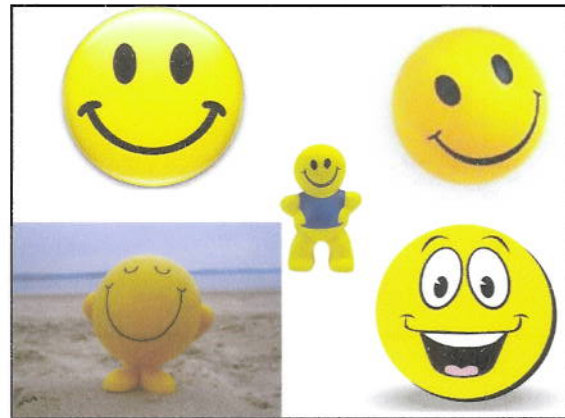


**"Stretching the Edges of Technology-Enhanced Teaching: From Tinkering to Tottering to Totally Extreme Learning"**

**Curtis J. Bonk, Professor, Indiana University**  
 cjbonk@indiana.edu  
<http://mypage.iu.edu/~cjbonk/>



**Dog Gets MBA,**  
**The Chronicle of Higher Ed, Unmuzzling Diploma Mills: Dog Earns M.B.A. Online, Marc Parry**

Unmuzzling Diploma Mills: Dog Earns M.B.A. Online  
 By Marc Parry

**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)

**COGNITIVE SURPLUS**  
 CREATIVITY AND COMPLEXITY IN A CONNECTED WORLD

**CLAY SHIRKY**

**HERE COMES EVERYBODY**

**September 5, 2010**  
**Open Source goes to High School (Utah)**  
<http://www.youtube.com/watch?v=sovve-j3xGk>

**Open High School of Utah**  
 meeting the needs of the 21st century learner

**DAVID WILEY**  
 Founding Member, Open High School of Utah  
 Associate Professor, Brigham Young University

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

**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

### October 31, 2010 Online Learning: By the Numbers, Chronicle of Higher Education

**Online Learning: By the Numbers**

GROWTH AND TYPE OF ONLINE ENROLLMENT

Enrollments of Online-Only Students Pursuing Bachelor's Degrees by PACE, 2009

Growth in Enrollments of Students Taking at Least One Online Course

SELECTED DEMOGRAPHICS

Age of Students

Gender

Race of Students Enrolled by Type of College, 2009

### October 31, 2010 Online Education vs. Traditional Learning: Time to End the Family Feud

Mark David Milliron, Chronicle of Higher Education

THE CHRONICLE of Higher Education

Online Learning

Online Education vs. Traditional Learning: Time to End the Family Feud

BILL & MELINDA GATES foundation

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

SOCIAL NETWORKING

Top social networking sites

Facebook.com: 82.2 million

MySpace.com: 64.7 million

Twitter.com: 20.8 million

Diigo.com: 17.4 million

Classmates.com.com: 13.0 million

Bebo.com: 12.5 million

Mi4.com: 11.4 million

Microsoft Live Profile: 10.3 million

TIME Person of the Year

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

FLVS Completion History As of June 30, 2010

Year	Completion History
2001-2002	18,000
2002-2003	12,740
2003-2004	24,160
2004-2005	24,670
2005-2006	36,170
2006-2007	46,950
2007-2008	116,920
2008-2009	124,170
2009-2010	219,070

Julie Young, President & CEO

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

Khan Academy on the Glass Notes

ONMoney.com

FORTUNE

Innovation in Education

Bill Gates' favorite teacher



**February 16, 2011**  
**Bill Clinton in Surprise Talk on Tech: It's the Institutions, Stupid, David Zax, Fast Company**

The image shows a screenshot of a Fast Company article. At the top, it says 'February 16, 2011' and 'Bill Clinton in Surprise Talk on Tech: It's the Institutions, Stupid, David Zax, Fast Company'. Below the title is a sub-headline 'Bill Clinton in Surprise Talk on Tech: It's the Institutions, Stupid' and a small photo of Bill Clinton speaking at a podium with an American flag in the background.

