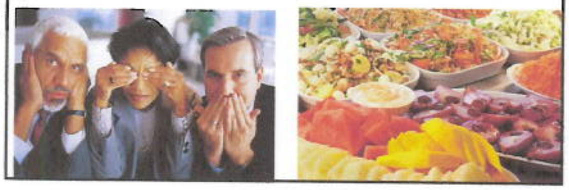
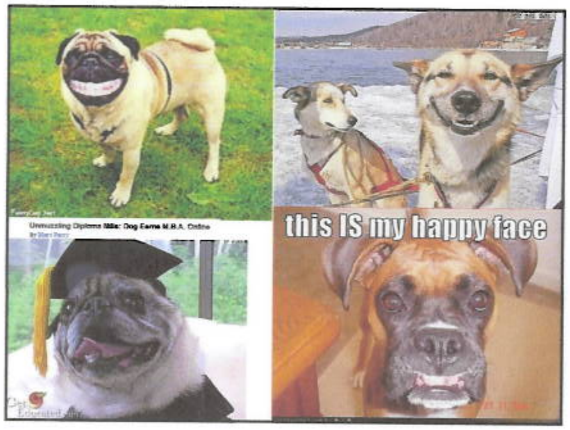
A Five-Part Masterclass for Technology-Enhanced Teaching and Learning: Sampling across a Scrumptious Smorgasbord

Dr. Curtis J. Bonk, cjbonk@indiana.edu
Professor, Indiana University




Unmuzzling Diploma Mills: Dog Earns M.B.A. Online
this IS my happy face

June 2010

Clay Shirky, NYU: How cognitive surplus will change the world, TED

http://www.ted.com/talks/clay_shirky_how_cognitive_surplus_will_change_the_world.html

TED ideas worth spreading
TALKS
Clay Shirky: How cognitive surplus will change the w
COGNITIVE SURPLUS
CREATIVITY AND GENEROSITY IN A CONNECTED AGE
CLAY SHIRKY
HERE COMES EVERYBODY

September 2011

Meta-Analysis Update: Blended and Fully Online Still Best!

U.S. DEPARTMENT OF EDUCATION

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

U.S. Department of Education
Office of Planning, Evaluation, and Policy Development
Policy and Program Studies Service

Revised September 2010

Prepared by

Barbara Means
Yukie Toyama
Robert Murphy
Marianne Bakia
Karla Jones

Center for Technology in Learning

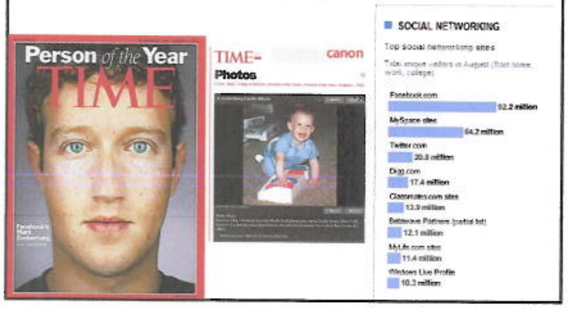
September 2010

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

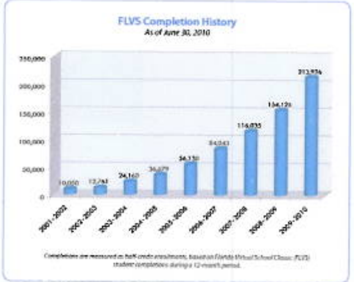
http://www.youtube.com/user/TravelinEdMan

YouTube
Search
Cross-Institutional Wikibook Project
(e.g., IU and the University of Houston)
Wiki Uses and Applications

December 15, 2010
Mark Zuckerberg, Time Magazine, Person of the Year


Person of the Year
TIME
TIME- Photos
canon
SOCIAL NETWORKING
Top social networking sites
Total unique visitors in August (from home, work, college)
Facebook.com
92.2 million
MySpace sites
64.2 million
Twitter.com
20.8 million
Digg.com
17.4 million
Classmates.com sites
13.9 million
Beliefnet Partners (partial list)
12.1 million
MyLife.com sites
11.4 million
Windows Live Profile
10.3 million

February 4, 2011
New Enrollment History Chart: Florida Virtual School (Julie Young, President & CEO)



February 16, 2011
How Bill Gates' Favorite Teacher Wants to Disrupt Education, *Gregory Ferenstein*, Fast Company

YouTube
Khan Academy on the Gates Notes
FORTUNE
Innovation in Education
Bill Gates' favorite teacher
NIGHTLY NEWS
NIGHTLY NEWS
NIGHTLY NEWS

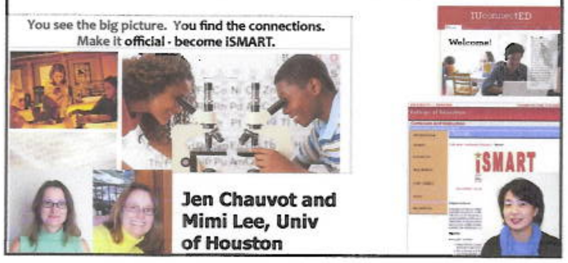
iPad 2, March 2, 2011: Steve Jobs' surprise appearance a 'big deal', CNN Tec, Mark Milian, March 2, 2011,

http://www.cnn.com/2011/TECH/gaming.gadgets/03/02/steve.jobs.ipad2/index.html?iref=NS1

CNN Tech
Steve Jobs' surprise appearance a 'big deal'
Apple's Jobs unveils the iPad 2

Whatever health concerns prompted Steve Jobs' leave didn't seem to affect his flair Wednesday as an Apple pitchman.

April 12, 2011. NCTM Conference
Free Online Degrees
iSMART: Integration of Science, Mathematics, and Reflective Teaching (iSMART), University of Houston


You see the big picture. You find the connections.
Make it official - become iSMART.

UConnectED
Welcome!
iSMART

Jen Chauvot and Mimi Lee, Univ of Houston

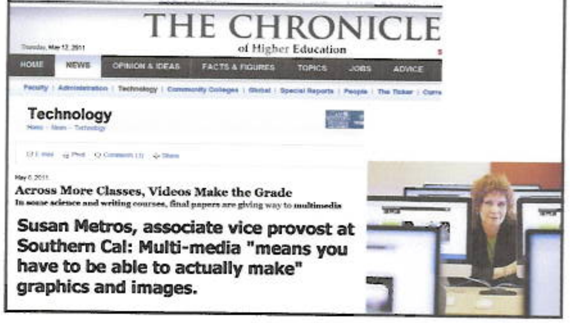
April 29, 2011
Shared Online Video (e.g., YouTube and the Royal Channel)

The Royal Channel
The Royal Wedding
Live on The Royal Channel
YouTube

News for Thursday May 12, 2011

Chronicle of Higher Education

http://chronicle.com/article/Across-More-Classes-Videos/127422/?sid=at&utm_source=at&utm_medium=en


HOME
NEWS
OPINION & IDEAS
FACTS & FIGURES
TOPICS
JOBS
ADVICE
Faculty | Administration | Technology | Community Colleges | Global | Special Reports | People | The Ticker

THE CHRONICLE
of Higher Education

Thursday, May 12, 2011

Technology

May 6, 2011

Across More Classes, Videos Make the Grade

In some science and writing courses, final papers are giving way to multimedia

Susan Metros, associate vice provost at Southern Cal: Multi-media "means you have to be able to actually make" graphics and images.

May 15, 2011

The Quiet Revolution in Open Learning, Kevin Carey, The Chronicle of HE

http://chronicle.com/article/The-Quiet-Revolution-in-Open/127545/

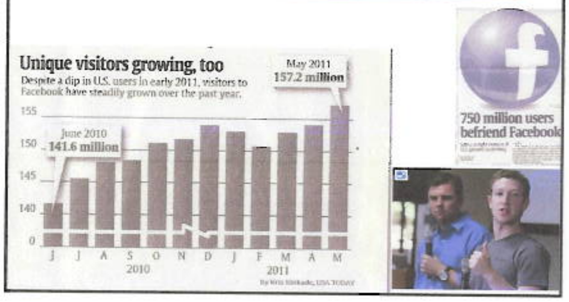
The Quiet Revolution in Open Learning

Online Learning Portals: Customizing Colleges Right Out of Higher Education?

July 7, 2011

Facebook says membership has grown to 750 million, USA Today, Jon Swartz

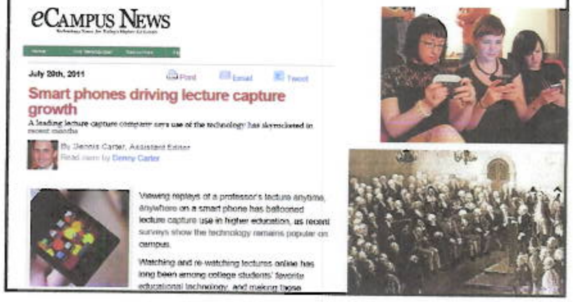
http://www.usatoday.com/tech/news/2011-07-06-facebook-skype-growth_n.htm



July 20, 2011

Smart phones driving lecture capture growth eCampus News, July 20, 2011, Dennis Carter

http://www.ecampusnews.com/technologies/smart-phones-driving-lecture-capture-growth/



eCAMPUS NEWS

July 20th, 2011

Smart phones driving lecture capture growth

A leading lecture capture company says use of the technology has skyrocketed in recent months

By Dennis Carter, Assistant Editor

Read more by Denny Carter

Viewing replays of a professor's lecture anytime, anywhere on a smart phone has ballooned lecture capture use in higher education, as recent surveys show the technology remains popular on campus.

Watching and re-watching lectures online has long been among college students' favorite educational technology, and making those

August 2, 2011

Stanford U. Offers Free Online Course in Artificial Intelligence, Jie Jenny Zou, Chronicle of Higher Education

http://www.ai-class.com/

SEPT. 26 - DEC. 16, 2011

INTRODUCTION TO Artificial Intelligence

You can join Stanford's AI class online, worldwide, this fall!

WIRED CAMPUS

Stanford U. Offers Free Online Course in Artificial Intelligence

August 3, 2011

Inkling opens textbooks on the iPad

USA Today, Jefferson Graham, August 3, 2011

http://www.usatoday.com/money/industries/technology/2011-08-02-inkling-ipad-e-textbooks_n.htm

Some $4.5 billion worth of textbooks were sold in 2010, according to the Association of American Publishers. Expects digital textbooks to represent 3% of sales in 2011, growing to 44% by 2017.

USA TODAY Technology
Comment
18
Tweet

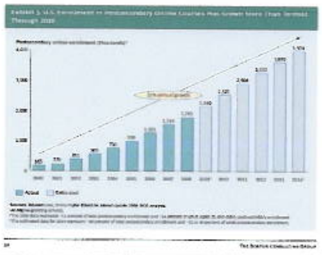
Inkling opens textbooks on the iPad

By Jefferson Graham, USA TODAY

August 11, 2011

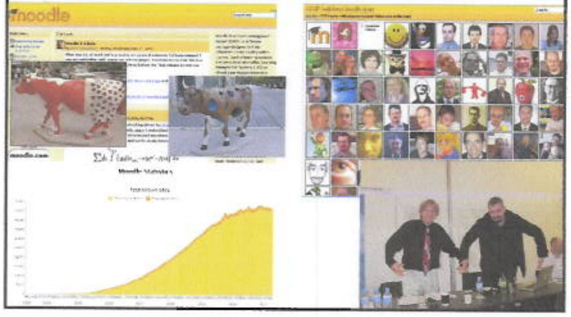
Unleashing the Potential of Technology in Education, The Boston Consulting Group, Allison Bailey, Tyce Henry, Lane McBride, & J. Pucket

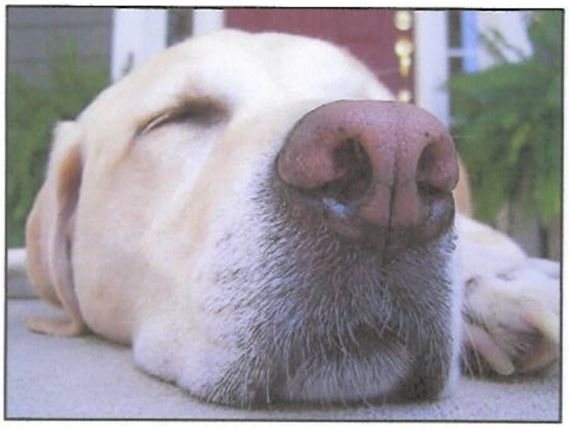
http://www.bcg.com/documents/file82603.pdf



August 12, 2011

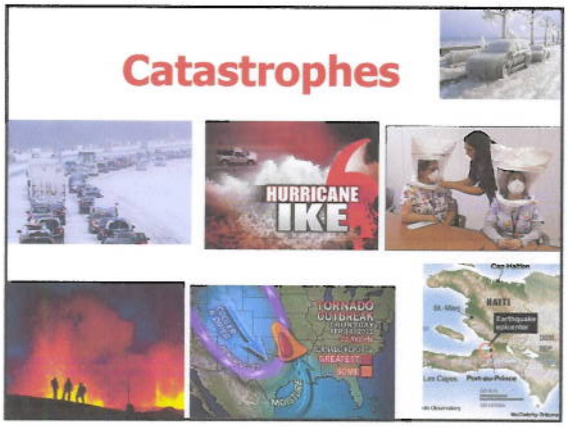
Moodle (45 million users in 209 countries, 54,000 sites, 4.6+ million courses)





But I am not Content!!!

Catastrophes



July 31, 2011

Rogue Downloader's Arrest Could Mark Crossroads for Open-Access Movement, Chronicle of HE, David Glenn

http://chronicle.com/article/Rogue-Downloaders-Arrest/128439/?sid=at&utm_source=at&utm_medium=en

WIRED CAMPUS

The latest news on tech and education.

Programmer Is Charged With Hacking Into Journal Database

Timothy B. Lee

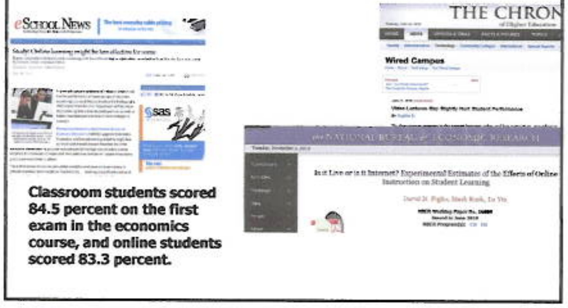
Aaron Swartz's Reckless Activism

A 24-year-old online activist was charged Tuesday with sneaking into a computer closet at the Massachusetts Institute of Technology and making unauthorized downloads of more than four million journal articles.

