
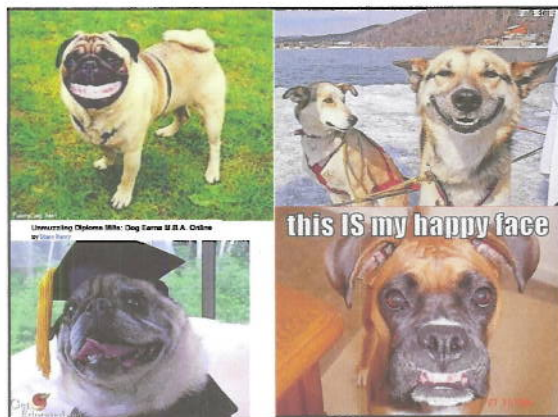


**A Five-Part Masterclass for Technology-Enhanced Teaching and Learning: Sampling across a Scrumptious Smorgasbord**

**Dr. Curtis J. Bonk, [cjbonk@indiana.edu](mailto:cjbonk@indiana.edu)  
Professor, Indiana University**

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

**TED** Worth watching

**TALKS**  
Clay Shirky: How cognitive surplus will change the world

**COGNITIVE SURPLUS**  
SECURITY AND DIVERSITY IN AN CONNECTED AGE

**CLAY SHIRKY**

**HERE COMES EVERYBODY**

**September 2011**  
**Meta-Analysis Update: Blended and Fully Online Still Best!**

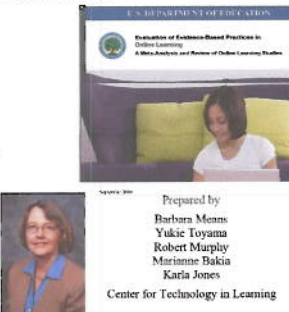
**U.S. DEPARTMENT OF EDUCATION**  
Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies

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

Prepared by  
Barbara Means  
Yukie Toyama  
Robert Murphy  
Marianne Bakia  
Karla Jones

Center for Technology in Learning

Revised September 2010



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

**Person of the Year**  
**TIME**

**SOCIAL NETWORKING**  
Top social networking sites

Site	Users (in millions)
Facebook.com	92.2 million
MySpace.com	64.8 million
Twitter.com	20.8 million
Dropbox.com	17.4 million
Classmates.com sites	13.3 million
Beats.com (partial list)	12.1 million
4M.com sites	11.4 million
Windows Live Profile	10.3 million



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

Khan Academy on the Gates Model  
 ONMoney.com  
**FORTUNE**  
 Innovation in Education  
**Bill Gates' favorite teacher**

**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?ref=NS1>

CNN Tech  
**Steve Jobs' surprise appearance a 'big deal'**  
 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.

Jen Chauvot and Mimi Lee, Univ of Houston

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

**May 30, 2011**  
**Moodle (42+ million users in 213 countries, 54,000 sites, 4.5+ million courses)**

**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 CHRON of Higher Education  
**GUESS WHAT? CHASE COMMUNITY GIVING**  
 Commentary  
**The Quiet Revolution in Open Learning**  
 HOPE



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

**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/](http://www.wired.com/magazine/2010/05/ff_nicholas_carr/)

Author Nicholas Carr: The Web Shatters Focus, Rewires Brains



**Let's Reflect Back 10 Years...**

2001: a space odyssey

2001 a space odyssey

### Virtual Tactical Operations Center (VTOC)

The image shows a screenshot of a virtual tactical operations center. It features a 3D rendered environment with a control room and various data displays. A small cartoon character is visible in the top right corner of the interface.

### Shovelware

The 'Shovelware' collage includes a Wii shovel controller, a thumbs-up gesture, and a photograph of several men in suits holding shovels, likely at a groundbreaking ceremony. The text 'SHOVELWARE' is prominently displayed.

### Ten Years Later...

The image features a clock face showing the year 2011 and large, three-dimensional numbers spelling '2011' set against a background of a cloudy sky.

### Nature AND Nurture: Technology

A Venn diagram with three overlapping circles. The top-left circle is red and labeled 'Technology'. The top-right circle is yellow and labeled 'Pedagogy'. The bottom circle is yellow and labeled 'People, Society, Culture, etc.'. There are also small icons of a bird, a frog, and a watch.

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


A collage of six small images illustrating various learning technology trends, including students using tablets, a hand holding a stylus, and a person using a laptop.

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

<http://www.nytimes.com/interactive/2010/09/15/magazine/classroom-technology.html?ref=magazine>

The image is a screenshot of a timeline article from the NY Times magazine, dated September 15, 2010. It features various images related to educational technology, including a person at a computer, a tablet, and a person using a laptop.