**March 3, 2011**  
**Bill Gates Promotes Professor's Online Course at TED, Chronicle of HE, Jeff Young, The History of Everything**  
<http://www.bhhistoryproject.com/>

The image shows a screenshot of a presentation slide. The title is 'Big History: An Introduction to Everything'. The slide includes a navigation menu on the left with options like 'Home', 'Big History', 'Why History?', 'The Big Picture', 'About the Project', and 'How I Learned About It'. On the right, there is a 'flowplayer' video player showing a presentation slide with the same title.

**But I am not Content!!!**

The image shows two kittens playing on a tree stump in a grassy field. One kitten is sitting on the stump while the other is jumping towards it.

**Shovelware**

The image is an advertisement for 'Shovelware'. On the left, there is a Wii game case for 'Shovelware' with a shovel icon and a thumbs-up gesture. On the right, there is a photo of three men in suits sitting on a bench, each holding a shovel. The text 'SHOVELWARE' is written in large letters at the bottom of the ad.

**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/)

The image is a collage related to Nicholas Carr's article. It includes the Wired magazine logo, the Atlantic magazine logo, a 'Google Stoopid?' logo, and a 'THE SHALLOWS' logo. There are also several small photos, including one of Nicholas Carr speaking at a podium and another of a person looking at a computer screen.

**July 25, 2010**  
**Professors' Use of Technology in Teaching, Jeffrey Young, Chronicle of Higher Education**

The image is an infographic titled 'Professors' Use of Technology in Teaching'. It features seven pie charts showing the percentage of faculty who use various technologies. The legend indicates: Blue = 'Use it a lot', Light Blue = 'Use it a little', and White = 'Do not use at all'. The technologies and their usage percentages are: Course management systems (88% use a lot, 12% use a little, 0% do not use), Presentation/delivery tools (84% use a lot, 16% use a little, 0% do not use), Collaborative writing software (84% use a lot, 16% use a little, 0% do not use), Blogs (83% use a lot, 17% use a little, 0% do not use), Student response systems (81% use a lot, 19% use a little, 0% do not use), Web conferencing or Internet group chat (78% use a lot, 22% use a little, 0% do not use), and Video games, simulations, or virtual worlds (76% use a lot, 24% use a little, 0% do not use).

### August 9, 2010

#### Bill Gates Predicts Technology Will Make 'Place-Based' Colleges Less Important in 5 Years, By Jeff Young, Chronicle of HE

**Wired Campus**

Bill Gates Predicts Technology Will Make 'Place-Based' Colleges Less Important in 5 Years

Bill Gates on in-person vs. online edu...

### September 15, 2010

#### Study: Online learning might be less effective for some, eSchool News, Dennis Carter

**eSchool News**

Study: Online learning might be less effective for some

**THE CHRONICLE of Higher Education**

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

### December 30, 2010

#### The year we stopped talking

Sharon Jayson, USA Today

[http://www.usatoday.com/printedition/news/20101230/1year30\\_cv.art.htm](http://www.usatoday.com/printedition/news/20101230/1year30_cv.art.htm)

### January 23, 2011

#### As the Web Goes Mobile, Colleges Fail to Keep Up, Chronicle of Higher Ed, Josh Keller

<http://chronicle.com/article/Colleges-Search-for-Their/126016/>

Percentage of Students Who Use Mobile Devices Daily to Access the Internet

Year	Percentage
2008	10.2%
2009	29.9%
2010	43.8%

"I used it to sign up for classes. I used it to check e-mails," says Laura Patterson, a junior at Nevada State College, about her iPhone. "I used it all the time, for everything." More than 40 percent of all college students, like Nevada State's Laura Patterson, used mobile devices to get on the Internet every day last year, compared with 10 percent in 2008.

### February 17, 2011

#### US internet access still a problem: Gov't says up to 10 pct in US lack good Internet, Joelle Tessler, AP Technology Writer

**US Internet access still a problem**

Gov't says up to 10 pct in US lack good Internet

Joelle Tessler, AP Technology Writer

### February 27, 2011

#### Actually Going to Class, for a Specific Course? How 20th-Century. New learning technologies prompt a rethinking of traditional course structure, Chronicle of HE, Jeffrey R. Young

**THE CHRONICLE of Higher Education**

Actually Going to Class, for a Specific Course? How 20th-Century.