The programmer, Aaron Swartz, was a fellow at Harvard University's Center for Ethics at the time of the alleged hack, and he is the founder of a lobbying group called Demand Progress, which focuses on technology-policy issues. He pleaded not guilty to all charges and was released on $100,000 bail.

The programmer reportedly broke into a computer wiring closet at the campus to access the university network and

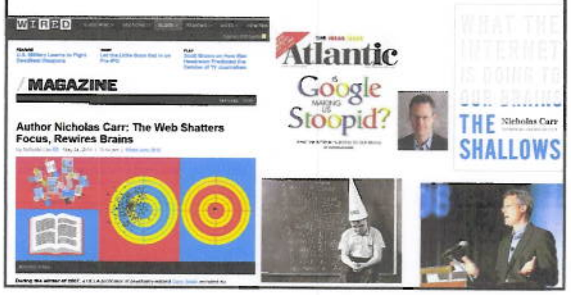
September 15, 2010
Study: Online learning might be less effective for some, eSchool News, Dennis Carter


eSchool News
THE CHRON
Wired Campus
NATIONAL BUREAU OF ECONOMIC RESEARCH

Classroom students scored 84.5 percent on the first exam in the economics course, and online students scored 83.3 percent.

May 24, 2010
Author Nicholas Carr, The Web Shatters Focus, Rewires Brains, Wired

http://www.wired.com/magazine/2010/05/ff_nicholas_carr/


WIRED
MAGAZINE
Author Nicholas Carr: The Web Shatters Focus, Rewires Brains
Atlantic
Is Google Making Us Stoopid?
WHAT THE INTERNET IS DOING TO OUR BRAINS
THE SHALLOWS
Nicholas Carr

September 15, 2010
Timeline of Technology for Teaching, NY Times

http://www.nytimes.com/interactive/2010/09/19/magazine/classroom-technology.html?ref=magazine

The Learning Machines

Technology of the 1980s

COMMODORE 64
64K

Radio Shack TRS-80 Model III

Introduced:	July 1980
Price:	US $699 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 B/W monitor: 64 X 16 text
Storage:	0, 1, or 2 internal 178K floppy drives External cassette @ 500 / 1500 baud
OS:	BASIC in ROM, TRS-DOS on disk

Mark Weiser, Scientific American, 1991, The Computer for the 21st Century

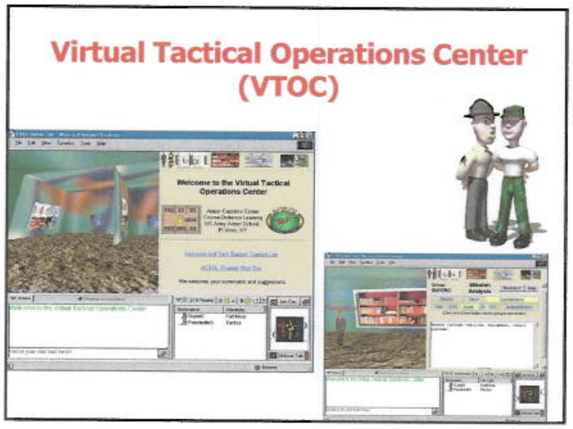
http://sandbox.xerox.com/want/papers/ubi-sciam-sep91.pdf

COMPUTER SCRATCHPADS augment the conventional screen in this office at the Xerox Palo Alto Research Center. Prototype pads are wired to conventional computers; thus far only a handful of wireless models have been built.

86 THE COMPUTER IN THE 21ST CENTURY

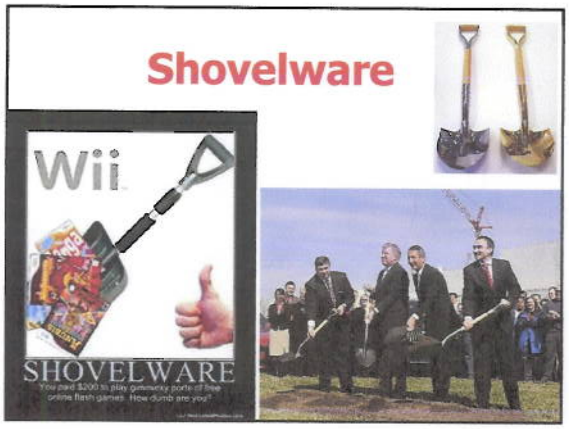
Let's Reflect Back 10 Years...

2001:
a space odyssey
2001
a space
odyssey
WEDNESDAY



Virtual Tactical Operations Center (VTOC)

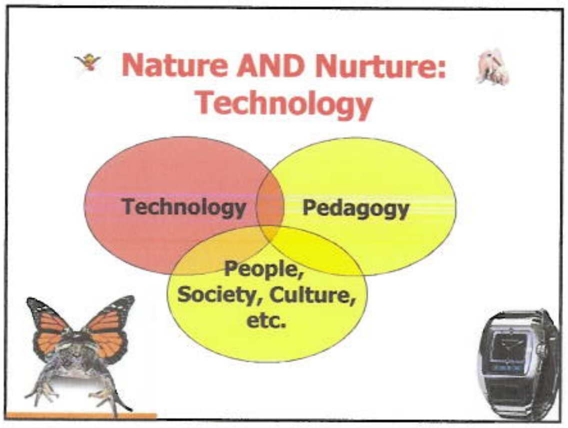
Welcome to the Virtual Tactical Operations Center



Shovelware

Wii
SHOVELWARE
You paid $200 to play gimmicky ports of free online flash games. How dumb are you?

Ten Years Later...

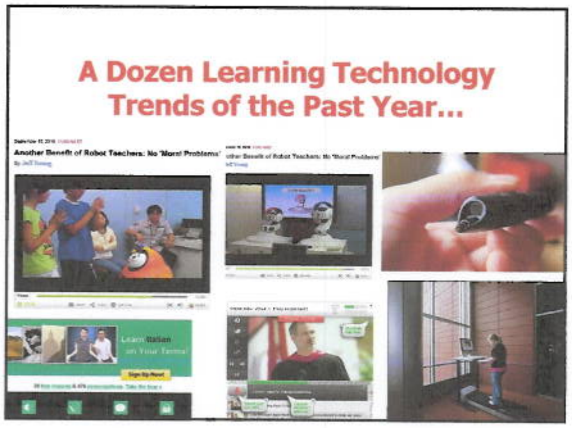


Nature AND Nurture: Technology

Technology

Pedagogy

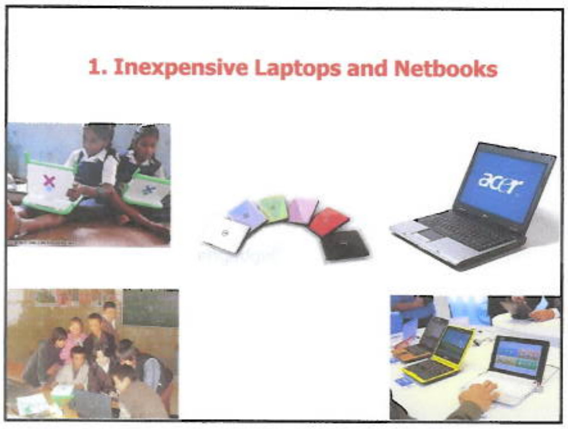
People, Society, Culture, etc.



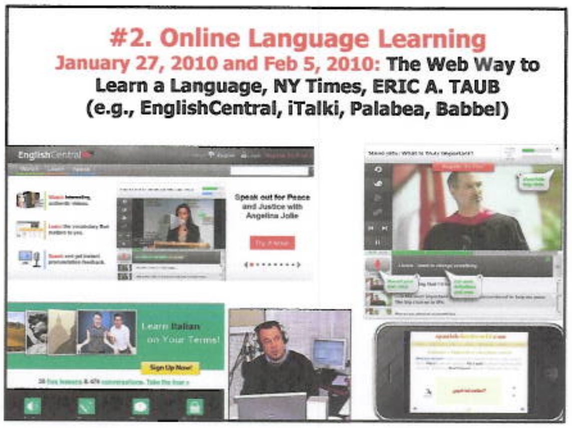
A Dozen Learning Technology Trends of the Past Year...

Another Benefit of Robot Teachers: No 'Moral Problems'

Learn Italian on Your Terms!
Sign Up Now!



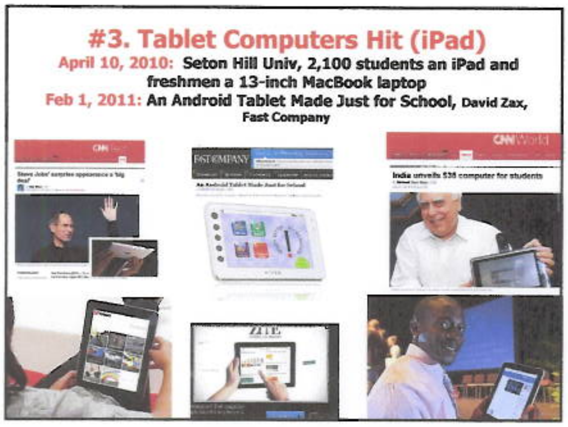
1. Inexpensive Laptops and Netbooks



#2. Online Language Learning

January 27, 2010 and Feb 5, 2010: The Web Way to Learn a Language, NY Times, ERIC A. TAUB (e.g., EnglishCentral, iTalki, Palabea, Babbel)

EnglishCentral
Speak out for Peace and Justice with Angelina Jolie
Learn Italian on Your Terms!
Sign Up Now!

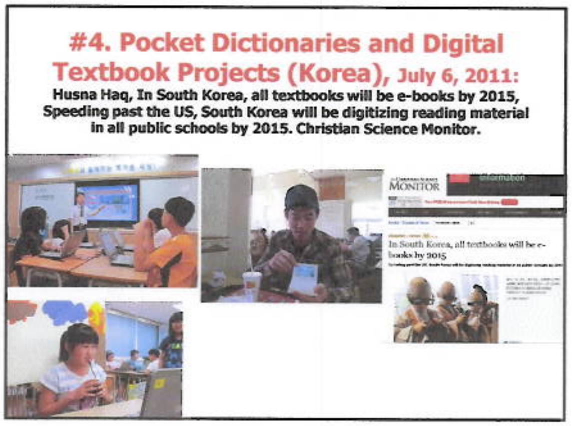


#3. Tablet Computers Hit (iPad)

April 10, 2010: Seton Hill Univ, 2,100 students an iPad and freshmen a 13-inch MacBook laptop

Feb 1, 2011: An Android Tablet Made Just for School, David Zax, Fast Company

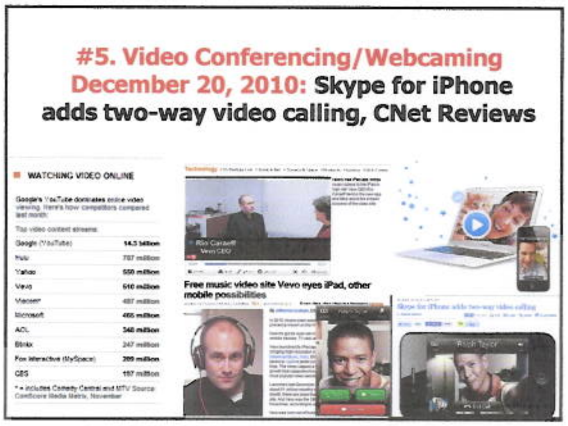
CNN
FAST COMPANY
An Android Tablet Made Just for School
CNN World
India unveils $35 computer for students
ZITE



#4. Pocket Dictionaries and Digital Textbook Projects (Korea), July 6, 2011:

Husna Haq, In South Korea, all textbooks will be e-books by 2015, Speeding past the US, South Korea will be digitizing reading material in all public schools by 2015. Christian Science Monitor.

The Christian Science Monitor
In South Korea, all textbooks will be e-books by 2015



#5. Video Conferencing/Webcaming

December 20, 2010: Skype for iPhone adds two-way video calling, CNet Reviews

WATCHING VIDEO ONLINE

Google's YouTube dominates online video viewing. Here's how competitors compared last month:

Top video content streams	
Google (YouTube)	14.3 billion
Hulu	787 million
Yahoo	550 million
Vevo	510 million
Viacom*	487 million
Microsoft	465 million
AOL	348 million
Blinkx	247 million
Fox Interactive (MySpace)	209 million
CBS	187 million

* = includes Comedy Central and MTV Source: ComScore Media Metrix, November

Free music video site Vevo eyes iPad, other mobile possibilities

Technology
Rio Caraeff
Vevo CEO
Skype for iPhone adds two-way video calling

First Look at Google+ Hangouts, June 29, 2011

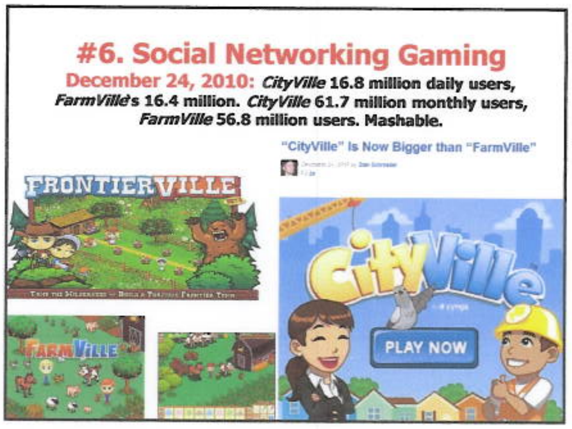
http://www.youtube.com/watch?v=KLf9jzFvkTA&annotation_id=annotation_389852&feature=iv

YouTube
Search
Browse
First Look at Google+ Hangouts
434 videos
Subscribe
36,714
Like
Add to
Share

Facebook introduces video calling, Eric Stoller, July 6, 2011, Inside Higher Ed

http://www.insidehighered.com/blogs/student_affairs_and_technology/facebook_introduces_video_calling

Facebook introduces video calling
Facebook introduces video calling
Facebook introduces video calling
Facebook introduces video calling
By Eric Stoller July 6, 2011 9:48 pm EDT
Facebook introduces video calling
By Eric Stoller July 6, 2011 9:48 pm EDT