## Technology of the 1980s





**Radio Shack TRS-80 Model III**  
 Introduced: July 1980  
 Price: US \$699 base model  
       US \$2495 w/ 23K, dual disks.  
 CPU: Z80 @ 2.86, 2.03 MHz  
 RAM: 4K, 48K max.  
 Ports: Cassette tape, expansion, serial  
 Display: 12-inch SW monitor, 84 x 18 led  
 Storage: 0, 1, or 2 internal 7 1/4 floppy drives  
       External cassette @ 500 / 1500 baud  
 OS: BASIC in ROM, TRS-DOS on disk




## 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)**







## #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**



## #4. Pocket Dictionaries and Digital Textbook Projects (Korea), Sept. 21, 2010: What South Korean Schoolchildren Can Teach Colleges About E-Textbooks; By Jeff Young, Chronicle of HE. Korea E-Learning Week, Coex, Seoul, Sept. 16-17, 2010

## #5. Video Conferencing/Webcamming

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



### WATCHING VIDEO ONLINE

Google's YouTube dominates online video viewing, but a few competitors compete just now.



**Top video content streams**

Google (YouTube)	14.3 billion
Hulu	297 million
Yahoo	650 million
Vevo	550 million
VevoTV	457 million
Microsoft	455 million
AOL	348 million
Bliks	247 million
Fox Interactive (FoxSearch)	208 million
CBS	197 million

\* Includes Comedy Central and MTV Source: ComScore Media Matrix, September

**Free music video site Vevo eyes iPad, other mobile possibilities**

### #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 Gahrn

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	3 pounds
4 years	6 million years
2,800 processors	1 billion neurons
200 trillion computations (per second)	100,000 trillion
10 trillion memory (in bytes)	1 trillion

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

### #9. New Interfaces

**February 18, 2011:** Telekinesis 2.0, David Zax, Fast Company

BrainDriver: How to drive with your Brain

Jeff Men on TED Talk

### #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

SAN FRANCISCO — The brand behind digital media pioneer iSocialEyes is all at it again — with a new, two-way video service on Facebook.

SocialEyes, which launches today, is bringing live video to 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, or even live on your social graph," says co-founder Rob Cramer of his first venture since he stepped down as CEO of RealNetworks last year: the remote classroom of iSocialEyes.

"This is a rather easy to use," Cramer says.

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

The 10-person limit-up based here. Live rated 55

### #11. Mobile Apps, May 13, 2011:

**USA Today, Mary Beth Marklein**

<http://www.usatoday.com/story/education/2011-05-13-iphone-apps-college-students/4186>

Apps make college easier to access

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

**Nature AND Nurture: Pedagogy**

**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**

**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!

### It is Open in the Philippines too! (May 29, 2011)

#### 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**ead-Time Mobility and Portability (e.g., iPhone)
- **N**etworks of Personalized Learning (Blogs, RSS)

## Audience Participation!

1. WE

2. ALL

3. LEARN!!!

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

1. **Pipes:** The availability of tools and infrastructure for learning.
2. **Pages:** The availability of free educational content and resources (OER—Open Educational Resources).
3. **Participatory Learning Culture:** A move towards a culture of open access to information, international collaboration, and global sharing.



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

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

tinkering things

**Tinker #1. Reading from Open Access Journals (e.g., PLOS)**

The International Review of Research in Open and Distance Learning

A refereed journal to advance research, theory and best practice in open and distance learning worldwide.

Alabama University

**Tinker #2. Webcast Lectures (Tegrity, Echo360, Mediasite, etc.)**

**Magnetic Disks**

What are tracks and sectors?

Tweak to access recording head that format disk

Search to access up to 255 bytes of data

Tegrity

**Tinker #3. Timeline Tools (e.g., SIMILE from MIT (<http://simile.mit.edu/>), Learning Tools from UBC)**

Gates through the

### Tinker #5. Video Animations and Self-Testings

### Tinker #6. Simulations (e.g., Foldit, puzzles that explain the shape that proteins fold into; the results can have huge impacts on scientific discoveries needed for Alzheimer's, AIDS, Cancer, etc.)

<http://fold.it/portal/>  
[http://www.youtube.com/watch?v=swf5c\\_8V25I](http://www.youtube.com/watch?v=swf5c_8V25I) (visual excerpt from interview below: 1:23 minutes)  
<http://www.youtube.com/watch?v=5Z1XuQglmuE&feature=youtu> (Stanford Project Interview: 5 minutes)

### Tinker #7. Pubcasts. (videos of authors of scientific papers and science; e.g., SciVee)

### Tinker #8. Collaborative Groups (Google Docs, Ning, Google Groups, MSN Groups, Yahoo Groups)

### Tinker #9. 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/Lh6eApsKja8>

### Tinker #10. 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.)

**Tinker #11. Online Experiments (e.g., psychology)**



**Tinker #12. Educational Simulations**



**Tinker #13. Online Role Play (e.g., Tulane University, Exercise for Renewable Energy, Freeman Sch. of Business, roles include power traders and utility dispatchers, etc.)**



**Tinker #14. Simulations and Video Animations and Self-Testings**



**Tinker #15. Online Self-Testing (e.g., self study in accounting, vocabulary, anatomy, chemistry, dissection, etc.)**



**Tottering**



**Totter #1. Bridges to World of Expert and Practitioners**  
 (e.g., Watch or Listen to Online Conferences, Expert interviews, blogs, chats, etc.)