There's not really much need for teachers anymore," since so much material is online, says Dekunle Somade, a senior at the U. of Maryland at College Park.




### Question: What is the Web?


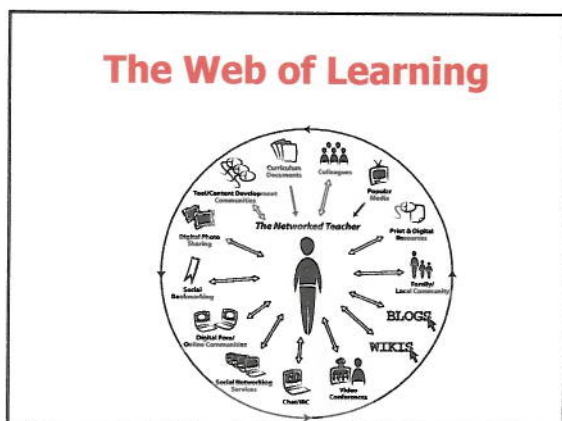
- An entertainment system?
- A writing aid?
- A communications system?
- A means to handle commercial transaction?
- A social networking device?

=====

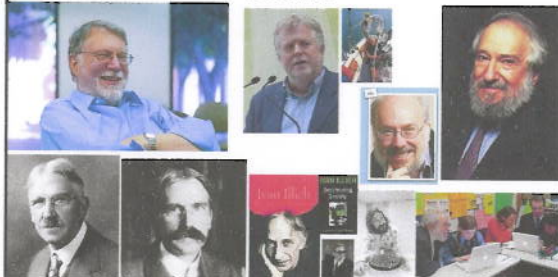
**No, it is a learning tool!**




### Answer: The Web of Learning

### Some Educational and Psychological Heroes: John Dewey, Seymour Papert, John Seely Brown, Ivan Illich, Stephen Heppell, Henry Jenkins



### Our New Heroes are not Theoretical or Psychological



The collage includes photos of Mark Prensky, Douglas Belk, and Yoonah Jenkes, along with book covers for 'The Wealth of Networks' and 'Future Internet'.

### Today we have the Web 2.0



The collage features logos for LiveJournal, Google, Facebook, Ning, PBWORKS, Blogger, Slideshare, Wikipedia, and photobucket.





### Things That Became Obsolete This Decade

December 11, 2009, Silicon Alley Insider

### Gadgets that Changed Everything This Decade

December 9, 2009, Jay Yarow, Silicon Alley Insider

### June 9, 2010

**Force is with new GPS units**

**TwitterPeek: Restricted to Twitter.**

**WikiReader: Updating can be a pain.**

### Marissa Mayer

leads the company's product management efforts on search products – web search, images, news, books, products, maps, Google Earth, Google Toolbar, Google Desktop, Google Health, Google Labs and more. She joined Google in 1999 as Google's first female engineer and led the user interface and web server teams at that time. Her efforts have included designing and developing Google's search interface, internationalizing the site to more than 100 languages, defining Google News, Gmail, and Orkut, and launching more than 100 features and products on Google.com

### Brewster Kahle, and Aaron Swartz, Open Library the Internet Archive

### 15 Learning Technology Trends

Another Benefit of Robot Teachers: No 'Moral Problems'

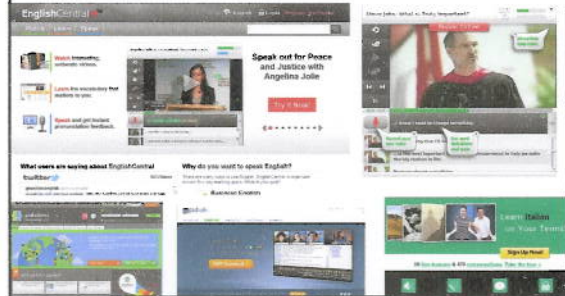
Let's Search of Robot Teachers: No 'Moral Problems'