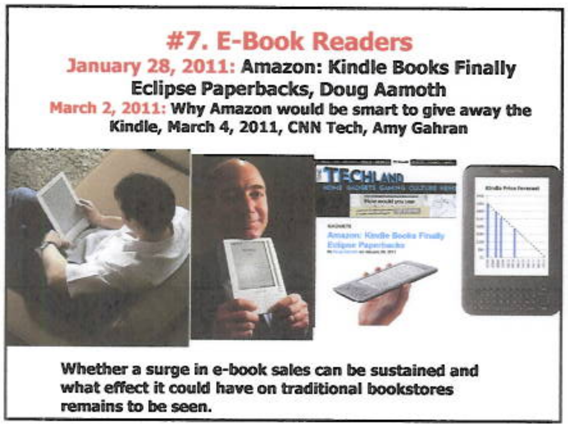


#6. Social Networking Gaming

December 24, 2010: ***CityVille*** **16.8 million daily users,** ***FarmVille's*** **16.4 million.** ***CityVille*** **61.7 million monthly users,** ***FarmVille*** **56.8 million users. Mashable.**

"CityVille" Is Now Bigger than "FarmVille"

FRONTIERVILLE
FARMVILLE
CityVille
PLAY NOW



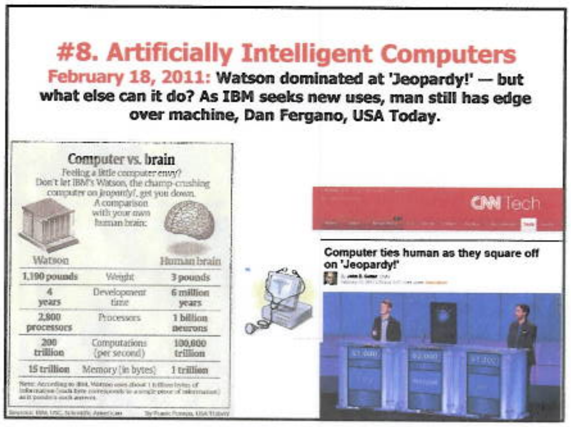
#7. E-Book Readers

January 28, 2011: Amazon: Kindle Books Finally Eclipse Paperbacks, Doug Aamoth

March 2, 2011: Why Amazon would be smart to give away the Kindle, March 4, 2011, CNN Tech, Amy Gahran

TECHLAND
Amazon: Kindle Books Finally Eclipse Paperbacks

Whether a surge in e-book sales can be sustained and what effect it could have on traditional bookstores remains to be seen.



#8. Artificially Intelligent Computers

February 18, 2011: Watson dominated at 'Jeopardy!' — but what else can it do? As IBM seeks new uses, man still has edge over machine, Dan Fergano, USA Today.

Computer vs. brain

Feeling a little computer envy? Don't let IBM's Watson, the champ-crushing computer on Jeopardy!, get you down. A comparison with your own human brain:

Watson		Human brain
1,190 pounds	Weight	3 pounds
4 years	Development time	6 million years
2,800 processors	Processors	1 billion neurons
200 trillion	Computations (per second)	100,000 trillion
15 trillion	Memory (in bytes)	1 trillion

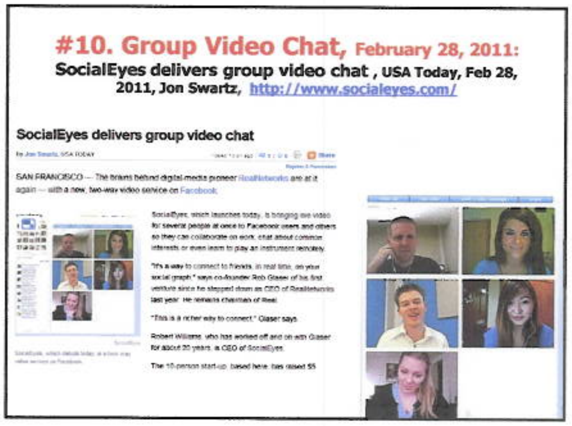
CNN Tech

Computer ties human as they square off on 'Jeopardy!'

#9. New Interfaces

Febuary 18, 2011: Telekinesis 2.0, David Zax, Fast Company

FAST COMPANY
BrainDriver
How to drive with your Brain
Jeff Han on TED Talks



#10. Group Video Chat, February 28, 2011:

SocialEyes delivers group video chat, USA Today, Feb 28, 2011, Jon Swartz, http://www.socialeyes.com/

SocialEyes delivers group video chat

By Jon Swartz, USA TODAY

SAN FRANCISCO — The brains behind digital-media pioneer RealNetworks are at it again — with a new, two-way video service on Facebook.

SocialEyes, which launches today, is bringing live video for several people at once to Facebook users and others so they can collaborate on work, chat about common interests or even learn to play an instrument remotely.

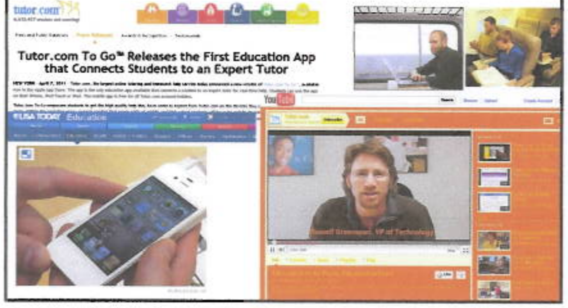
"It's a way to connect to friends, in real time, on your social graph," says co-founder Rob Glaser of his first venture since he stepped down as CEO of RealNetworks last year. He remains chairman of Real.

"This is a richer way to connect," Glaser says.

Robert Williams, who has worked off and on with Glaser for about 20 years, is CEO of SocialEyes.

The 10-person start-up, based here, has raised $5

11. Mobile Apps (e.g., Tutors), April 7, 2011: Tutor.com Releases First Ed App that Connects Students to an Expert Tutor


Tutor.com To Go™ Releases the First Education App that Connects Students to an Expert Tutor
tutor.com
USA TODAY Education
YouTube

#12. Augmented Reality, May 17, 2011: USA Today, Edward Baig, May 17, 2011, Augmented reality has potential to reshape our lives.

Augmented reality has potential to reshape our lives

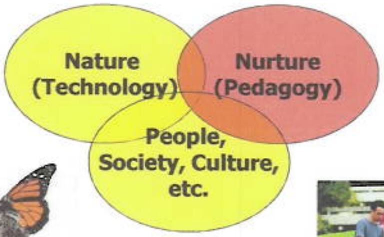
Augmented reality has potential to reshape our lives

Augmented reality has potential to reshape our lives

Augmented reality has potential to reshape our lives

Is this a revolution?

Nature AND Nurture: Pedagogy


Nature (Technology)
Nurture (Pedagogy)
People, Society, Culture, etc.

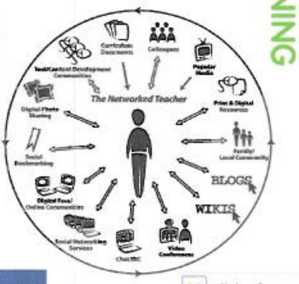
Question: What is the Web?

- 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


Curriculum Documents
Colleagues
Popular Media
Print & Digital Resources
Family/ Local Community
BLOGS
WIKIS
Video Conferences
Chat/IM
Social Networking Services
Online Communities
Social Bookmarking
Digital Photo Sharing
Text/Content Development Communities
The Networked Teacher

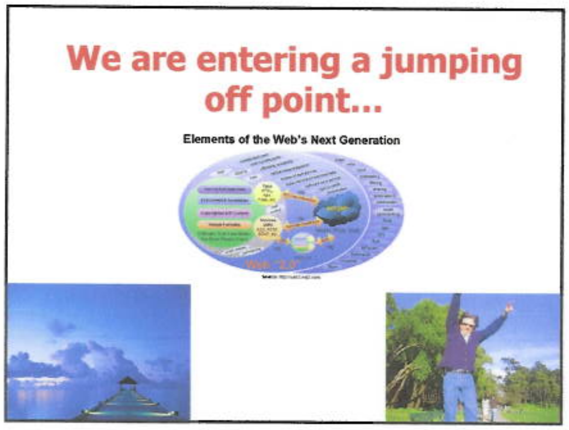
NING

Google

PBWORKS

Blogger

slideshare

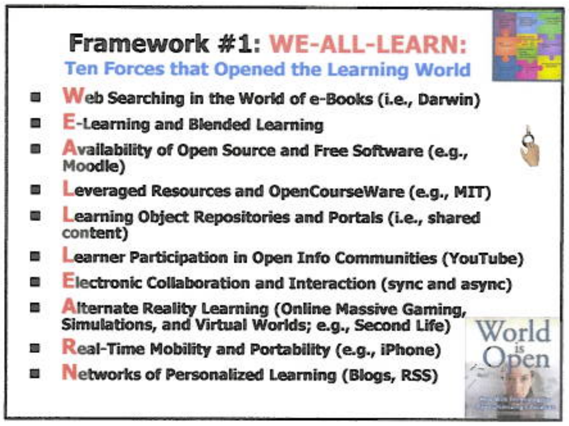


We are entering a jumping off point…

Elements of the Web's Next Generation

It is Open in Norway… (May 23-26, 2011)

Very open in Norway!

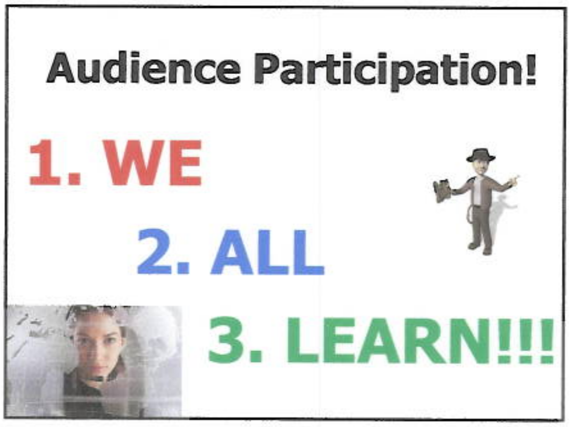


Framework #1: WE-ALL-LEARN:

Ten Forces that Opened the Learning World

- Web Searching in the World of e-Books (i.e., Darwin)
- E-Learning and Blended Learning
- Availability of Open Source and Free Software (e.g., Moodle)
- Leveraged Resources and OpenCourseWare (e.g., MIT)
- Learning Object Repositories and Portals (i.e., shared content)
- Learner Participation in Open Info Communities (YouTube)
- Electronic Collaboration and Interaction (sync and async)
- Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- Real-Time Mobility and Portability (e.g., iPhone)
- Networks of Personalized Learning (Blogs, RSS)

World is Open

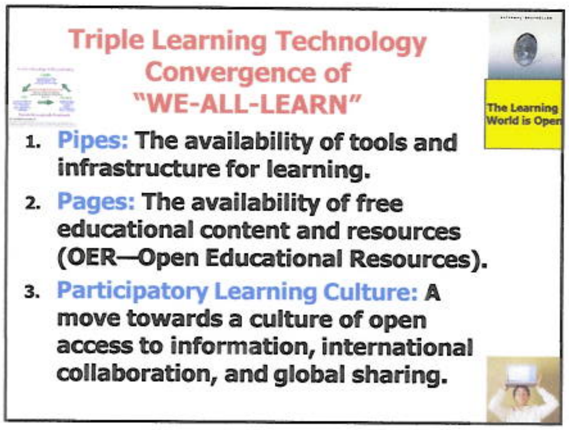


Audience Participation!

1. WE

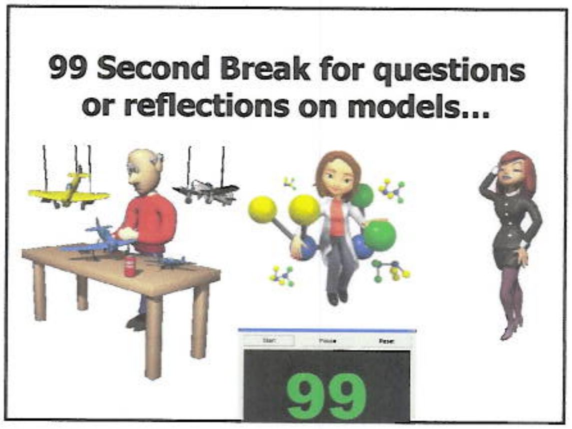
2. ALL

3. LEARN!!!


The Learning World is Open

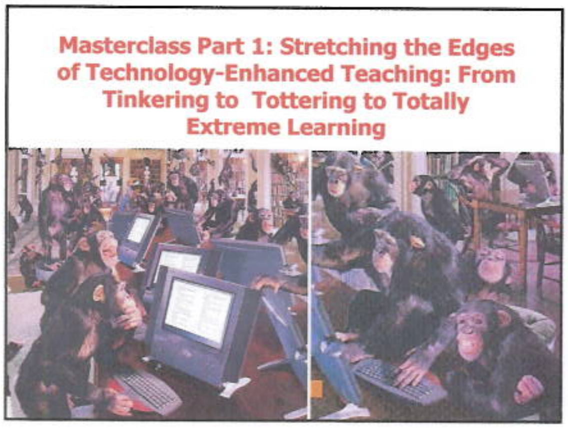
Triple Learning Technology Convergence of "WE-ALL-LEARN"

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.



