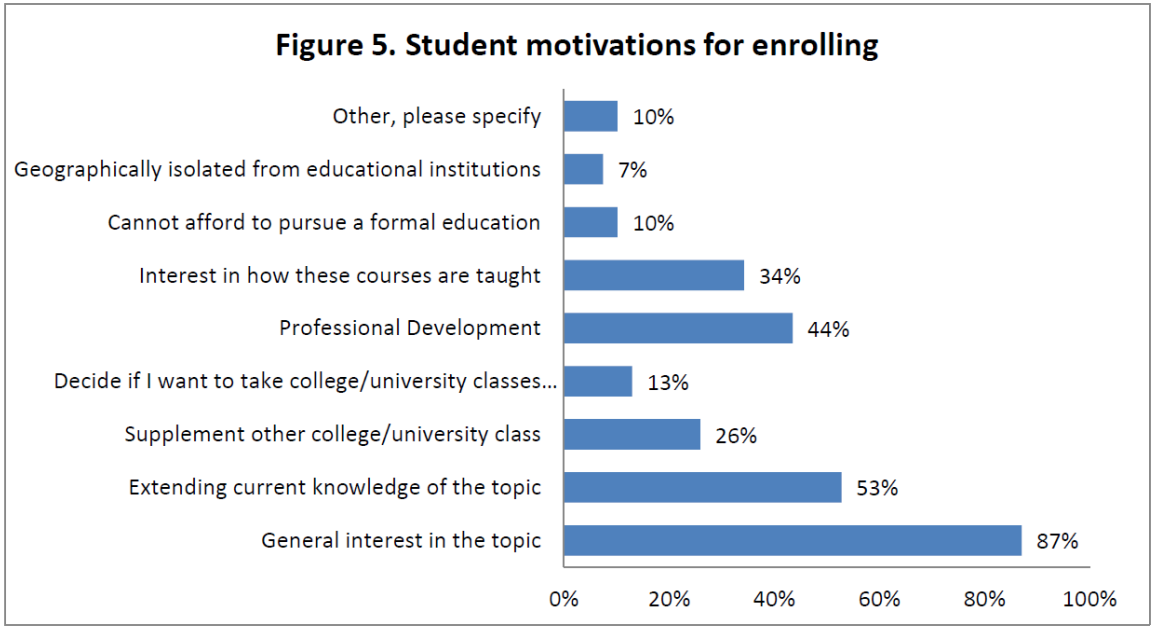
February 5, 2013

Bioelectricity: A Quantitative Approach, Duke University's First MOOC

http://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/6216/Duke_Bioelectricity_MOOC_Fall2012.pdf







May 2013

MOOCs @ Edinburgh 2013– Report #1

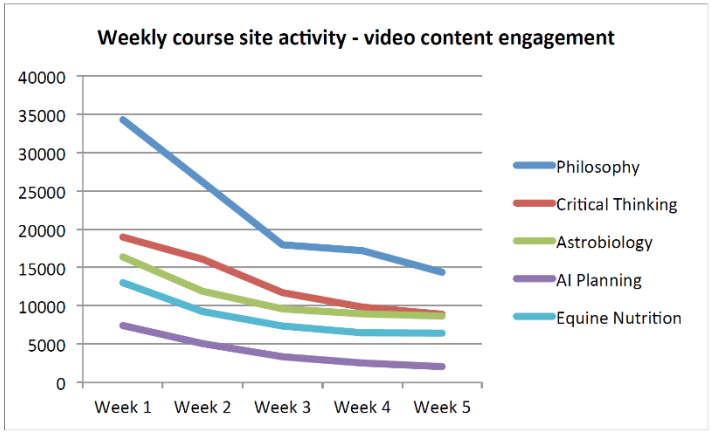


Figure 7 - Week-by-week activity tracking of the number of unique course participants engaging with video content – viewed and downloaded combined results – during the first 5 weeks (applicable to 5 courses in total)

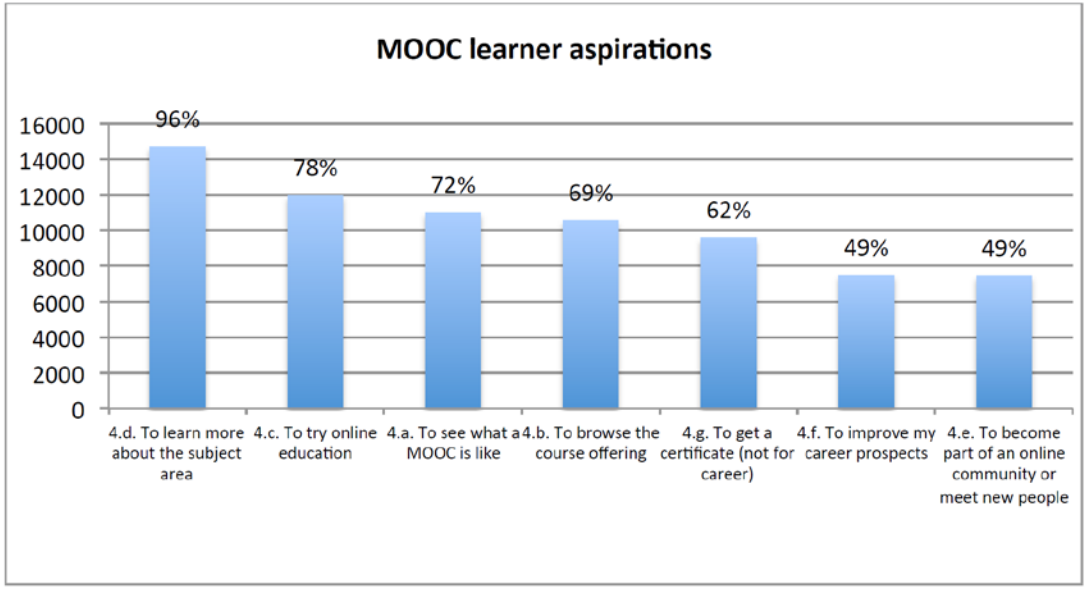


Figure 9 - Combined exit survey responses to Q4 'What did you hope to get out of the course and did it meet your expectations?' – calculated as a sum of *exceeded expectations*, *met expectations*, and *fell below expectations* responses – with percentage shown of total exit survey respondents

October 31, 2013

U.S. Teams Up With Operator of Online Courses to Plan a Global Network, Tamar Lewin, NY Times

http://www.nytimes.com/2013/11/01/education/us-plans-global-network-of-free-online-courses.html?hp&_r=3&

From Seoul, South Korea, to La Paz, Mexico, Coursera is partnering with local institutions to create "Global Learning Hubs," the company announced Oct. 31.

coursera

The New York Times

Education

WORLD | U.S. | N.Y. / REGION | BUSINESS | TECHNOLOGY | SCIENCE | HEALTH | SPORTS | OPINION

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U.S. Teams Up With Operator of Online Courses to Plan a Global Network

By TAMAR LEWIN
Published: October 31, 2013 | 43 Comments

Coursera, a California-based venture that has enrolled five million students in its free online courses, announced on Thursday a partnership with the United States government to create "learning hubs" around the world where students can go to get Internet access to free courses supplemented by weekly in-person class discussions with local teachers or facilitators.

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Readers' Comments

Share your thoughts.
Post a Comment »
Read All Comments (43) »

The learning hubs represent a new stage in the evolution of "massive open online courses," or MOOCs, and address two issues: the lack of reliable Internet access in some countries, and

September 16, 2013

Rwandan Degree Program Aims for a 'University in a Box', Chronicle of Higher Education, Megan O'Neil

http://chronicle.com/article/Rwandan-Degree-Program-Aims/141631/

Students attend an orientation session at Kepler, a new hybrid program in Kigali, Rwanda, which will use MOOCs and classroom time to help students earn competency-based associate degrees.

October 31, 2013

The launch of OERu: Towards free learning opportunities for all students worldwide, BC Campus (Canada)

http://bccampus.ca/2013/10/31/the-launch-of-oeru-towards-free-learning-opportunities-for-all-students-worldwide/

The launch of OERu: Towards free learning opportunities for all students worldwide

October 31, 2013

Imagine anyone in the world havi
credentials for it. With the launch
that's exactly what is now possibl
and marks a transition from an int
program of accessible OERu stud

The official lau
streamed live f
partners and w
United World C
website.

"The OERu lau
less expensive
radical. Howev
unemployment

August 5, 2013

Free Online Higher Education: 5 Best MOOCs

By Kannan Sankaran, Epoch Times

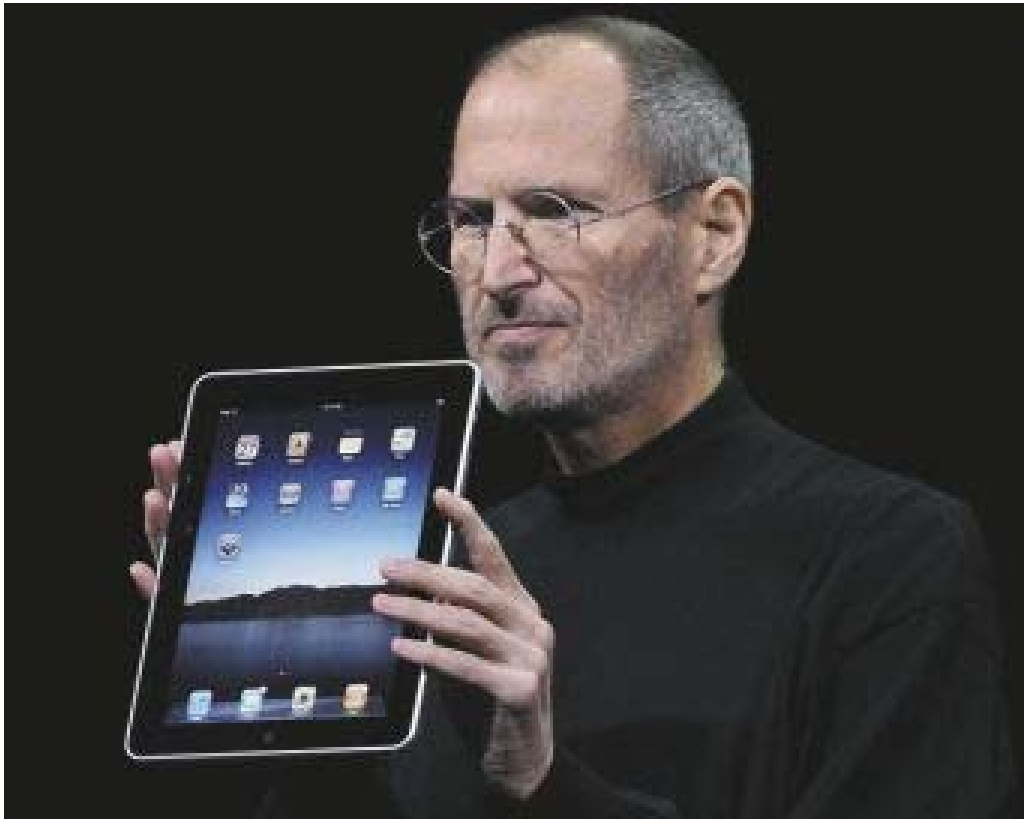
http://www.theepochtimes.com/n3/229640-5-best-moocs-for-free-online-higher-education/

MOOC at UPenn; Recession Fuels Explosion of Online Learning

http://on.aol.com/video/recession-fuels-explosion-of-online-learning-517885097

Part I. Learning is Changing

New Technologies =
New Delivery Methods...



I. Learning is More Open

(80-Year-Old WGU Texas Grad Keeps His Promise, November 30, 2012, Reeve Hamilton, Texas Tribune)

THE TEXAS TRIBUNE

An 80-Year-Old Graduate With an Online Marketing Degree Kept His Promise

The Digital Campus

Home > News > Special Reports > The Digital Campus

E-mail Print Comments (4) Share

April 29, 2012

Open Education's Wide World of Possibilities

II. Learning is More Video-Based

Adora Svitak, WFP Youth Representative - 2013 ECOSOC Youth Forum, March 27, 2013

"Shaping tomorrow's innovators: Leveraging science, technology, innovation and culture for today's youth", Statement by the World Food Programme Youth Representative, Ms. Adora Svitak at the 2013 ECOSOC Youth Forum.

http://webtv.un.org/meetings-events/economic-and-social-council/other-meetings/watch/adora-svitak-wfp-youth-representative-2013-ecosoc-youth-forum-shaping-tomorrows-innovators:-leveraging-science-technology-innovation-and-culture-for-todays-youth/2257875055001

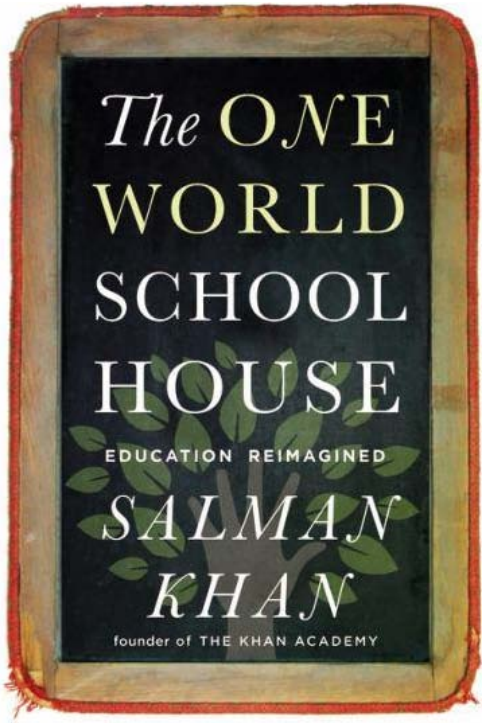
III. Learning is More Flipped

One Man, One Computer, 10 Million Students: How Khan Academy Is Reinventing Education,

Forbes, November 19, 2013, Michael Noer

http://www.forbes.com/sites/michaelnoer/2012/11/02/one-man-one-computer-10-million-students-how-khan-academy-is-reinventing-education/

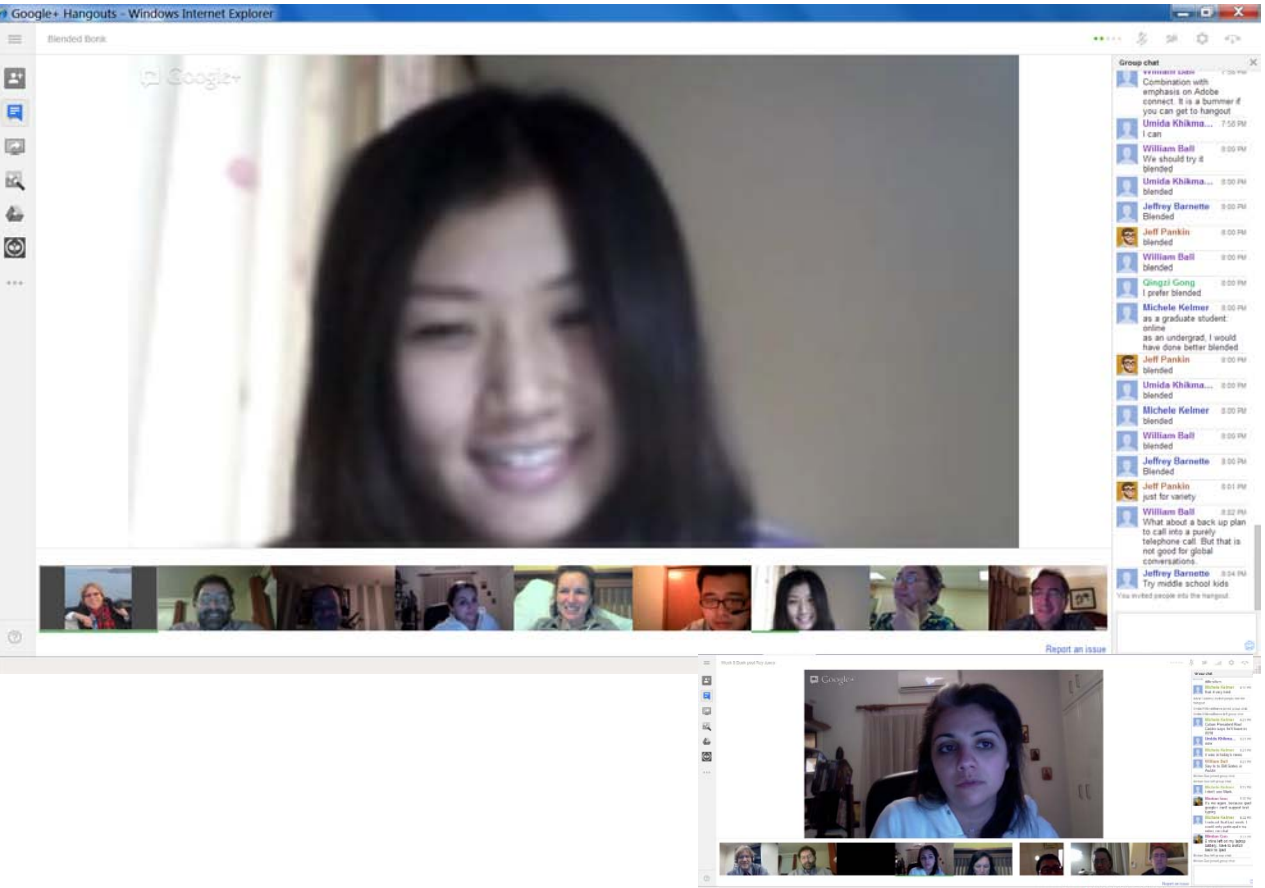
The One World Schoolhouse (Twelve, Oct. 2, 2012)



IV. Learning also is More Collaborative

Collaboration and Discussion in Google Hangouts or with iPad, Jan. 28, 2013

(Carrie Gong from Beijing Normal University)



V. Learning is More Mobile

Open Learning on Smartphone (Coursera, December 8, 2013)

http://blog.coursera.org/post/69518555384/this-holiday-season-learn-on-the-go-with-the-new

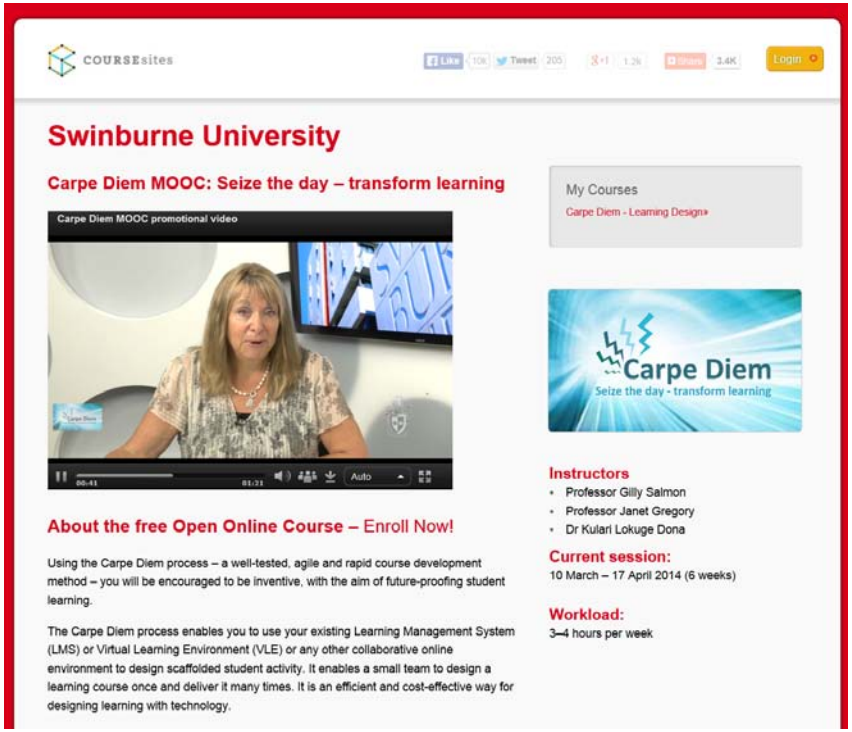
	Beijing 2008	London 2012
Smartphones	139.3 million	657 million
Facebook	90 million	901 million
Twitter	<1 million	300 million
Tweets / day	1.1 million	140 million
Tablets	0	54.8 million
App store downloads	300+ million	25+ billion

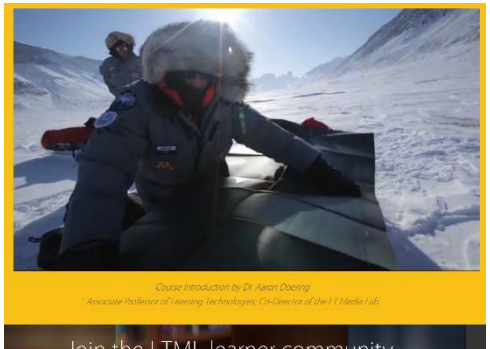
Sources: Nielsen, eMarketer, Forrester, Apple

March 2014

VI. Learning is More Massive

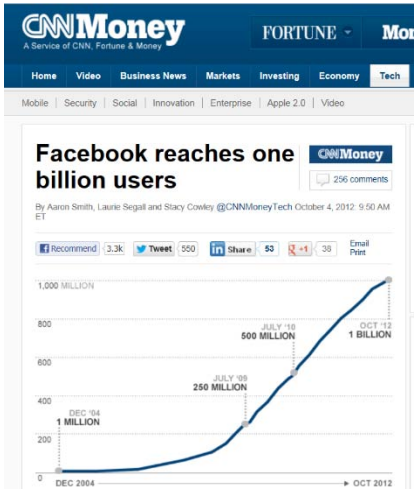
Courses on How to Design Learning Environments (Gilly Salmon, Swinburne University, Melbourne and Paul Kim from Stanford University, Aaron Doering, University of Minnesota)





VII. Learning is More Social

Facebook reaches one billion users, CNN Money, Aaron Smith, October 4, 2012



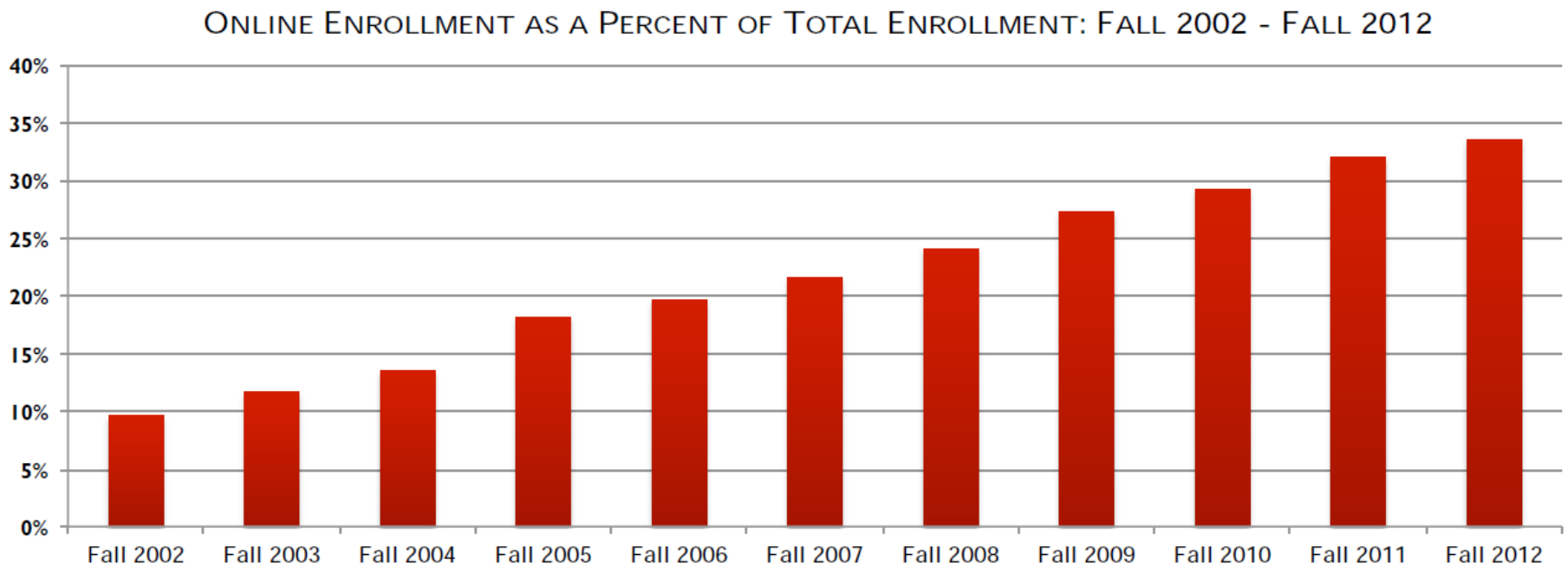
January 2014

VIII. Learning is More Online

Grade Change: Tracking Online Education in the United States, 2013, The Sloan Consortium, I. Elaine Allen & Jeff Seaman, 2013 Survey of Online Learning Report

http://sloanconsortium.org/publications/survey/grade-change-2013

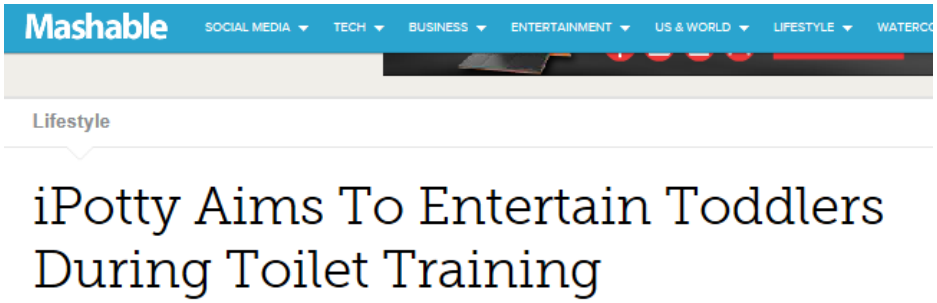
Direct connect: http://www.onlinelearningsurvey.com/reports/gradechange.pdf



IX. Learning is More Personal

iPotty Aims To Entertain Toddlers During Toilet Training, Mashable, Kate Freeman (January 10, 2013)

http://mashable.com/2013/01/10/ipotty/

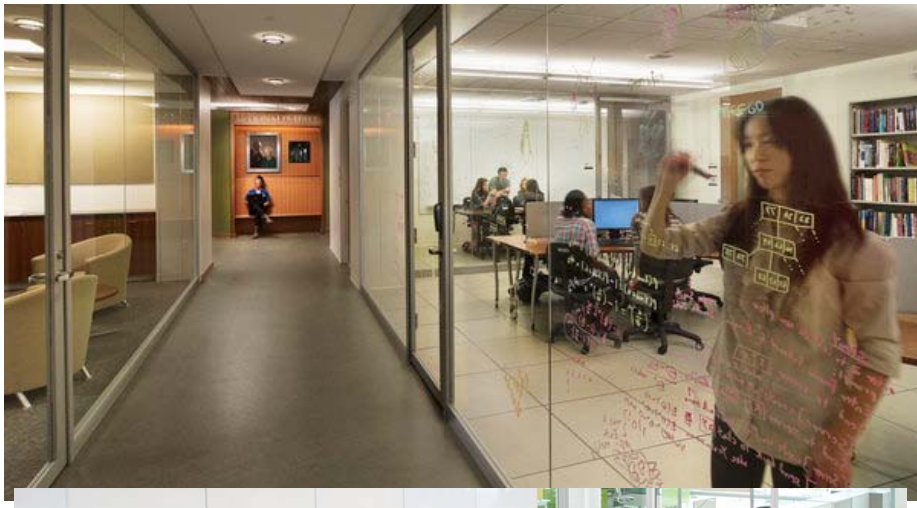


X. Learning is More Modifiable

Inside Look: Learning Spaces, Meeting classroom teaching and collaboration expectations, University Business, Feb. 22, 2013

http://www.universitybusiness.com/article/inside-look-learning-spaces

THE HIPERWALL SYSTEM at La Sierra University turns students into "spotlight academic performers," allowing them to use their own computers to control displays anywhere in the room.



XI. Learning is More Comfortable

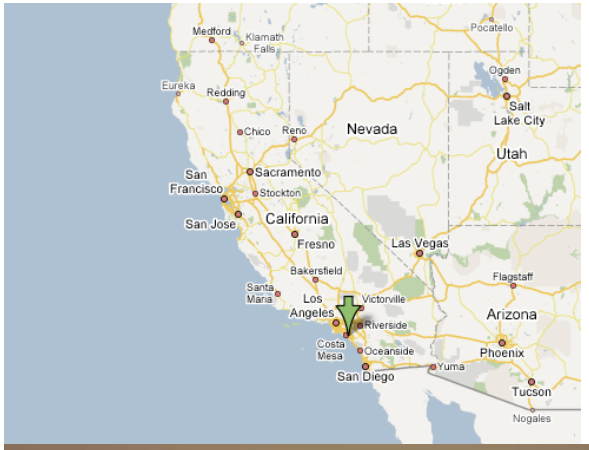
Design for Students, with Students, "Hub Central", the $42 million University of Adelaide learning hub opened in October 2011, May 8, 2012, Mike Roberts
http://designbuildsource.com.au/design-for-students-with-students

XII. Learning is More Global

UC Irvine (2013 report)

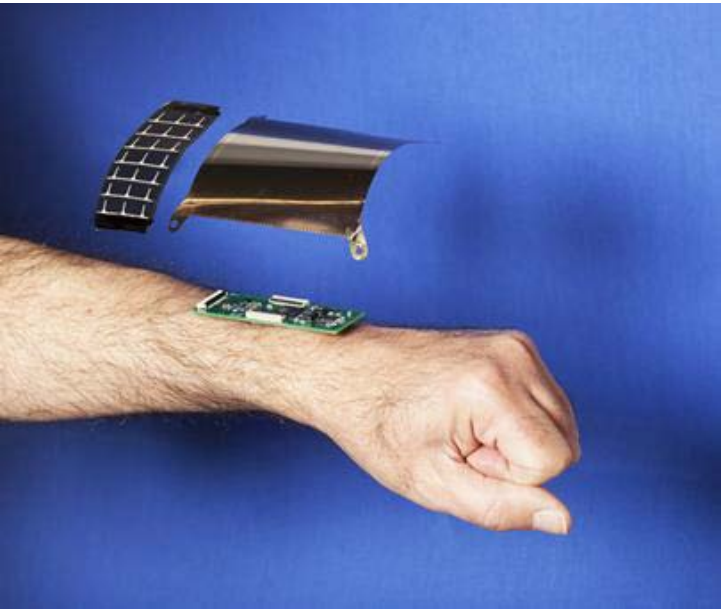
Example 3: Fundamentals of Japanese

Dr. Hidemi Riggs, Fall 2012 & Winter 2013, Tech-enhanced: EEE AdvancedWebspace (Dreamweaver), Skype video conferencing tool, Active Learning, Format: 5 - 1A lectures (24 students maximum); 3 - 2A lectures (24 students maximum); 2- 3A lectures (24 students maximum)



XIII. Learning is More Ubiquitous

Flexible displays bend what's possible for computers, Jon Swartz, USA Today (May 4, 2012)

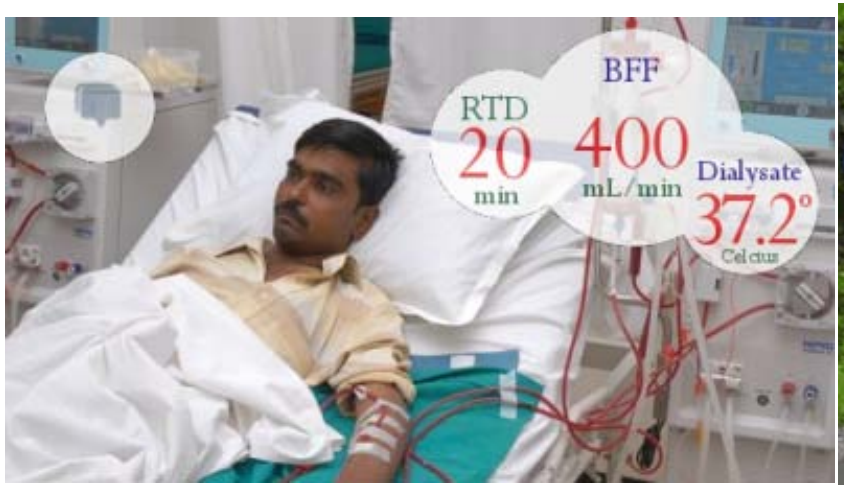


IXV. Learning is More Instantaneous

April 9, 2013

HER Computer fashions face social test: Can wearable computers fit in? Scott Martin, USA Today
http://www.usatoday.com/story/tech/2013/04/06/google-apple-iwatch-glass-jawbone-iphone-nike-microsoft-samsung/1979419/

(i.e., magnify moles or injuries, see vital signs, live stream surgeries, access previous PT sessions, access research and drug info, etc.)
http://www.fiercemobilehealthcare.com/story/google-glasses-could-have-strong-potential-healthcare-use/2013-03-18



XV. Learning is More Technology-Based

DataWind Prepared $20 Tablet Computer for Indian Market

Jan 30, 2013 4:15 AM EST

A Canada-based company believes it can revolutionize education in India by rolling out a $20 tablet computer.