### 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



May 27, 2010: OLPC, Marvell Join Forces, Announce sub-\$100 Tablet by December 2010, Mike Prospero

July 23, 2010: India unveils \$35 computer for students, CNN World, Harmeet Shah Singh



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



Feb 8, 2011: CNN HP unveils TouchPad tablet, two phones, Mark Milian, CNN,

Feb 9, 2011: Apple iPad 2 now in production, Chris Taylor, CNN Tech News





**Feb 15, 2011: Widescreen tablets are coming soon,**  
Mark Millan, CNN

**Feb 15, 2011: iPhone 5 rumor round-up,** Jolie O'Dell, CNN

**4. Mobile (e.g., iPad) News**

**August 10, 2010: Flipboard pretties up social-media updates**  
Facebook statuses and tweets feed into magazinellike format in free app for iPad; Jefferson Graham, USA TODAY

**February 1, 2011: A peek at The Daily's iPad news app**  
(\$40/year); CNN Tech, Mark Millan

**5. Pocket Dictionaries**

**September 9, 2010: Campus Tech in China: Impressions From 3 Campuses,** Jeff Young  
<http://chronicle.com/blogPost/Campus-Tech-in-China-/26817/>

I didn't see any laptops in use here, though the three Korean exchange students I sat with proudly produced their favorite educational gadgets: portable electronic dictionaries that can hunt down words in Chinese, Korean, English, and Japanese. Language learning has the best use of technology here, according to some professors I've talked to this week, and electronic stores sell what seems like hundreds of varieties of digital dictionaries.

**6. 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

**7. Mobile Music**

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

**8. Video Calling/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, but its four competitors combined are catching up.

Top video content streams	Viewers
Google (YouTube)	54.3 billion
Facebook	297 million
Yahoo	500 million
Vimeo	510 million
Vuclip	497 million
Ustream	485 million
ADL	348 million
Bleeb	347 million
Five Interactive (5y5.com)	289 million
CBS	187 million

\* Includes Comedy Central and MTV. Source: ComScore Media Metrix, November

### 9. 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"

The image shows two screenshots of social networking games. On the left is FarmVille, a farming simulation game. On the right is CityVille, a city-building simulation game. The CityVille screenshot includes a 'PLAY NOW' button and a character wearing a yellow hard hat.

### 10. E-Book Readers

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

[http://www.usatoday.com/life/books/news/2011-01-05-1Aebooksales05\\_ST\\_R.htm](http://www.usatoday.com/life/books/news/2011-01-05-1Aebooksales05_ST_R.htm)

The image shows a person reading a Kindle e-reader. To the right is a snippet of a news article with the headline 'Kindle: Kindle Books Finally Eclipse Paperbacks' and a photo of a man speaking at an Amazon event.

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

### March 2, 2011: The rise of the 99-cent Kindle e-book, March 3, 2011, Cnet, Dan Carnoy,

The image shows a screenshot of a Cnet article titled 'The rise of the 99-cent Kindle e-book' and a large sign that says '99¢ JUST DEALS'.

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

[http://articles.cnn.com/2011-03-04/tech/amazon.free.kindle.1\\_1.html](http://articles.cnn.com/2011-03-04/tech/amazon.free.kindle.1_1.html)

The image shows a screenshot of a CNN Tech article titled 'Why Amazon would be smart to give away the Kindle' and a graph titled 'Kindle Price Forecast' showing a downward trend in prices over time.

### 12. New Interfaces

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

The image shows several screenshots related to new interfaces, including a telekinesis demonstration titled 'Telekinesis 2.0' and a 'BrainDriver' interface titled 'How to Drive with your Brain'.

### 13. 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	
1,190 pounds	3 pounds
4 years	6 million years
2,800 processors	1 billion neurons
200 trillion (per second)	100,000 trillion
15 trillion	1 trillion

The image shows a screenshot of a CNN Tech article titled 'Computer ties human as they square off on Jeopardy!' and a photo of the IBM Watson computer system on the Jeopardy! game show stage.