A collage of four images illustrating online expert interactions. Top left: A woman in a red jacket speaking. Top right: A map of Australia with a video inset of a woman. Bottom left: A woman in a dark top speaking. Bottom right: A man in a suit speaking at a podium.

**Totter #2. Famous Expert Via TED (shared online video), Fast Company, Anya Kamenetz, September 1, 2010**

Two screenshots of web pages. The left one is from Fast Company, featuring an article titled "How TED Connects the Idea-Hungry Elite" with a photo of a group of people. The right one is from TED, featuring a talk by Adora Svitak titled "What adults can learn from kids" with a photo of her.

**Totter #3. Real World Problems (PBL online): Real-time Cases**

A screenshot of a webpage titled "REALTIME CASE STUDY". The main text reads "Supercharging the case method, making it more realistic and engaging" and includes a photo of Professor James Thomson, a Florida Professor of Entrepreneurship at the University of Massachusetts, Amherst.

**Totter #4. Class Synchronous Sessions and Archives**  
 (Breeze/Adobe Connect Pro, Elluminate, WebEx, Dim Dim)

A screenshot of a synchronous session interface showing multiple video feeds of participants in a grid layout, typical of a virtual classroom or meeting.

**Totter #5. Global Class Videoconferencing**

A collage of three photos showing students in a classroom or meeting room. They are seated around a table, looking at multiple computer monitors displaying video feeds of other participants in a global videoconferencing session.

**Totter #6. 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, Veterinarian 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.)

A collage of four photos. Three show students in a videoconferencing room similar to Totter #5. The fourth photo shows a soldier in military gear in a field setting, likely related to the context provided in the text.

**Totter #7. Combining Asynchronous and Synchronous Events**

**Totter #7b. Asynchronous and Synchronous Events (e.g., William and Mary, March 3, 2011)**

**Totter #8. Online Language Learning and Conversations (e.g., PalTalk, iTalki, Palabea, Babbel)**

**Totter #9. Wikibooks, Wikipedia editing, wiki syllabi, wiki glossaries (Ron Owston, York University, Toronto)**

**Totter #10. Student YouTube Products**

<http://www.youtube.com/watch?v=xiwS1ryPzsQ>  
[http://www.youtube.com/watch?v=x3FJyI4Pn\\_E](http://www.youtube.com/watch?v=x3FJyI4Pn_E)  
<http://www.youtube.com/watch?v=eD1awpaSuPQ>  
[http://www.youtube.com/watch?v=BP7Bj396yYM#watch/player\\_profilepage](http://www.youtube.com/watch?v=BP7Bj396yYM#watch/player_profilepage)

**Totter #11. Podcast Productions and Virtual Performances for students of pronunciation class (e.g., Tzu-Su Chen, Taiwan)**

### Totter #12. Video Blogging

### Totter #13. YouTube as Class

### Totter #14. Collect Student Data for Shared Online Videos (e.g., Michael Wesch, Kansas State)

### Totter #15. Podcasting Medical Lectures (School of Dentistry, University of Michigan)

### Totally Extreme Learning

### Totally Extreme #1. Live Science (Nautilus Live allows people to watch expeditions live & listen to scientists in control rooms a discoveries made)

**Totally Extreme #2. Immediate Science**  
**Ida (a transitional species) 47-Million-Year-Old Fossil**  
*the Missing Link?* (May 20, 2009)

Discovery Channel  
 Dr. Jeroen Huiskes  
 University of Oxford

**Totally Extreme #3. Armchair Archeology**  
**UCLA Summer Digs Program**

UCLA Summer Digs Program

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

Discovery Channel  
 Archeology

**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)

Adventure Learning

**Totally Extreme #6. Learning on the Sea.** (May 2010, Jessica Watson became the youngest person ever to sail solo, non-stop and unassisted around the world.)

Discovery Channel  
 Jessica Watson

Abby Sunderland's blog

**Totally Extreme #7. The LAST OCEAN**  
**Website and The Last Ocean Project**  
<http://www.lastocean.com/> and <http://lastocean-project.org/>; Cassandra Brooks

Discovery Channel  
 the LAST OCEAN

### Totally Extreme #8. MBAs from War Zones...!

The image shows a screenshot of a website titled 'Knowledge Network: Faculty & Research'. The main article is titled 'Online MBA for War Zone' and features a photograph of a soldier in military uniform sitting at a desk with a laptop. The website layout includes a navigation menu on the left and a main content area with text and images.