Share 125 Like 275 Tweet 149 +1 5

What can you buy for $20? A lunch for two? A new shirt? A few groceries? For India's 220 million schoolchildren, $20 may soon buy a tablet computer.

Let's Review:
Learning is Changing…

(i.e., it's more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)

Frank Basile, an aircraft technician, took an MITx course on circuits and electronics to increase his knowledge.

Joe Alfonso, a financial adviser from Oregon, is taking the online finance course as a "refresher."

Poll #3: Is this a revolution in education today?

A. Yes…

B. No…

April 15, 2013
World will soon be “Webified”

Google boss: Entire world will be online by 2020, Doug Gross, CNN

http://www.cnn.com/2013/04/15/tech/web/eric-schmidt-internet/index.html?hpt=hp_t3

Google boss: Entire world will be online by 2020

By **Doug Gross**, CNN
updated 1:20 PM EDT, Mon April 15, 2013 | Filed under: **Web**

Google Executive Chairman Eric Schmidt says everyone on Earth will be connected by 2020.

Google Wi-Fi from the Sky, Steven Levy, pp. 126-131, Wired, September 2013

http://www.wired.com/gadgetlab/2013/08/googlex-project-loon/

Google X chief Astro Teller (left) and Project Loon's first leader, Rich DeVaul, holding the system's ground-based antennas.

The World is very open!

(at least in Norway and the Philippines)

January 29, 2014

Maybe it is not so open!

(e.g., MOOCs and the Promise of Internationalization, The Chronicle of Higher Education, Christina C. Davidson)

http://chronicle.com/blogs/future/2014/01/29/moocs-and-the-promise-of-internationalization/?cid=pm&utm_source=pm&utm_medium=en

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January 29, 2014

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#FutureEd

Thoughts from a MOOC on higher education.

January 29, 2014 by Christina C. Davidson

Comment (1)

MOOCs and the Promise of Internationalization

The MOOC's Chinese edition.

A MOOC at Duke University, "History and Future of (Mostly) Higher Education," opened on Monday morning. A few of us gathered in the university's Smith Warehouse, anticipating a rush of technical questions about the online course. None came.

Instead, people from around the world began to introduce themselves. The first comment was from Britain, then from Germany, China, Brazil, and Quebec. Introductions from a few American cities—Boston, Des Moines, and Asheville, N.C.—interspersed with those from the international community, which then

inspiring, empowering and connecting entrepreneurs

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Online education platform Coursera blocks students in Syria and Iran

by Nina Curley, January 27, 2014

بالعربي

https://accounts.coursera.org/signin

coursera | Accounts

Sign In

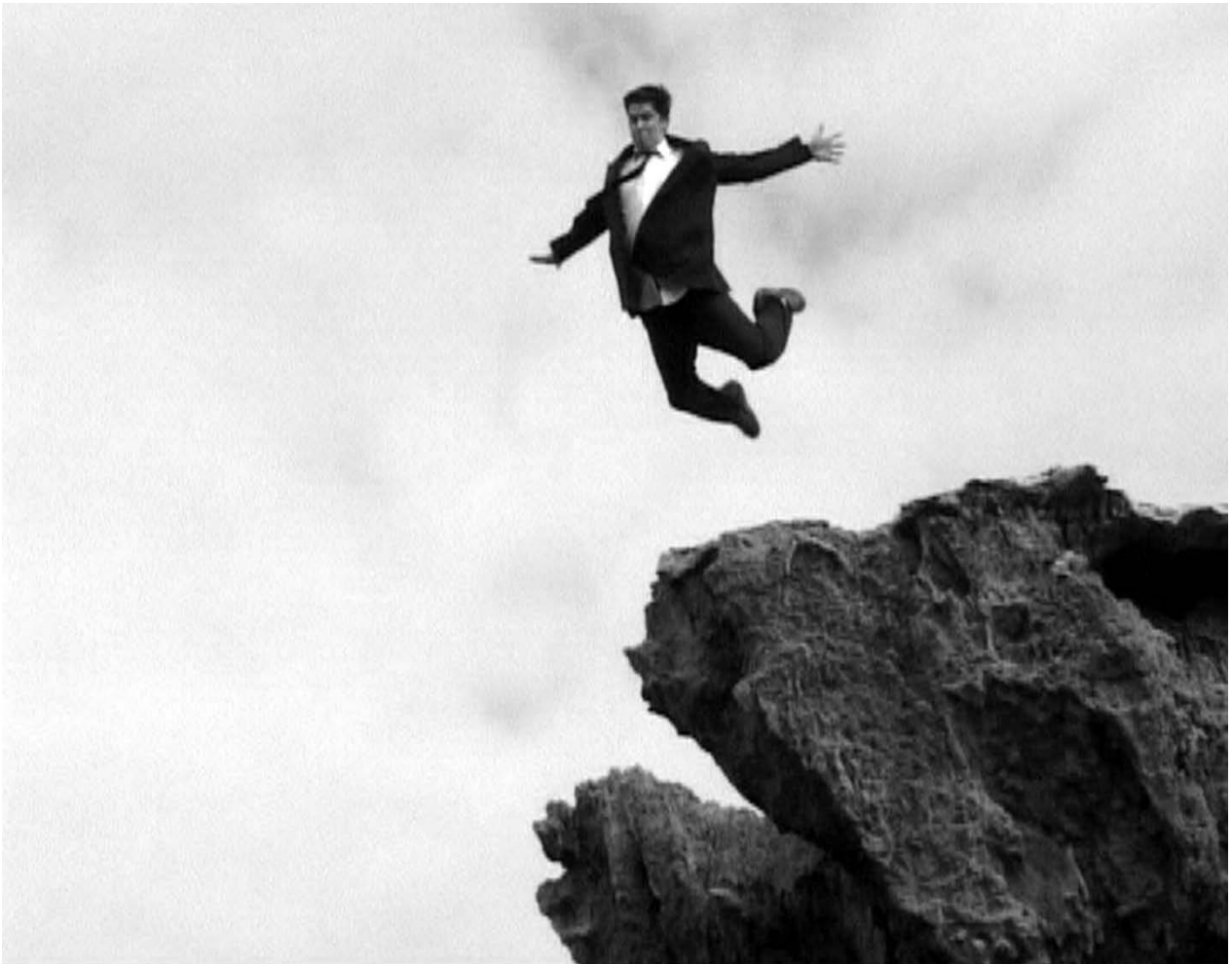
Comment 8

Tweet 80

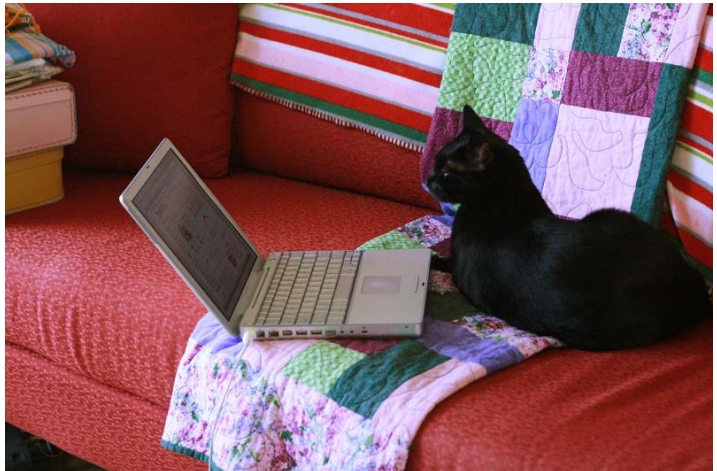
Like 55

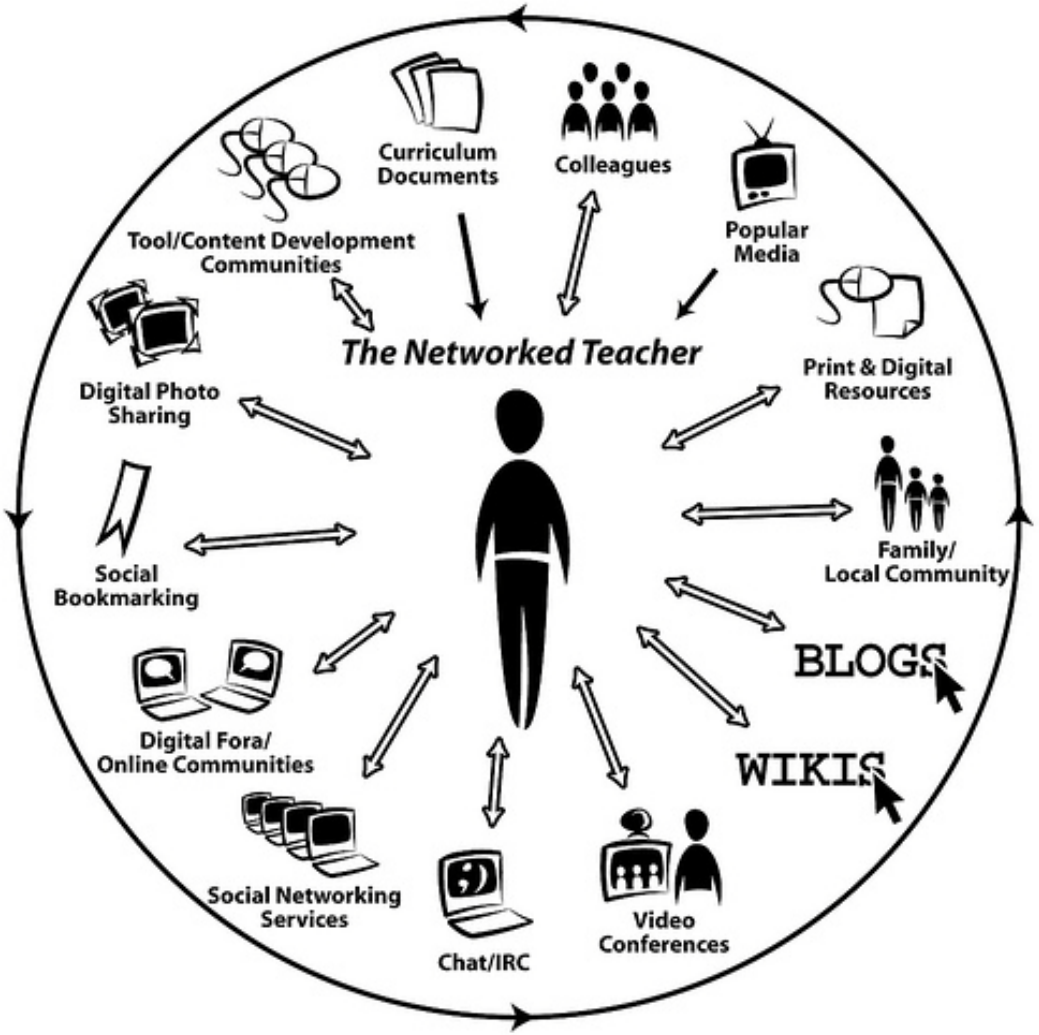
Share 8

We are entering a jumping off point…



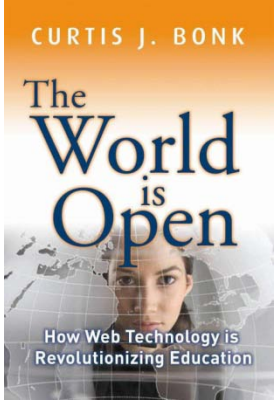
The Web of Learning





Framework #1: 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)

Audience Participation!

WE

ALL

LEARN!!!

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

In South Korean classrooms, digital textbook revolution meets some resistance

Ahn Young-joon/AP Teacher Yoon Eun-jung, right, helps student Jeong Ha-sook study on a tablet PC during a lesson at Sosu Elementary School in Gwesan, South Korea in July. The country is now scaling back a plan to digitize classrooms by 2015.

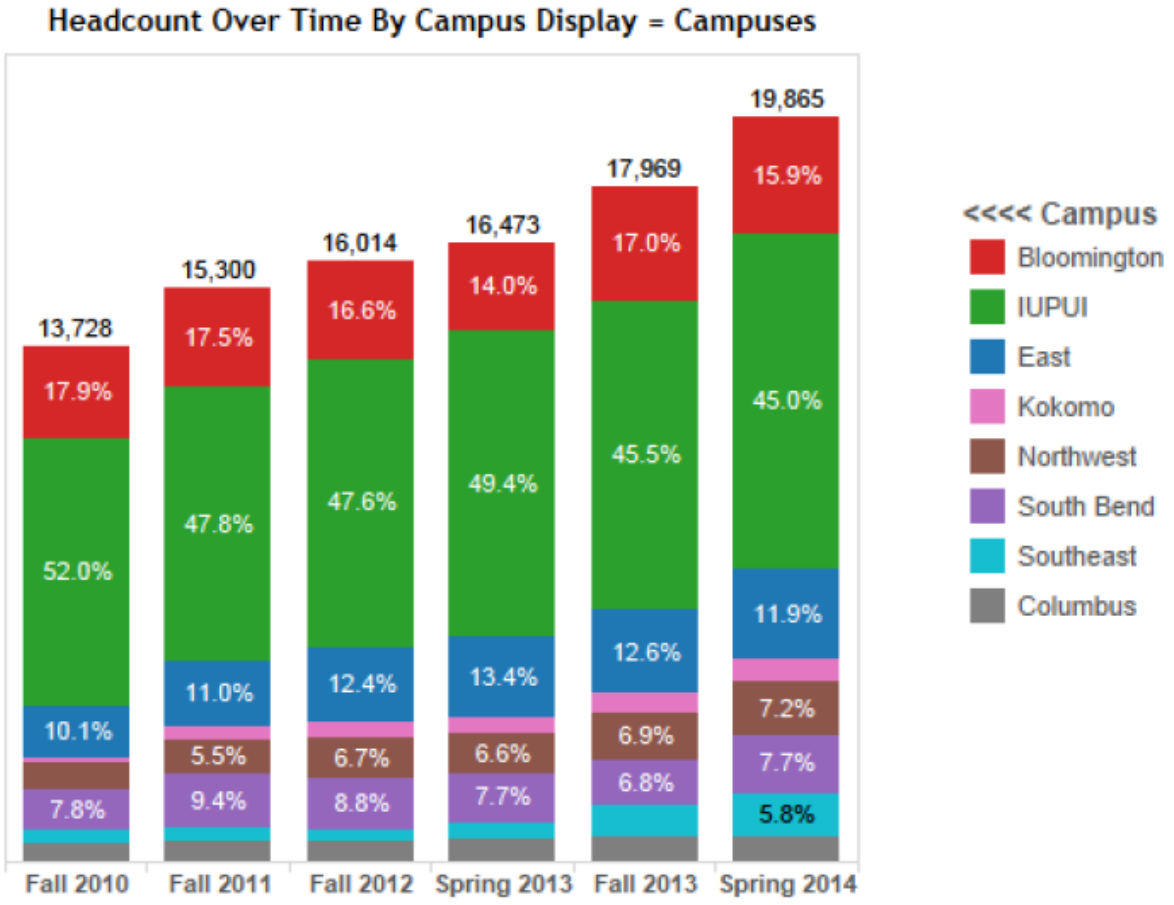
Opener #2. E-Learning and Blended Learning

February 2014

IU Online Enrollments

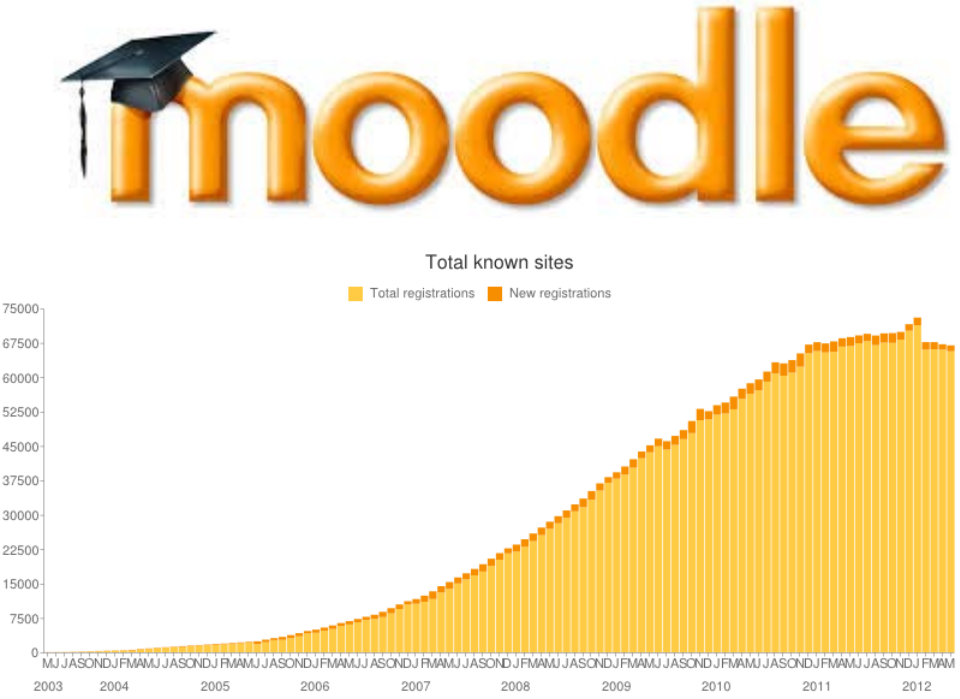
(at least one class online)

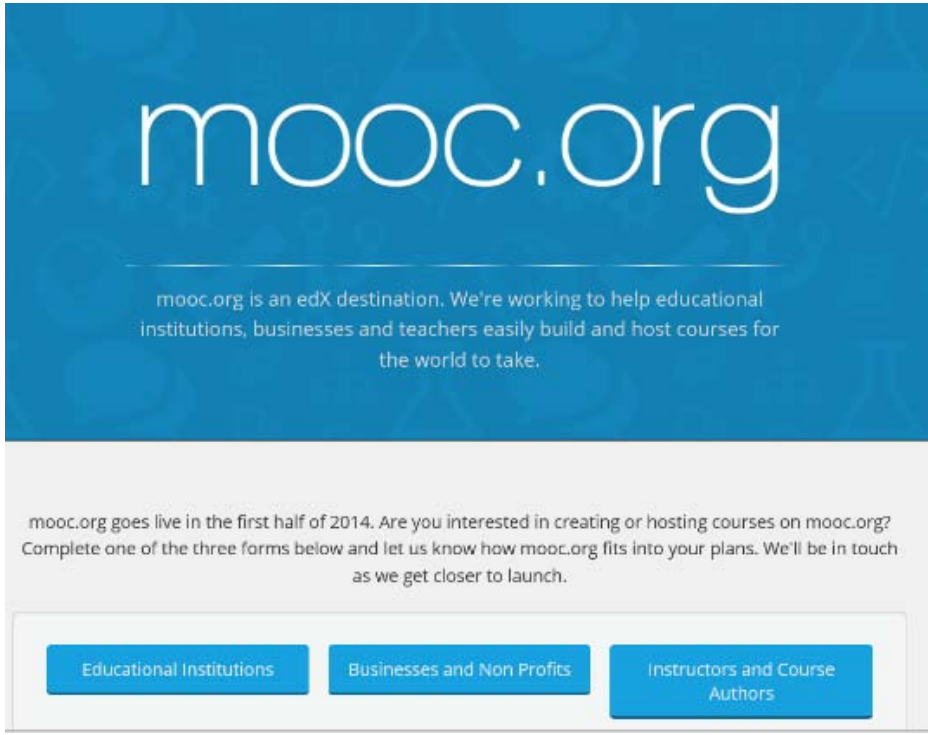
http://public.tableausoftware.com/views/Students-AtLeastOneOnlineClass/Dashboard-AtLeastOne?:embed=y&:display_count=no



Opener #3. Availability of Open Source and Free Software Moodle

(July 18, 2013: 72 million users in 237 countries, 84,518 sites, 7.6 million courses)

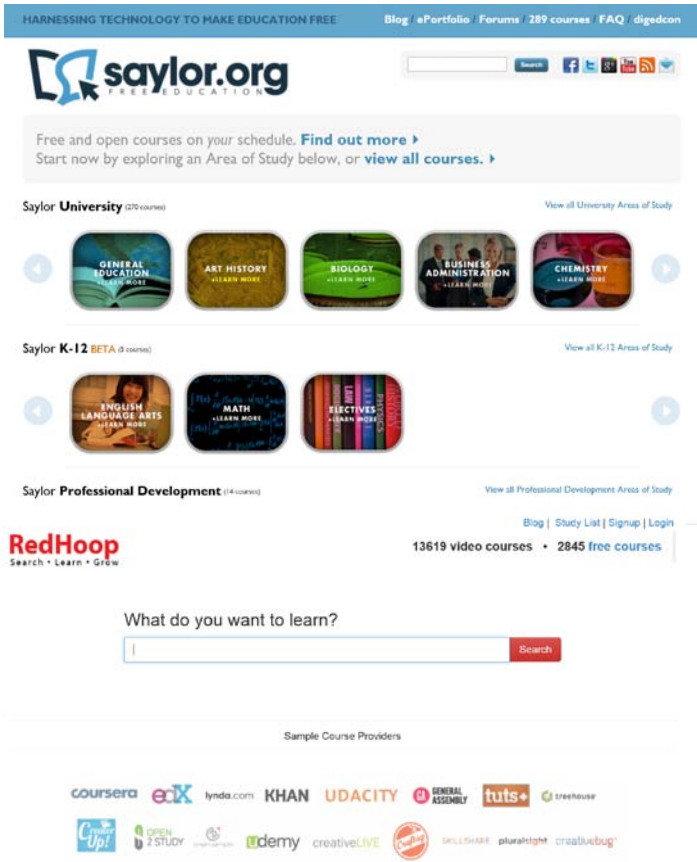




Opener #4. Leveraged Resources and OpenCourseWare (OCW) (e.g., free courses from Harvard Edx, MITx, CORE, OOPS)

Saylor.org; http://www.saylor.org/
RedHoop; http://redhoop.org/

OOPS! Opensource Opencourseware Prototype System
The Foundation of Fantasy Culture and Arts

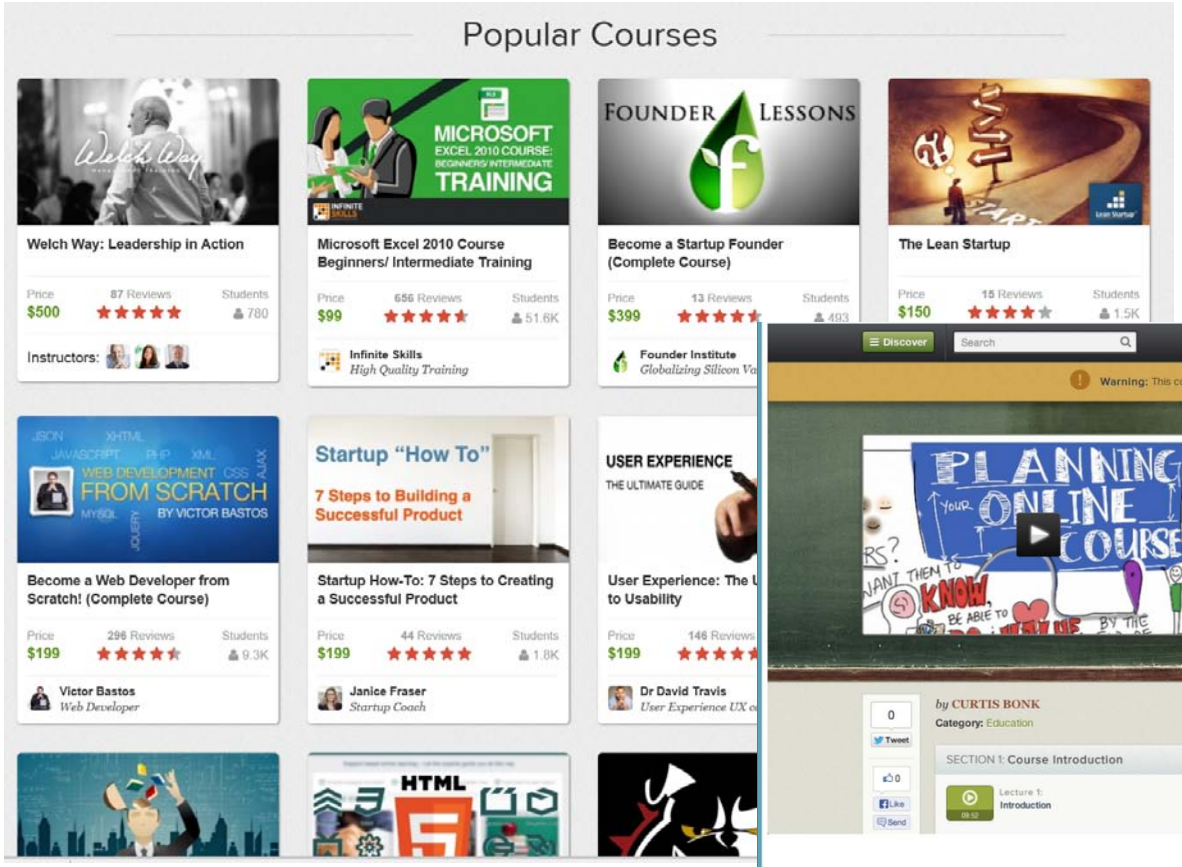


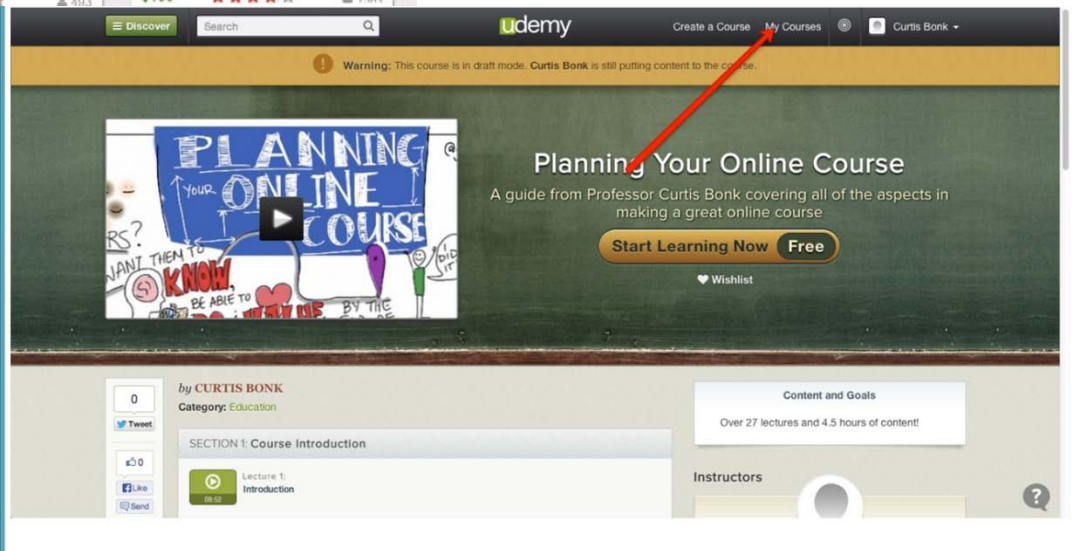
November 4, 2012

Udemy (professors create own courses)

(e.g., “Planning Your Online Course”)

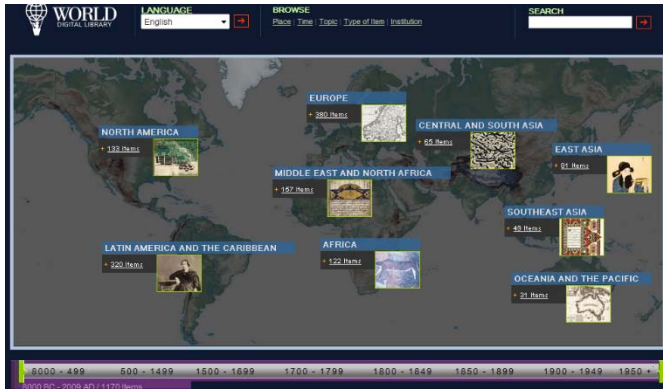
https://www.udemy.com/courses/

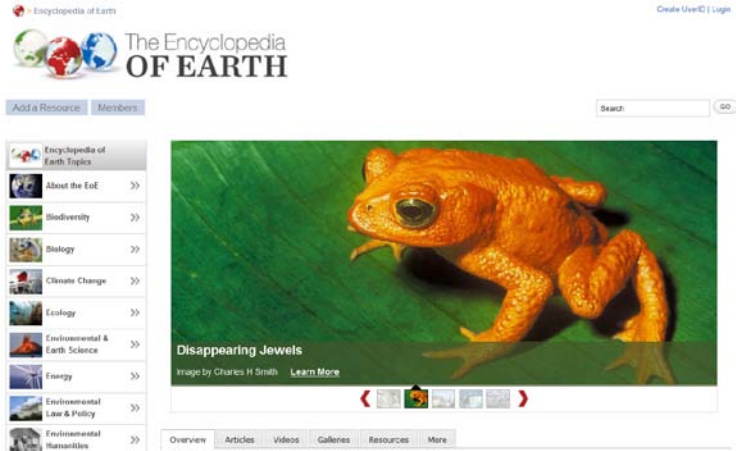




Opener #5. Online Learning Object Repositories and Portals (shared content)

http://www.deadseascrolls.org.il/explore-the-archive
http://www.deadseascrolls.org.il/explore-the-archive/search#q=site_en:'Qumran,_Cave_4'
http://www.deadseascrolls.org.il/home





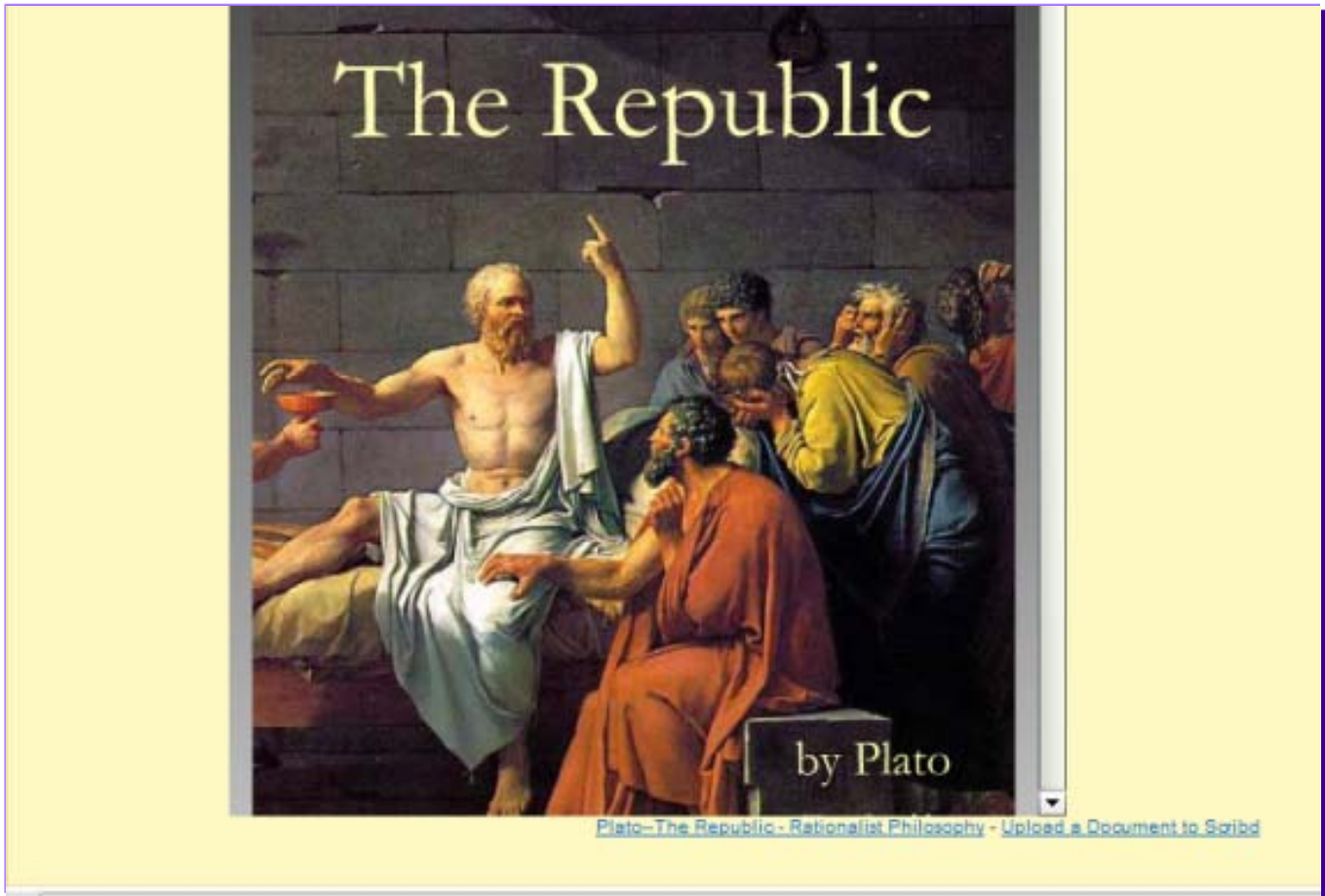
October 2010, The V-PORTAL (Bonk, IU)