99 Second Break for questions or reflections on models...

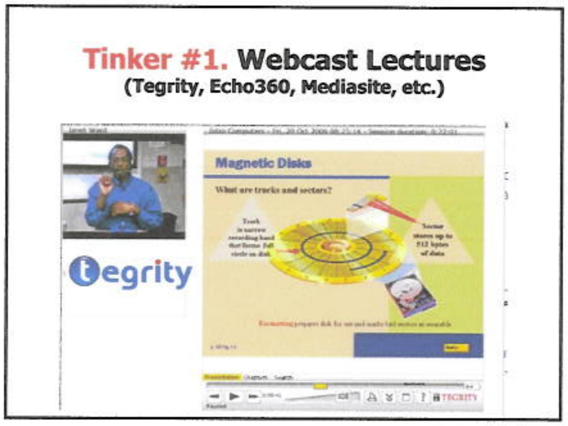
Start
Pause
Reset
99



Masterclass Part 1: Stretching the Edges of Technology-Enhanced Teaching: From Tinkering to Tottering to Totally Extreme Learning

Tinkering

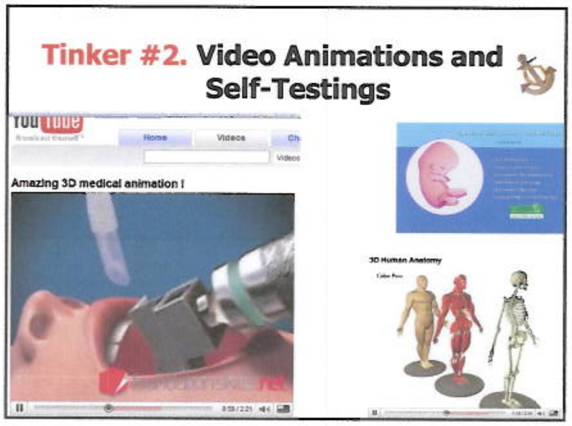
WE WERE REDUCED TO MAKING SHADOW PUPPETS
TINKERING
"I'm a tinker therefore I tinker?"
tinkering
things



Tinker #1. Webcast Lectures

(Tegrity, Echo360, Mediasite, etc.)

Magnetic Disks
What are tracks and sectors?
Track
Sector
Tegrity



Tinker #2. Video Animations and Self-Testings

YouTube
Home
Videos
Amazing 3D medical animation !
3D Human Anatomy

Tinker #3. Pubcasts.
(videos of authors of scientific papers and science; e.g., SciVee)

SciVee
Explore
Upload
ve the Oysters - Introducing Non-native Species to the Chesape

SciVEE
make your research known
browse
pubcasts
videos
MacArthur Fellow 2008: Sally Temple, neuroscientist

Tinker #4. Collaborative Groups
(Google Docs, Ning, Google Groups, MSN Groups, Yahoo Groups)

Google docs
Create documents, spreadsheets and presentations online

Ning in Education
Google

Tinker #5. Track Life of a Scientist or Famous People (e.g., Brian J Ford, independent scientist)

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

YouTube
Search

The Brian J Ford

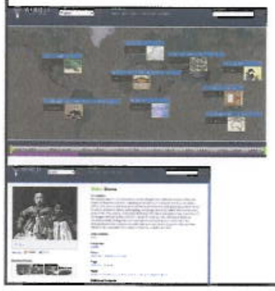
Research on the microscopes of Robert Brown

Watch as the BBC fail to recreate the experiments

Inter Micro
2010
Chicago, Illinois
An excerpt from
An Evening with Brian
12 July 2010

The great question - could Brown have viewed Brownian Movement? On the next page you can see what Brown saw.

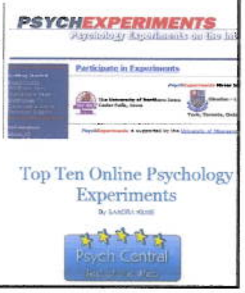
Tinker #6. Online Portals of Rich Data
United Nations Opens World Digital Library, Turning the Pages from the British Library, etc. (history, culture, literature, writing, art, etc.)



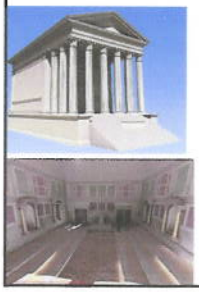
ONLINE GALLERY

Tinker #7. Online Experiments
(e.g., psychology)

perception lab
BLUE


PSYCHEXPERIMENTS
Participate in Experiments
Top Ten Online Psychology Experiments
Psych Central

Tinker #8. Educational Simulations



Tinker #9. Online Role Play (e.g., Tulane University, Exercise for Renewable Energy, Freeman Sch. of Business, roles include power traders and utility dispatchers, etc.)

Tinker #10. Simulations and Video Animations and Self-Testings

(e.g., Foldit)

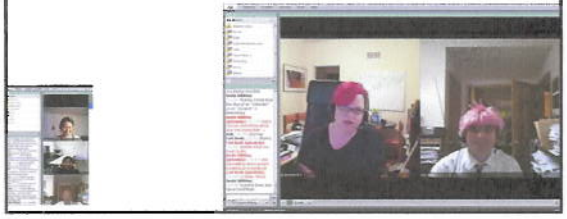
Human Embryology Animations
fold it

Tottering

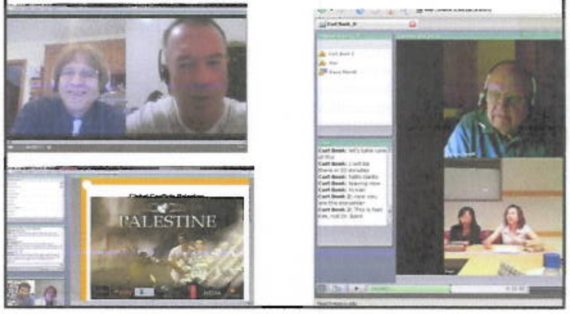
Totter #1. Bridges to World of Expert and Practitioners

(e.g., Watch or Listen to Online Conferences, Expert interviews, blogs, chats, etc.)

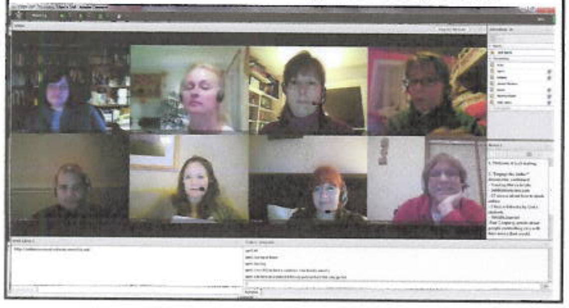
Totter #2. Class Synchronous Sessions and Archives (Breeze/Adobe Connect Pro, Elluminate, WebEx, Dim Dim)



Totter #3. Combining Asynchronous and Synchronous Events



Totter #3b. Asynchronous and Synchronous Events (e.g., William and Mary, March 3, 2011)



Totter #4. Global Class Videoconferencing and Remote Lands

(e.g., The seminar was structured on a series of videoconferences and virtual classes on e-learning platform, organized by the Major of the Health and Veterinary Corps of Italian Army Lorenzo TIDU, Veterinary of the Task Force South of the Regional Command West, which is strongly involved in the specific field in favor of populations of the villages in the province of Farah.)

Totter #5. Wikibooks, Wikipedia editing, wiki syllabi, wiki glossaries (Ron Owston, York University, Toronto)

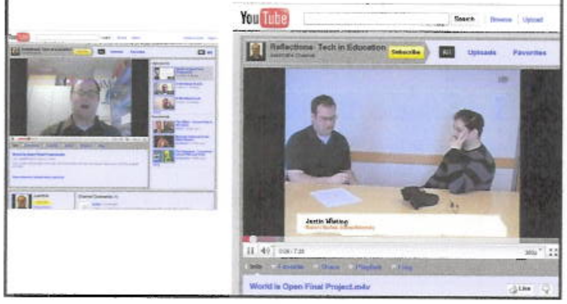
Web 2.0 and Emerging Learning Technologies
Web 2.0
WIKIBOOKS

Totter #6. Podcast Productions and Virtual Performances for students of pronunciation class (e.g., Tzu-Su Chen, Taiwan)

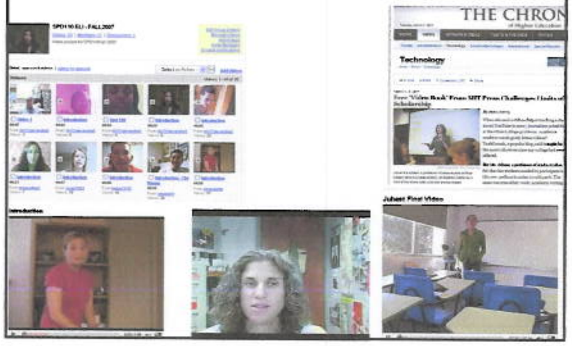
podomatic
PODCAST
tsuyi hsueh's Podcast
Play
KK & Phonics Easy Go!

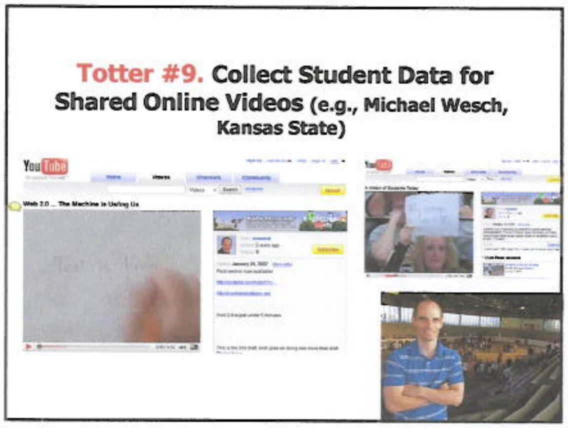
Hey Jude, don't make it bad
Take a sad song and make it better

Totter #7. Video Blogging


YouTube
Reflections: Tech in Education
Subscribe
Uploads
Favorites
World is Open Final Project.m4v

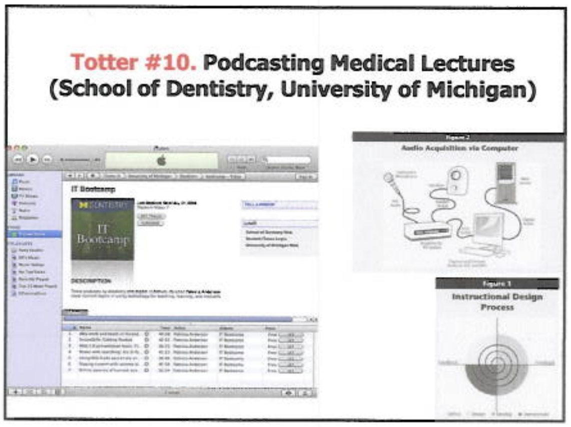
Totter #8. YouTube as Class


THE CHRON
Technology
Introduction



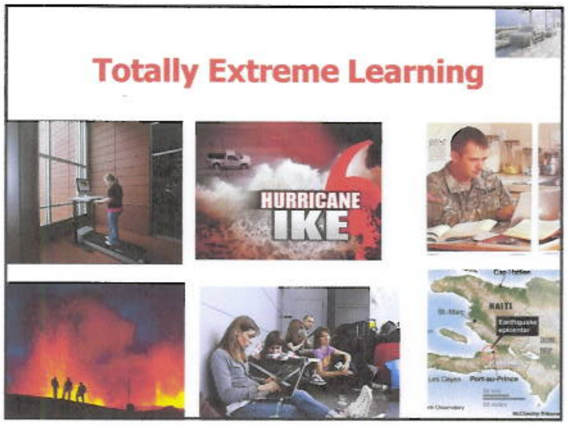
Totter #9. Collect Student Data for Shared Online Videos (e.g., Michael Wesch, Kansas State)

YouTube
Web 2.0 ... The Machine is Us/ing Us



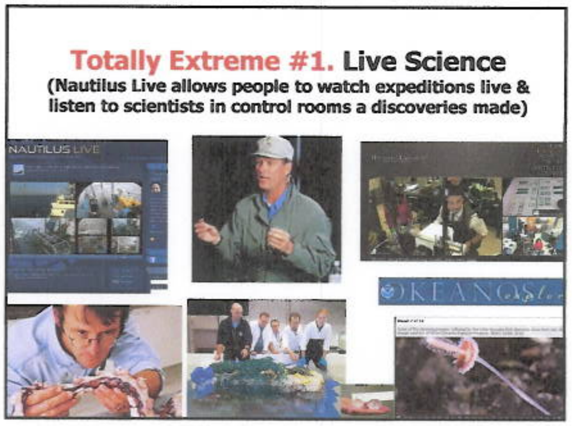
Totter #10. Podcasting Medical Lectures (School of Dentistry, University of Michigan)

IT Bootcamp
DESCRIPTION
Figure 2
Audio Acquisition via Computer
Figure 1
Instructional Design Process



Totally Extreme Learning

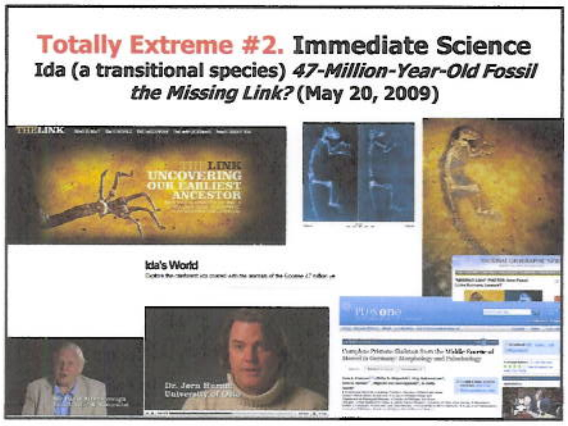
HURRICANE
IKE
Cap-Haïtien
HAITI
St. Marc
Earthquake epicenter
Les Cayes
Port-au-Prince



Totally Extreme #1. Live Science

(Nautilus Live allows people to watch expeditions live & listen to scientists in control rooms a discoveries made)

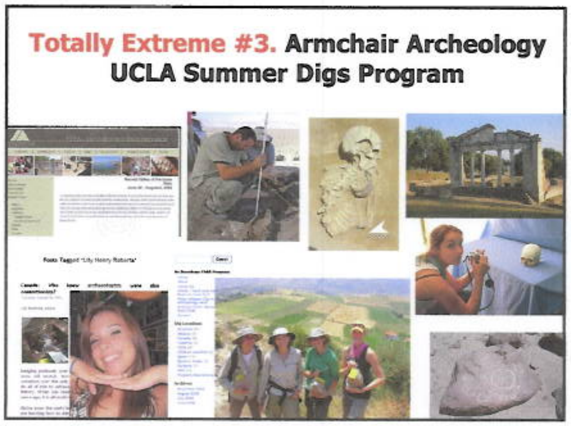
NAUTILUS LIVE
OKEANOS



Totally Extreme #2. Immediate Science

Ida (a transitional species) ***47-Million-Year-Old Fossil the Missing Link?*** (May 20, 2009)

THE LINK
UNCOVERING OUR EARLIEST ANCESTOR
Ida's World
PLoS one
Dr. Jørn Hurum
University of Oslo



Totally Extreme #3. Armchair Archeology UCLA Summer Digs Program

Totally Extreme #4. Google Earth Archeology (David Thomas, Archeologist, La Trobe University, Australia)

Discovery
Discovery News

Totally Extreme #5. Adventure Learning (e.g., GeoThentic, Earthducation, Polar Husky, GoNorth; Aaron Doering, Univ of Minnesota; cars and bikes--Dan Grec and Mark Beaumont)

The road chose me
DAILY UPDATE 1-13-11
EARTH

Totally Extreme #6. South African teens get virtual mentoring from all over the world, By Danielle Berger, CNN, January 14, 2011

http://www.cnn.com/2011/LIVING/01/13/cnnheroes.stokes/index.html?hpt=T2

CNN Living
CNN HEROES
South African teens get virtual mentoring from all over the world
CNN

Totally Extreme #7. International and Global Education and Competitions

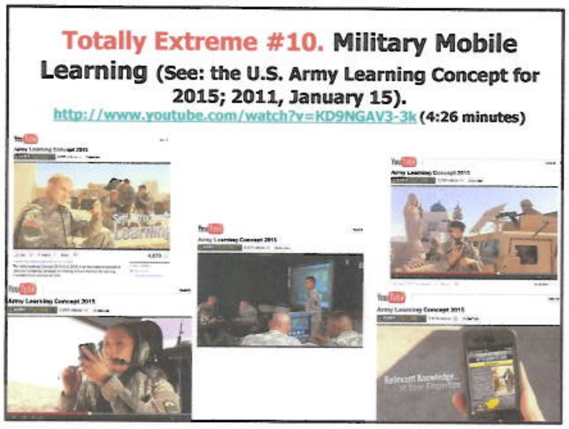
(e.g., Global Game Jams, online role play, Global Videoconferencing)

Global Game Jam

Totally Extreme #8. Telepresence and Teleportec Systems (e.g., Cisco and HP)

Totally Extreme #9. MBAs from War Zones...!