### Totally Extreme #9. 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>

This block contains a collage of images. On the left is a screenshot of a CNN Live broadcast with the headline 'South African teens get virtual mentoring from all over the world'. To the right is a grid of multiple small video conference windows showing various participants. Below the grid are larger images of individuals, including a woman in a pink shirt and a man in a white shirt, engaged in virtual communication.

### Totally Extreme #10. On-Demand Multi-Participant Synchronous Conferencing

The image shows a screenshot of a multi-participant video conferencing interface. It features a grid of many small video windows, each showing a different participant. The interface includes standard conferencing controls like mute, video on/off, and chat at the bottom.

### Totally Extreme #11. International and Global Education and Competitions (e.g., Global Game Jams, online role play, Global Videoconferencing)

This block features a collage of images related to global education and competitions. It includes a group of people standing together outdoors, a 'Global Game Jam' logo with a globe, and several images of people working at computers or in classrooms, illustrating various educational and competitive activities.

### Totally Extreme #12. Learn Anytime, Always On/Mobile. Will Technology Kill the Academic Calendar? Online, semesters give way to students who set their own schedules, Marc Parry, Chronicle of Higher Ed, October 10, 2010

The image contains a collage of three photographs. The first shows a student sitting in a train car, working on a laptop. The second shows a student sitting at a table in a cafe, also working on a laptop. The third shows a group of students in a classroom setting.

Robert Johnson, who championed the open-format Learn Anytime program at a two-year college in Louisville, Ky. checks students' e-mail while waiting for a flight. "Everything I need to do today, I can do on my phone," says Robert Johnson...He often grades papers and communicates with students from a cafe near his home.

### Totally Extreme #13. Pocket School and Videoconferencing in Developing World (Paul Kim, Stanford, Rwanda, August 2010, Kigali Institute of Education linking up with universities in India and Cameroon through Satellite Internet video conferencing system. They were discussing Java programming.)

This block features a collage of images showing students in a developing world setting. It includes a group of children in school uniforms, a student sitting at a computer, and a student in a classroom setting, illustrating the use of technology for education in these regions.



**Totally Extreme #14.**  
**Telepresence and Teleportec Systems**  
 (e.g., Cisco and HP)

**Totally Extreme #15.** Space tourism  
 comes closer to fruition, USA Today, April 27,  
 2011, Charisse Jones  
[http://www.usatoday.com/travel/flights/2011-04-26-space-tourism-travel\\_n.htm](http://www.usatoday.com/travel/flights/2011-04-26-space-tourism-travel_n.htm)

**Poll: Is your brain mush?**

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

**Any Extreme Questions and Comments?**  
 Slides at: [TrainingShare.com](http://TrainingShare.com)  
 Papers: [PublicationShare.com](http://PublicationShare.com)  
 Book: <http://worldisopen.com/>  
 Email: [curt@worldisopen.com](mailto:curt@worldisopen.com)

**Masterclass Part 2: The Rise of Shared Online Video, the Fall of Traditional Learning**

**Technology**  
**Let's Think Outside the Box!**  
 (For 99 Seconds—how can video be used for learning and what might students today prefer to use?)

**March 10, 2011: iPad 2 is even better than the original, USA Today, Edward C. Baig**  
[http://www.usatoday.com/tech/columnist/edwardbaig/2011-03-10-baig10\\_ST\\_N.htm](http://www.usatoday.com/tech/columnist/edwardbaig/2011-03-10-baig10_ST_N.htm)

**April 21, 2011: Apple iPad 2 stars in vacation videos, Jefferson Graham**  
<http://www.usatoday.com/tech/news/2011-04-20-ipad2-videos.htm>

**Professor Celebrity YouTube Videos (Michael Wesch, millions of views)**

**YouTube Growth**

Randy Pausch's last lecture

April 2008 ~2 millions	October 2008 ~7.5 millions	May 29, 2011 ~13.3 millions
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**January 2008**  
 ~79 million viewers watched more than 3 billion user-posted videos on YouTube (Yen, 2008)



**December 10, 2010: Mobile Music; Virtual Bands, Choirs, Singers, etc. iBand Rocks Tunes on iPads and iPhones; PadGadget.**

**Bonk (2008)**

"Clearly, YouTube technology is something in which students in higher education settings in the United States are highly familiar. It is a tool of the culture. And it is one that instructors from K-12 to higher education to corporate training need to begin experimenting with in their classes."