"Video Primers in an Online Repository for e-Teaching and Learning" V-PORTAL, TravelinEdMan (27 free/open YouTube videos)

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

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

WIKIPEDIA
The Free Encyclopedia



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

Soliya Connect

http://gli.georgetown.edu/#soliya

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

Video games may improve brain power in older adults

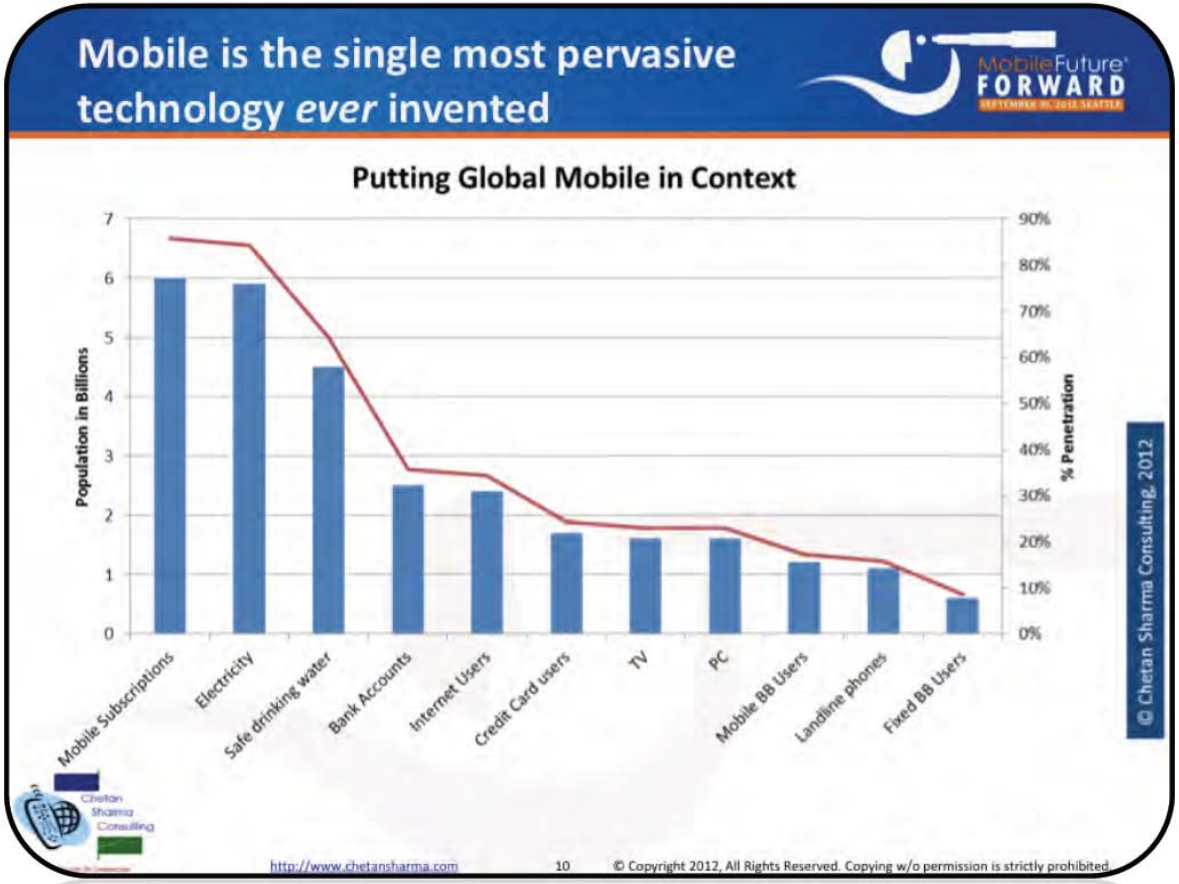
http://www.usatoday.com/story/news/nation/2013/09/04/video-games-brain-power-dementia/2762523/

Opener #9. Real-Time Mobility and Portability (e.g., iPhone, iPads, smart watches (September 4, 2013))

The Samsung Galaxy Gear smartwatch

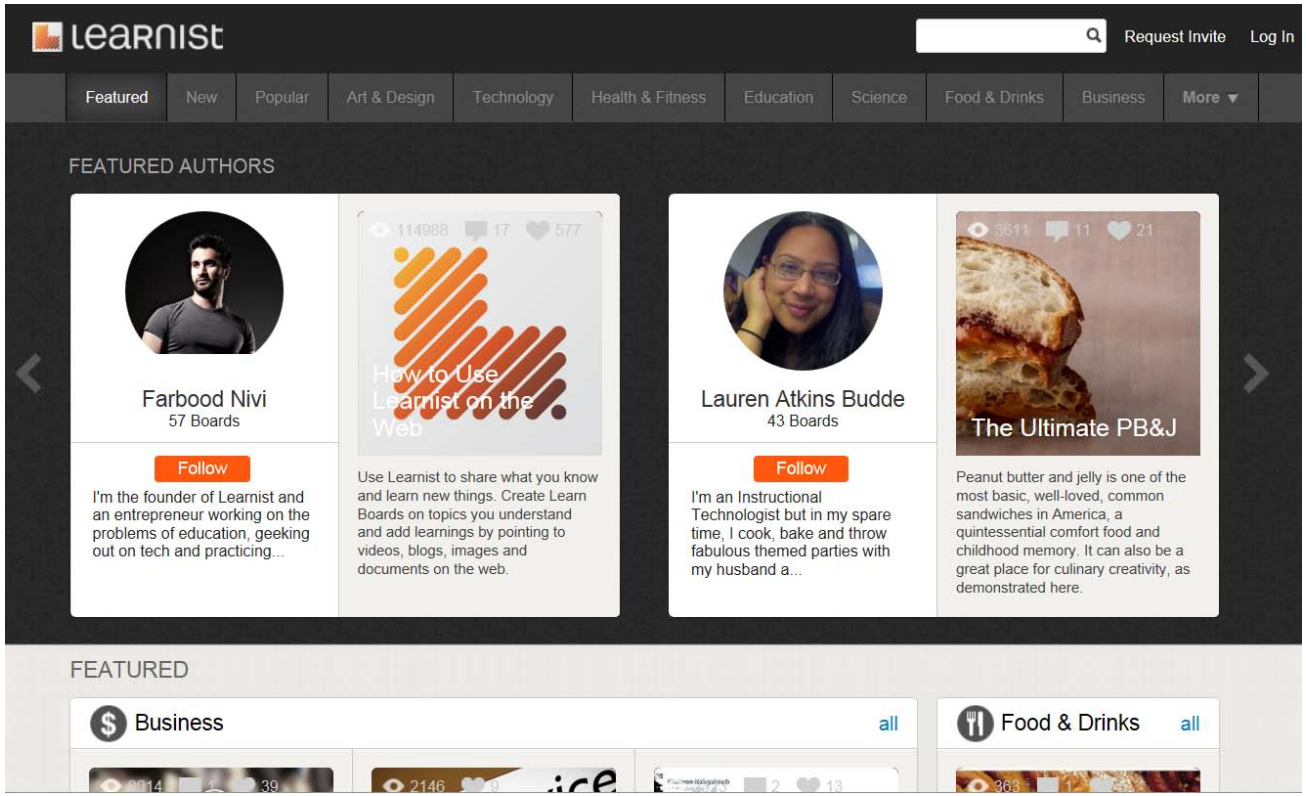
Mobile is the Most Pervasive Technology Ever

Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012



Opener #10. Networks of Personalized Learning

(Blogs, Podcasts, Facebook, and RSS feeds, etc.)



May 22, 2013

Video Walls of Experts (IQ Wall)

Indiana University unveils high-tech classroom

The Herald-Times, Mike Leonard

http://www.indianaeconomicdigest.net/main.asp?SectionID=31&SubSectionID=135&ArticleID=69980

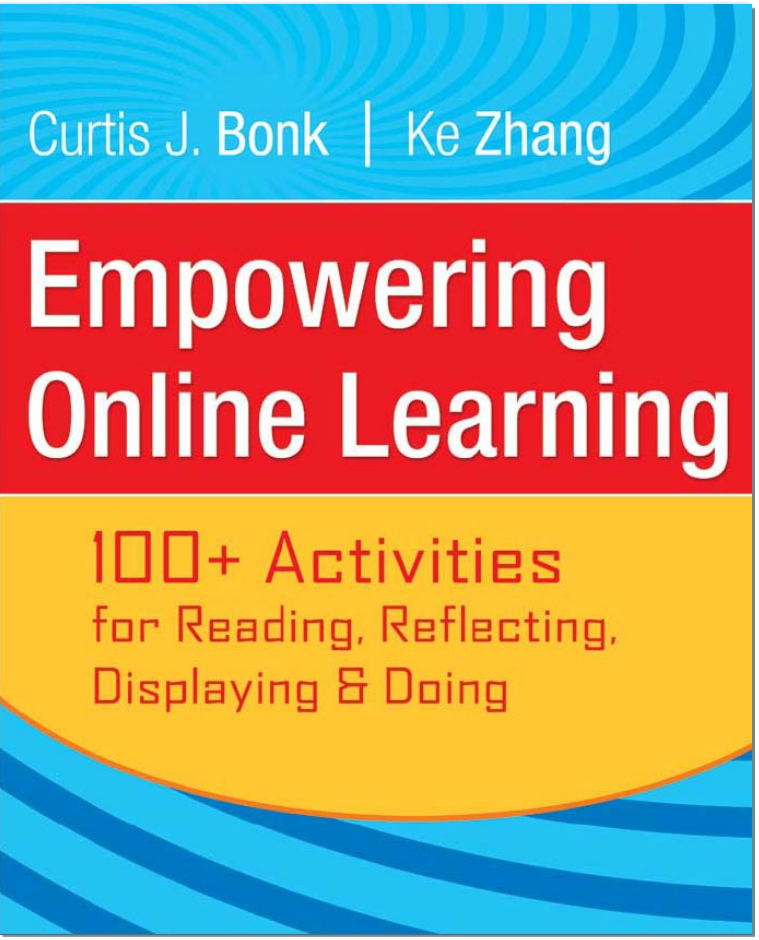
What about the Instructor in the Open World?

Instructor as Curator

Instructor as Concierge

How can technology address diverse learner needs?

Framework #2: The R2D2 Model

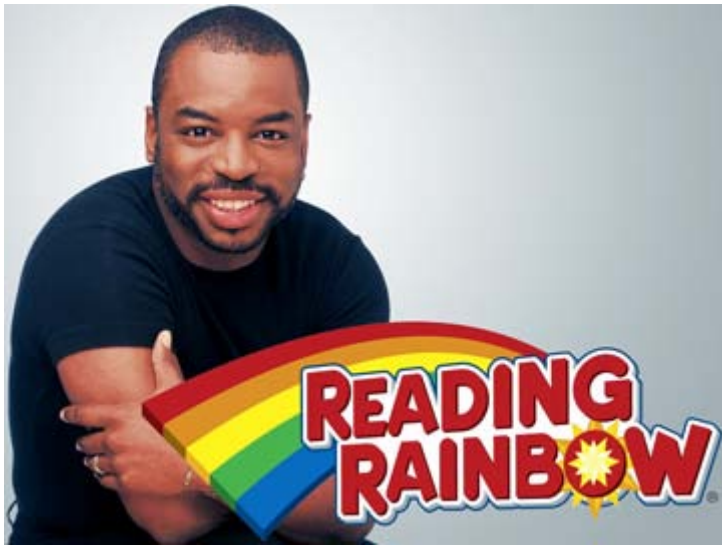


The R2D2 Method

1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)

1. Auditory or Verbal Learners

- **Auditory and verbal learners prefer words, spoken or written explanations.**



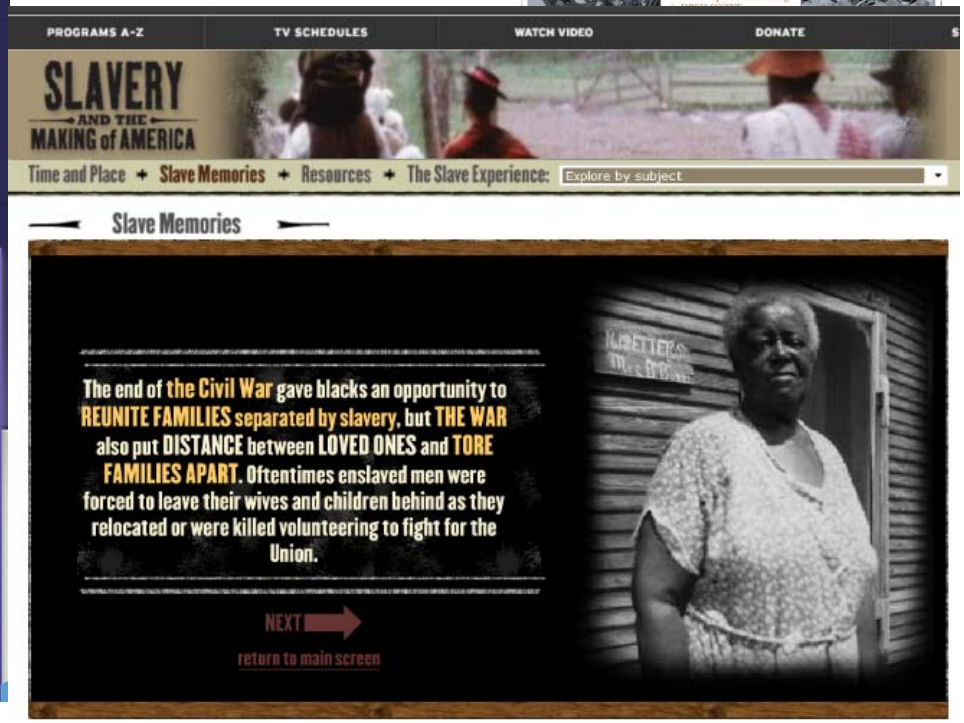
Read 1a. Collect and Listen to Interactive Stories

(e.g., Meograph: http://www.meograph.com/)

Timelines with Oral Histories, Slavery and the Making of America

Time and Place, PBS

http://www.pbs.org/wnet/slavery/timeline/1857.html

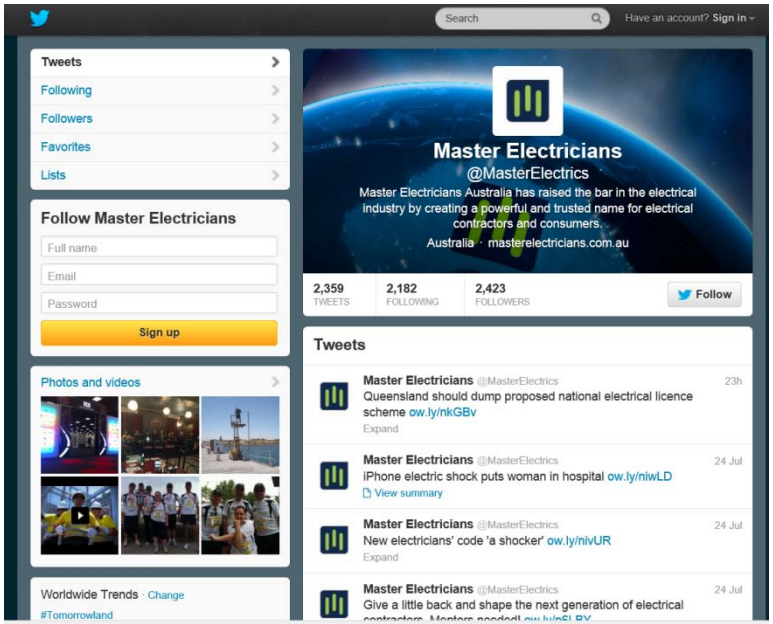


Read 1b. Grammer Checkers (e.g., Grammarly, Ginger, GrammarCheck, PaperRater, and SpellCheckPlus)

http://www.grammarly.com/

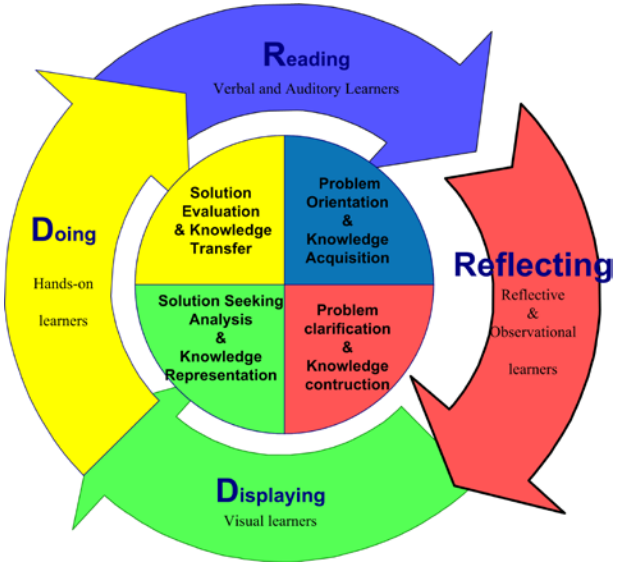
Read 1c. Follow on Twitter

http://venture-lab.org/education
https://twitter.com/electricians



2. Reflective and Observational Learners

- **Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives**



Reflect 2a. Big Issue Reflections

(Big Questions Online (BQO)), January 8, 2013 (e.g., Do We Have Souls?)

https://www.bigquestionsonline.com/content/do-we-have-souls

BIG QUESTIONS ONLINE

HOME QUESTIONS ABOUT

Do We Have Souls?

image: Getty

By Tim O'Connor

January 8, 2013

Plato taught that the soul is a simple immaterial thing that relates to the human body (brain included) as a captain to a ship. The person *is* a soul, the bearer of all psychological capacities and the fount of purposive action. It has a body as a vehicle for acting upon this world,

Share

Tweet

COMMENT

BIG QUESTIONS ONLINE

HOME QUESTIONS ABOUT

Can You Learn to Control Your Mind?

image: Getty

By Richard Davidson

February 19, 2013

Share

Reflect 2b.

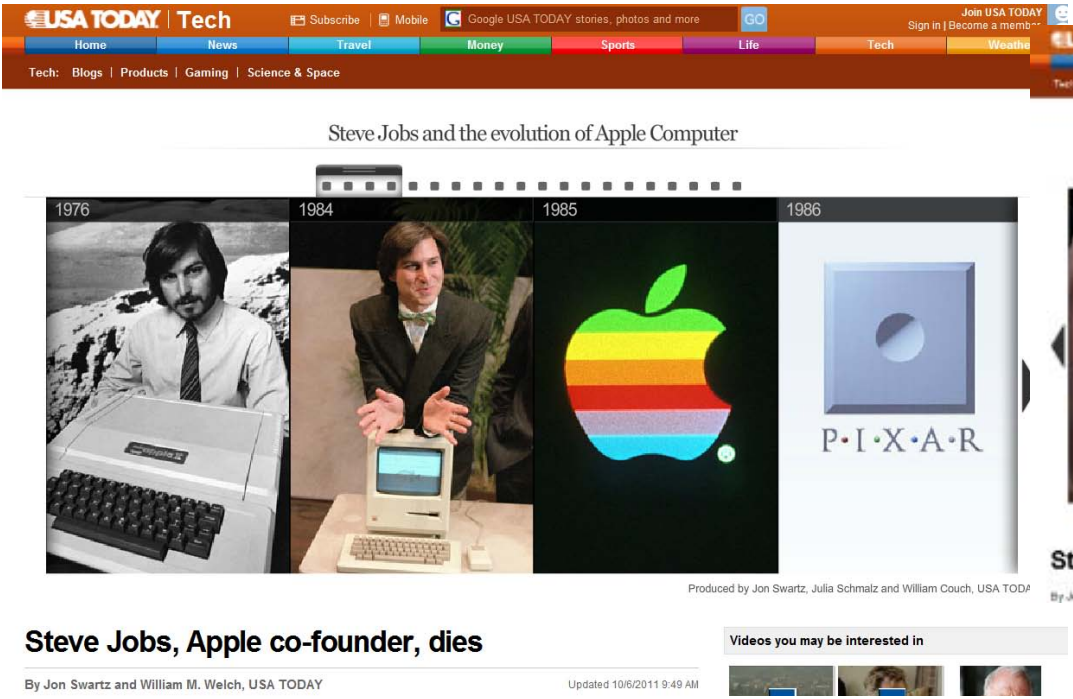
Reflect on Virtual Timelines

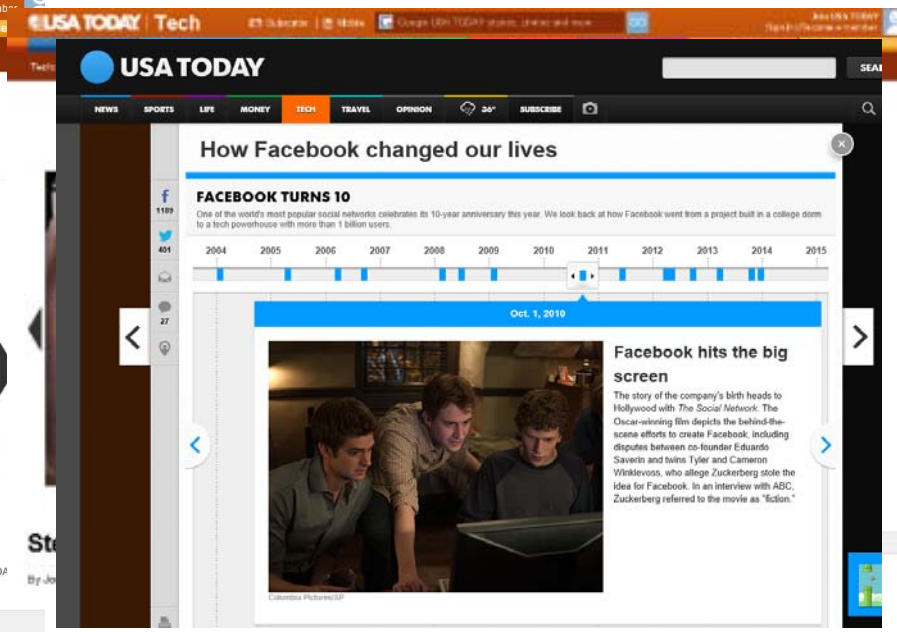
(Dipity, xtimeline, Simile, etc.)

http://www.usatoday.com/story/tech/2014/02/02/facebook-turns-10-cultural-impact/5063979/

http://www.usatoday.com/tech/news/story/2011-09-22/steve-jobs-dies/50672498/1

http://www.usatoday.com/news/destinations/story/2011-08-25/Martin-Luther-King-Jr-Memorial-in-Washington-A-closer-look/50136470/1?csp=34news





Reflect 2c. Cultural Blogs (e.g., Dr. Kim Foreman, San Fran State University, Come and See Africa Blog; http://comeandseeafrica.blogspot.com/)

Come and See Africa (CASA)

Kim Foreman's reflection on works in Africa, at First Southern Baptist Church in San Lorenzo, and at San Francisco State University.

Come and See Africa

About Me

SAN FRANCISCO, CALIFORNIA, UNITED STATES

View my complete profile

Blogs I read

Stephen Downes
George Siemens
Vicky Davis
Clark Quinn
Curt Bonk
Jay Cross
Will Richardson

Connections

ITEC 712Ning
ITEC 712 Summer
ITEC 830 Spring 2009
ITEC 830 blogs/wikis

WEDNESDAY, JULY 28, 2010

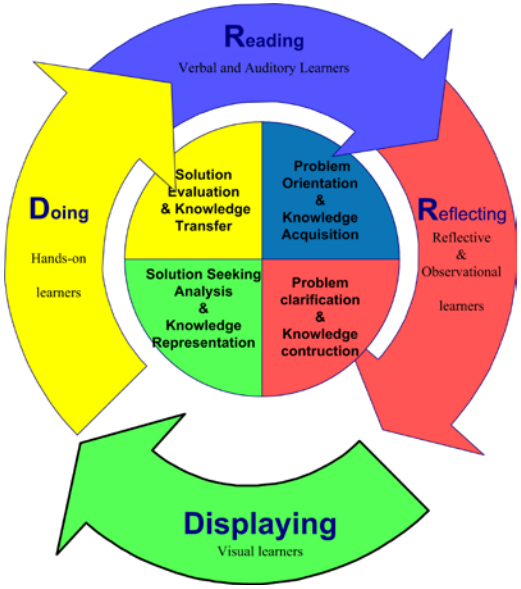
A Day in Butare, Rwanda

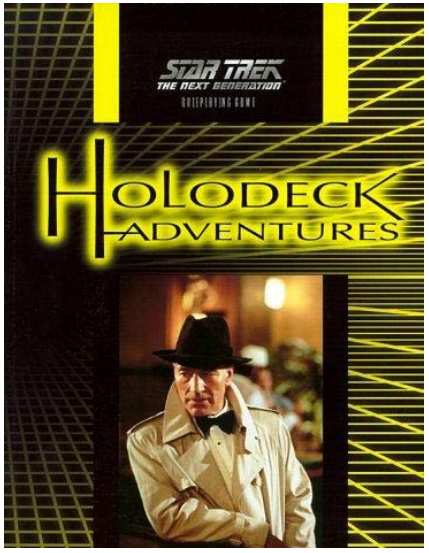
When people ask me "What do you do in Africa?", I say, "We do all kinds of different things. We stay at the Come and See Africa (CASA) House. We teach. We visit." I think I need to give you a little more detail than this terse answer, so you can pray for us specifically. Here is a list of things that I did today, on July 28, 2010

I got up around 4 am (sounds like I am a very diligent person), but not really. My body is still confused from California time and Rwanda time. I check my email and prepare a sermon to share at the morning devotion. At 5 am, Jack the night watchman prepares the room for the morning devotion. Adults usually sit on chairs, and children sit on the floor. Around 5:30 people start singing, I join them. It was my turn to give a sermon this morning.

3. Visual Learners

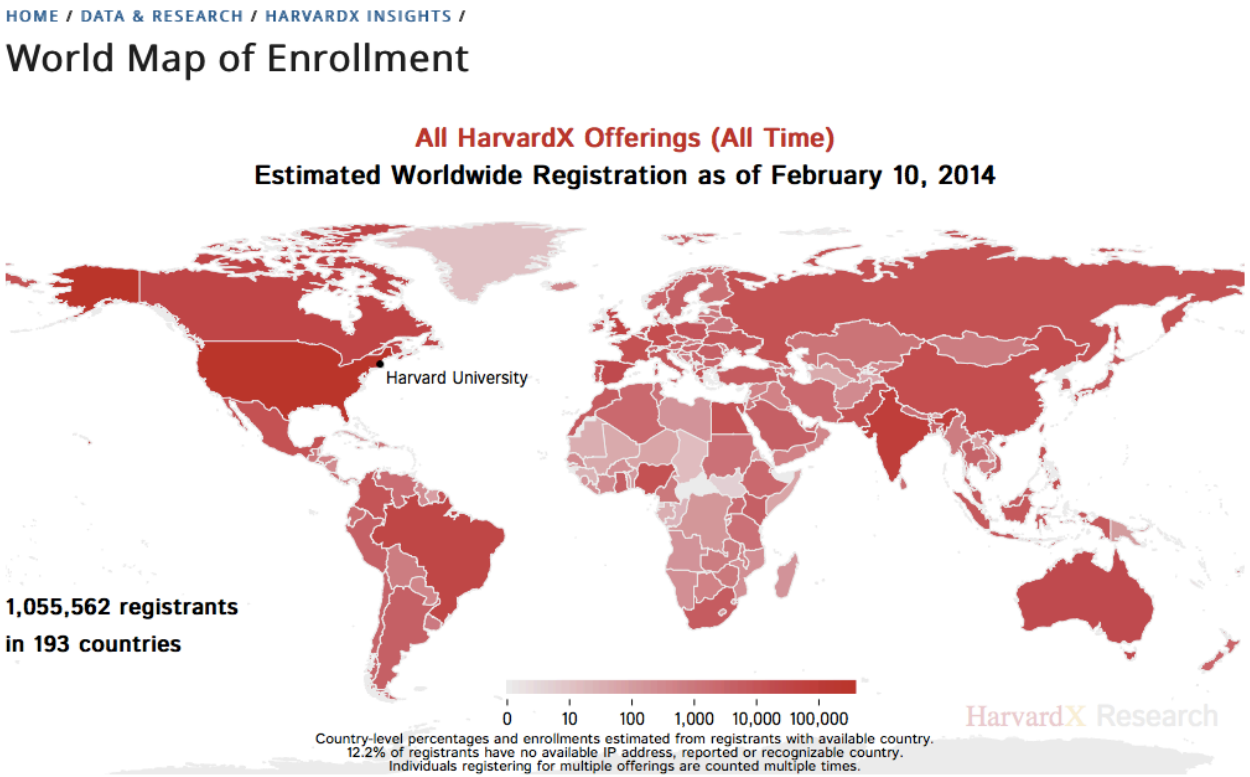
- **Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.**

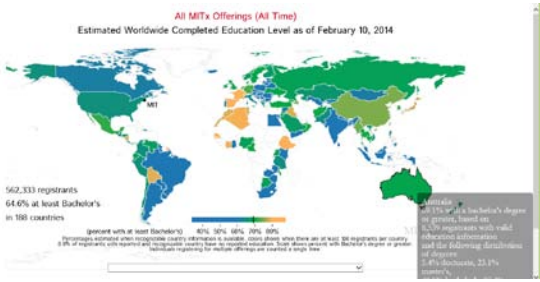


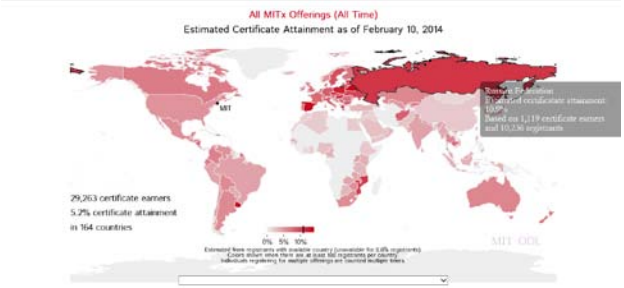


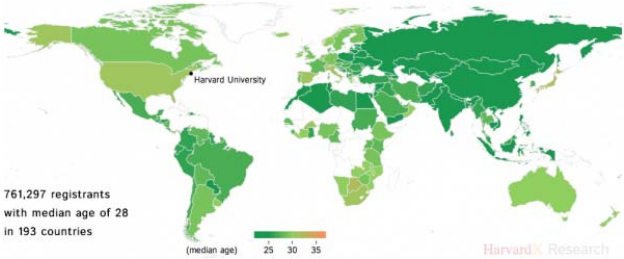
Display 3a. Data Visualization Tools (Harvard and MIT MOOCs) Lawrence Biemiller, February 20, 2014, Chronicle of Higher Education

http://chronicle.com/blogs/wiredcampus/harvard-and-mit-release-visualization-tools-for-trove-of-mooc-data/50631?cid=pm&utm_source=pm&utm_medium=en