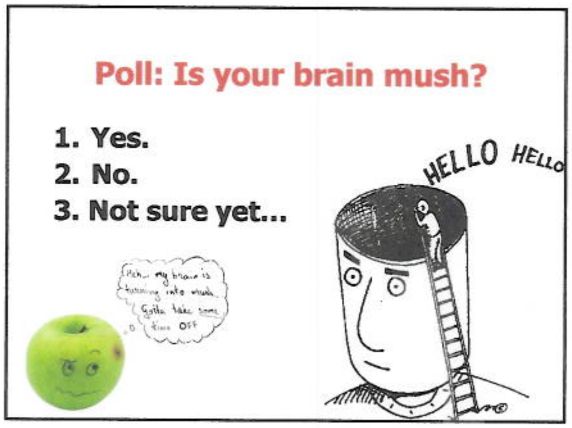
E LEARNING
THUNDERBIRD
Knowledge Network: Faculty & Research



Totally Extreme #10. Military Mobile Learning (See: the U.S. Army Learning Concept for 2015; 2011, January 15).

http://www.youtube.com/watch?v=KD9NGAV3-3k (4:26 minutes)

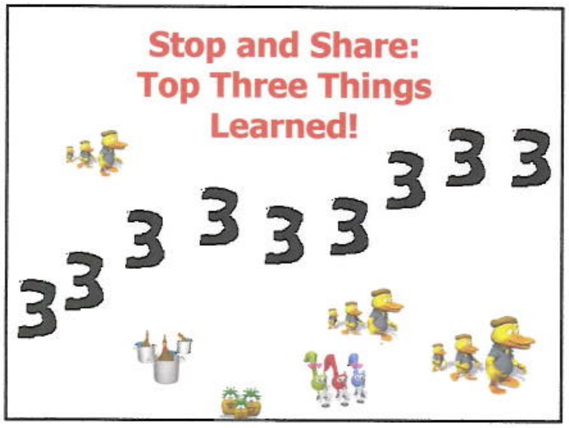
Army Learning Concept 2015
Army Learning Concept 2015
Army Learning Concept 2015
Army Learning Concept 2015
Army Learning Concept 2015
Relevant Knowledge... at Your Fingertips



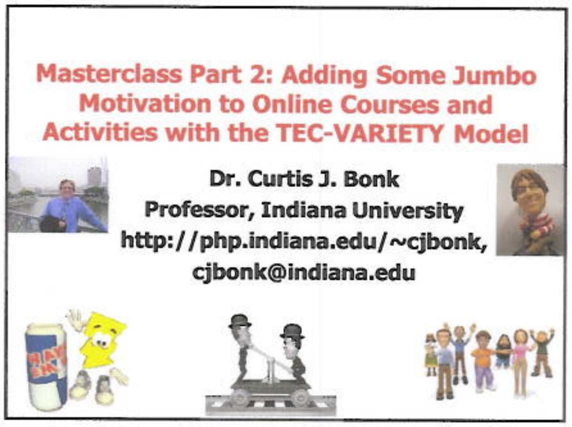
Poll: Is your brain mush?

1. Yes.
2. No.
3. Not sure yet...

Hch... my brain is turning into mush. Gotta take some time OFF
HELLO HELLo

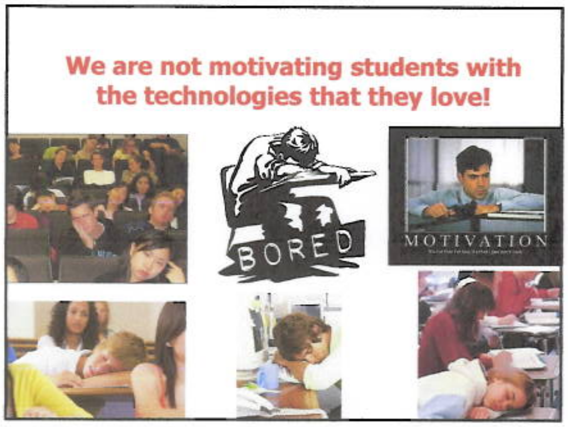


Stop and Share: Top Three Things Learned!



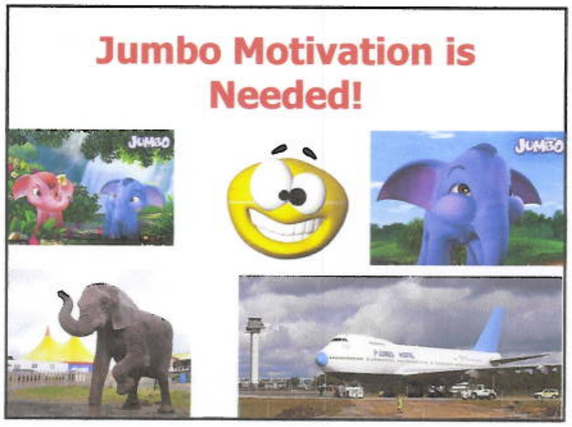
Masterclass Part 2: Adding Some Jumbo Motivation to Online Courses and Activities with the TEC-VARIETY Model

Dr. Curtis J. Bonk
Professor, Indiana University
http://php.indiana.edu/~cjbonk,
cjbonk@indiana.edu



We are not motivating students with the technologies that they love!

BORED
MOTIVATION



Jumbo Motivation is Needed!

JUMBO
JUMBO

SEEDS OF EMPOWERMENT
Empowering
Be a part of the story

August 5, 2010
Remaking the College Campus,
Bridget McCrea, Campus Technology

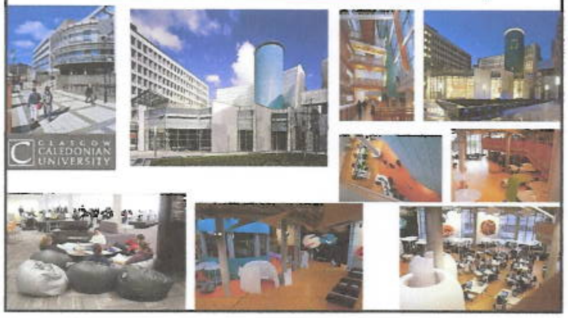
http://campustechnology.com/Articles/2010/08/05/Remaking-the-College-Campus.aspx?Page=1

CAMPUS TECHNOLOGY
Biweekly Ed Tech Poll
Remaking the College Campus

Yonsei University Library, Seoul, Korea

Saltire Centre

(Glasgow Caledonian University; http://www.gcu.ac.uk/thesaltirecentre/)


GLASGOW CALEDONIAN UNIVERSITY

Aces of Spaces, Campus Technology, June 2011, Jennifer Demski

CAMPUS TECHNOLOGY
LIGHTS! CAMERA! ACTION!

Ok, Million Dollar Question: How do you motivate online learners? What Words come to mind?

ONE BILLION DOLLARS
VIRTUCON OF AMERICA
ONE BILLION

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.

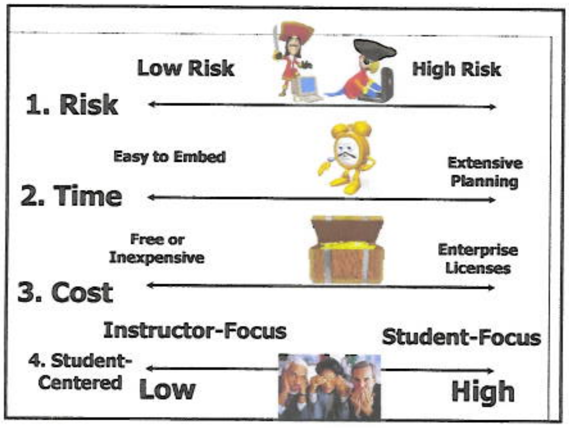
I even reflected on this for a moment...and then something magical happened...

Magic #1: TEC-VARIETY Model for Online Motivation and Retention

1. Tone/Climate: Psych Safety, Comfort, Belonging
2. Encouragement, Feedback: Responsive, Supports
3. Curiosity: Fun, Fantasy, Control

...

4. Variety: Novelty, Intrigue, Unknowns
5. Autonomy: Choice: Flexibility, Opportunities
6. Relevance: Meaningful, Authentic, Interesting
7. Interactive: Collaborative, Team-Based, Community
8. Engagement: Effort, Involvement, Excitement
9. Tension: Challenge, Dissonance, Controversy
10. Yields Products: Goal Driven, Products, Success, Ownership



Low Risk — High Risk
1. Risk ←→

Easy to Embed — Extensive Planning
2. Time ←→

Free or Inexpensive — Enterprise Licenses
3. Cost ←→

Instructor-Focus — Student-Focus
4. Student-Centered ←→
Low — High

1. Tone/Climate: Social Ice Breakers

A. Public Commitments:

Have students share how they will fit the coursework into their busy schedules

B. Favorite Websites

1. Everyone posts 1-2 of their favorite Websites and explain why.
2. Peers comment on or rate them.

1. Tone/Climate: Social Ice Breakers

C. 8 nouns (adjectives, verbs)

- List of nouns: (e.g., pirate, computer, traveler, roadrunner, wind, bookworm, musician, mentor, etc.)
  - http://www.momswhothink.com/reading/list-of-nouns.html
- List of adjectives: (e.g., lazy, powerful, shy, bored, exotic, cooperative, sloppy, rebel, etc.)
  - http://www.momswhothink.com/reading/list-of-adjectives.html
- List of verbs: (e.g., coordinate, entertain, amuse, push, unite, beg, dream, publicize, etc.)
  - http://www.momswhothink.com/reading/list-of-verbs.html

nouns
sun
moon
tree
man
woman

---

1. Tone/Climate: D. Video Course Intros

(examples from Northern Virginia Community College and Indiana University KD (online MBA) program)

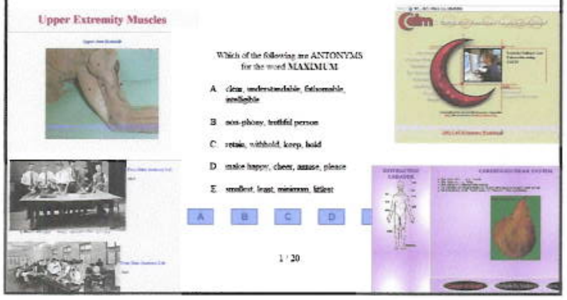
Yun Yun Chow, Open U Malaysia, Making Art Lessons Come Alive with Web 2.0

http://www.youtube.com/watch?v=BO9rqJD1GXo

---

2. Encouragement, Feedback, etc.:

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


Upper Extremity Muscles

Which of the following are ANTONYMS for the word MAXIMUM

A clear, understandable, fathomable, intelligible

B non-phony, truthful person

C retain, withhold, keep, hold

D make happy, cheer, amuse, please

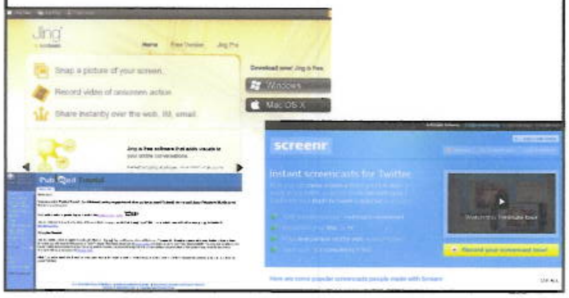
E smallest, least, minimum, littlest

A
B
C
D
1 / 20

---

2. Encouragement, Feedback, etc.:

B. Tutorials with Screen Capture (e.g., Jing, Screenr, GoView, etc.)

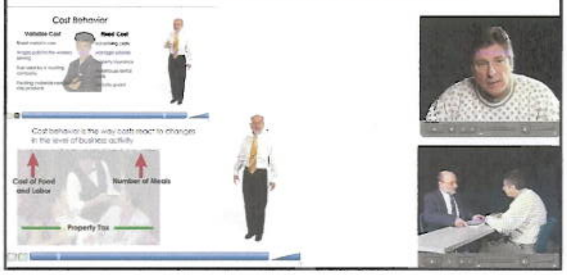

Jing
Snap a picture of your screen.
Record video of onscreen action.
Share instantly over the web, IM, email.
Windows
Mac OS X
screenr
instant screencasts for Twitter

---

2. Encouragement, Feedback, etc.:

C. 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


Cost Behavior
Variable Cost
Fixed Cost
Cost of Food and Labor
Number of Meals
Property Tax