**14. 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 Facebook — with a new, two-way video service on Facebook

SocialEyes, which launches for several people at once so they can collaborate on interests or even learn to play

"It's a way to connect to the social graph," says co-founder since he stepped off last year. He remains bullish

"This is a richer way to communicate"

Robert Williams, who has worked for about 20 years, is CEO

The 10 person start-up, the mission is funding, mostly by Partners

**15. iPad 2, March 2, 2011: Steve Jobs' surprise appearance a 'big deal', CNN Tech, Mark Milian, March 2, 2011, <http://www.cnn.com/2011/TECH/gadgets/03/02/steve.jobs.ipad2/index.html?ref=HS1>**

**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.

**Where are you headed?**

**Do you know the shape of the world?**

**Is the World Flat?**

**Is the World Curved?**

**THE WORLD IS CURVED**  
 HIDDEN DANGERS TO THE GLOBAL ECONOMY

DAVID M. SMICK

## Is it spiky?

## Or is it Open?



## WE-ALL-LEARN:

### Ten Forces that Opened the Learning World

- **W**eb Searching in the World of e-Books (i.e., Darwin)
- **E**-Learning and Blended Learning
- **A**vailability of Open Source and Free Software (e.g., Moodle)
- **L**everaged Resources and OpenCourseWare (e.g., MIT)
- **L**earning Object Repositories and Portals (i.e., shared content)
- **L**earner Participation in Open Info Communities (YouTube)
- **E**lectronic Collaboration and Interaction (sync and async)
- **A**lternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- **R**eal-Time Mobility and Portability (e.g., iPhone)
- **N**etworks of Personalized Learning (Blogs, RSS)

**"Video Primers in an Online Repository for e-Teaching and Learning" V-PORTAL, TravelinEdMan (27 free/open YouTube videos), October 2010**

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

## Audience Participation!

- 1. WE**
- 2. ALL**
- 3. LEARN!!!**

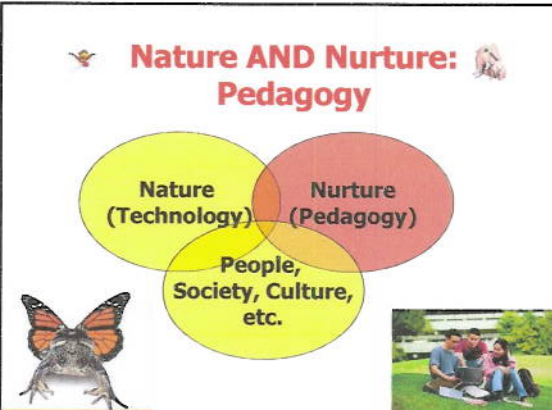


### Triple Learning Technology Convergence of "WE-ALL-LEARN"

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




### Nature AND Nurture: Pedagogy





### Magic #2: The R2D2 Model

Curis J. Borik | Ke Zhang


**Empowering Online Learning**

100+ Activities for Reading, Reflecting, Displaying & Doing



### The R2D2 Method

- Read** (Auditory and Verbal Learners)
- Reflect** (Reflective Learners)
- Display** (Visual Learners)
- Do** (Tactile, Kinesthetic, Exploratory Learners)





### 1. Auditory or Verbal Learners

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

### Read 1. Wikibook or Wikipedia Editing or Critiques

- Ask students to critique a wikibook or page from Wikipedia

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

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

### 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, Explo.TV, NASA TV, ClipChef, TV Lesson, BookTV, Edutopia videos, MonkeySee, doFlick, the Research Channel, iVideosong

### Learning and Memory Videos

### Academic Earth

Free online video courses from leading universities.

### RSA Animate - Drive: The surprising truth about what motivates us

<http://www.youtube.com/watch?v=u6XAPnuFJc>



**Do 4. Create Blogs** (e.g., Dr. Kim Foreman, San Fran State University, Come and See Africa Blog; <http://comeandseeafrica.blogspot.com/>)

**Do 4. Second Life** (business, law, education, English, medicine)

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

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

**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

**1. Tone/Climate: A. 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=B09rqJD1GXo>

## 2. Encouragement, Feedback, etc.:

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

This slide features a collage of educational materials. At the top left is a screenshot of a 'Financial Accounting' website. To its right is a photograph of two men in a meeting. Further right is a diagram titled 'Upper Extremity Muscles' showing a human arm. Below these are a 'Cost Behavior' chart with a graph, a 'Financial Accounting' interface, and a photograph of a person in a white lab coat.