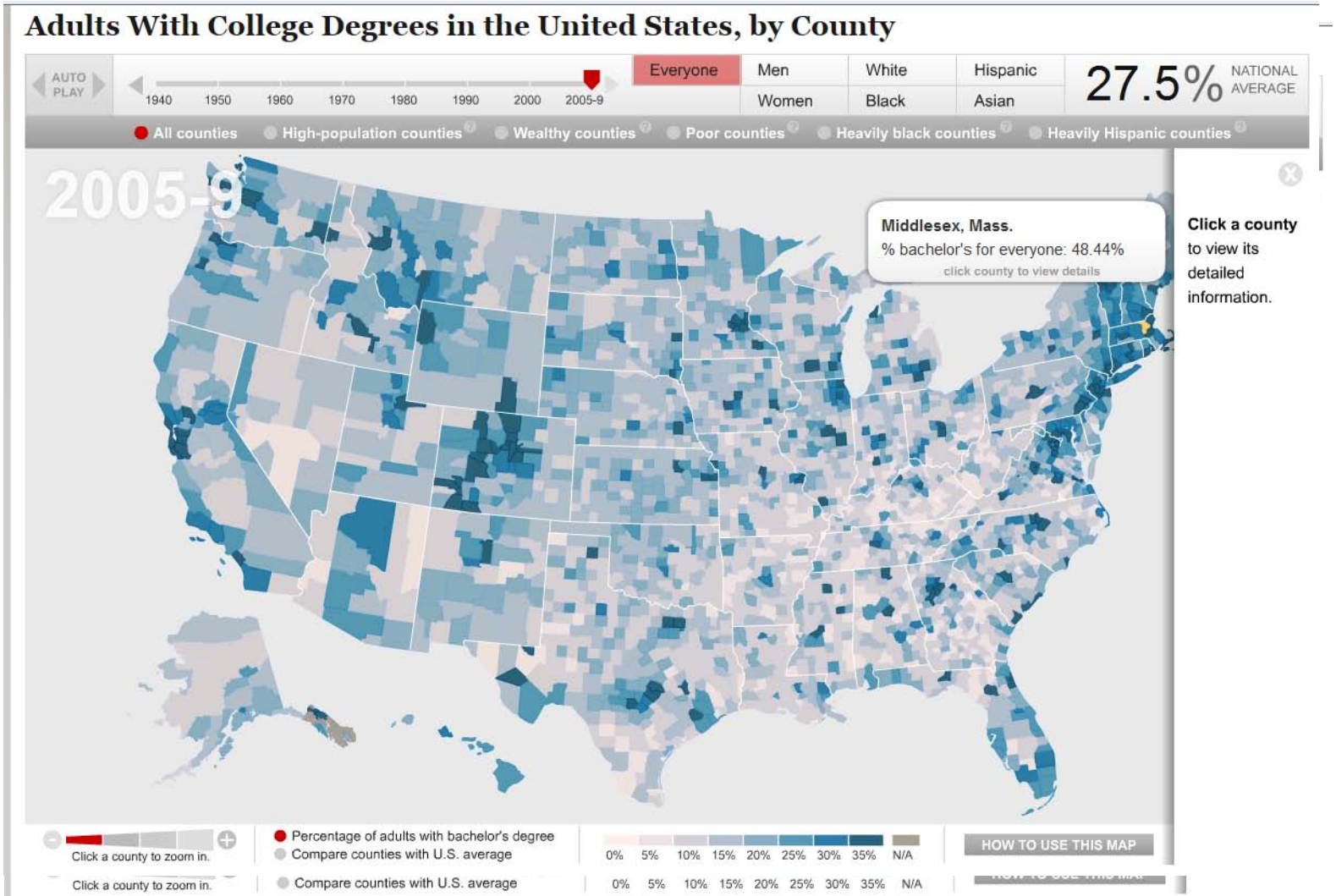


Display 3b. Videos for clinical education

(Sungkyunkwan University School of Medicine, www.mededu.or.kr)

Display 3c. Interactive Map Timelines
(adults with college degrees by county, May 7, 2012)

http://todayscampus.com/article/Keith_Hampson_Interviews_Josh_Keller_on__Interactive_Graphics_for_Higher_Education



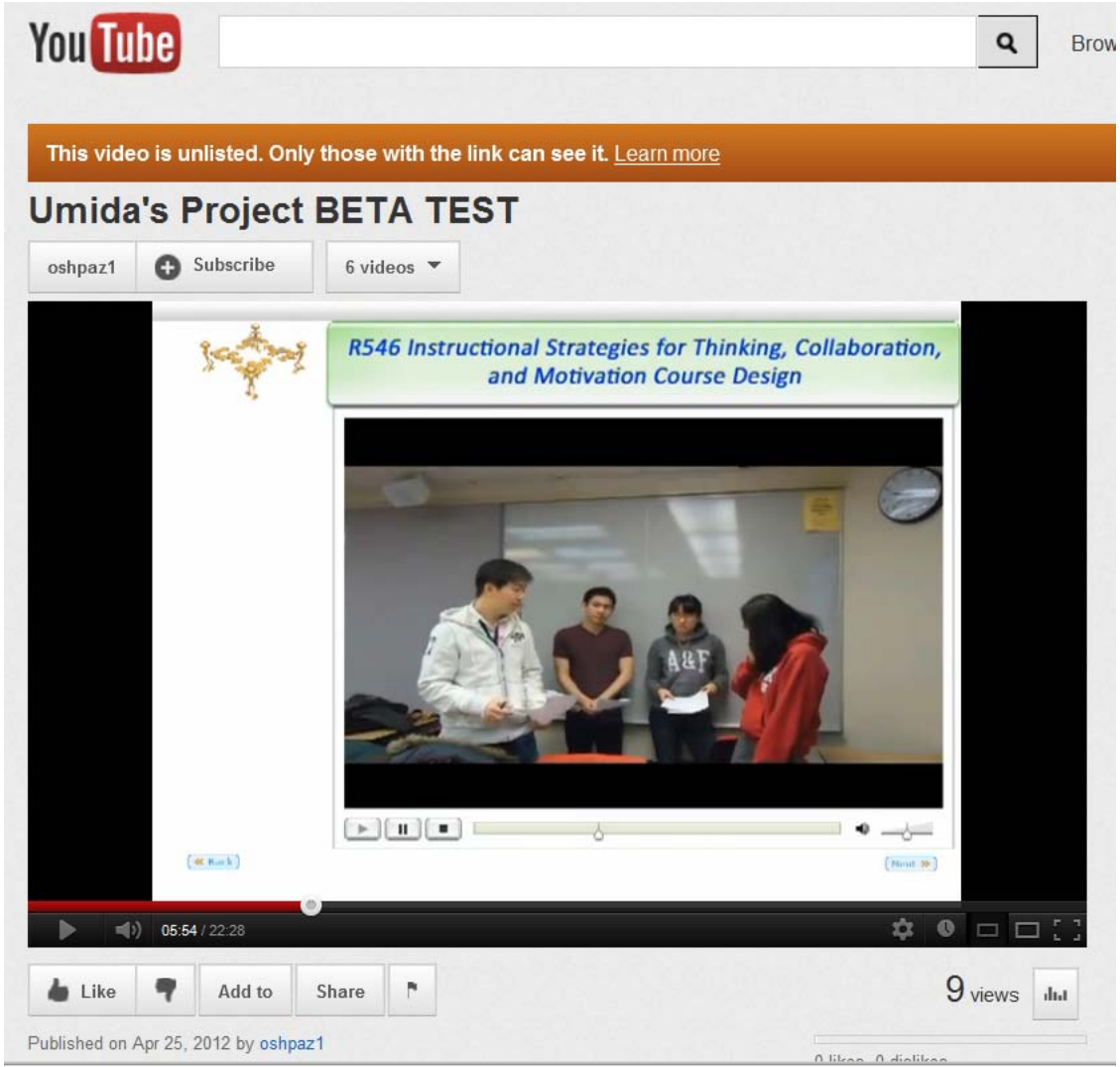
4. Tactile / Kinesthetic Learners

- **Tactile / kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.**

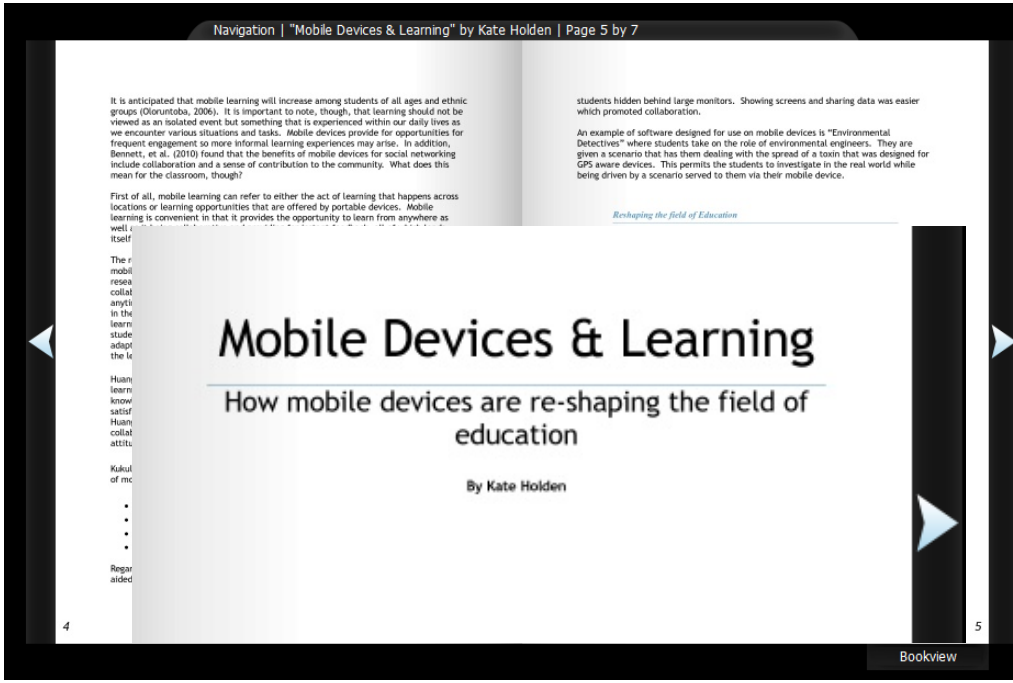
Do 4a. Student Class Documentaries

Umida's R546 Documentary Project

http://www.youtube.com/watch?v=EMLTzqCV_5A



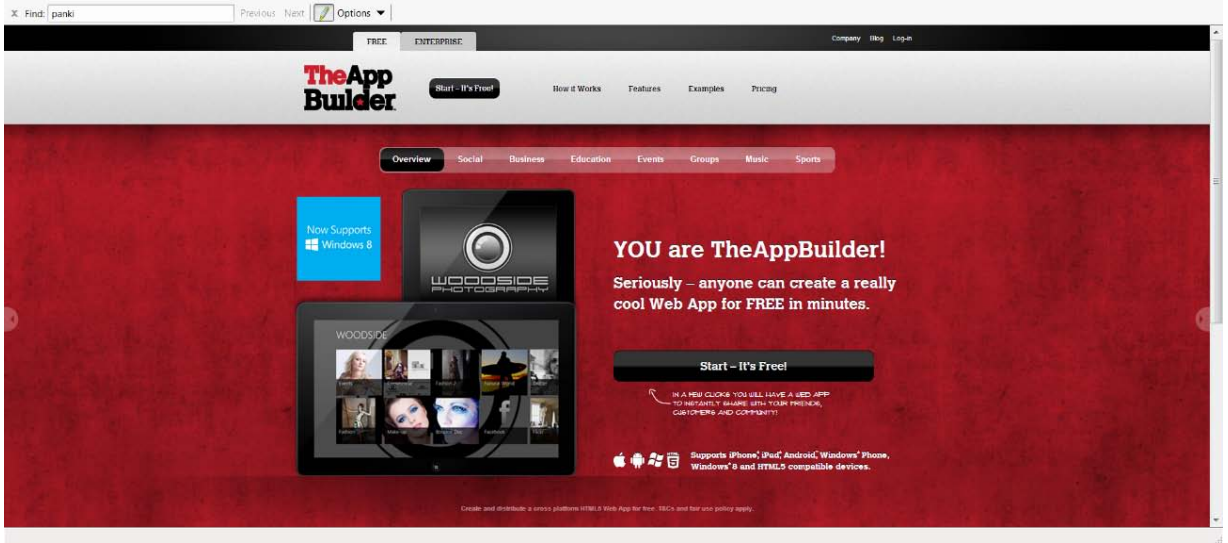
Do 4b. Uploading Mobile Books (e.g., BookRix, http://www.bookrix.com/



Do 4c. Student Mobile App Creation

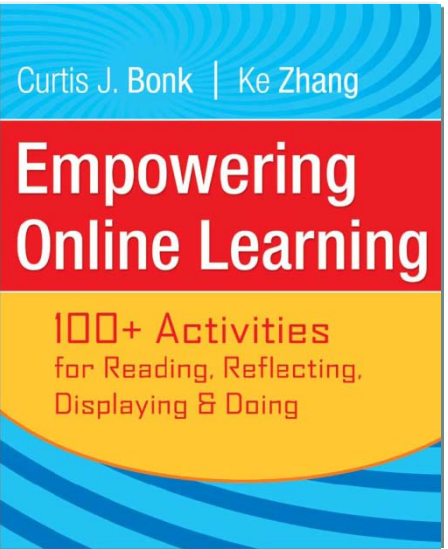
The App Builder: http://www.theappbuilder.com/

Mintian Guo (April 2013): http://myapp.is/r685final



Poll #4: What phase of the R2D2 Method do you like best?

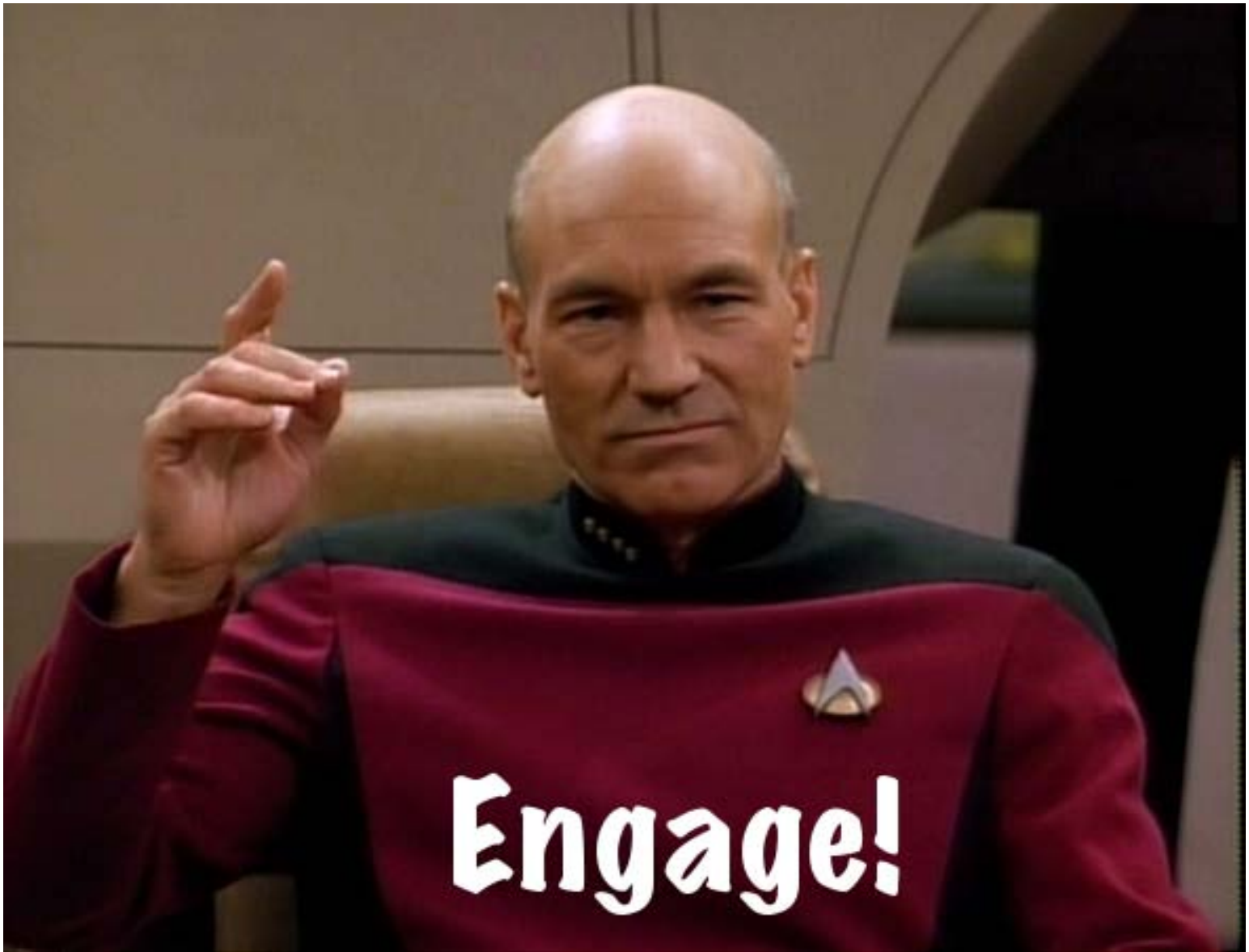
A. Read (Auditory and Verbal Learners)
B. Reflect (Reflective Learners)
C. Display (Visual Learners)
D. Do (Tactile, Kinesthetic, Exploratory Learners)



How do we engage online?

What did Jean-Luc Picard say?

That’s right, Engage!



Ok, Million Dollar Question: What words come to mind when I say that I want to motivate learners?

Motivation Research Highlights

(Jere Brophy, Michigan State University)

1. Supportive, appropriate challenge, meaningful, moderation/optimal.
2. Teach goal setting and self-reinforcement.
3. Offer rewards for good/improved performance.
4. Novelty, variety, choice, adaptable to interests.
5. Game-like, fun, fantasy, curiosity, suspense, active.
6. Higher levels, divergence, dissonance, peer interaction.
7. Allow to create finished products.
8. Provide immediate feedback, advance organizers.
9. Show intensity, enthusiasm, interest, minimize anxiety.
10. Make content personal, concrete, familiar.

Intrinsic Motivation

"…innate propensity to engage one's interests and exercise one's capabilities, and, in doing so, to seek out and master optimal challenges

(i.e., it emerges from needs, inner strivings, and personal curiosity for growth)

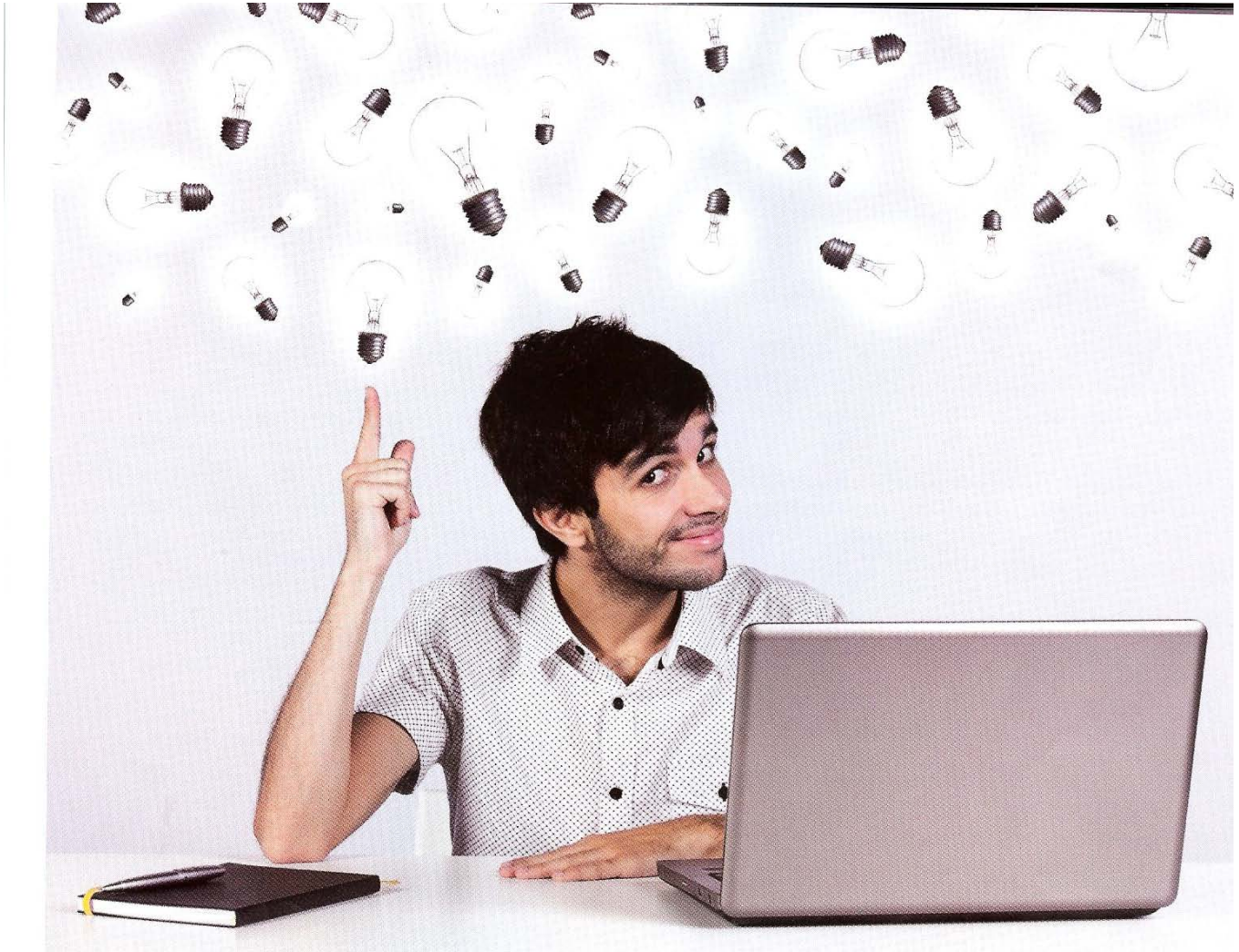
See: Deci, E. L., & Ryan, R. M. (1985). ***Intrinsic motivation and self-determination in human behavior*****. NY: Plenum Press.**

Framework #3: TEC-VARIETY for Online Motivation and Retention

1. **T**one/Climate: Psych Safety, Comfort, Belonging
2. **E**ncouragement, Feedback: Responsive, Supports
3. **C**uriosity: Fun, Fantasy, Control

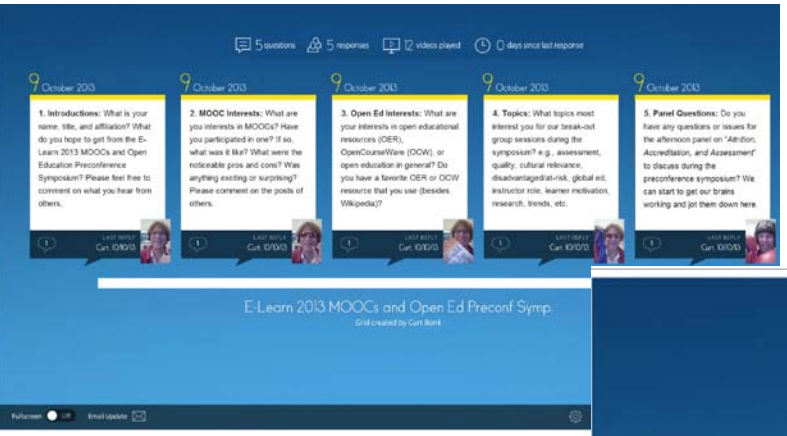
   …
4. **V**ariety: Novelty, Intrigue, Unknowns
5. **A**utonomy: Choice: Flexibility, Opportunities
6. **R**elevance: Meaningful, Authentic, Interesting
7. **I**nteractive: Collaborative, Team-Based, Community
8. **E**ngagement: Effort, Involvement, Excitement
9. **T**ension: Challenge, Dissonance, Controversy
10. **Y**ields Products: Goal Driven, Products, Success, Ownership

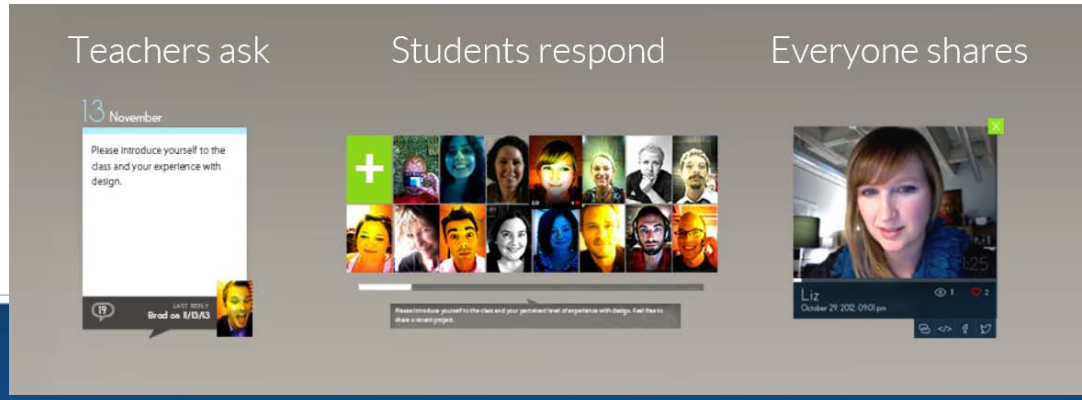
Examples of TEC-VARIETY

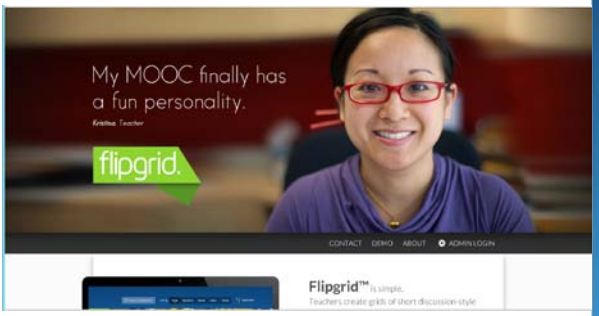


1. Tone/Climate: A. Video Introductions, e.g., Flipgrid

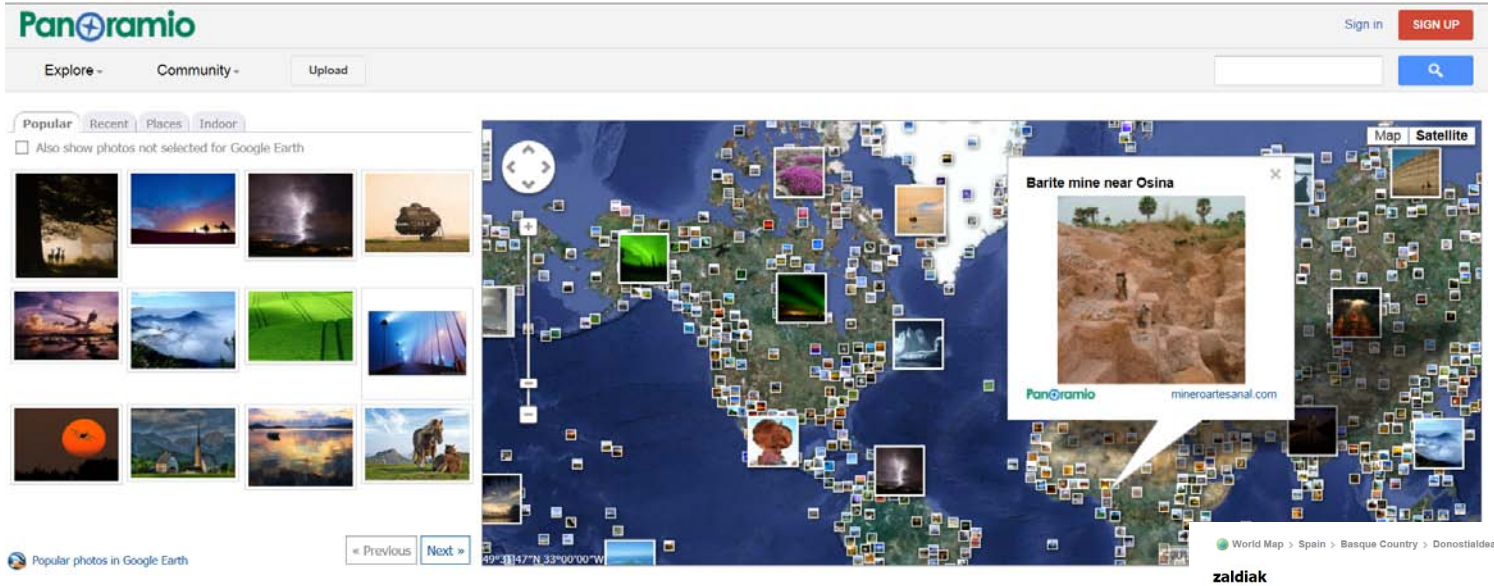
http://flipgrid.com/#429f88c5)

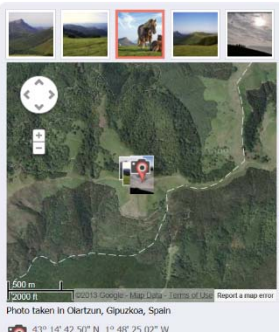






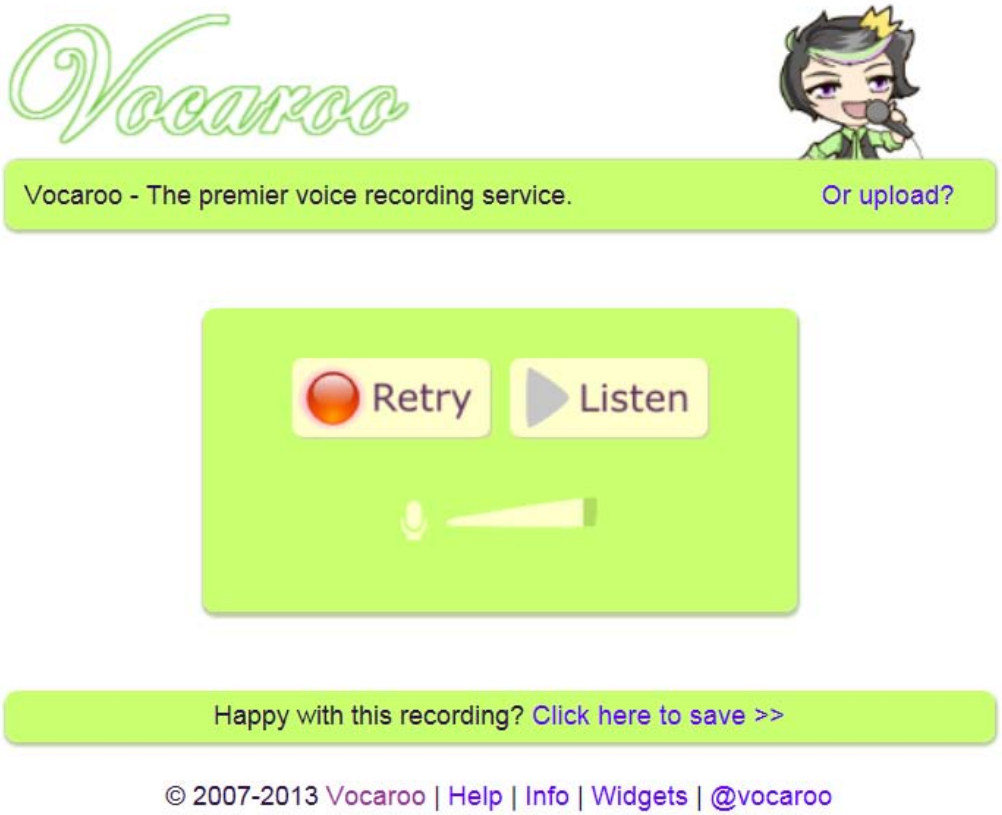
1. Tone/Climate: B. Share Visuals of Favorite Places (e.g., Panoramio, http://www.panoramio.com/)