---

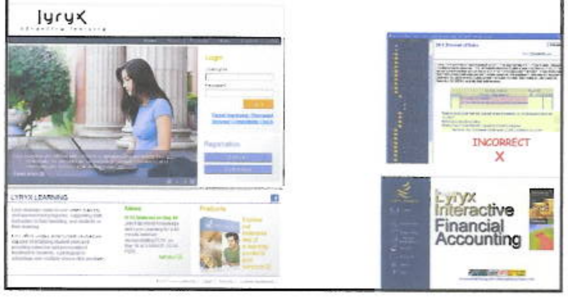
2. Encouragement, Feedback, etc.:

D. Vocab Sushi ($25 for 3 months)

http://www.vocabsushi.com/

VOCABsushi
Build Your Vocabulary
Rice
1435
38

2. Encouragement, Feedback, etc.:
E. Online Acounting Lessons
(e.g., Lyryx; https://lifa.lyryx.co)


lyryx
LYRYX LEARNING
INCORRECT
X
Lyryx Interactive Financial Accounting

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

blogpolls
Welcome to Blog Polls!
create
embed
ready!
blogpoll
"Set up your custom poll in minutes...for FREE"
micropoll

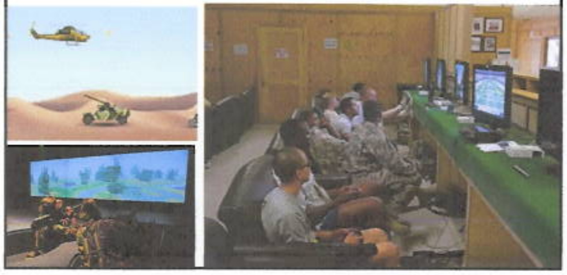
3. Curiosity, Fun:
A. Online News
(Politics, Giant jellyfish, Tiny T. rex, and Ardi)

After mob violence, Philadelphia begins curfew
Their final sacrifice: The men we lost
Complicated relationship
Human origin takes a new track

3. Curiosity, Fun:
B. Online Social Networking Games
(e.g., scrabble, hangman, etc.)

Google takes swing at Facebook in social games
USA TODAY
By Mike Snider and Scott Martin, USA TODAY
August 12, 2011
ANGRY BIRDS
Instant Interactive
New
Drills
Ready for Snow Leopard
WOWEIIA
IWGOEII

3. Curiosity, Fun:
C. Online War Games



3. Curiosity, Fun: D. Online Database Activities (e.g., WolframAlpha)

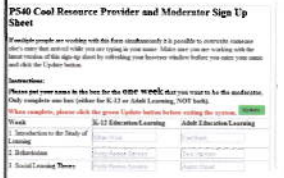
http://www.wolframalpha.com/

WolframAlpha
WolframAlpha
WolframAlpha
A Quick Introduction to Wolfram|Alpha
by Stephen Wolfram

3. Curiosity, Fun: E. Track a Scientist, Scholar, Celebrity, Writer
(e.g., Biography.com, biography online, FamousPeople.com)

Biography ONLINE
Welcome to Biography Online
bio.

4. Variety, Novelty:
A. Cool Resource Provider or Tech Demos



P540 Cool Resource Provider and Moderator Sign Up Sheet

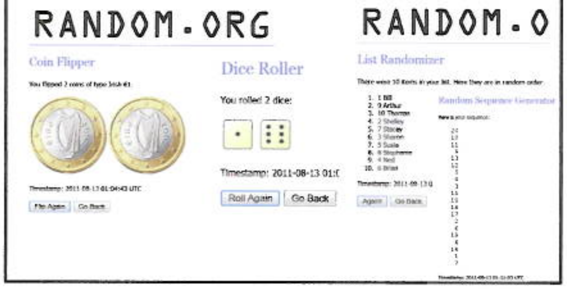
Instructions:

Please put your name in the box for the one week that you want to be the moderator. Only complete one box (either for K-12 or Adult Learning, NOT both).

When complete, please click the green Update button before exiting the system.

Week	K-12 Education/Learning	Adult Education/Learning
1. Introduction to the Study of Learning	[illegible]	[illegible]
2. Behaviorism	[illegible]	[illegible]
3. Social Learning Theory	[illegible]	[illegible]

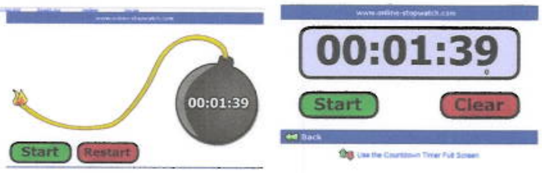
4. Variety, Novelty, Fun, Fantasy:
B. Random Lists (Random.org—clocks, coins, playing cards, dice, integers, passwords, jazz scales, lists, sequences, etc.)


RANDOM.ORG
Coin Flipper
Flip Again
Go Back
Dice Roller
Roll Again
Go Back
RANDOM.O
List Randomizer
Again
Go Back
Random Sequence Generator

You rolled 2 dice:

Timestamp: 2011-08-13 01:(

4. Variety, Novelty, Fun, Fantasy:
C. Timers (Stopwatches, Countdown Timers, Stopwatch Bombs, etc.; http://www.online-stopwatch.com/countdown-timer/)


00:01:39
Start
Restart
www.online-stopwatch.com
00:01:39
Start
Clear
Back
Use the Countdown Timer Full Screen

Arlington Racetrack

Jockey's are Important

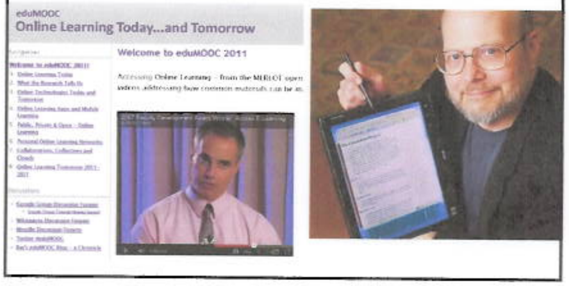
5. Autonomy, Choice: A. Online Literature Search (Class Google Jockeys)
(links to text, soundtracks, video clips, etc.)

5. Autonomy, Choice:
B. Web Exploration Assignments

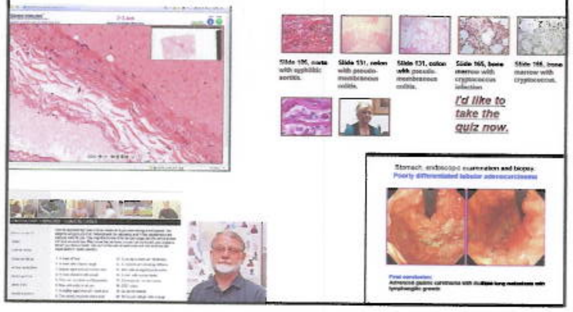
1. Complete Works of Charles Darwin Online: http://darwin-online.org.uk/
2. The Complete Works of William Shakespeare: http://shakespeare.mit.edu/
3. Edgar Allan Poe Society of Baltimore: http://www.eapoe.org/
4. Einstein Archives Online: http://www.alberteinstein.info/
5. Federal Resources for Educational Excellent project: http://free.ed.gov/
6. Global Text Project: http://globaltext.org/
7. iBerry (Open Courseware Directory): http://iberry.com/
8. Jane Austen: http://www.janeausten.org/
9. The Jane Goodall Institute: http://www.janegoodall.org/
10. Timeless Hemmingway: http://www.timelesshemingway.com/

Don't Miss Out. Purchase Tickets Today!

5. Autonomy, Choice:
C. Open Teaching and Massive Open Online Courses (i.e., MOOC, David Wiley, George Seimens, Ray Schroeder)


eduMOOC
Online Learning Today...and Tomorrow
Welcome to eduMOOC 2011

6. Relevance, Meaningfulness:
A. Online Cases (e.g., Mark Braun, IU)


I'd like to take the quiz now.

6. Relevance, Meaningfulness:
B. Google Art Project (new Google project that allows visitors to explore museums around the world and view hundreds of artworks) http://www.googleartproject.com/

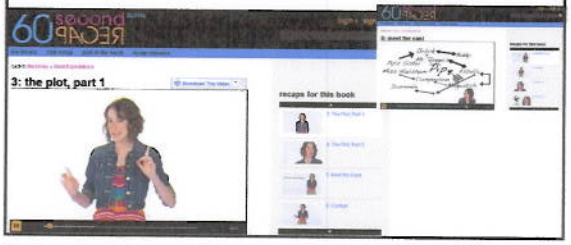
Art Project

6. Relevance, Meaningfulness:
C. 60 Second Recap, Jenny Sawyer

http://www.60secondrecap.com/

Actress to students: Lend me your earbuds!

English major, 24, rambunctiously recaps the classics in 60-second Web videos; By Greg Toppo; USA TODAY, September 2009


60 second RECAP
3: the plot, part 1
recaps for this book

6. Relevance, Meaningfulness: D. Tour an Online Oil Drilling Site or Role Play Situations (i.e., BP)

http://www.youtube.com/watch?v=ts45BkAnqTs

Open newsroom learning

About

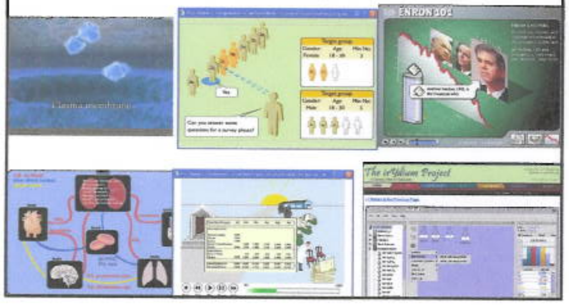
Learn. Create. Share. All for free.

Technology, Enhancing the Home School
CNN

7. Interactive, Collaborative: A. Working In Virtual Teams

(e.g., Collanos, Ning, Groove, SharePoint, Google Docs)

8. Engagement, Effort: A. Flash, 3-D Visualization, & Laboratory Software



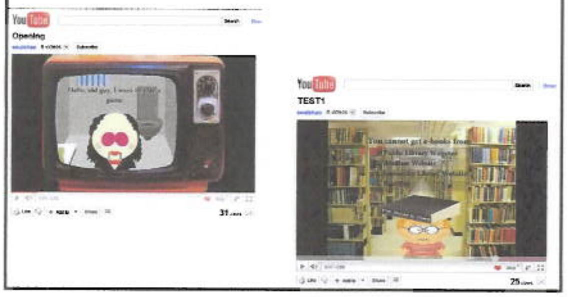
ENRON 101
The irYdium Project

8. Engagement, Effort: B. Dr. Monica Rankin's class, UT Dallas, Cuban Revolution (April/May 2011)

http://www.youtube.com/watch?v=ocQMf1kPo98

No Country for Old Castro
No Country for Old Castro

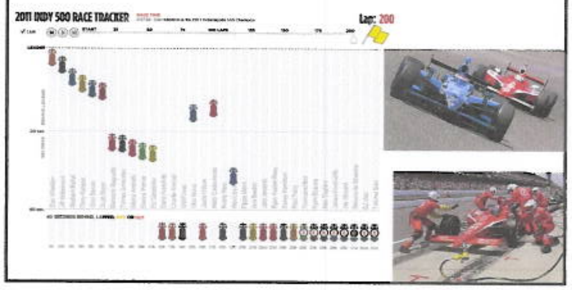
8. Engagement, Effort: C. Flash, 3-D Visualization, & Laboratory Software



Opening
TEST1
You cannot get e-books from

8. Engagement, Effort: D. Time Tracker (e.g., Indy Race Tracker, May 29, 2011)

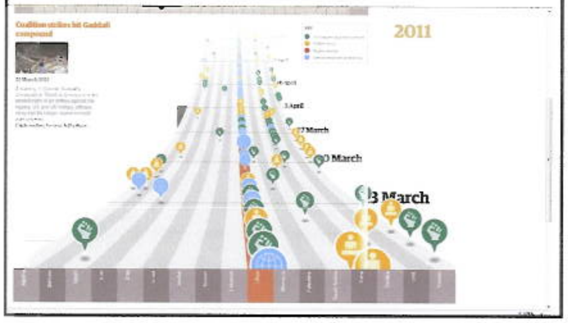
http://www.indystar.com/interactive/article/99999999/SPORTS0101/99990474/2011-Indianapolis-500-Race-Tracker



2011 INDY 500 RACE TRACKER
Lap: 200
START
100 LAPS

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

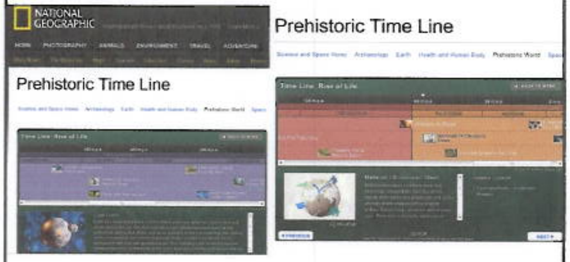
http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-protest-interactive-timeline


Coalition strikes hit Gaddafi compound
2011
3 April
7 March
10 March
3 March

---

8. Engagement, Effort: D. National Geographic Prehistoric Timeline

http://science.nationalgeographic.com/science/prehistoric-world/prehistoric-time-line.html


NATIONAL GEOGRAPHIC
Prehistoric Time Line
Prehistoric Time Line

---

9. Tension, Challenge, etc.:
A. Ethical Debates

North Korea demands apology, reparations from Japan over colonization
BODY WORLDS
Iran unveils long-range bombing drone

---

10. Yields Products, Goals:
A. Student YouTube Products

http://www.youtube.com/watch?v=xiwSIryPzsQ
http://www.youtube.com/watch?v=x3FJyi4Pn_E
http://www.youtube.com/watch?v=eD1awpaSuP0

Virtual Learning - Is it for You?
Who do these thoughts feel like an uncomfortable pair of shoes?