## 3. Curiosity, Fun:

### A. Online News (Giant jellyfish, Tiny T. rex, and Ardi)

This slide contains a collage of news-related content. It includes a photograph of a giant jellyfish, a news article snippet titled 'Human origin takes a new track' with a picture of a person, a photograph of a protest with the headline 'Protesters rally against...', and a drawing of a dinosaur labeled 'Ardi'. There are also smaller images of a dinosaur and a person.

## 4. Variety, Novelty:

### A. Cool Resource Provider or Tech Demos

This slide features a collage centered on educational resources. The main element is a 'PS40 Cool Resource Provider and Moderator Sign Up Sheet' with a sun icon and text. Below the sheet are two photographs: one of a classroom with students at desks, and another of students gathered around a computer monitor.

## 6. Relevance, Meaningfulness:

### A. Tour an Online Oil Drilling Site or Role Play Situations (i.e., BP)

This slide contains a collage of images related to oil drilling. It includes a photograph of an oil rig at sea, a map of the Gulf of Mexico, a simulation interface showing a drilling site, and a photograph of people on a beach.

## 10. Yields Products, Goals:

### C. Photo Festivals and Competitions (e.g., COFA at UNSW, Scrapblog, flickr, etc.)

This slide features a collage of photos and websites. It includes a screenshot of a website titled 'OMNIUM', a photograph of a large pile of coconuts, a 'Country Contest' website, a photograph of a man, and a photograph of a person working with wood.

## TEC-VARIETY Model for Online Motivation and Retention

**T**one/Climate  
**E**ncouragement, Feedback  
**C**uriosity  
  
**V**ariety  
**A**utonomy  
**R**elevance  
**I**nteractive  
**E**ngagement  
**T**ension  
**Y**ields Products

The slide includes two illustrations: one of two figures on a seesaw and another of a character holding a can labeled 'RAY SKY'.



## Tinkering, Tottering, or Totally Extreme?



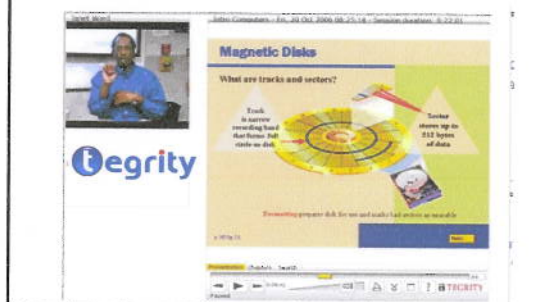
## Tinkering



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



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



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



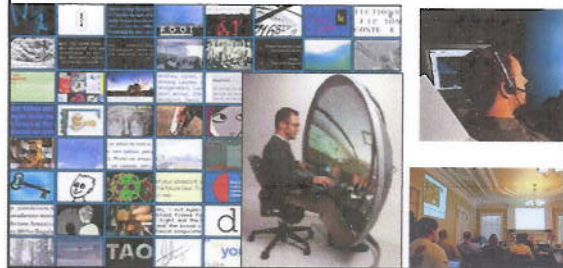
## Arlington Racetrack



### Jockey's are Important



### Tinker #4. Online Literature Search (Class Google Jockeys) (links to text, soundtracks, video clips, etc.)



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



### Tinker #6. Anchored Instruction with Shared Online Video (tracking the life of scientists; (e.g., Brian J Ford, )



### 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/LhGeApsKjaer>

**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. Podcast Reflections**

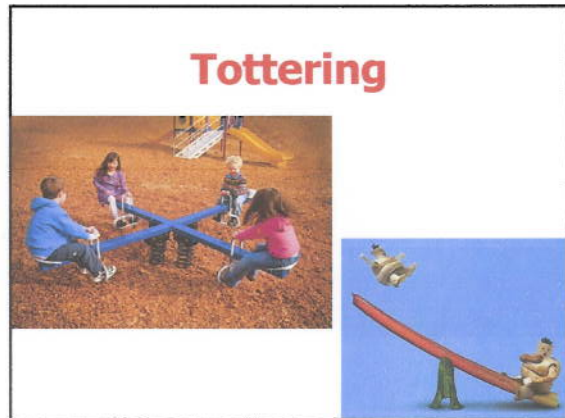
### Tinker #15. Expert and Domain Specific Blog Reflections (English, Health, Business, etc. blogs)