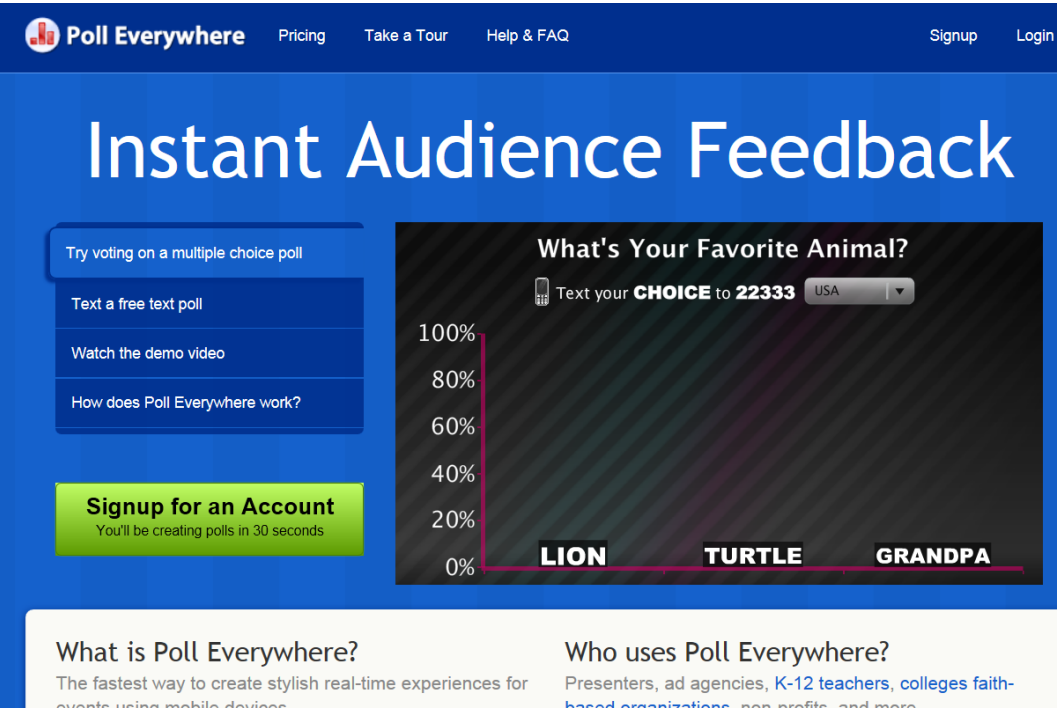
2. Encouragement, Feedback, etc.: A. Voice Feedback

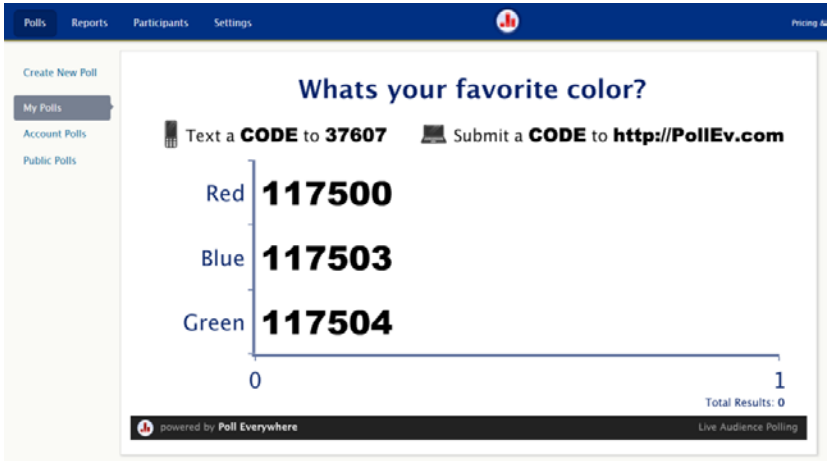
Vocaroo; http://vocaroo.com/ http://vocaroo.com/i/s1Rx6glU8rfD (Suan Dusit)



2. Encouragement, Feedback, etc.: B. Blog and Website Polling (e.g., Poll Everywhere, BlogPolls, BlogPoll, MicroPoll)

http://www.polleverywhere.com/





3. Curiosity, Fun:

A. Tracking the Life of a Scientist

(e.g., Brian J. Ford, independent scientist)

http://www.youtube.com/user/tellymonitor#p/a/u/1/LhGeApsKjasr

http://www.labnews.co.uk/news/prehistoric-revolution/

3. Curiosity, Fun:

B. Something in the News

(e.g., Fauja Singh, 101, finishes last race, February 24, 2013)

http://espn.go.com/sports/endurance/story/_/id/8979487/fauja-singh-101-caps-career-10k-hong-kong

Fauja Singh, 101, finishes last race

Associated Press

Updated: February 24, 2013, 11:11 AM ET

HONG KONG -- The world's oldest marathon runner ran his last race on Sunday at the age of

.25-mile) race in 1 hour, 32

llowed the route along the

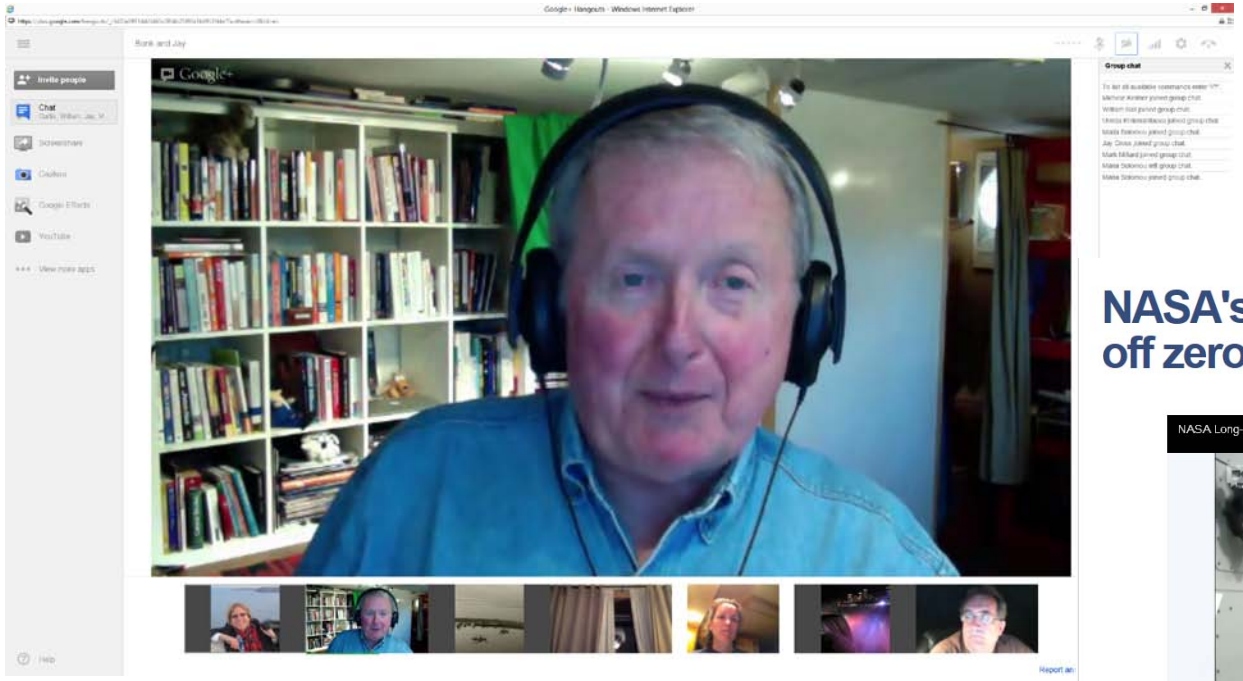
+] Enlarge

P Photo/Kin Cheung

auja Singh, the world's oldest
arathon runner, runs his last race
t the age of 101 on Sunday.

of the game but I am sad that the time has come for me

4. Variety, Novelty, Fun:
A. External Guests
(e.g., Jay Cross, Internet Time Group)



NASA's spacey Google+ Hangout shows off zero-G antics – and cats!

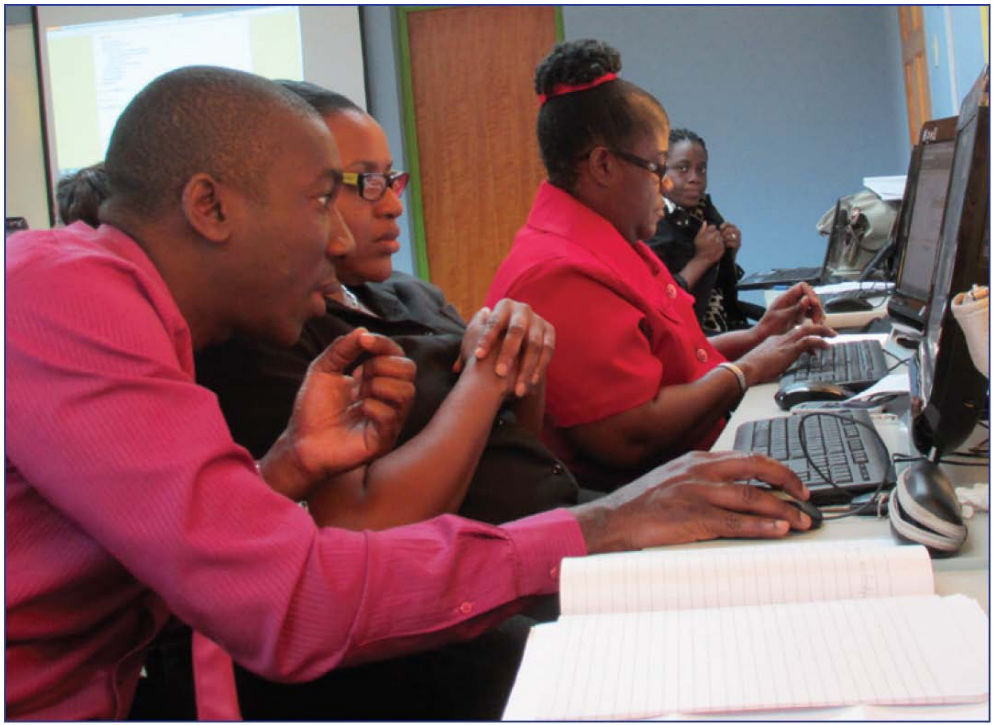
5. Autonomy, Choice:

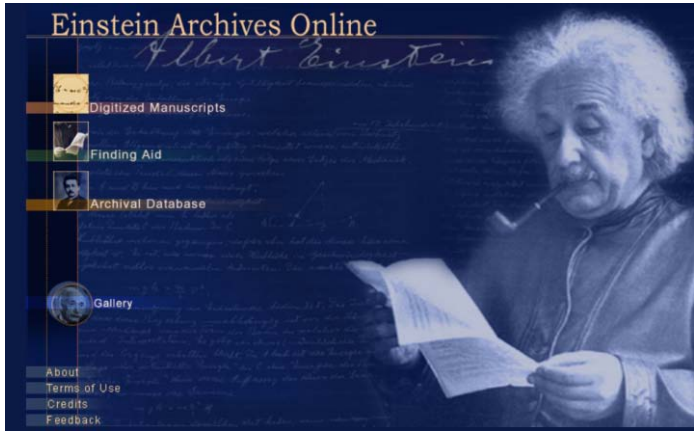
A. Demonstrate, Explore, and Share Websites

Commonwealth of Learning, March 2013

http://www.col.org/news/Connections/2013Mar/Documents/Connections_March2013.pdf

ONLINE COURSE DEVELOPMENT FOR TEACHER EDUCATION IN JAMAICA





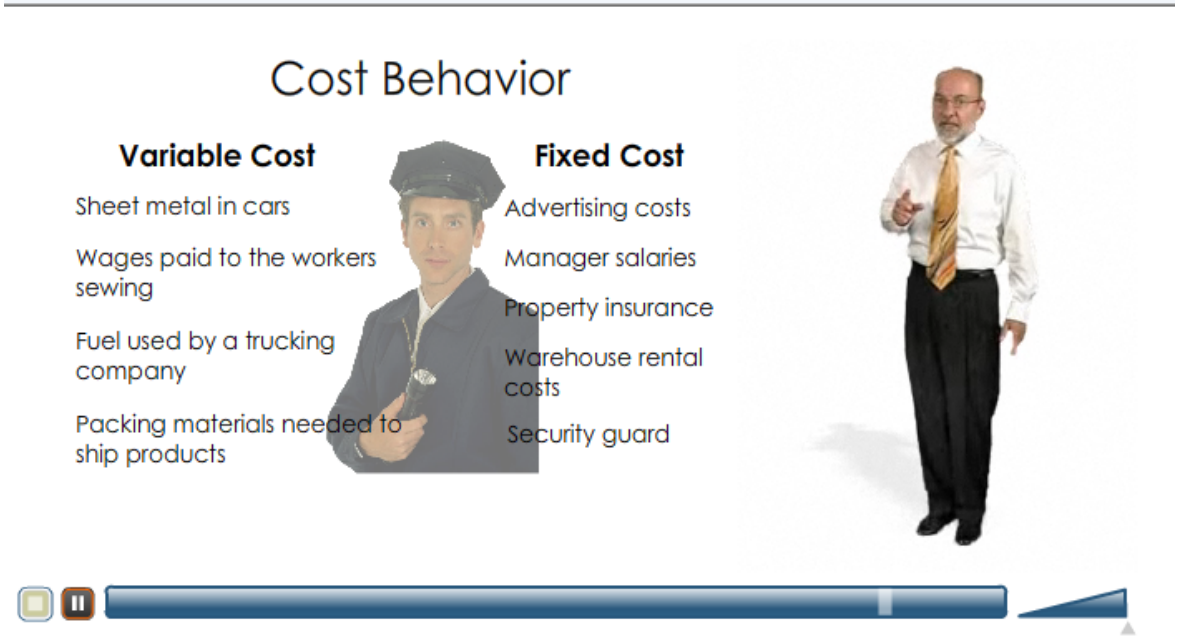
6. Relevance, Meaningfulness:
A. Design Multimedia Glossaries

Ozgur Ozdemir, December 2012
http://r685glossary.shutterfly.com/
Umida Khikmatillaeva, Dec. 2011, P540
http://learningplanet.shutterfly.com/

6. Relevance, Meaningfulness:

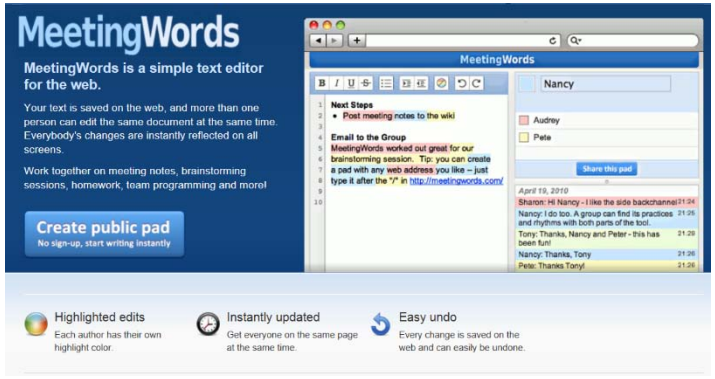
B. Video Scenario Learning Accounting Interviews and Preparatory Course Review Modules (Franklin University, cost and forensic accounting course)

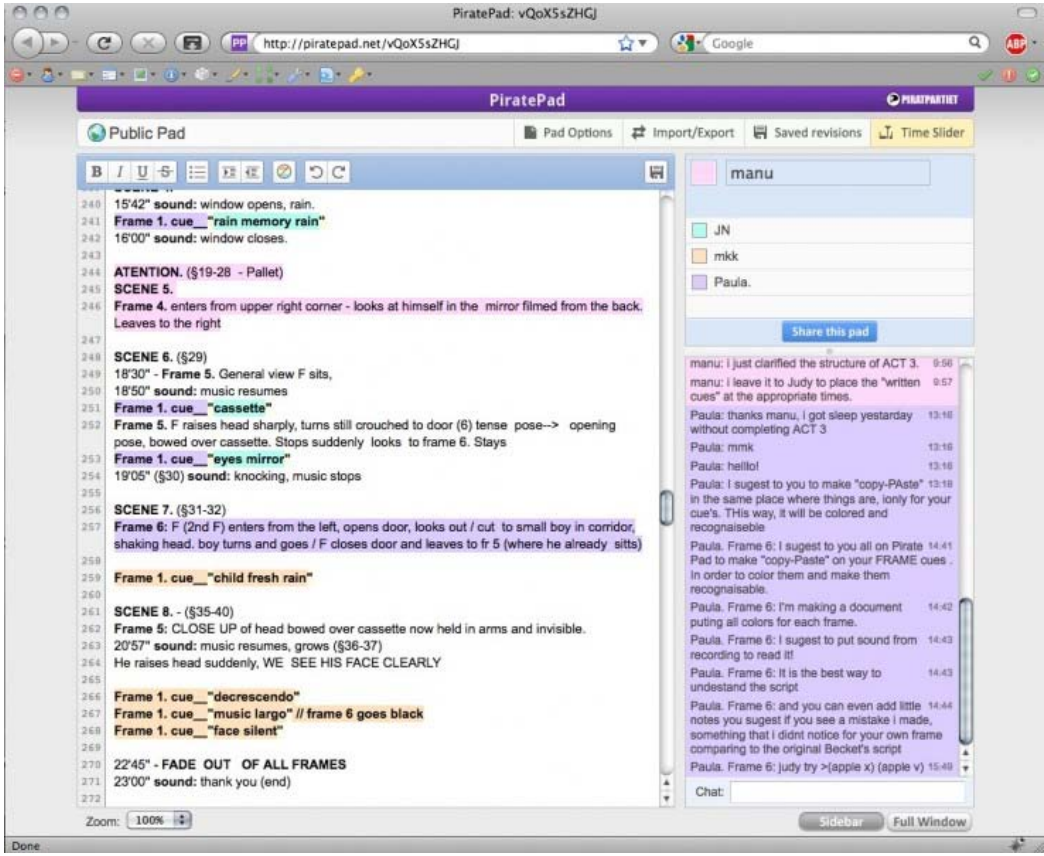
http://video.franklin.edu/Franklin/acct/managerialAccounting/cost-behavior-player.html
http://video.franklin.edu/Franklin/acct/342/common/fraudScenario02.html



7. Interactive, Collaborative:
A. Negotiate Meanings Online
(e.g., PiratePad: http://meetingwords.com/)

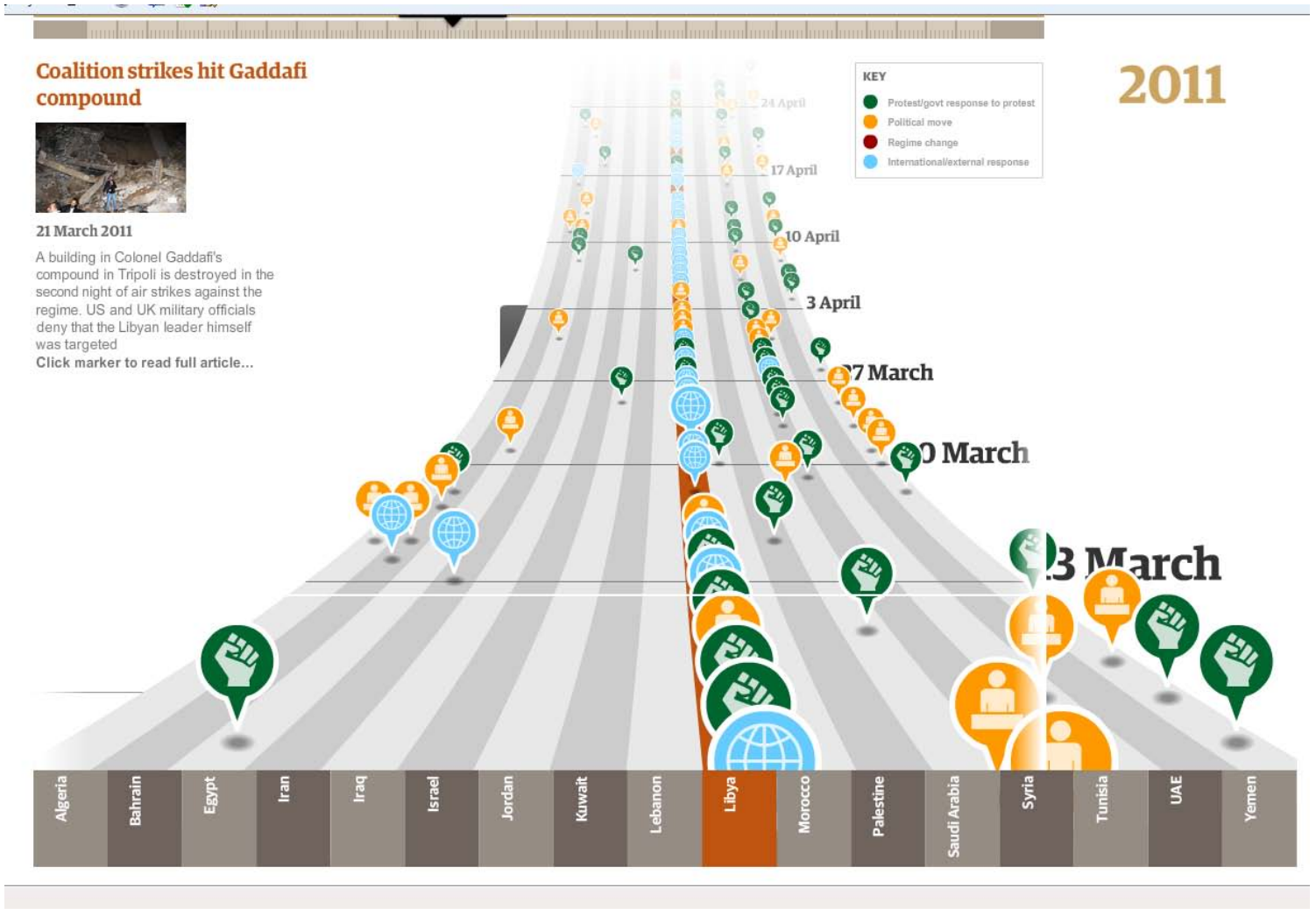
MeetingWords is a simple text editor for the web.
Your text is saved on the web, and more than one person can edit the same document at the same time. Everybody's changes are instantly reflected on all screens. Work together on meeting notes, brainstorming sessions, homework, team programming and more!





8. Engagement, Effort: A. Arab spring: an interactive timeline of Middle East protests, The Guardian, Garry Blight, and Sheila Pulham, July 12, 2011

http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-protest-interactive-timeline

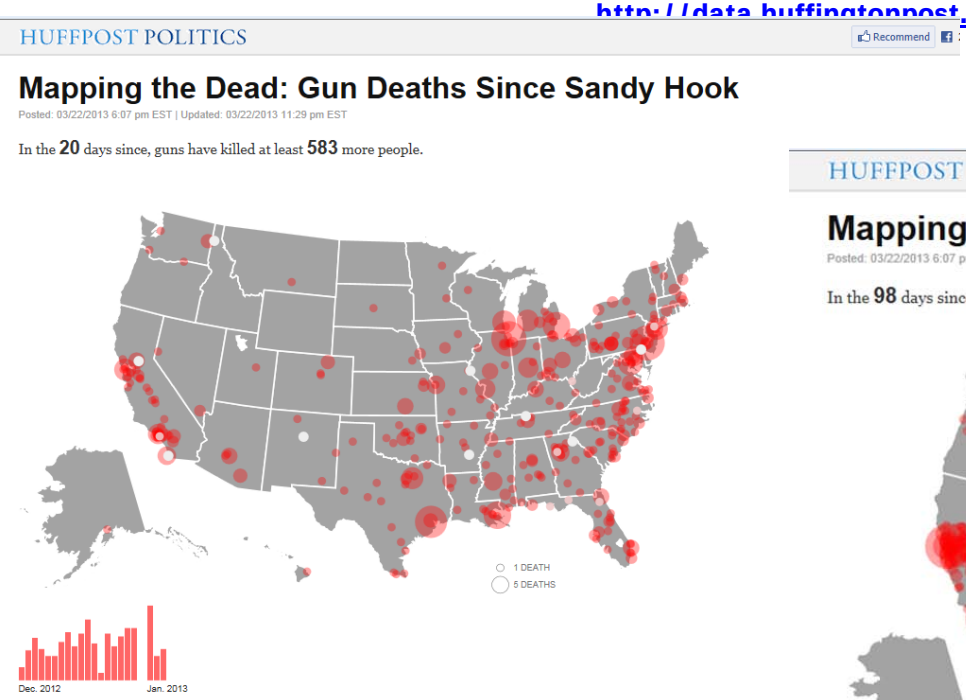


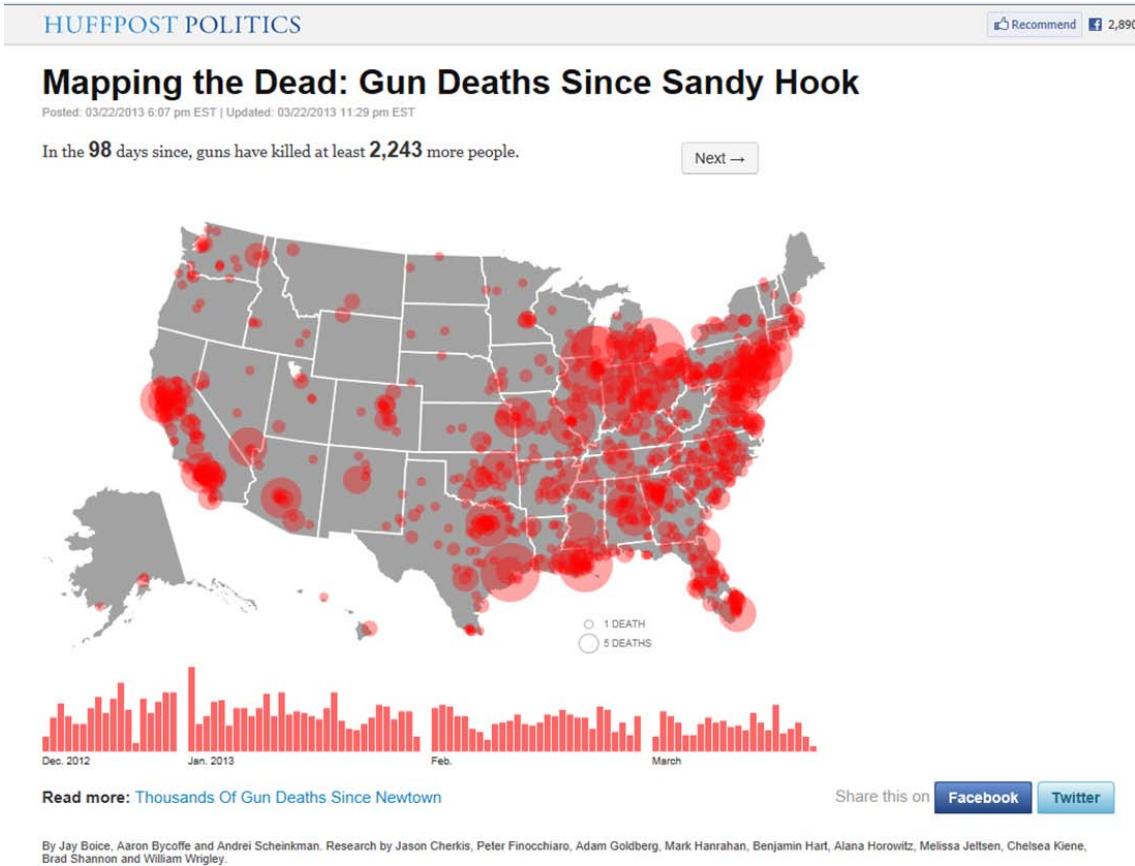
8. Engagement, Effort:

B. Reflections on Interactive Maps

Mapping the Dead: Gun Deaths Since Sandy Hook, Huffington Post, March 22, 2013

http://data.huffingtonpost.com/2013/03/gun-deaths



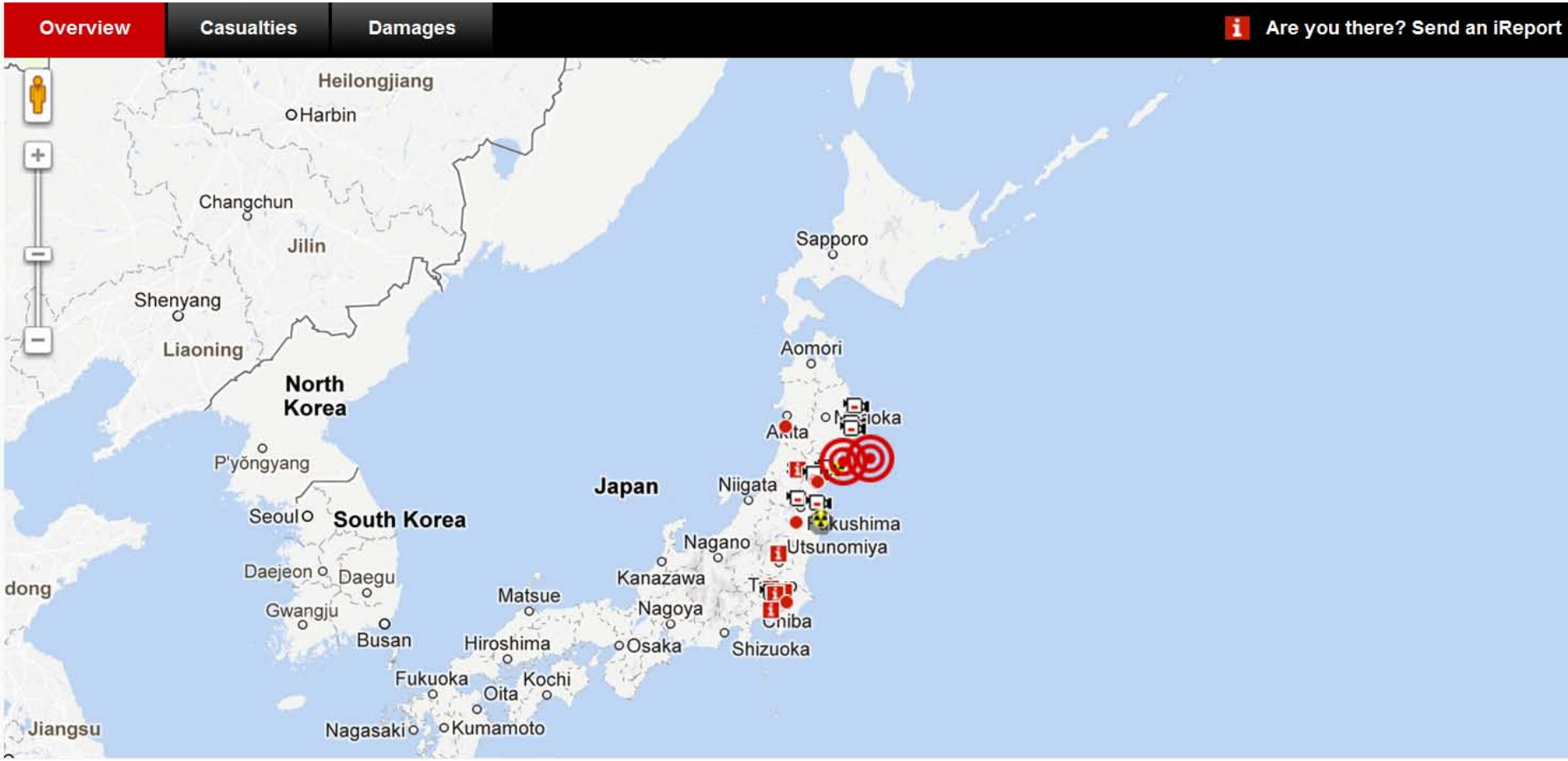


8. Engagement, Effort:

C. CNN (2011). Map: Impact of Japan tsunami and earthquake. *CNN*.

http://www.cnn.com/SPECIALS/2011/japan.quake/map/

also: Visualizing Emancipation



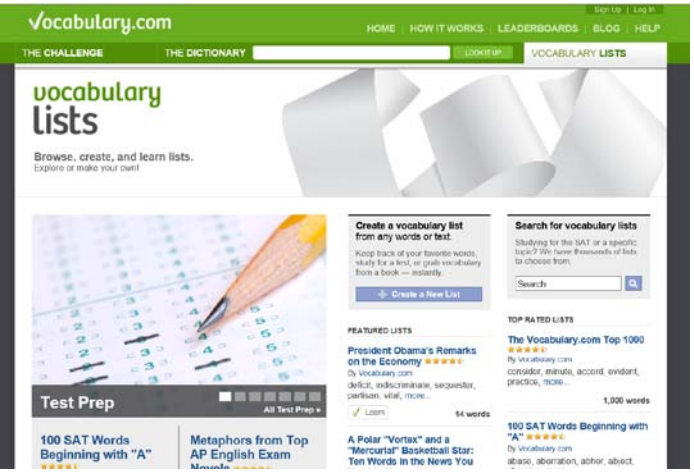
9. Tension, Challenge, etc.:

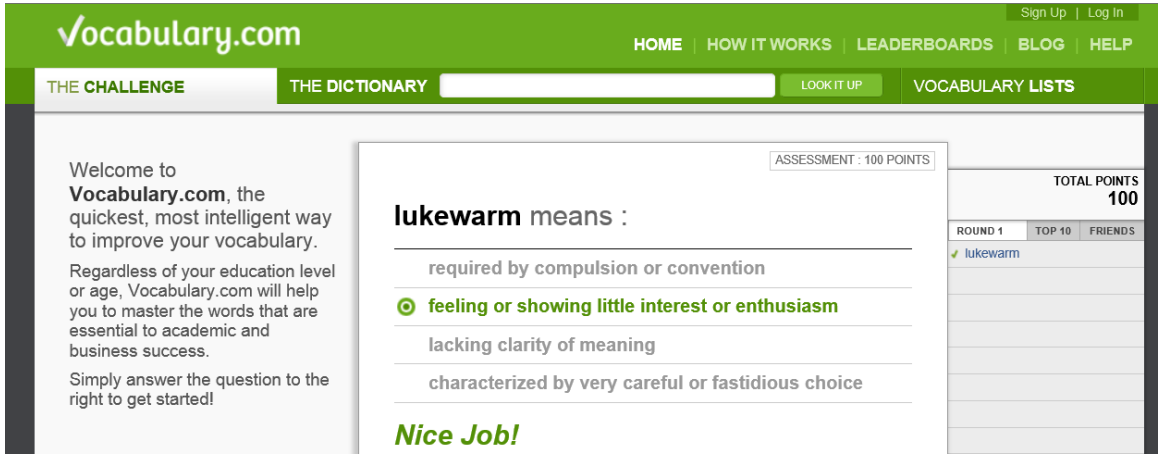
A. Vocabulary Competitions (e.g., Kids learning new words

at warp speed, January 14, 2014, Greg Toppo (Georgia Scurletis, Dir of Curriculum Development, for Vocabulary.com (Thinkmap) presents a banner to Marc Williams, Brooklyn Technical High School)

http://www.usatoday.com/story/news/nation/2014/01/13/vocabulary-schools-online-competition-education-students-teachers/4455087/

Vocabulary.com: https://www.vocabulary.com/

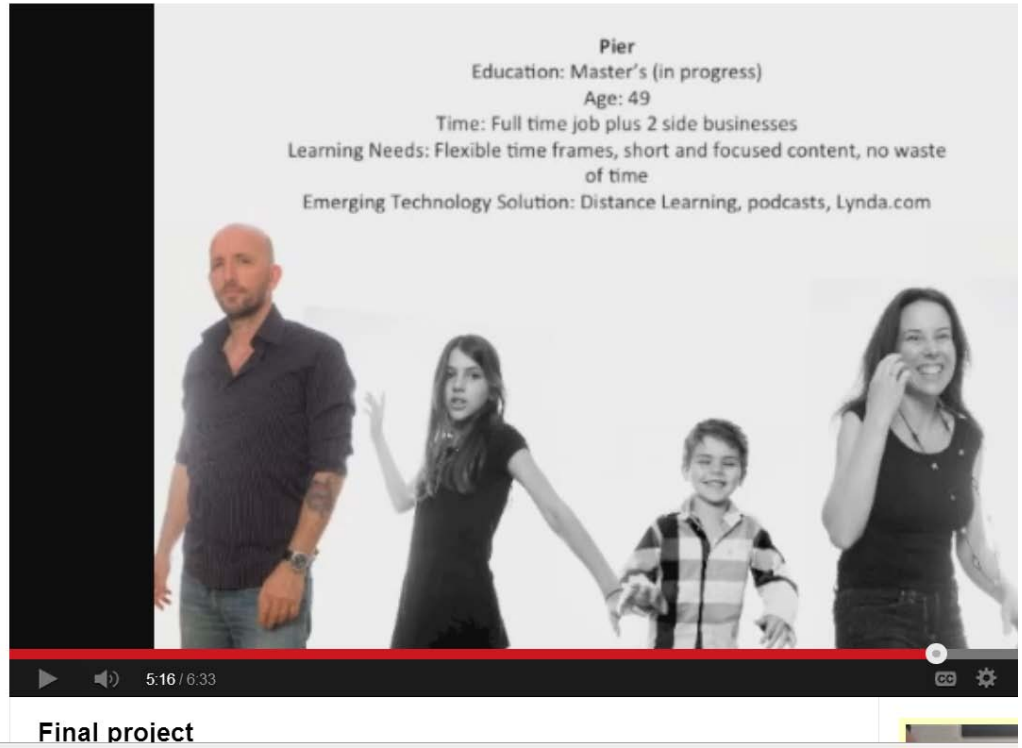




10. Yields Products, Goals:

A. Final Product Video Summaries

Piercarlo Abate: http://www.youtube.com/watch?v=_-TURzHO0aU
Qi Li, Gangnam: http://www.youtube.com/watch?v=7Q429lqxZaU&feature=youtu.be
Miguel Lara (Web 2.0 FREEDOM): http://www.youtube.com/watch?v=8cmCFWi9lW8



Commitments:

Stop and Share:

Which principle(s) of TEC-VARIETY will you use?

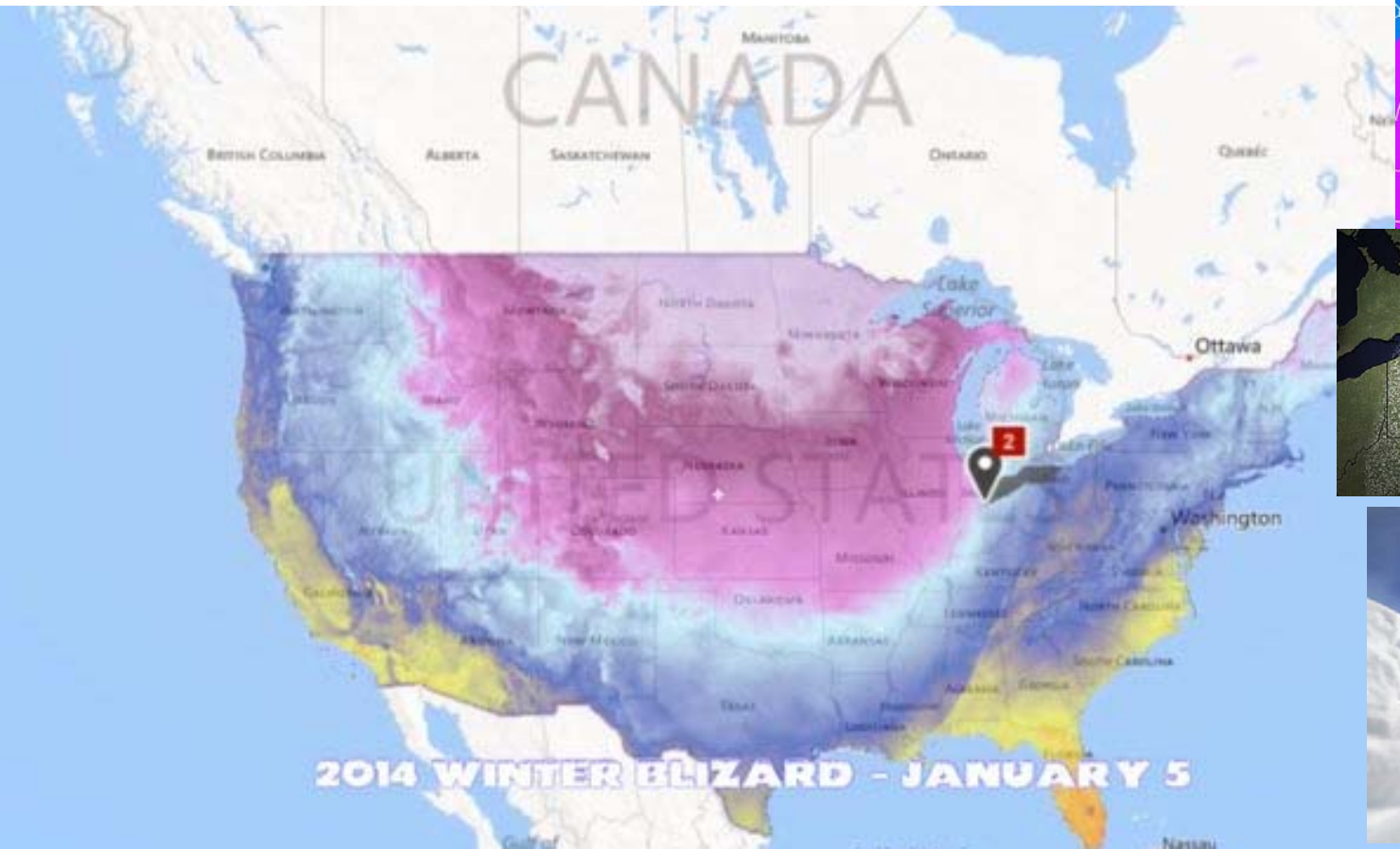
Tone / Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products

Part 2:
Blended Learning A to Z:
Myths, Models, and Moments of Magic

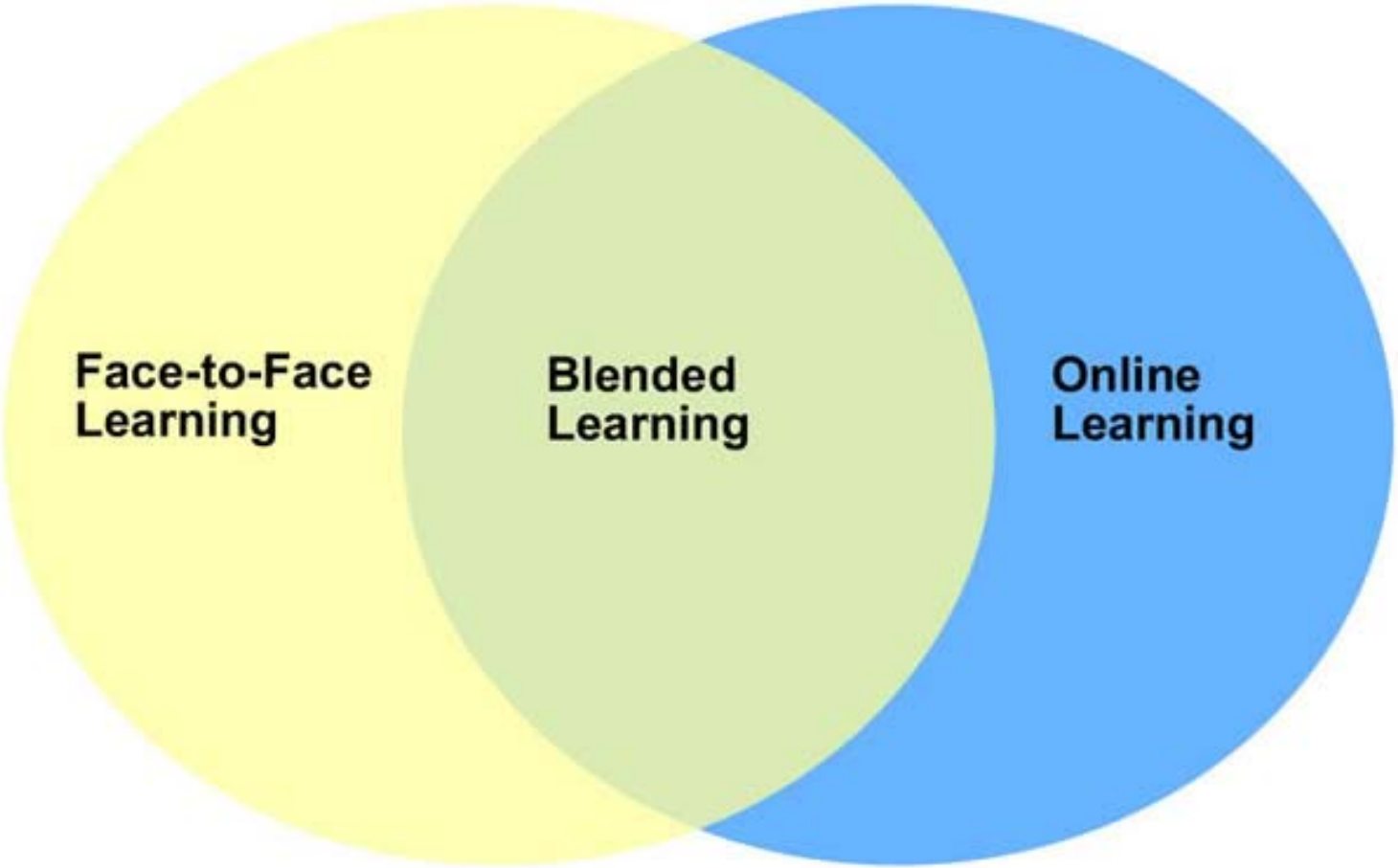
Curt Bonk, Professor, Indiana University
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk

Who Needs Blended and Online Learning?



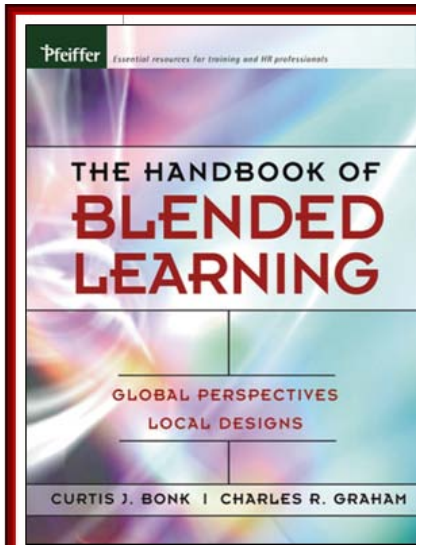
Those where there are diseases and outbreaks…

Answer: Blended Learning



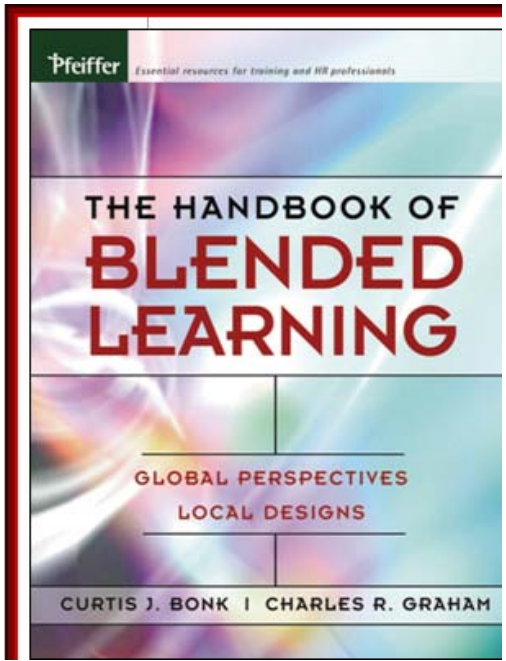
What I will discuss…

1. Definitions of blended learning
2. Myths of blended learning
3. Models of blended learning
4. Examples of blended learning



Myth #1: If you read the enough research you will be able to know the impact of blended learning.

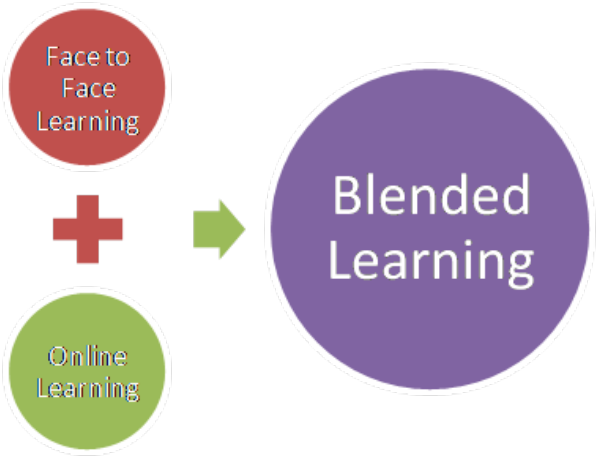
1. **Improved Pedagogy**
   - **More interactive instead of transmissive**
   - **Authentic, real world, etc.**
2. **Increased Access/Flexibility**
3. **Increased Cost Effectiveness**



Myths #2: Blended learning is easy to define.
Myth #3: Blended learning is hard to define.

Blending Online and F2F Instruction

"Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)

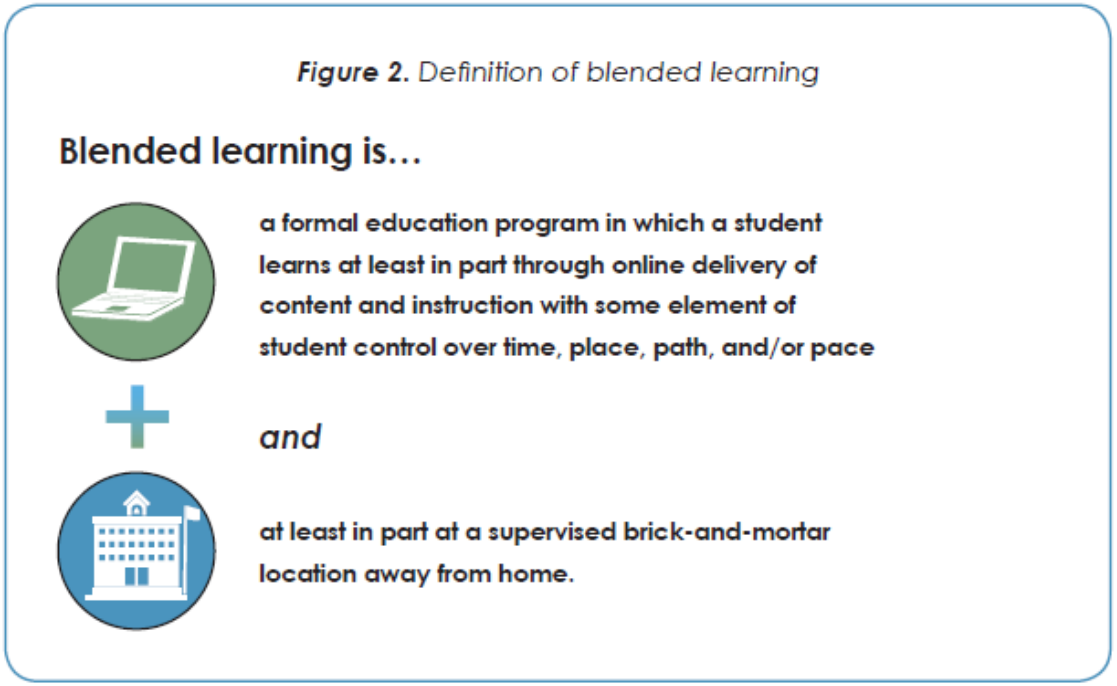


Classifying K-12 Blended Learning

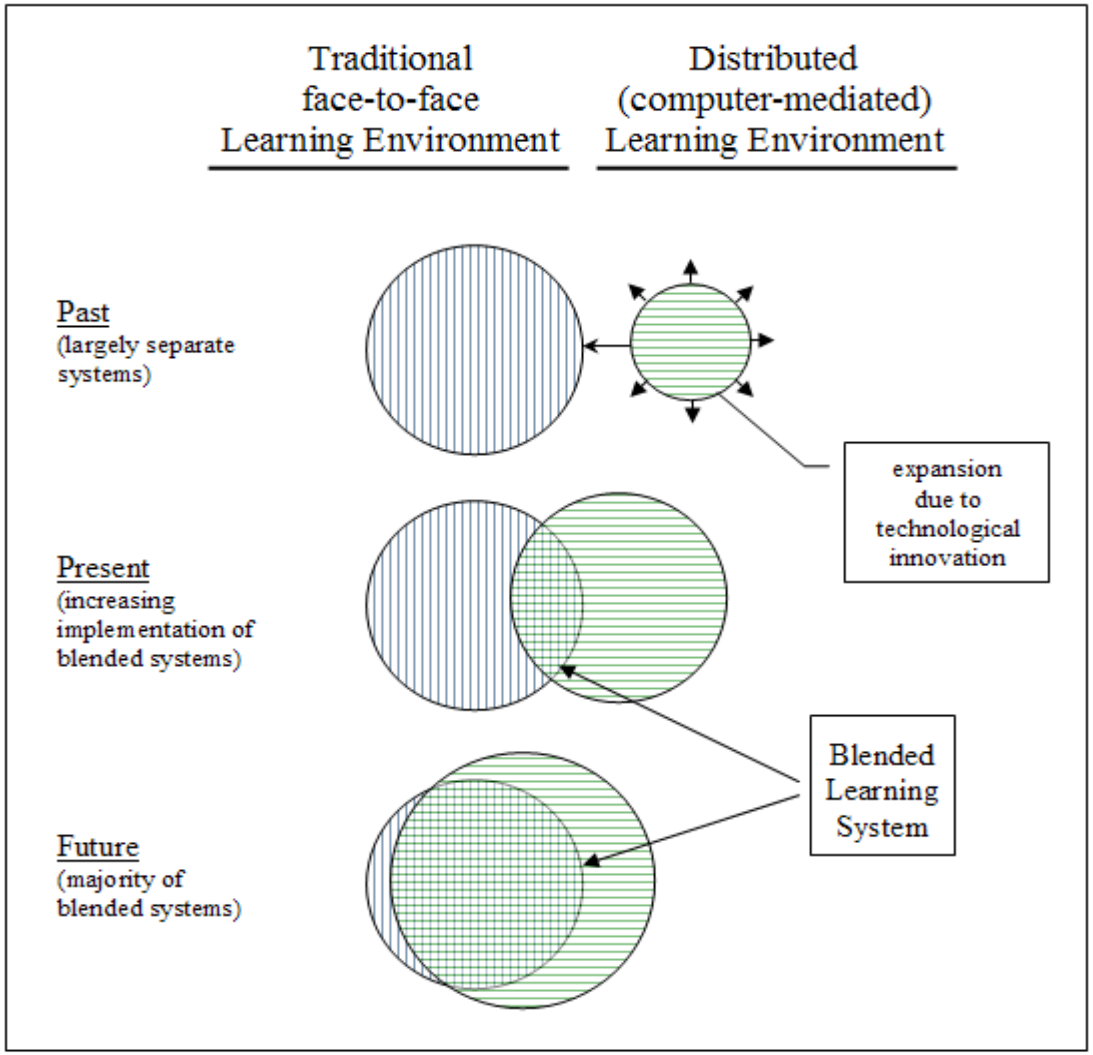
Heather Staker and Michael B. Horn, May 2012

http://www.projectred.org/uploads/The-Rise-of-K-12-Blended-Learning.pdf

"Blended learning is any time a student learns at least in part at a supervised brick-and-mortar location away from home *and at least in* part through online delivery with some element of student control over time, place, path, and/or pace."

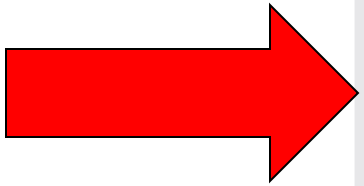


Historical Emergence of Blended (Graham, 2006)



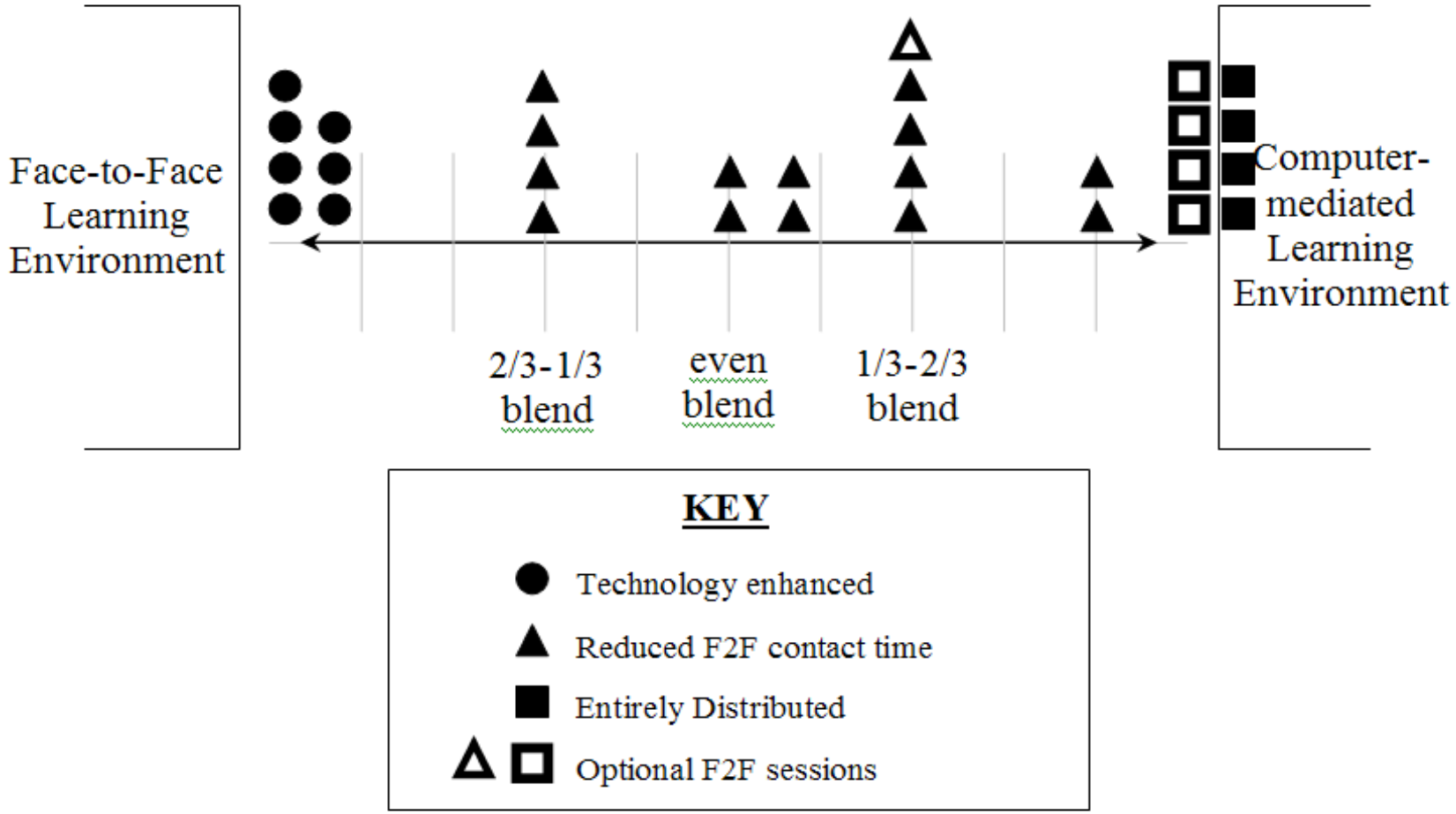
Myth #4: People will know what I am saying when I say "blended learning."
Myth #5: Blended is the same as "hybrid."
The Sloan Consortium

Proportion of content delivered online	Type of Course	Typical Description
0%	Traditional	Course with no online technology used - content is delivered in writing or orally.
1 to 29%	Web facilitated	Course which uses web-based technology to facilitate what is essentially a face-to-face course. Might use Blackboard or WebCT to post the syllabus and assignments, for example.
30 to 79%	Blended/Hybrid	Course that is a blend of the online and face-to-face course. Substantial proportion of the content is delivered online, typically uses online discussions, typically has some face-to-face meetings
80+%	Online	A course where the vast bulk of the content is delivered online. Typically has no face-to-face meetings.



Myth #6: Knowing "how much" to blend is vital.

Range of Blends in Pew Cases



Source: Graham, C. R., & Allen, S. (2005). Blended learning: An emerging trend in education. In C. Howard & J. V. Boettecher & L. Justice & K. D. Schenk & P. L. Rogers & G. A. Berg (Eds.), *Encyclopedia of Distance Learning* (pp. 172-179). Hershey, PA: Idea Group Inc.

Myth #7: Blended learning works everywhere.

Where is Blended Beneficial?

- Intro Classes (Spanish, psych, algebra, biology)
- AP Classes
- Classes with low success rates
- Classes with students working part-time
- Required classes
- Students are rural or spread over a distance
- Classes with certification or standardization
- Classes with new requirements or standards
- Writing intensive classes, theory classes, etc.
- Lab classes?

Examples of Blended Learning

- Put assessments / reviews online
- Online discussions
- Online labs
- Put reference materials on Web
- Deliver pre-work online
- Provide office hours online
- Use mentoring / coaching tool
- Access experts live online

Myth #8: People learn more in face-to-face settings than blended or fully online ones.

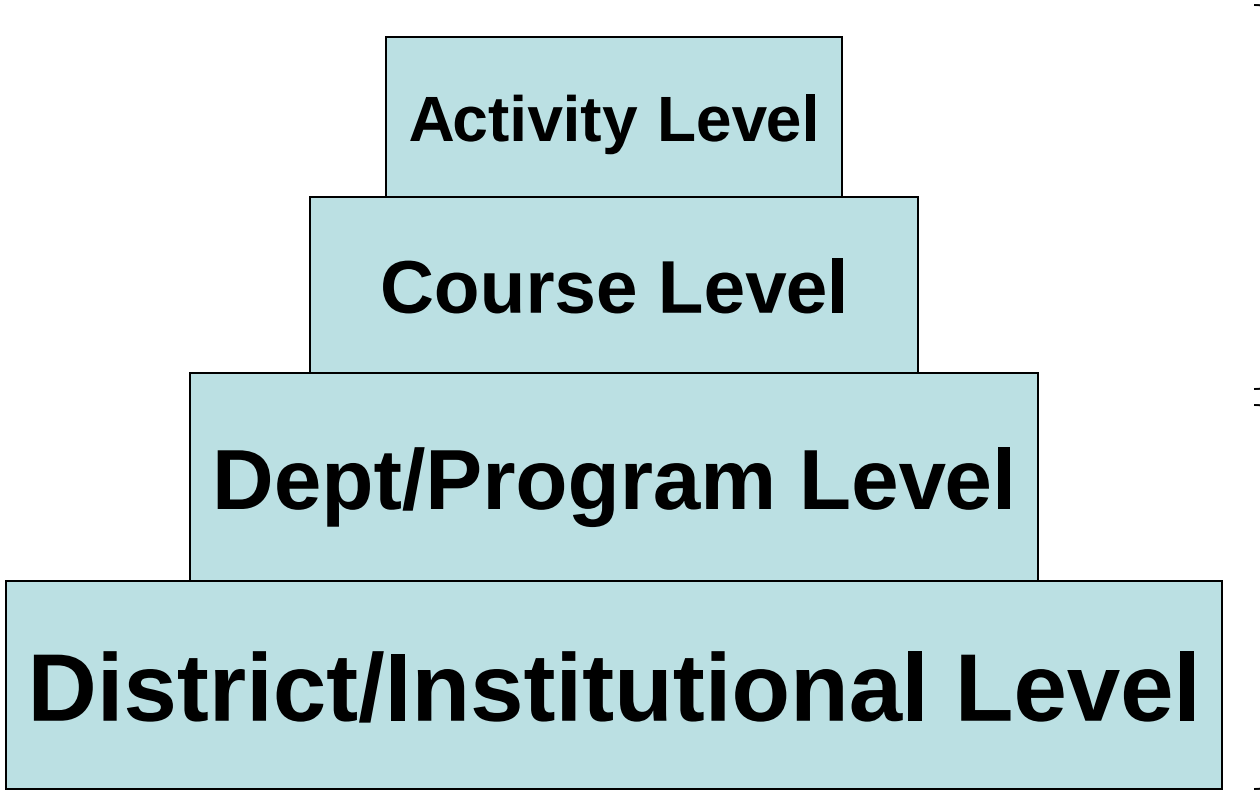
Fully Online and Blended Learning Advantages

1. Increased Learning (better papers, higher scores)
2. More effective pedagogy and interaction
3. Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)
4. Reduction in physical class or space needs, commuting, parking, etc.
5. Increased opportunities for human interaction, communication, & contact among students
6. Introverts participate more

Myth #9: Instructors can have a logical discussion with administrators about blended learning.

Models of Blending

Blending occurs at the following four levels:



Myth #10: There is a best model of blended.