**Elliott Masie, Learning Trends,  
March 2, 2010**

**"Raising bandwidth, lowered equipment costs, ease of editing and growing expectations of learners will make video a profound component of our learning efforts going forward."**

**Elliott Masie, Learning Trends,  
March 2, 2010**

- Video "YouTube" story segments
- Video Podcasts
- Video Reports – Webcam Captures
- Produced Video for Learning Modules
- Skype (with video)
- Webinar Video Elements
- High Definition Video Conferencing (up to 4 Megs)




**Elliott Masie, Learning Trends,  
March 2, 2010**


- Telepresence Video (Beyond 6 megs)
- Flipcam and iPhone Video Clips
- Webchat Video
- Video Capture of Seminars and Classrooms
- Video Keynotes Live and Asynchronously.
- Video Guests in Workshops and Conferences
- Video Coaching



**LearningTalks - a series of short, free, video interviews on learning. The MASIE Center.**  
<http://www.learning2010.com/Videos/JonathanKopp.htm>



**February 21-24, 2011: E-Learning and Distance Learning (ELI) Conference in Riyadh**



**Multimedia Enhancements and Trends**



## Multimedia Enhancements and Trends



## Animation of Videos (e.g., RSA Animate - Drive: The surprising truth about what motivates us)

<http://www.youtube.com/watch?v=u6XAPnuFiJc>  
<http://comment.rsablogs.org.uk/videos/>



## Graphic Facilitation of Speeches (e.g., ImageThink)

<http://www.imagethink.net/>  
<http://imagethink.squarespace.com/line-by-line/2011/3/1/second-international-conference-of-e-learning-and-distance-e.html>



## Why Use Video?

1. Importance of shared online video: educational psychologists such as David Ausubel (1978) argued that knowledge was hierarchically organized.
2. New learning concepts and ideas to be subsumed under or anchored within prior learning experiences.



## Why Use Video?

3. Ausubel suggested that new info is going to be meaningful if it is anchored (i.e., attached or related) to what learners already know and understand.
4. YouTube videos can help in that regard. A key part of this effort is finding ways to link prior learning experiences to new concepts and ideas.






## Why Use Video?

5. Advance Organizers: Provide a context, richer learning, can be replayed for key concepts, bring students to the real world, discussion, reflection, common experience, and the potential for higher order thinking skills.



## Why Use Video?

6. Dual coding theory (learning information verbally and visually is more richly stored): Alan Paivio.
7. Anchored instruction and macrocontexts: John Bransford and colleagues.
8. Multimedia theory: Richard Mayer.






## Which of these video sharing sites do you use?

1. BBC News Video and Audio
2. CNN.com Video
3. MSNBC.com
4. Google Video, Yahoo Video
5. Current TV
6. Fora TV
7. MIT World
8. YouTube, YouTube Edu
9. TeacherTube
10. Link TV, Explore, Global Pulse, Latin Pulse
11. Howcast, Big Think, WonderHowTo, Explor.TV, NASA TV, ClipChef, TV Lesson, BookTV, Edutopia videos, MonkeySee, doFlick, the Research Channel, iVideosong



## Video Sharing Websites





## CNN Video and MSNBC

<http://www.cnn.com/video/>




## Current TV

## MIT World




## TED: Technology, Entertainment and Design

## Salman Khan: Let's use video to reinvent education, TED, March 2011

[http://www.ted.com/talks/salman\\_khan\\_let\\_s\\_use\\_video\\_to\\_reinvent\\_education.html](http://www.ted.com/talks/salman_khan_let_s_use_video_to_reinvent_education.html)

## NBC Special

<http://www.msnbc.msn.com/id/21134540/vp=42018991&42018991>

## YouTube EDU Page

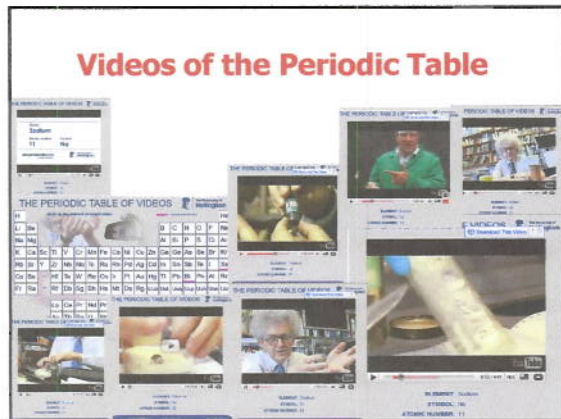
## Medical YouTube

## Academic Earth

Login | Register | Advanced Search

Free online video courses from leading universities.