---

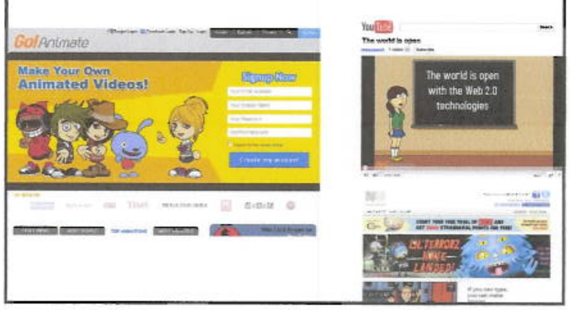
10. Yields Products, Goals:
More Student YouTube Products

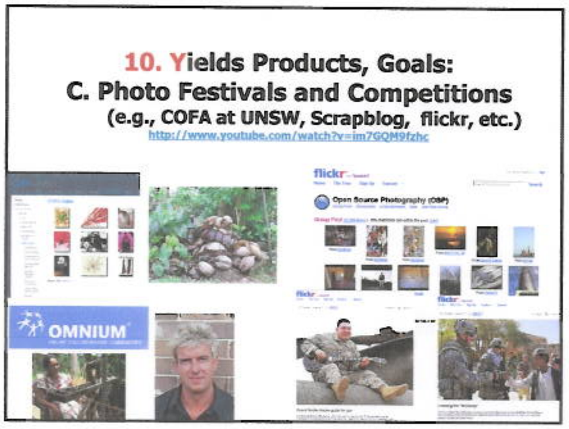
Miguel Lara (Web 2.0 FREEDOM): http://www.youtube.com/watch?v=8cmCFWI9lW8
Shuya Xu and Yue Ma (Blog my online lrng): http://www.youtube.com/watch?v=im7GQM9fzhc
Julie Rust (Participatory Learning): hhttp://www.youtube.com/watch?v=cHx_SbRWV0M
Cesur Dogli (Animal perspectives on course): http://www.youtube.com/watch?v=cDeTEId05Ic

web2 0 Freedom
FREEDOM
Flexibility
Rapport
Expression
E-Collaboration
Digital Games
Open Resources
Motivation
TechCrunch

---

10. Yields Products, Goals:
B. Animated Movie Creations


GoAnimate
Make Your Own Animated Videos!
Signup Now
The world is open
The world is open with the Web 2.0 technologies

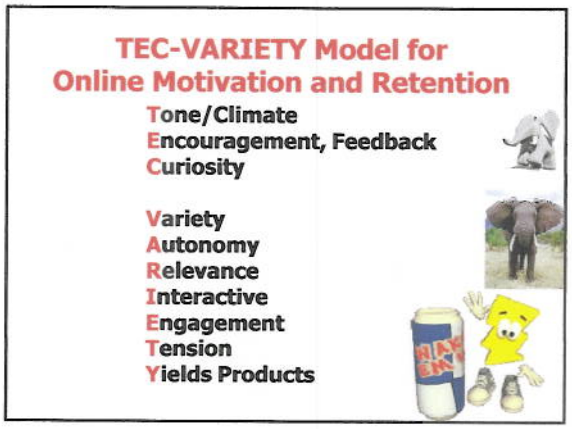


10. Yields Products, Goals:
C. Photo Festivals and Competitions

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

http://www.youtube.com/watch?v=im7GQM9fzhc

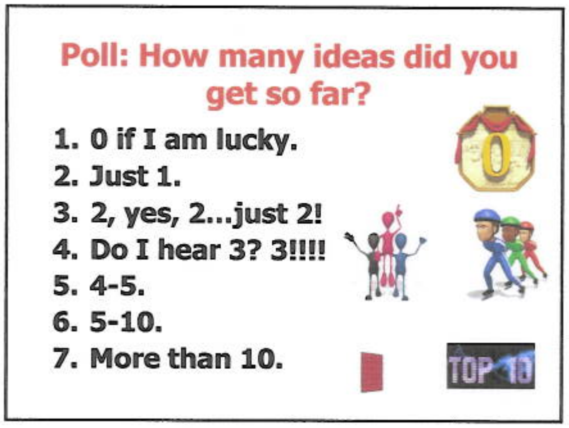
flickr
Open Source Photography (OSP)
OMNIUM



TEC-VARIETY Model for Online Motivation and Retention

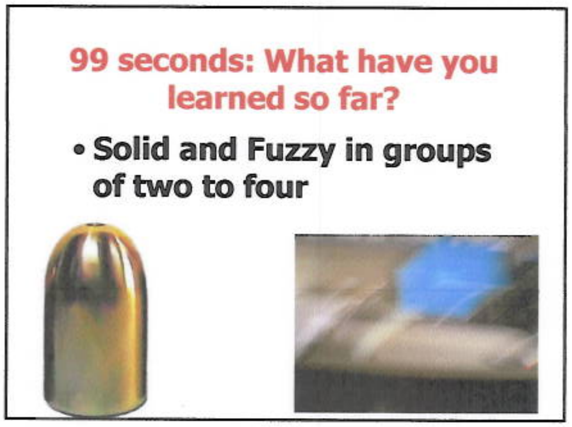
Tone/Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products



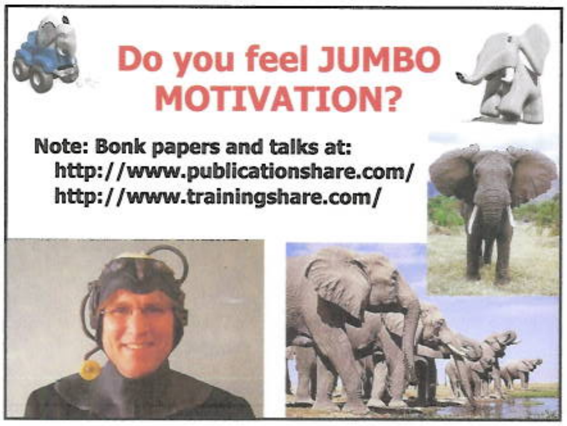
Poll: How many ideas did you get so far?

1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2…just 2!
4. Do I hear 3? 3!!!!
5. 4-5.
6. 5-10.
7. More than 10.



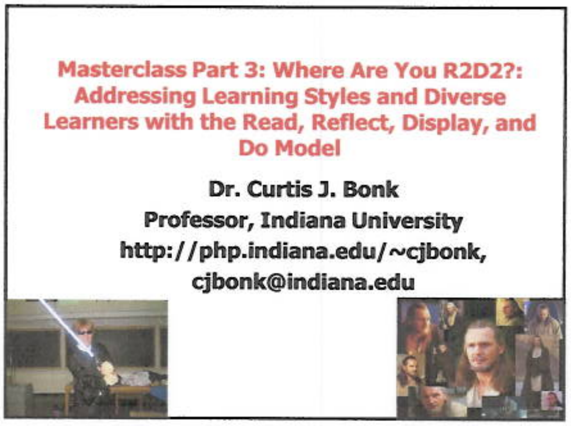
99 seconds: What have you learned so far?

- Solid and Fuzzy in groups of two to four



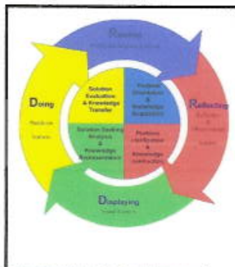
Do you feel JUMBO MOTIVATION?

Note: Bonk papers and talks at:
http://www.publicationshare.com/
http://www.trainingshare.com/

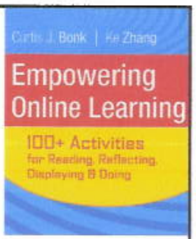


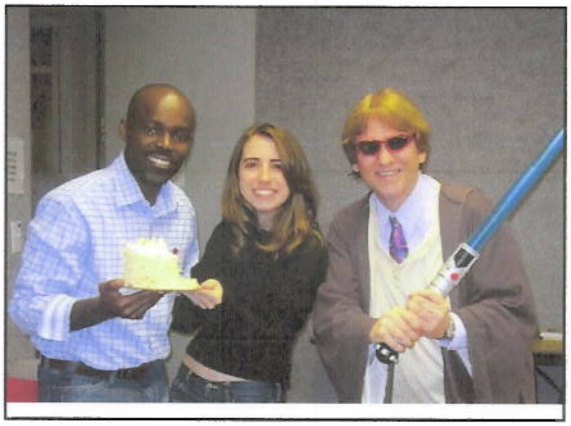
Masterclass Part 3: Where Are You R2D2?: Addressing Learning Styles and Diverse Learners with the Read, Reflect, Display, and Do Model

Dr. Curtis J. Bonk
Professor, Indiana University
http://php.indiana.edu/~cjbonk,
cjbonk@indiana.edu


Reading
Doing
Reflecting
Displaying
Solution Evaluation & Knowledge Transfer

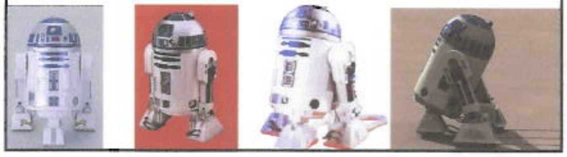
Frame work: #5: The R2D2 Model


Curtis J. Bonk | Ke Zhang
Empowering Online Learning
100+ Activities for Reading, Reflecting, Displaying & Doing



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.

Doing
Displaying

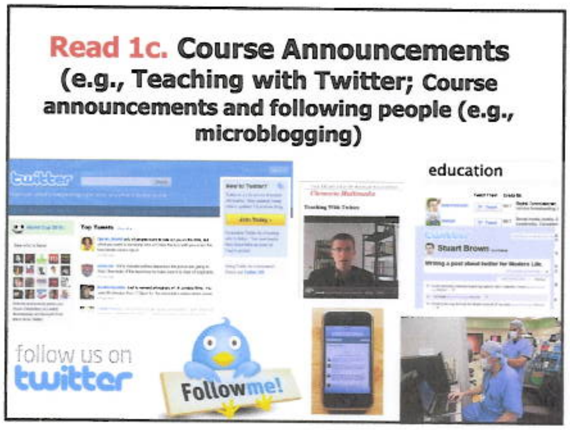
Read 1a. Wikibook or Wikipedia Editing or Critiques

- Ask students to critique a wikibook or page from Wikipedia

Wikipedia
Wikipedia is there when you need it — now it needs you.
Kaprosuchus
Description

Read 1b. Reading from Open Access Journals (e.g., PLOS)

PLoS
EQ
Learning Spaces
Featured Articles
The International Review of Research in Open and Distance Learning
A refereed e-journal to advance research, theory and best practice in open and distance learning worldwide
Athabasca University



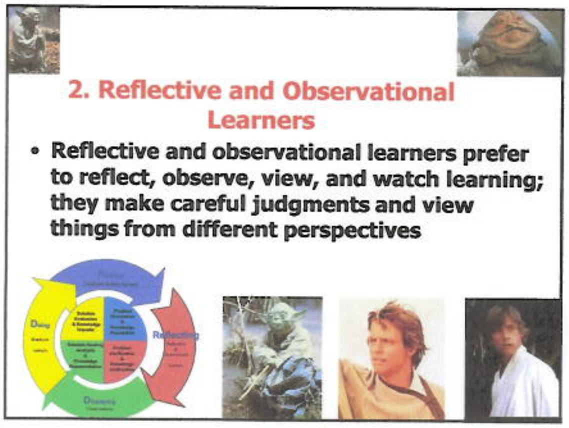
Read 1c. Course Announcements

(e.g., Teaching with Twitter; Course announcements and following people (e.g., microblogging)

twitter
education
Teaching With Twitter
Stuart Brown
follow us on twitter
Followme!

Read 1d. Listen to Open Access Podcast Shows (and write papers)

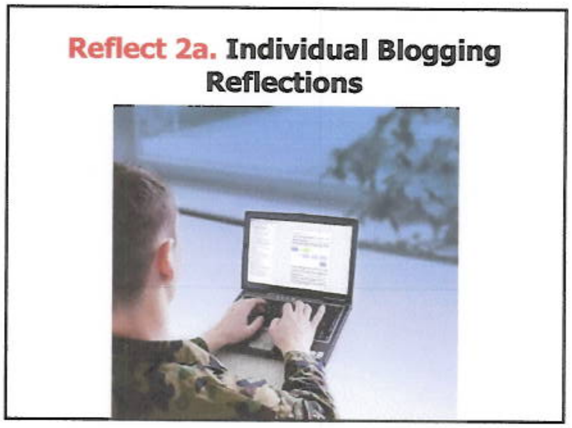
nature REVIEWS CANCER
Military History Podcast
ENGLISH IN THE REAL WORLD
weekly podcasts
NursingShow.com
INFORMATION TECHNOLOGY



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

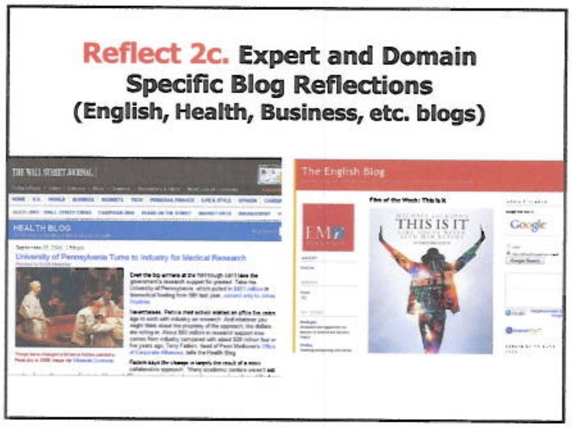
Doing
Reflecting
Thinking



Reflect 2a. Individual Blogging Reflections

Reflect 2b. Critical Friend Blog Postings (Kristen and Susan)

R685 - Is the World Open
My Personal Reflections on Web 2.0
R685: The Web 2.0



Reflect 2c. Expert and Domain Specific Blog Reflections

(English, Health, Business, etc. blogs)

THE WALL STREET JOURNAL
HEALTH BLOG
University of Pennsylvania Turns to Industry for Medical Research
The English Blog
Film of the Week: This is it
THIS IS IT
Google

Reflect 2d. 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)

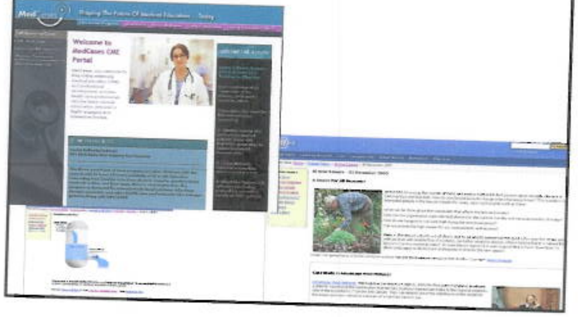
Reflect 2e. Scenario Learning (e.g., Krispy Kreme Management 101)

Krispy Kreme
DOUGHNUTS

Reflect 2f. Case and Online Discussion (Kelley Direct, IU)

KELLEY SCHOOL
OF BUSINESS
INDIANA UNIVERSITY
IUPUI

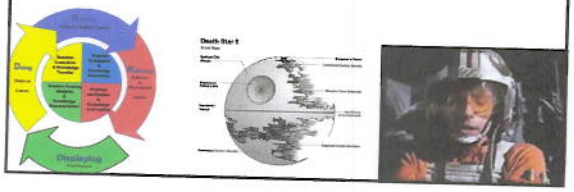
Reflect 2g. Analyze Online Cases (problems, solutions, etc.)