AMA Special Report, Effectively Implementing a Blended Learning Approach (Steven Shaw & Nicholas Igneri, 2006)

Source: American Management Association, AMA at Work

7 Blended Learning Models

Face-to-face

- Instructor-led training/ workshops

Synchronous

- Webinars/Live streaming
- Live simulations

"Collaborative" Asynchronous

- Discussion forums
- Social networking

Self-paced Asynchronous

- Online-self tutorials
- Archived podcasts

Blended Model #1.
Face-to-Face Primary
(online is for remediation of supplement)

Blended Model #2. Rotation (students alternate FTF and Online instruction)

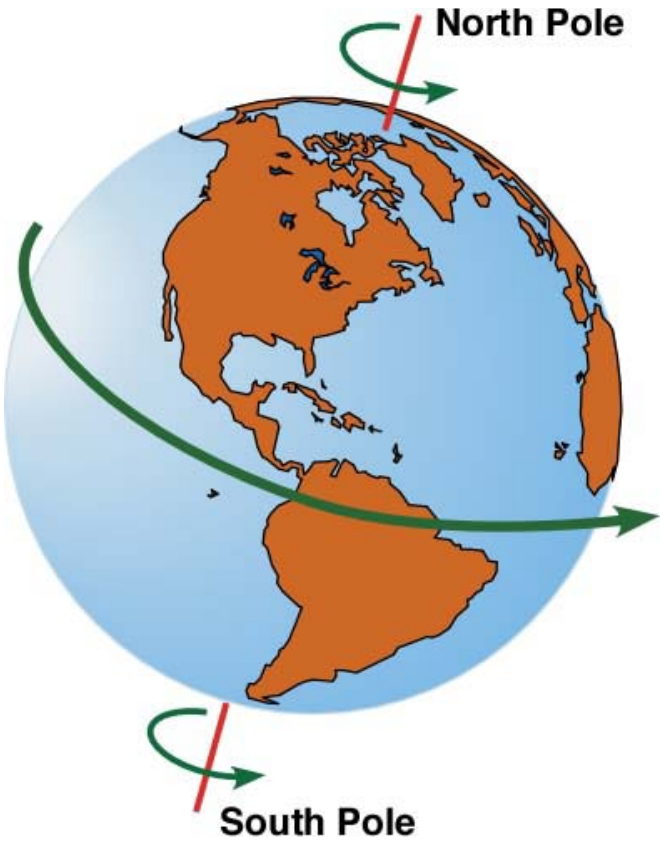
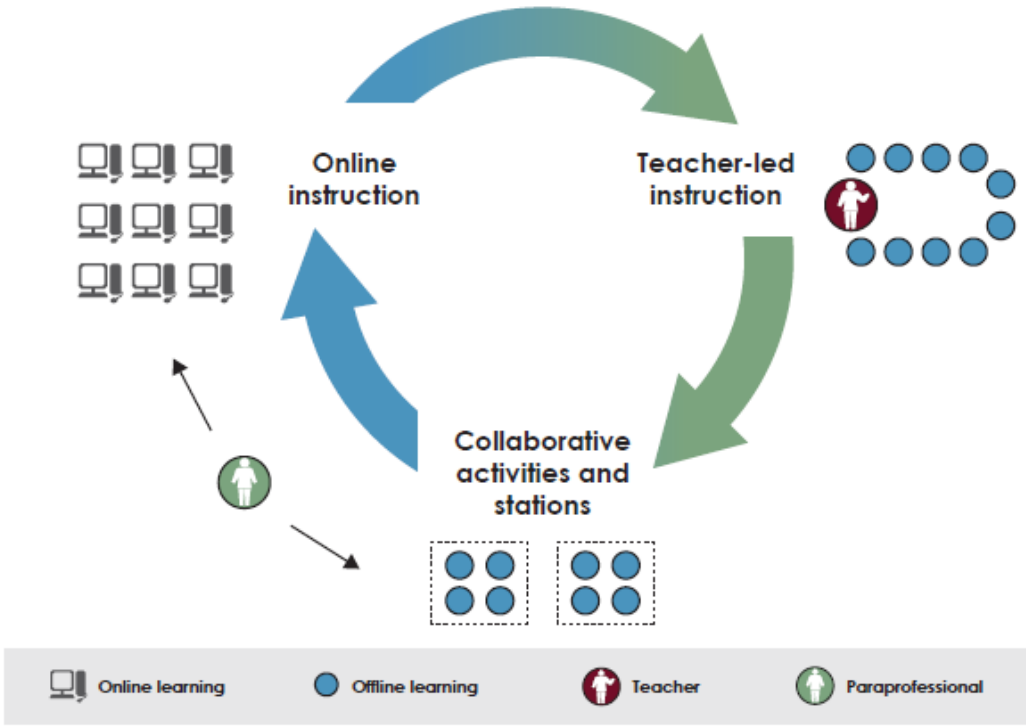
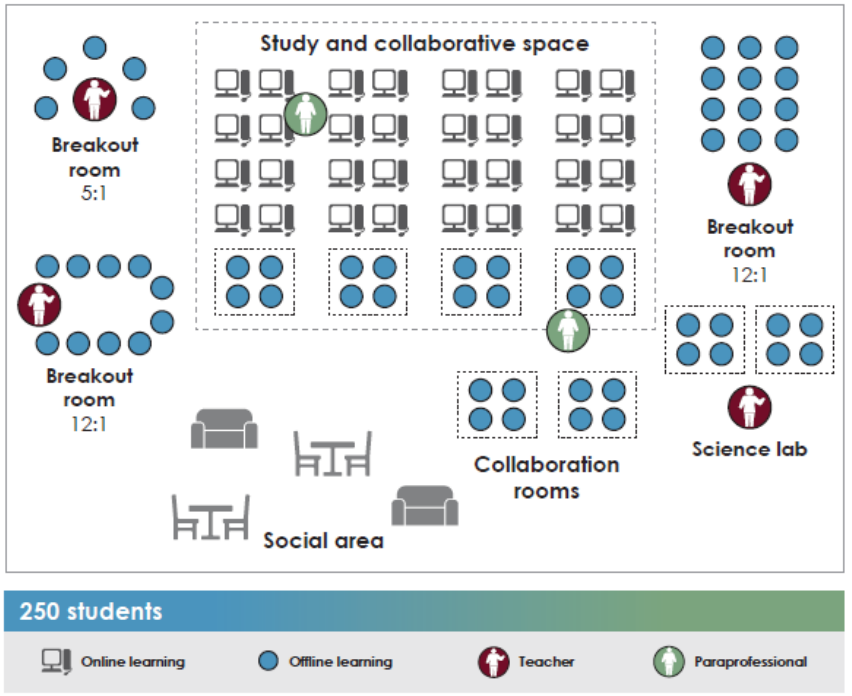


Figure 6. *Station-Rotation model, KIPP LA Empower Academy*

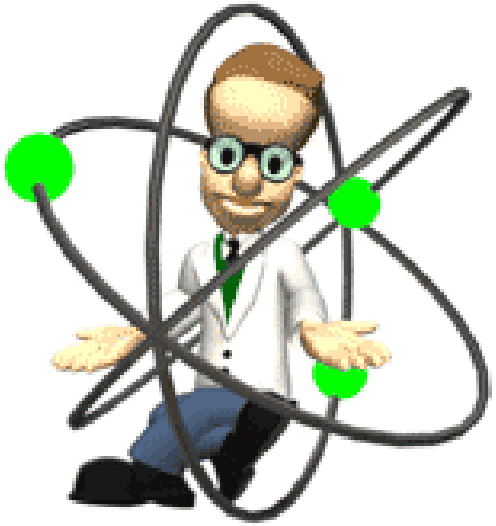


Blended Model #3. Flex
(curriculum primarily online with instructors available FTF)

Figure 10. Flex model, San Francisco Flex Academy

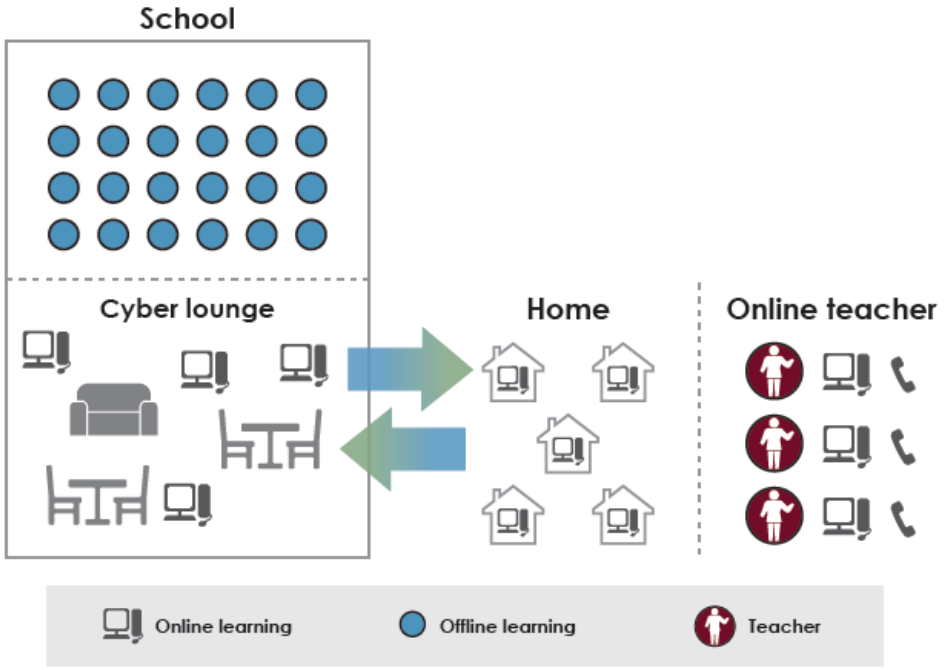


Blended Model #4. Online Lab
(lab or field experience component of course is online)



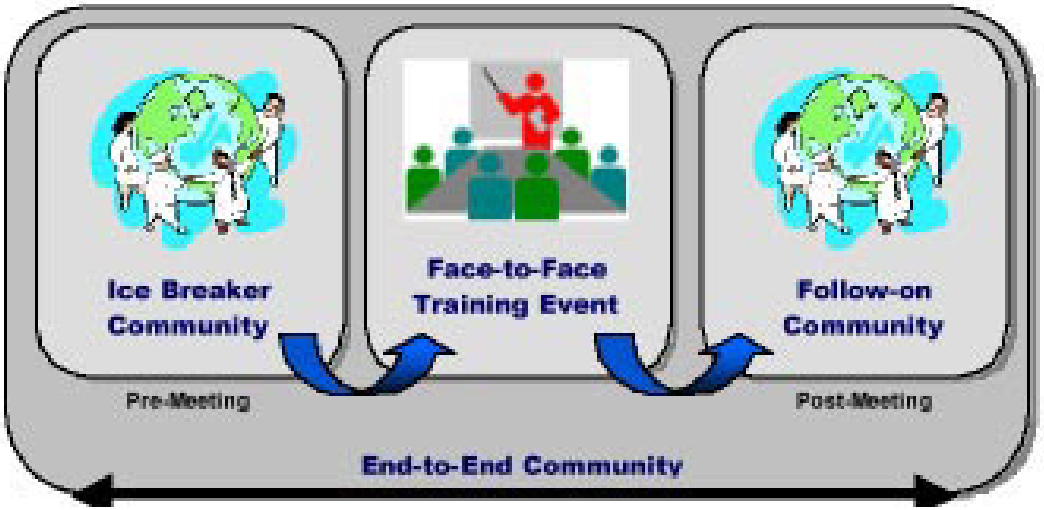
Blended Model #5. Self-Blend (students decide on which courses they take online or which portion of the course is online)

Figure 11. Self-Blend model, Quakertown Community School District



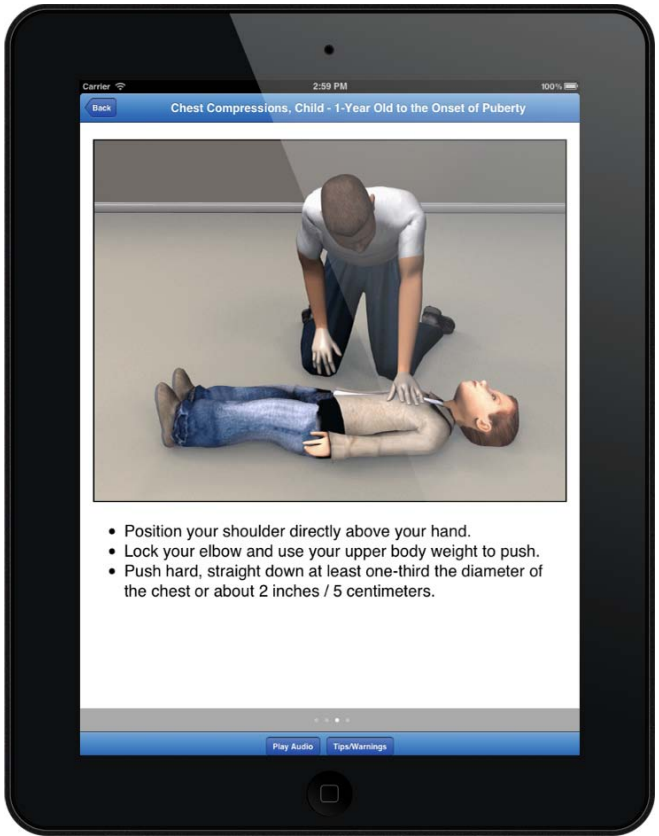
Blended Model #6. Bookend

(first and last part of the course is online and middle portion is FTF; AMA Special Report, Blended Learning Opportunities, Alison Rossett (2006))

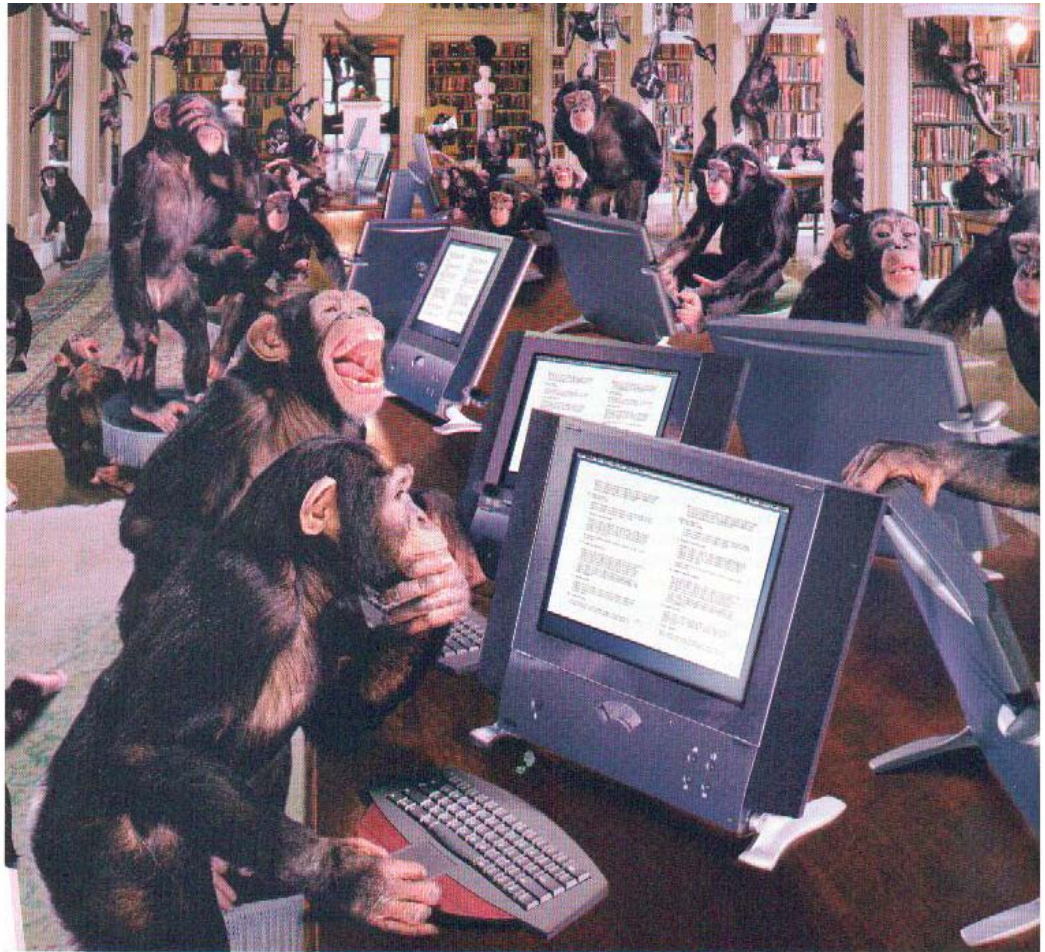


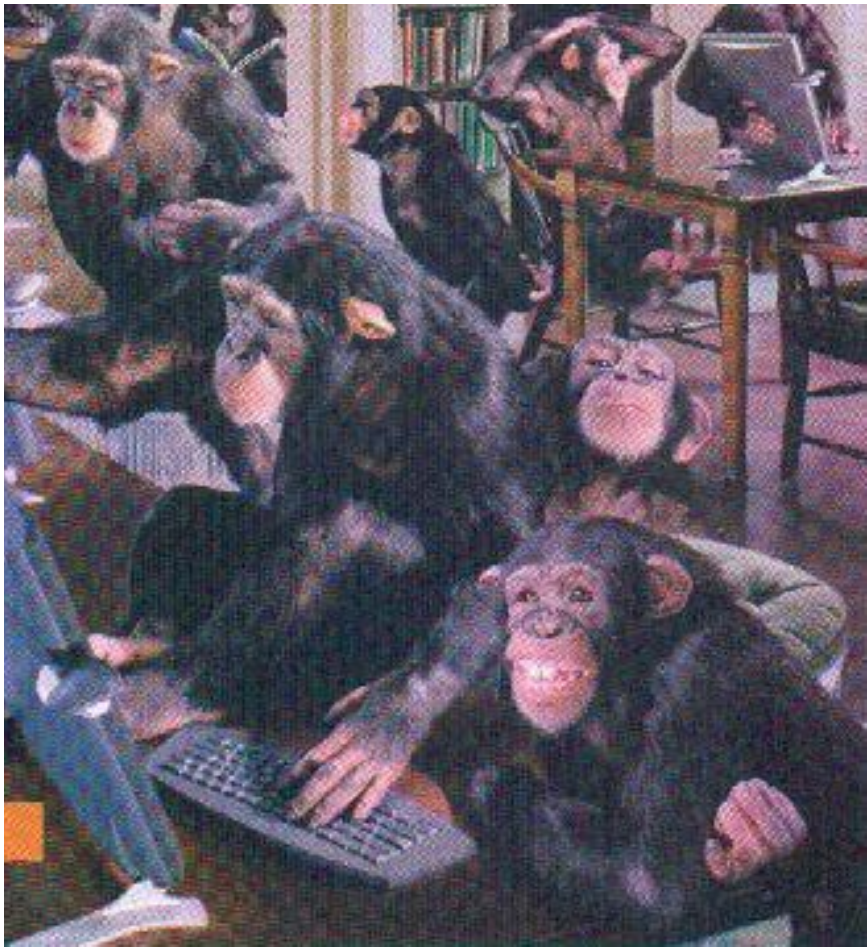
Blended Model #7. Anchor

(start with FTF or what students are familiar with and then move to online)



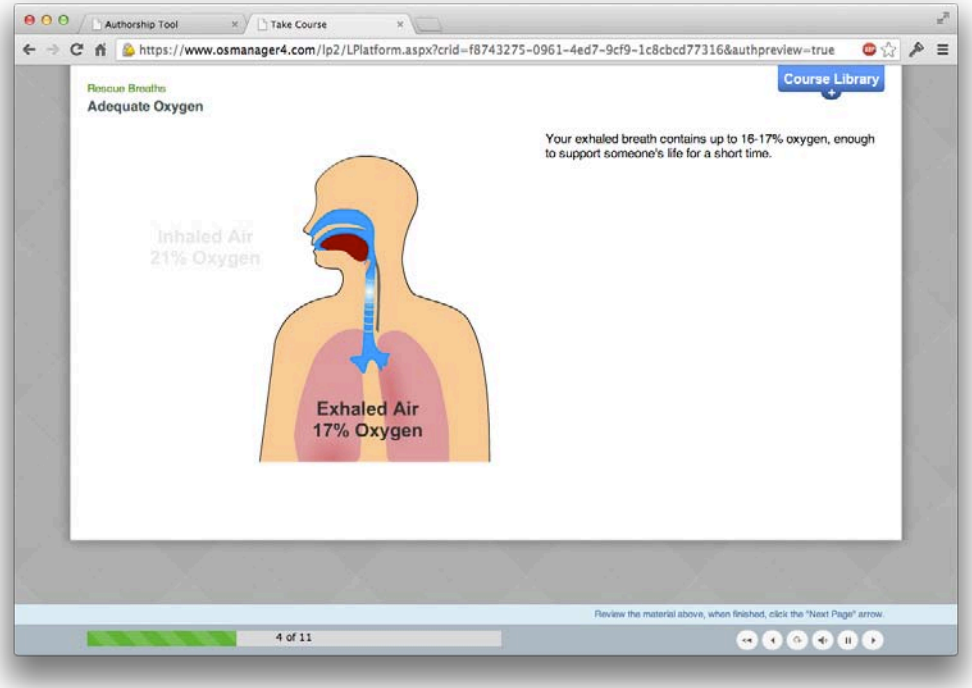
15 Blended Learning Examples

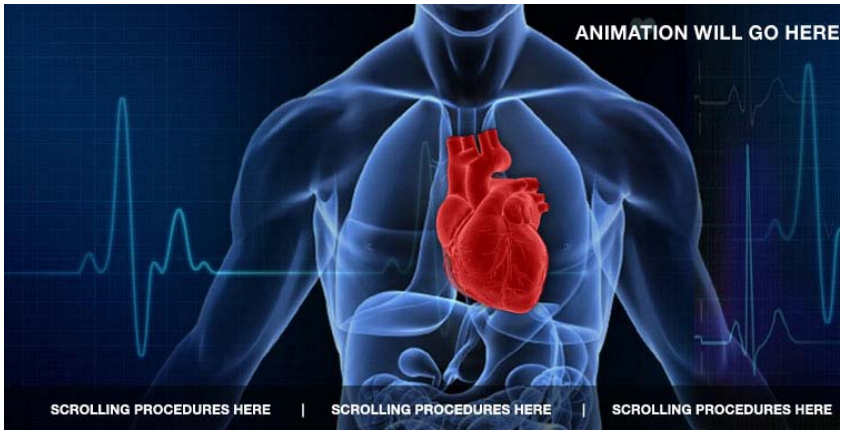


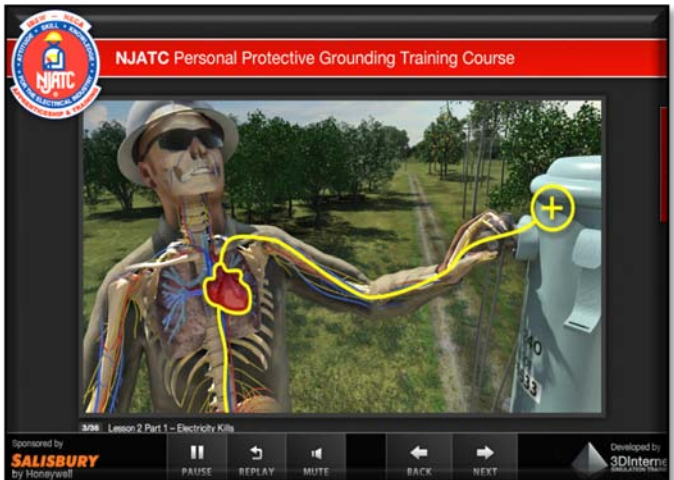


Blended Solution #1.

Concept Animations

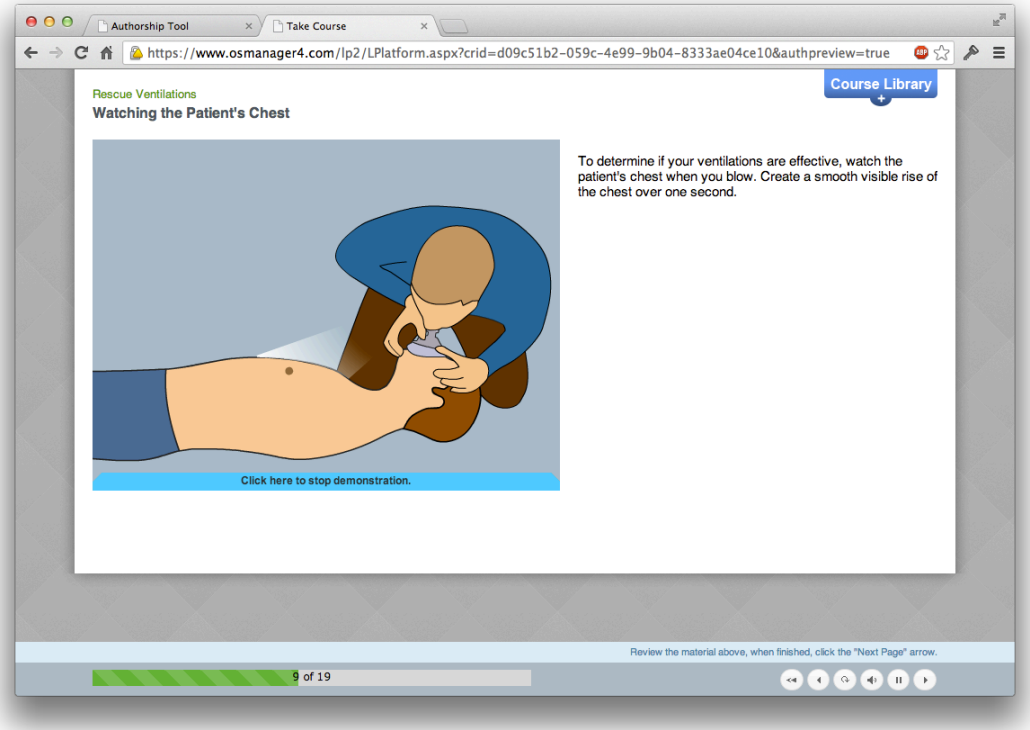






Blended Solution #2.

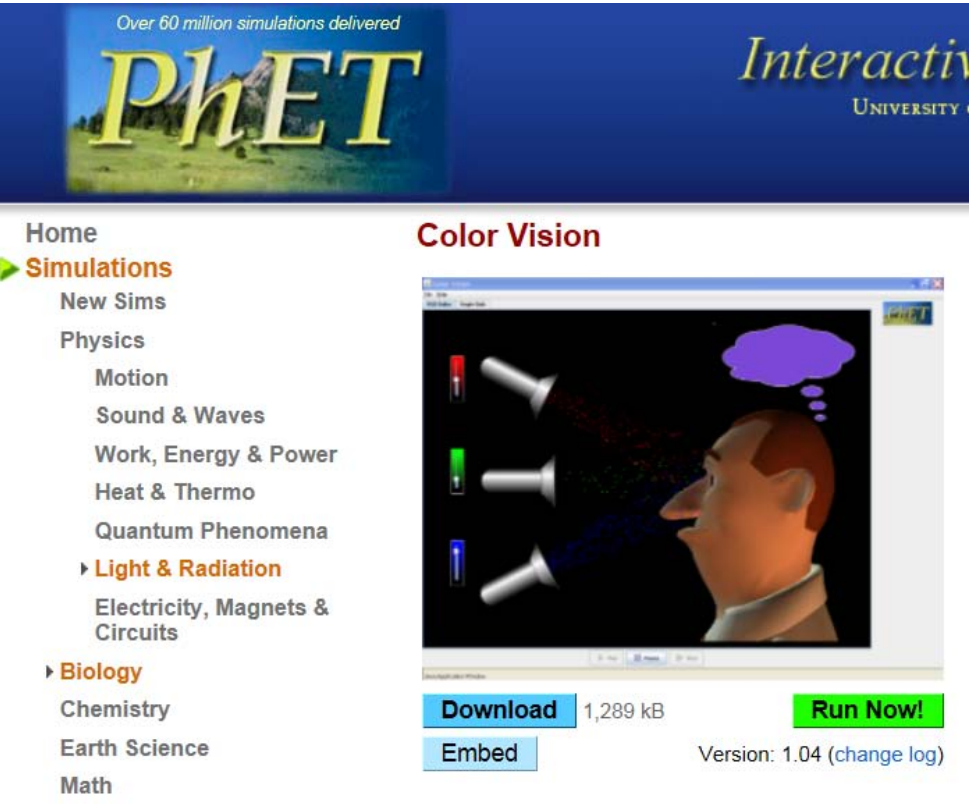
Concept Demonstrations

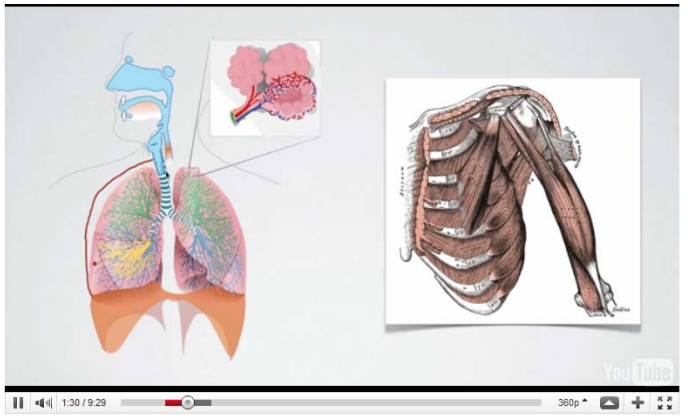


Blended Solution #3.

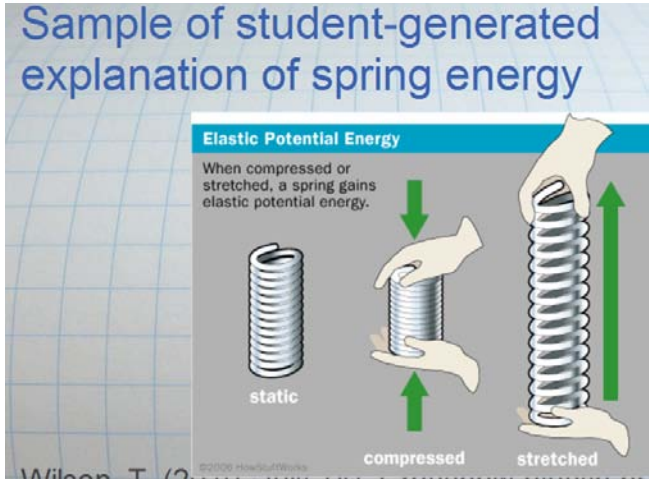
Interactive Simulations

http://phet.colorado.edu/en/simulation/energy-skate-park





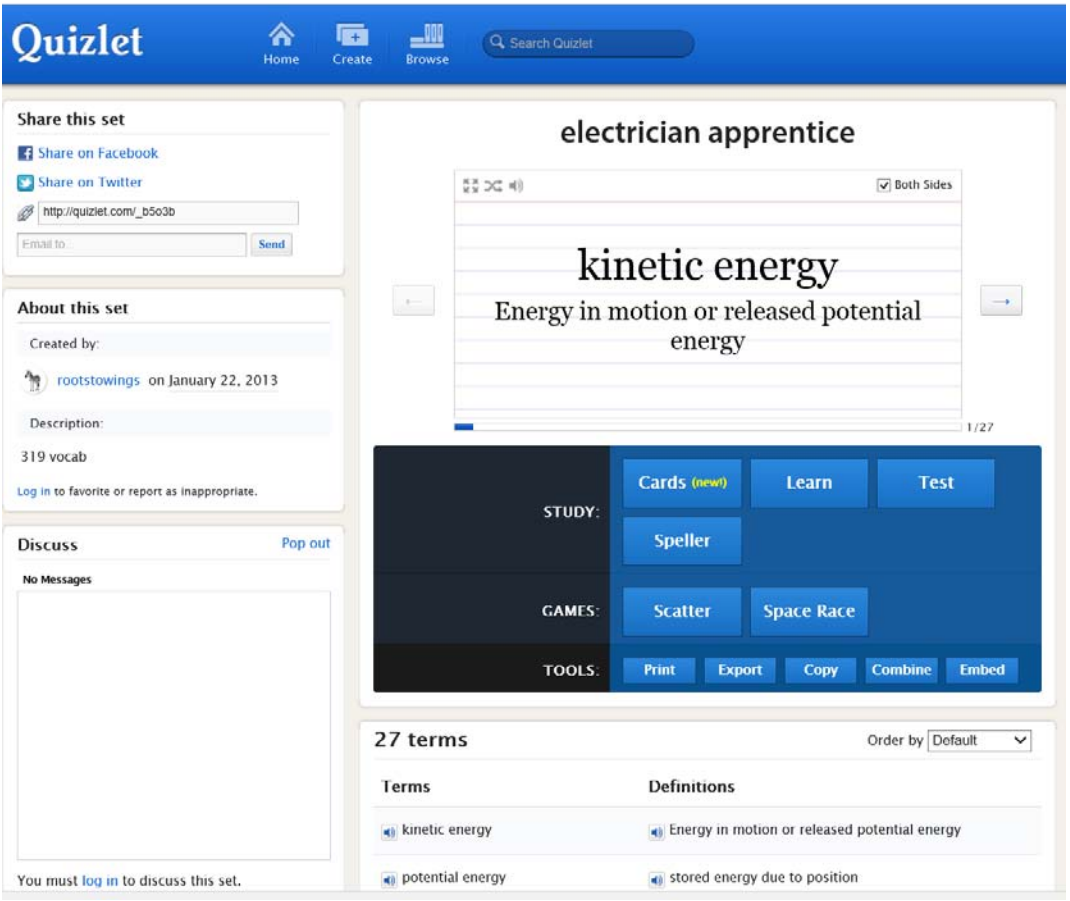
Breathing is one of the most common things we do everyday to a point that it becomes unnoticed. Wouldn't it be great to learn what happens behind this process? What exactly happens when we breathe air in and out of our body? Watch this video as Leslie teaches once again in such an easy way to make it all easy for us to understand this concept.