### Videos of the Periodic Table



### TV Lesson (expert videos)



### History for Music Lovers (e.g., The Trojan War)

<http://www.youtube.com/user/historyteachers?feed=likes&pbj=5&gl=us>



### Big Think (short topical videos from famous people)

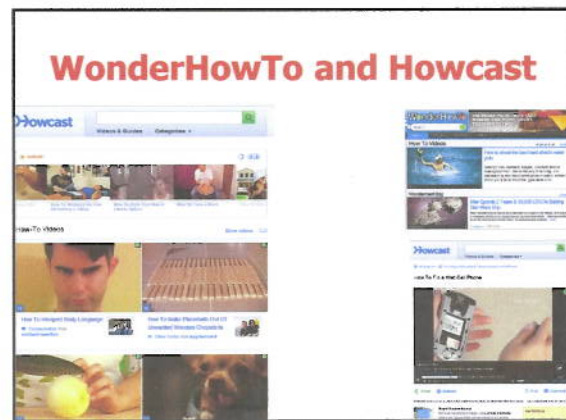
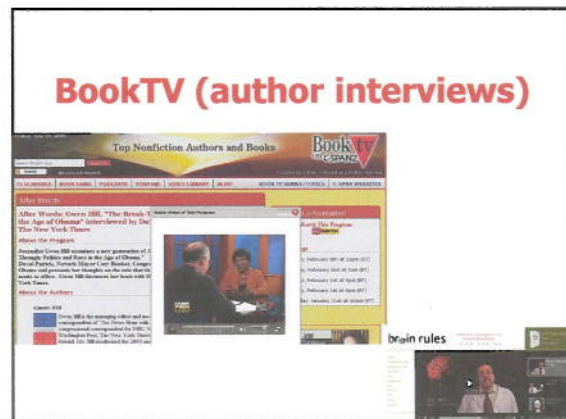


### Fora TV

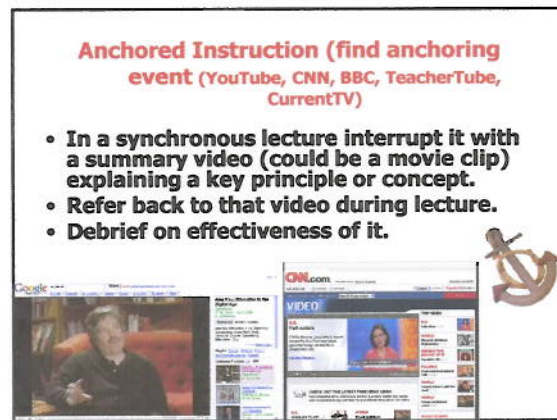
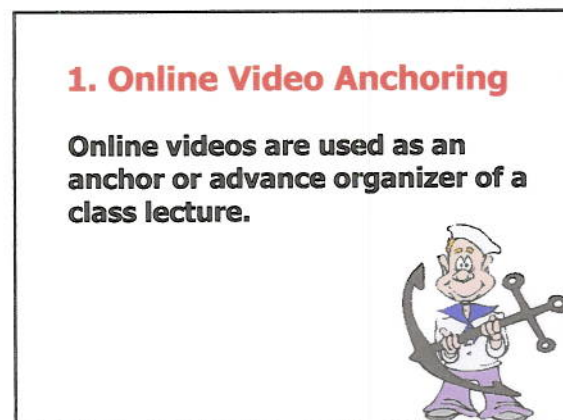
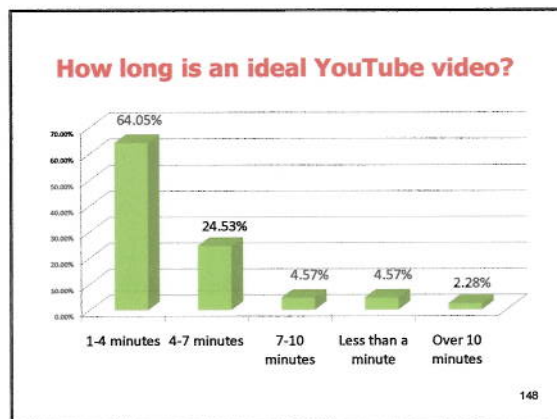
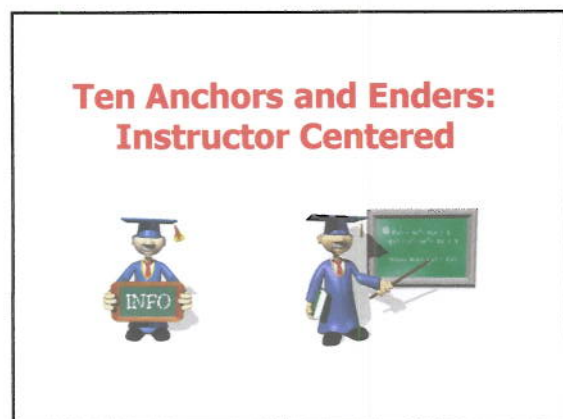
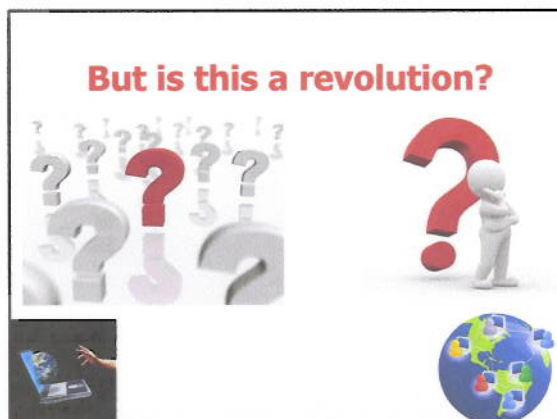