Reflect 2h. Workplace and Field Reflections

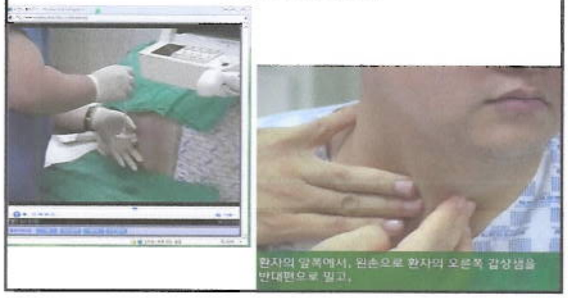
3. Visual Learners

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


Doing
Displaying
Death Star II

Display 3a. Videos for clinical education

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


환자의 앞쪽에서, 왼손으로 환자의 오른쪽 갑상샘을
반대편으로 밀고,

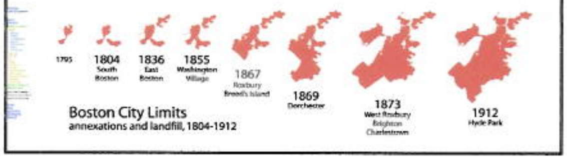
Display 3b. Visual presentations (e.g., Prezi)

http://prezi.com/ihmhhl59xd46/is-the-world-open/
http://prezi.com/8h7grxlyaymv/the-world-is-open/

Prezi
Is The World Open?
Is The World Open?
Prezi
THAT WAS IN 1945

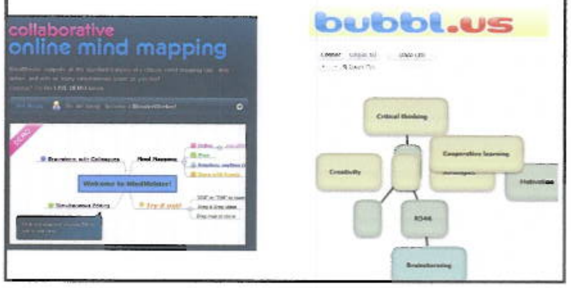
Display 3c. Radical Cartography

http://www.radicalcartography.net/index.html?chicagodots

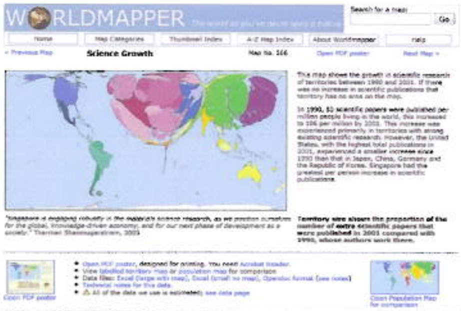

1795
1804
South Boston
1836
East Boston
1855
Washington Village
1867
Roxbury
Breed's Island
1869
Dorchester
1873
West Roxbury
Brighton
Charlestown
1912
Hyde Park

Boston City Limits
annexations and landfill, 1804-1912

Display 3d. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)


collaborative
online mind mapping
Welcome to MindMeister!
bubbl.us
Critical thinking
Cooperative learning
Creativity
Motivation
Brainstorming

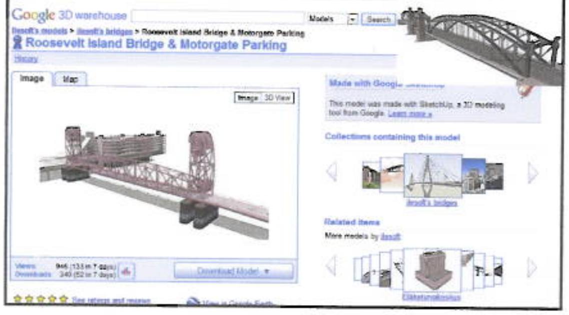
Display 3e. World Trends and Indices (e.g. Worldmapper)


WORLDMAPPER
Search for a map
Go
Home
Map Categories
Thumbnail Index
A-Z Map Index
About Worldmapper
Help
Science Growth
Open PDF poster
Next Map
Open PDF poster
Open Population Map for comparison

Display 3f. Medical Animations and Videos (e.g., YouTube, CNN, BBC)

YouTube
Health Matters: Gastric Bypass Surgery
Virtual Medical Simulator
Simulator

Display 3g. Download and Use Online 3D Sketches (Google SketchUp; download http://sketchup.google.com/3dwarehouse)

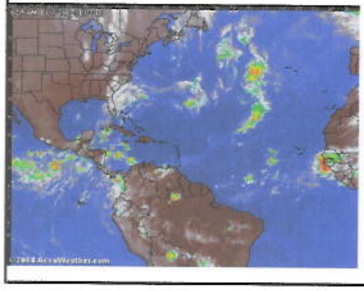

Google 3D warehouse
Models
Search
> Roosevelt Island Bridge & Motorgate Parking
Roosevelt Island Bridge & Motorgate Parking
History
Image
Map
Image
3D View
Made with Google
This model was made with SketchUp, a 3D modeling tool from Google. Learn more »
Collections containing this model
Related items
More models by
Views
Downloads
Download Model

Display 3h. The Virtual Zooarchaeology of the Arctic Project (VZAP) is a virtual, interactive, osteological reference collection for the study of northern vertebrates. VZAP is a dynamic natural history archive which allows students and researchers to examine the complete skeletal anatomies of multiple bird, mammal, and fish species in both 2D and 3D.

(Anthropologist Puts an Idaho Museum's Many Bones Within Virtual Reach, Peter Monaghan, July 10, 2011, Chronicle of HE)
http://vzap.iri.isu.edu/ViewPage.aspx?id=230

OF NATURAL HIS

Display 3i. Weather-Related Visuals and Animations


© 2008 AccuWeather.com

HURRICANE
IKE

Display 3j. Online History Portals and Resources (Civil Rights Digital Library and Amistad)

CIVIL RIGHTS DIGITAL LIBRARY
Welcome to the Civil Rights Digital Library

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. Podcast Productions and Shows

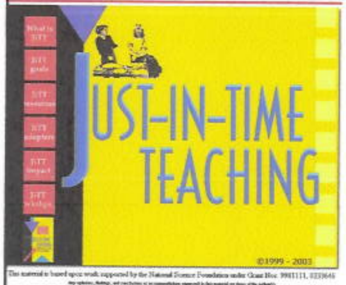
Do 4b. Paired Article Critiques in Blogs

- Students sign up to give feedback on each other's article reviews posted to their blogs.

Article	Student Critique	Student Peer Review
Arbaugh, J.B. (2007). *Does the Community of Inquiry Framework Predict Outcomes in Online MBA Courses?*	Stephen Moses	Lorraine Ryan
	Carolyn Pawelko	Karen Leppard
	Lin Yu	Flora Lin
	Alex Brierley	Lori Atkinson
Meyer, K.A. (2003). Face-to-Face versus Threaded Discussions: The Role of Time and Higher-Order Thinking	Lorraine Ryan	Paul Anderson
	Harit Dhanjal	Yvonne Toney
	Neera Arora	Carolyn Pawelko
	Karen Leppard	Lin Yu
	Fransica Wilkinson	Alex Brierley
Shea, P., Li, C.S. and Pickett, A. (2006). A study of teaching presence and student sense	Heather Burnett	Stefan Rasporich
	Daryl Wilson	Neera Arora

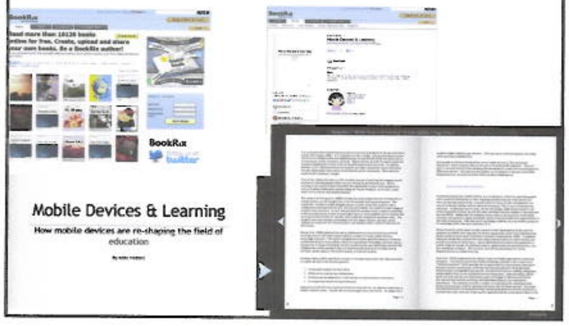
Do 4c. Online Warm-ups Activities Just-In-Time-Teaching (JiTT)

http://webphysics.iupui.edu/jitt/jitt.html



This material is based upon work supported by the National Science Foundation under Grant Nos. 9981111, 0233646

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

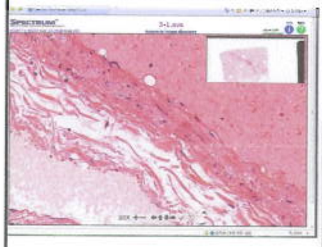


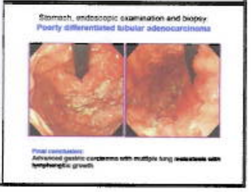
Read more than 10126 books online for free. Create, upload and share your own books. Be a BookRix author!

Mobile Devices & Learning

How mobile devices are re-shaping the field of education

Do 4e. Virtual Microscopes (Sungkyunkwan University School of Medicine, www.mededu.or.kr)





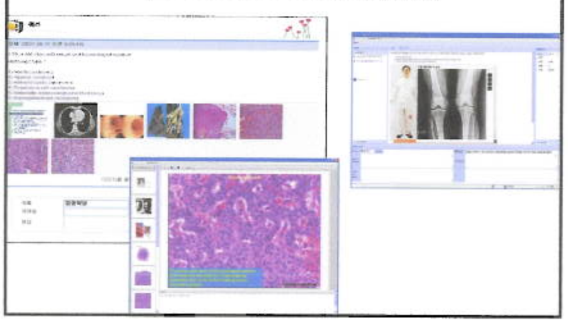
Stomach, endoscopic examination and biopsy

Poorly differentiated tubular adenocarcinoma

Final conclusion:

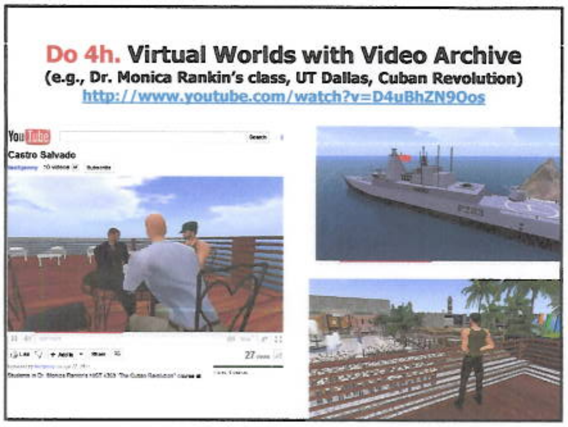
Advanced gastric carcinoma with multiple lung metastasis with lymphangitic growth

Do 4f. Virtual Quizzes (www.mededu.or.kr)



Do 4g. Virtual Worlds (e.g., Second Life)

Welcome to The Koraza Resource Center
YouTube

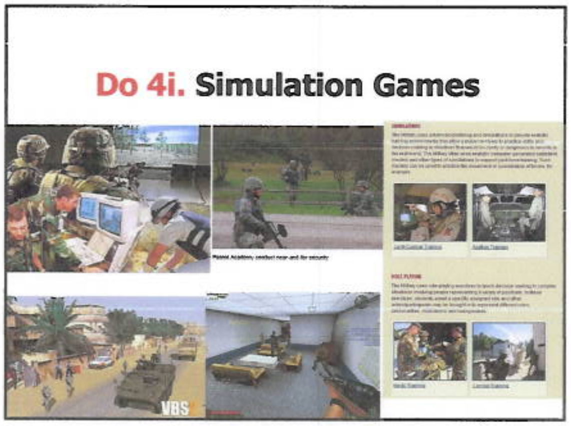


Do 4h. Virtual Worlds with Video Archive

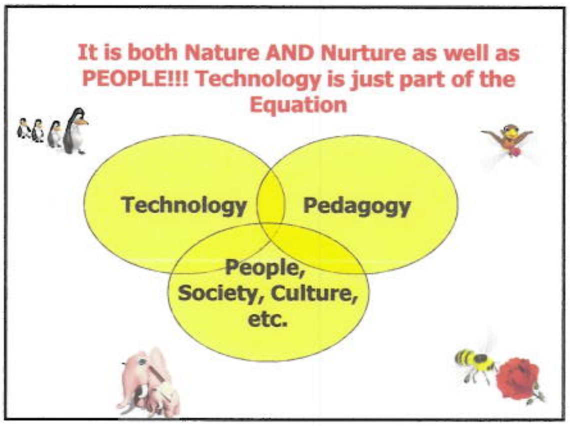
(e.g., Dr. Monica Rankin's class, UT Dallas, Cuban Revolution)

http://www.youtube.com/watch?v=D4uBhZN9Oos

YouTube
Search
Castro Salvado
27

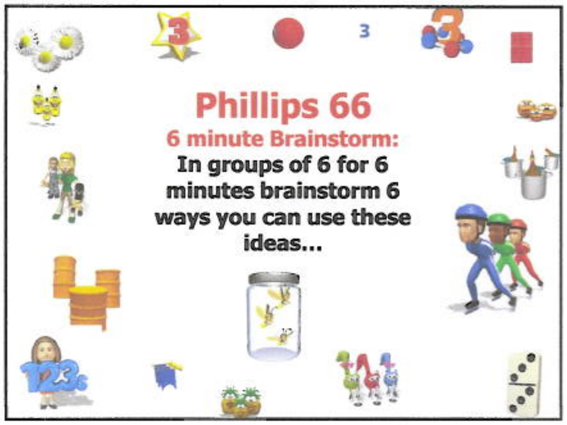


Do 4i. Simulation Games



It is both Nature AND Nurture as well as PEOPLE!!! Technology is just part of the Equation

Technology
Pedagogy
People, Society, Culture, etc.



Phillips 66

6 minute Brainstorm:

In groups of 6 for 6 minutes brainstorm 6 ways you can use these ideas...

Any Extreme Questions?

Try the R2D2 and TEC-VARIETY!

Slides at: TrainingShare.com

Papers: PublicationShare.com

Book: http://worldisopen.com/

Email: curt@worldisopen.com