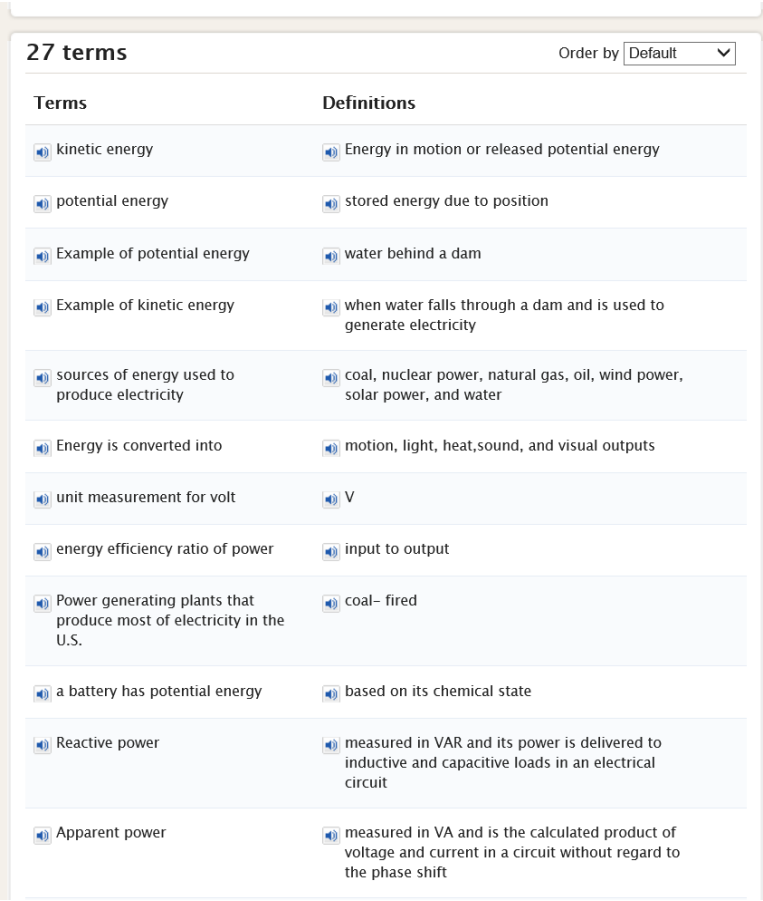


Blended Solution #4.

Online Quizzes

http://quizlet.com/

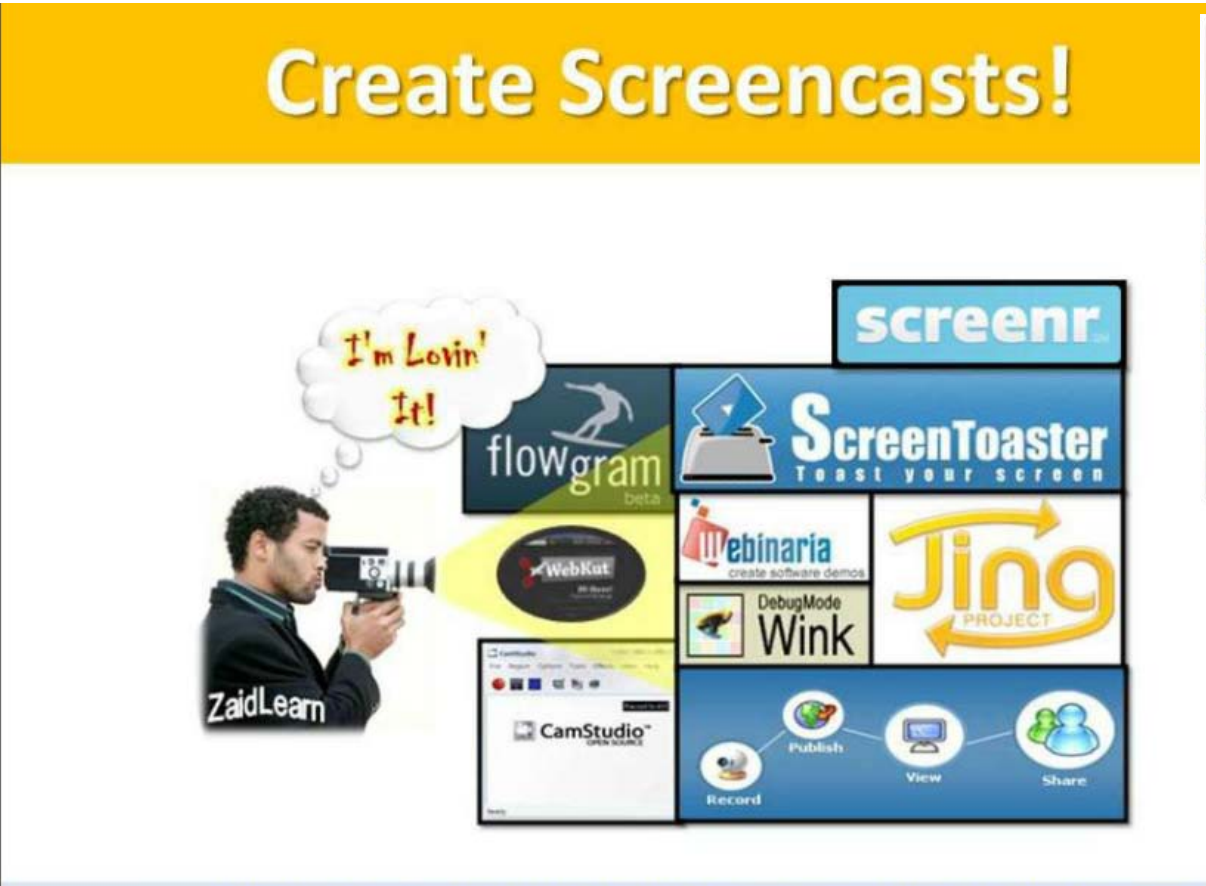




Blended Solution #5.

Screencasts and Tutorials

(Jing, GoView, Screenr)



URL: http://zaidlearn.blogspot.com/2008/10/8-free-screencasting-tools-for-tony.html

Blended Solution #6.

Online Database Activities

(e.g., WolframAlpha)

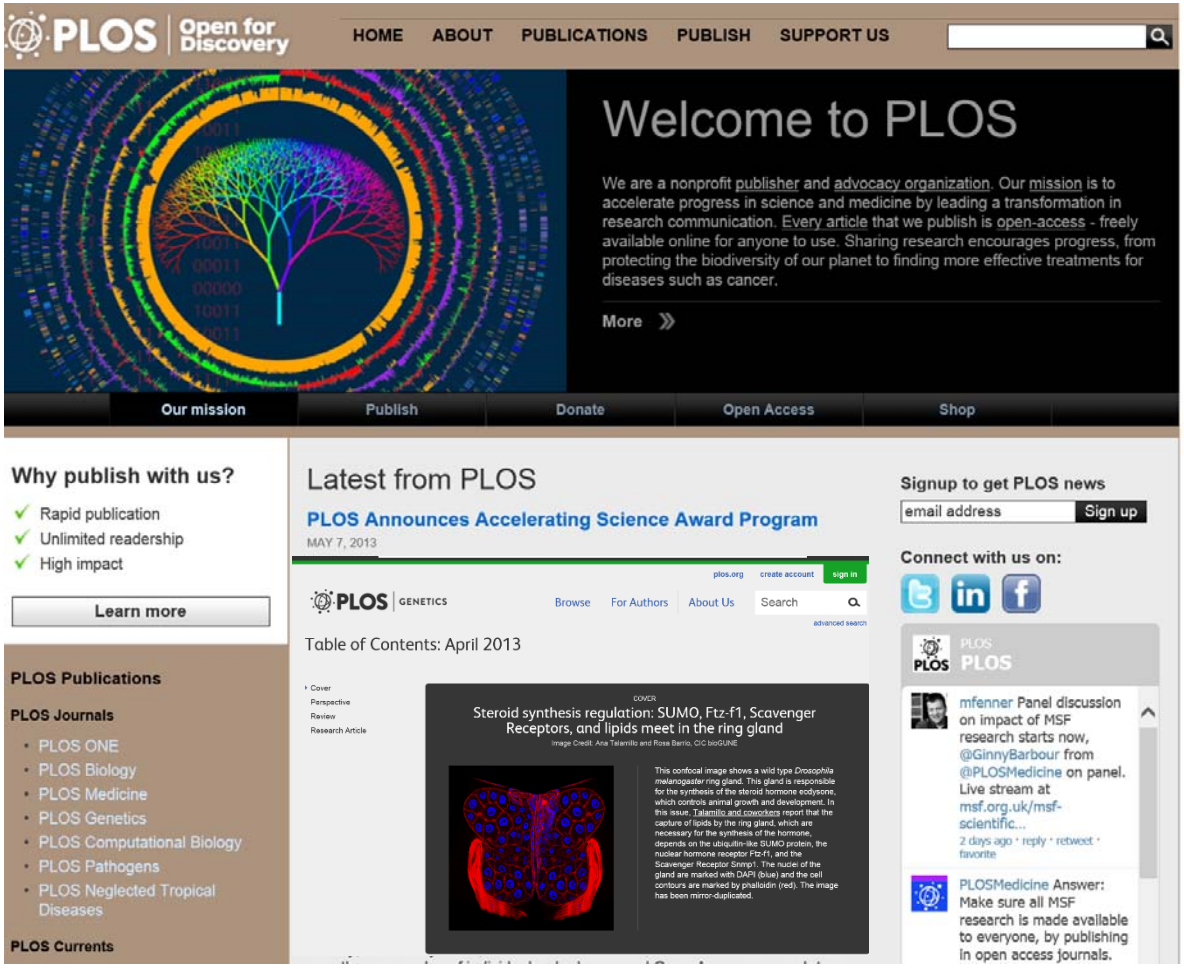
http://www.wolframalpha.com/

A Quick Introduction to Wolfram|Alpha
by Stephen Wolfram

Blended Solution #7.

Reading from Open Access Journals (e.g., PLOS)

http://www.plos.org/
http://www.plosbiology.org/
http://www.plosgenetics.org/



Blended Solution #8.

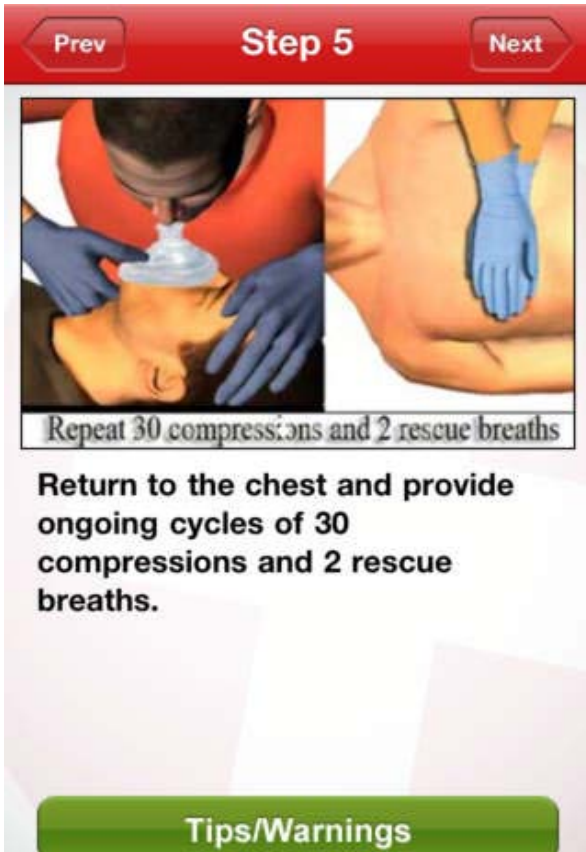
Online Role Play or Debate

Blended Solution #9.

Anchor Course Concepts and Activities in Brief Shared Online Videos

Blended Solution #10.

Mobile Apps for the other training and resources

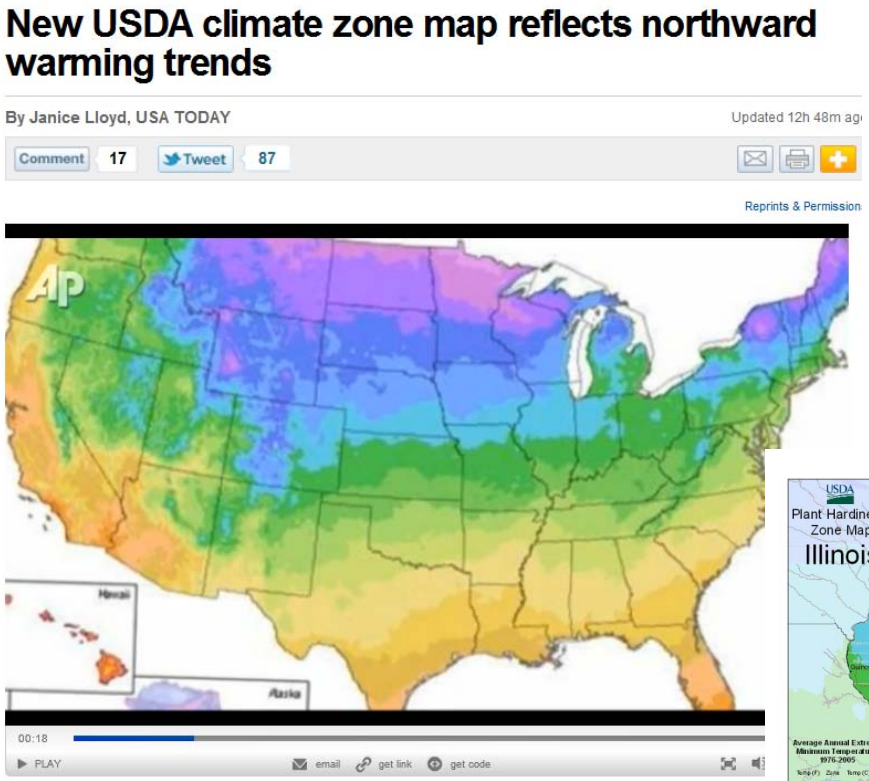


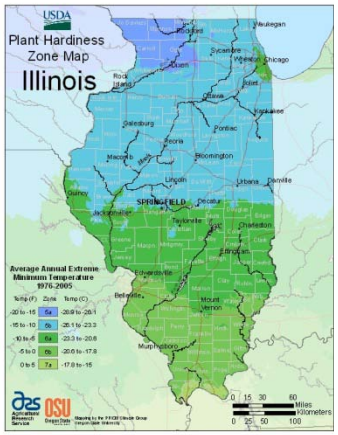
Blended Solution #11.

Comparison and Contrast Maps

(e.g., New USDA climate zone map reflects northward warming trends, By Janice Lloyd, USA TODAY, January 26, 2012)

http://www.usatoday.com/news/nation/environment/story/2012-01-26/USDA-climate-zone-map/52787142/1

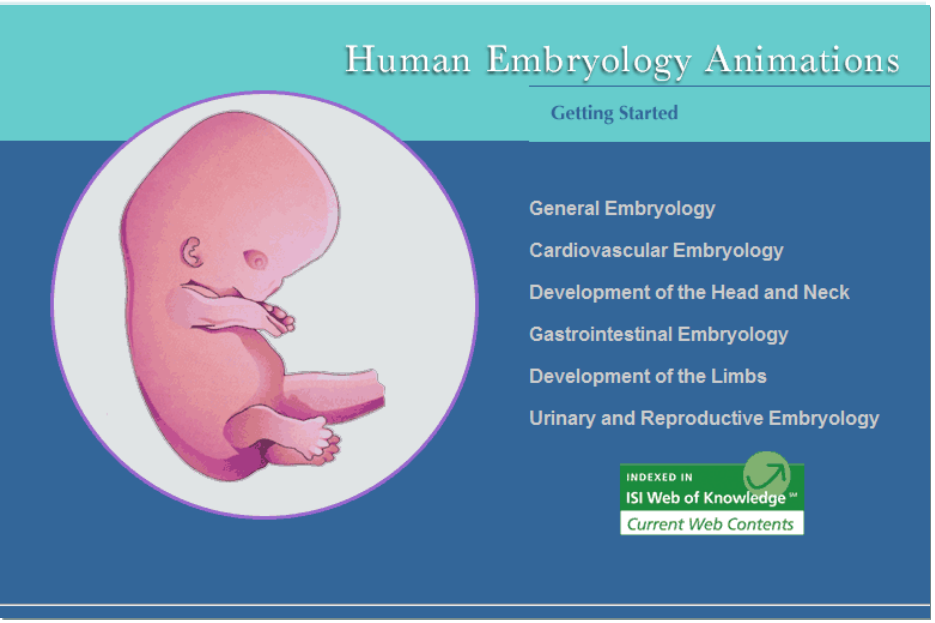


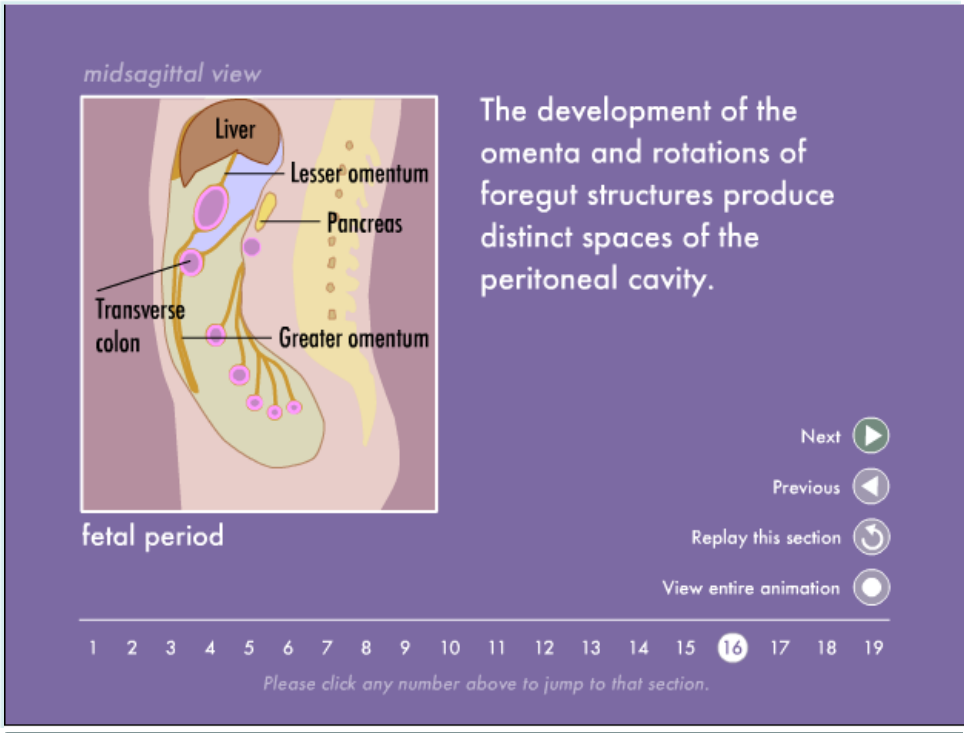


Blended Solution #12.

Human Embryology Animations

(Valerie O'Loughlin, Indiana University)





Blended Solution #13.

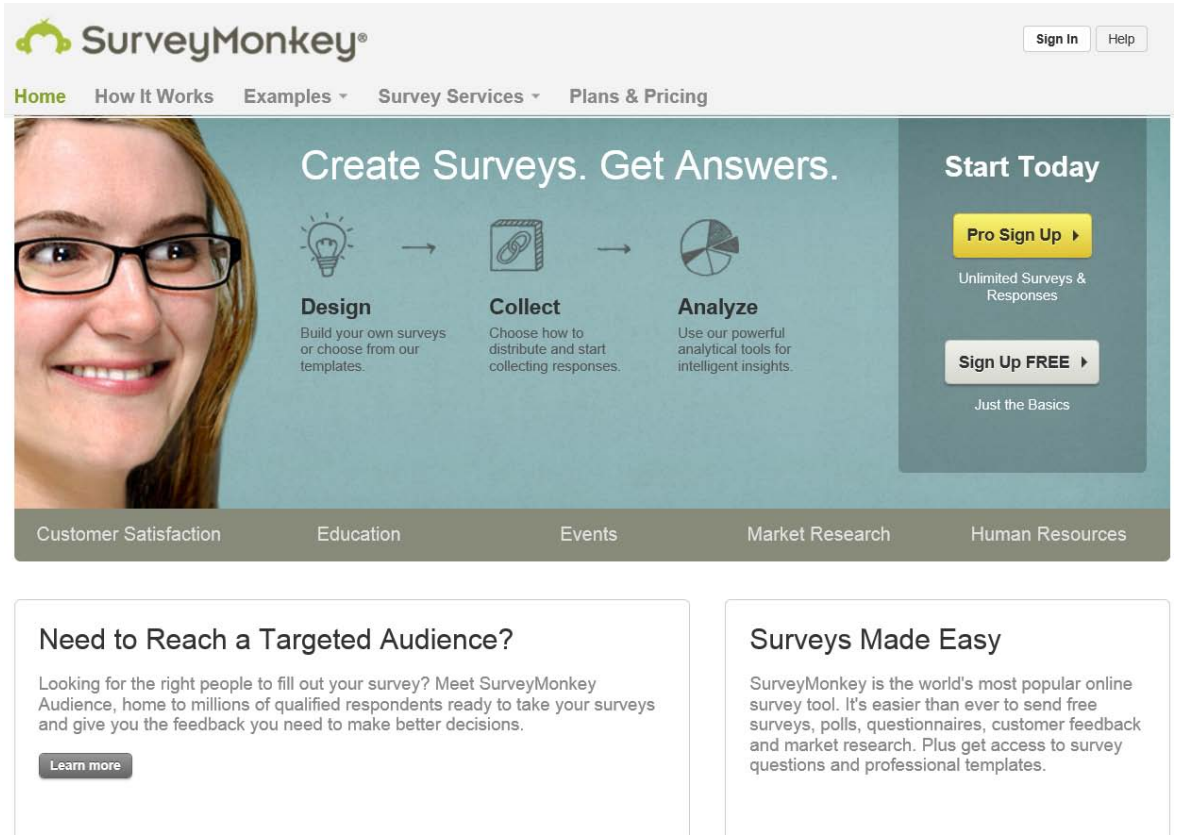
Concept Mapping and Timeline Tools

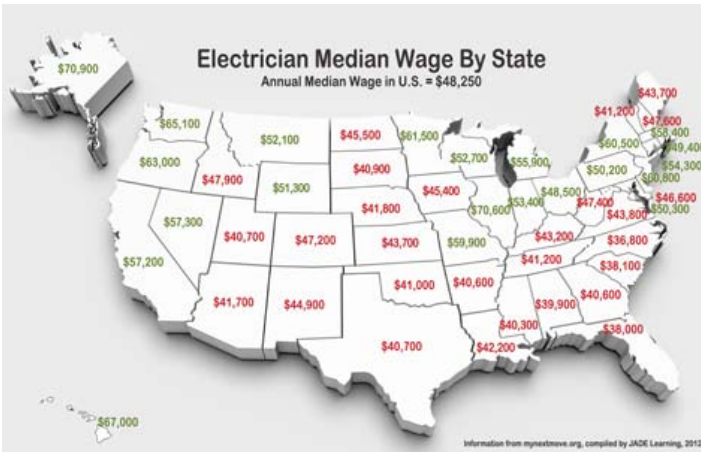
(VUE, Bubbl.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)

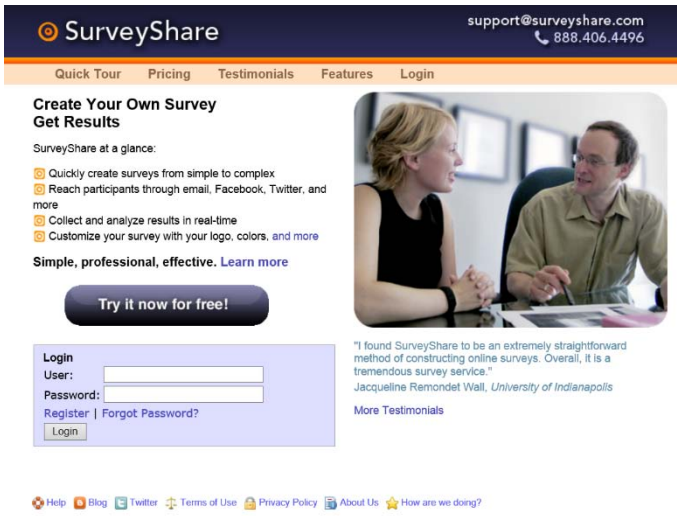
Blended Solution #14.

Survey Research and Market Analysis

(e.g., SurveyShare, Zoomerang, SurveyMonkey)



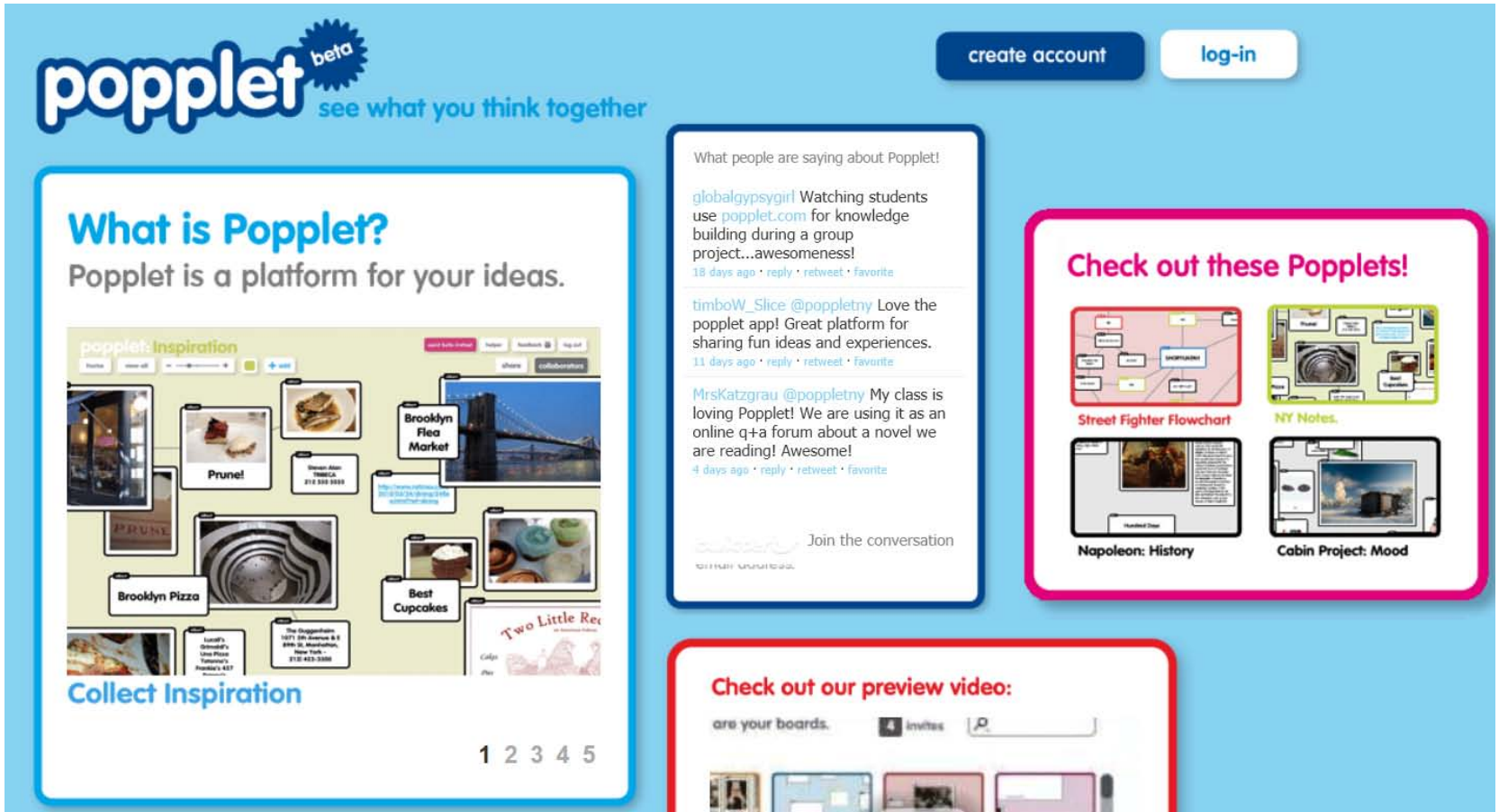




Blended Solution #15.

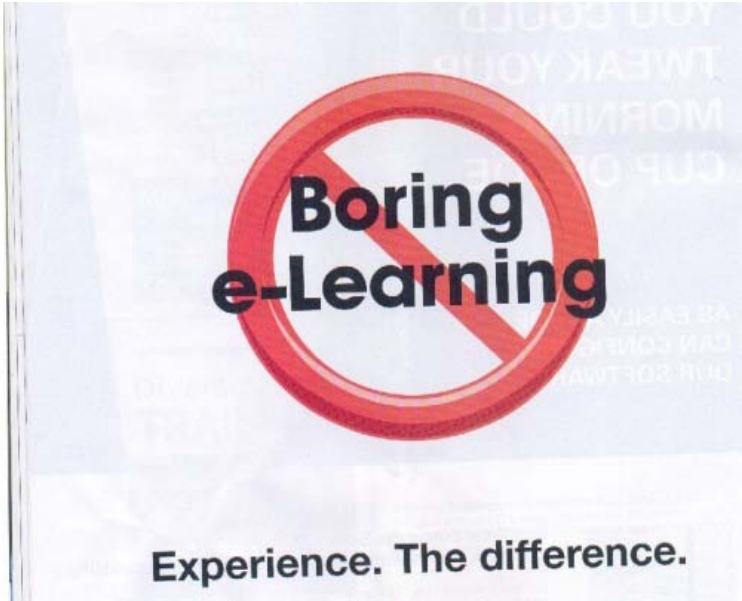
Student Collaborative Knowledge Building and Sharing

(e.g., Popplet: http://popplet.com/



Again, this talk covered…

1. 1 Definition of blended learning
2. 10 Myths of blended learning
3. 7 Models of blended learning
4. 15 Examples of blended learning



December 13, 2013

Former MIT president Charles M. Vest dies at 72 As the Institute's leader from 1990 to 2004, he sparked a period of dynamism.

Steve Bradt, MIT News Office

http://web.mit.edu/newsoffice/2013/former-mit-president-charles-m-vest-dies-at-72-1213.html

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Former MIT president Charles M. Vest dies at 72

As the Institute's leader from 1990 to 2004, he sparked a period of dynamism.

Steve Bradt, MIT News Office

today's news

December 13, 2013

Share

Former MIT president Charles M. Vest — a tireless advocate for research and science, and a passionate supporter of diversity and openness — died last night of pancreatic cancer at his home in the Washington area. He was 72.

As MIT's 15th president, serving from 1990 to 2004, Vest led the Institute through a period of striking change and growth. A mechanical engineer by training, Vest was president of the National Academy of Engineering from 2007 until earlier this year.

During Vest's presidency — the third-longest in the Institute's 152-year history

Any Questions?

Try the R2D2 Model!

Try TEC-VARIETY too…

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Papers: PublicationShare.com

Book: http://tec-variety.com/

Dr. Curt Bonk – CJBonk@Indiana.edu