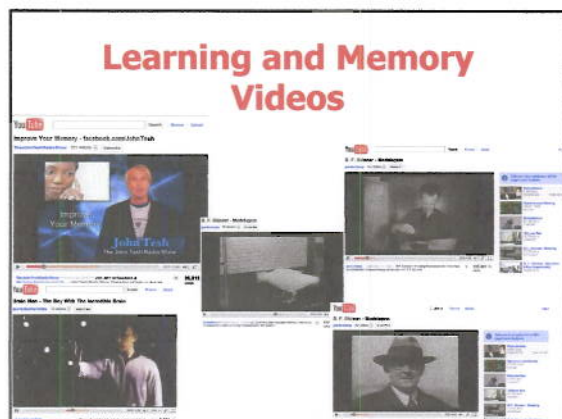
### Link TV (Television without Borders)











## 2. Online Video Ender

Online videos are used after discussion and activities as a class "ender" or capstone event.



## 3. Anchoring and Ending

One or more online videos are used to start discussion as well as others at the end of the class to draw a sense of closure to that discussion.



## 4. Online Class Previews and Discussions

The instructor(s) finds videos and then posts them to the course management system for students to watch prior to or after class. If students participate in an online discussion based on such videos, the instructor should be clear about the length of post (e.g., two paragraphs) and how many comments of peers to respond to.



## 5. Anchor with Discussion

The instructor(s) finds videos and shows them in class and students discuss them in small groups with certain assigned tasks.



## 6. Pause and Reflect

The instructor(s) plays a portion of a YouTube video and pauses for reflections and then continues playing the video which is followed by still more class reflection.



## 7. Key Concept Reflections

Instructor shows the YouTube video and asks students to reflect on concepts embedded in it. He may replay the video 1-2 more times while prompting the class for certain key concepts. He might ask students to say "pause" when they see a concept from a particular chapter or unit displayed.



## 8. Video Anchor, Lecture, and Test (VALT)

Instructor(s) might show 1-2 YouTube videos at the start of a class and then lectures on topics related to concepts in those videos. When done lecturing, the instructor might show the same YouTube videos and ask for student reflection papers or discussion of what concepts are displayed in them. Such an activity might be embedded in a course quiz or examination.



## 9. On-Demand Conceptual Anchoring

Instructor pauses a class activity or discussion at any moment and shows a YouTube videos related to a concept, theory, or idea being presented or discussed.



## 10. Videoconferencing Anchors and Enders

YouTube videos might be shown in a videoconference or Web conference with other classes and then used to spur discussion and interaction across sites. Controversial videos might be purposefully chosen to foster such interaction.



## Ten Anchors and Enders: Student Centered



## 1. Course Resource Provider Handouts

Students find videos and show them in class and discussion unfolds. Students assigned as the cool resource providers for the week are asked to create a handout for the videos and other course resources selected.



## 2. Class Previews of Student Anchors

Have students (as cool resource providers) find videos and share with the class which previews them prior to the class meeting and discussion of them.



## 3. Collaborative Anchoring

A pair of students as well as the course instructor each find a few relevant videos for the week and then share what they have found with each other and decide which ones to use in class.



## 4. Student Anchor Demonstrations

Each student brings a video to class and presents and explains how each one is related to course concepts. A coinciding handout of videos and concepts is recommended.



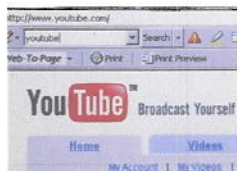
## 5. Anchor Creators

Students create their own YouTube videos to illustrate course concepts.



## 6. Anchor Archives

An archive is created of videos from previous years and students are asked to update them.



## 7. Video Anchor Competitions

Students find relevant videos and send the list to the instructor(s) for viewing and selecting. The students whose videos are selected might receive special class recognition or bonus points.



## 8. Video Sharing and Ranking

Students might share YouTube videos across class sections or institutions and perhaps rate those posted by their peers.



## 9. Video Anchor Debates

Students are asked to find YouTube or other online video content on the pro and con sides of a key class issue and then use them in face-to-face or online discussions and debates.



## 10. Anchor Creator Interviews

Students find YouTube videos relevant to course concepts and email interview the creator about the purpose and potential uses of the video or perhaps request that the creator join the class in a synchronous chat.



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

## Bonk (2008)

This is just a small sample of possibilities that each of us now has to learn with shared online video. Seems nearly everyone can find educational uses for shared online video. The potential is immense. Access is increasing. Better evaluation methods and indexing schemes are needed. The time has ripe to put these millions of free videos to work. It may be up to you!



Turn and Share 1-2 ideas  
you can use...



But who can use shared  
online video?

TOP  
10  
LIST



### Audiences and Uses of Shared Online Video

**1. Instructors:** start or end a class with online video as an anchor for student discussion and debate, while asking students to reflect on concepts embedded in the videos that relate to course content.



### Audiences and Uses of Shared Online Video

**2. Formal Learners:** find and present online videos to show to the class that demonstrate concepts, provide an historical context for learning material, or integrate multiple topics as well as those that they simply find inspiring within a field of study.



### Audiences and Uses of Shared Online Video

**3. Informal Learners:** browse and watch instructional video sites for situation specific needs and personal interests, including business and finance, healthcare, cooking, crafts and hobbies, sports and fitness, relationships, parenting, travel, technology, and so on.



### Audiences and Uses of Shared Online Video

**4. Curriculum Developers:** embed critical video snippets or complete lectures at key points in a course for learner reflection.



### Audiences and Uses of Shared Online Video

**5. Librarians:** create videos to demonstrate how to use technology resources and tools to access information as well as call attention to any changes in materials, networks, procedures, and operations.



### Audiences and Uses of Shared Online Video

**6. Executives, Administrators, and Consultants:** open or close meetings using short online videos to foster debate or reflection on recent problems, strategic plans, or upcoming events.



### Audiences and Uses of Shared Online Video

**7. Training Managers:** make available a series of videos that employees can watch on-demand when the need arises; especially short, instructional ones that are adapted to hectic schedules and pressing demands.



### Audiences and Uses of Shared Online Video

**8. Conference Directors and Keynote Speakers:** post complete or short summary videos of invited talks and keynote speeches prior to or after a workshop, conference, institute, or summit as a means of sharing and reflecting upon that event.



### Audiences and Uses of Shared Online Video

**9. Bloggers:** point to online videos that exemplify a recent issue or emerging trend linking to their blog reflections or extending well beyond them.



### Audiences and Uses of Shared Online Video

**10. Podcasters:** embed links to shared online videos that relate to a particular podcast session or set of online audio files.



### Audiences and Uses of Shared Online Video

**11. Global Educators, Consultants, and Heads of Non-Profit Agencies:** post videos that exemplify a mission statement or stated goals as well as recent societal issues and problems as a means of attracting attention and dialogue.



### Audiences and Uses of Shared Online Video

**12. Government Agencies and Politicians:** post online videos that relate to proposed or newly adopted policies, activities, and events.



### Audiences and Uses of Shared Online Video

**13. Retirees:** watch online videos to learn new skills and competencies or explore personal hobbies and interests.



### Audiences and Uses of Shared Online Video

**14. Unemployed:** search for and access videos that can add new skills, fine-tune existing ones, or arouse new career interests altogether as well as share what has been found with others in the same situation.



### Advice and Guidelines

1. When using shared online videos, consider the learning theory or approach makes them more powerful than other media.
2. Assign students to reflect on why or how you used them.



### Advice and Guidelines

3. Length of video for activities should be less than 10 minutes and preferably under 4 minutes.
4. Considering offering online video creation as an option—can foster student creativity.



### Advice and Guidelines

5. Instead of finding all course videos, offer the student the chance to find and show 1-2 free online videos.
6. Watch and approve all videos before selecting.





### Advice and Guidelines

- 7. Test videos online (or, if FTF, in the room you will use) to check for link rot or video removal.
- 8. Have back-up videos in case do not work or are taken down.



### Advice and Guidelines

- 9. Have a guidesheet, job aid, or scaffold to help students evaluate the validity of sources (issues of credibility/authority, quality, design, etc.)



### Advice and Guidelines

- 10. Many unconventional videos might be used to emphasize key points from class (e.g. old television programs or other non-educationally produced).



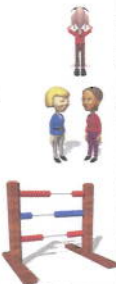
### Final Thoughts

It is important for instructors to begin to reflect on the power of such online video technology, to experiment on their use, and to share their results.




**Poll: How many ideas did you get from the second part of this talk?**

- a. None—you are an idiot.
- b. 1 (and it is a lonely #).
- c. 2 (it can be as bad as one).
- d. 3-5
- e. 6-10
- f. Higher than I can count!








### Stop and Share: Top Three Things Learned!



 **Stand and Share Ideas**

- Will Work: \_\_\_\_\_
- Might Work: \_\_\_\_\_
- No Way: \_\_\_\_\_



**Slides at: [TrainingShare.com](http://TrainingShare.com)**  
**Papers: [PublicationShare.com](http://PublicationShare.com)**  
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**The World is Open.**