The English Blog

Plan of the Week: This is it

HEALTH BLOG

University of Pennsylvania Turns to Brain Activity for Medical Research



### 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

Remaking the College Campus





### Feb 1, 2011: Self-Organized Learning from Sugata Mitra, Teacher-Replacing Tech: Friend or Foe?, Gregory Ferenstein, Fast Company

The screenshot shows a Fast Company article from February 1, 2011. The main headline is "Teacher-Replacing Tech: Friend or Foe?" by Gregory Ferenstein. Below the headline is a video player showing Sugata Mitra, a prominent figure in self-organized learning, speaking at a TED event. The article text is partially visible, discussing the impact of technology on education.

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

This slide features a collage of images illustrating online expert interactions. It includes a globe with the acronym "IOMC" (International Online Meeting Center), a person on a video call, a map of Australia, and a person in a suit speaking at a podium. The text describes various ways to connect with experts, such as through online conferences, interviews, blogs, and chats.

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

The screenshot shows a Fast Company article from September 1, 2010, titled "How TED Connects the Idea-Hungry Elite" by Anya Kamenetz. The article features a video of Chris Anderson, the founder of TED, speaking. The text discusses the impact of TED Talks on the idea-hungry elite and the role of technology in spreading ideas.

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

This slide displays a screenshot of the REA TIME (Real-time Assessment and Instruction) case study interface. The main headline is "Supercharging the case method, making it more realistic and engaging." It features a video of Professor James Thomas, a Professor of Entrepreneurship at the University of Queensland, Australia, discussing real-world problems and case studies.

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

The screenshot shows a synchronous videoconferencing session. It features a grid of video feeds for multiple participants, including a man in a red shirt and a man in a blue shirt. The text indicates that these sessions are conducted using various software tools like Breeze, Adobe Connect Pro, Elluminate, WebEx, and Dim Dim.

### Totter #5. Global Class Videoconferencing

This slide features a collage of images showing students in a classroom setting participating in videoconferencing. It includes a large screen displaying a video conference, students sitting at desks, and a person interacting with a large screen. The text describes the use of videoconferencing for global class sessions.

**Totter #6. Synchronous and Asynchronous Events (e.g., Breeze + Video + Online Forum + Online Papers)**

**Totter #6b. Asynchronous and Synchronous Events (e.g., William and Mary, March 3, 2011)**

**Totter #7. Online Language Learning and Conversations (e.g., PalTalk, iTalki, Palabea, Babbel)**

**Totter #8. Course Announcements (e.g., Teaching with Twitter; Course announcements and following people (e.g., microblogging))**

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

Web 2.0 and Emerging Learning Technologies  
Peer Production: the open source software movement

**Totter #10. Student YouTube Products**

<http://www.youtube.com/watch?v=xiwSiryPzsQ>  
[http://www.youtube.com/watch?v=x3FJyi4Pn\\_E](http://www.youtube.com/watch?v=x3FJyi4Pn_E)  
<http://www.youtube.com/watch?v=eD1awpaSuP0>



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

A collage of various media related to podcasting and virtual performances. It includes a 'podomatic' logo, a podcast cover with the text 'Hey Jude, don't make it bad. Take a sad song and make it better.', a 'News' podcast cover titled 'Journalistic English: Objectivity Issue', and a poster for 'TWELVE NIGHT LIVE PLAY' featuring several actors.

### Totter #12. Video Blogging

A screenshot of a YouTube video player. The video title is 'Reflections- Tech in Education'. The video shows two men sitting at a table, engaged in a discussion. The YouTube interface includes search, share, and like buttons.

### Totter #13. YouTube as Class

A screenshot of a YouTube channel page for 'THE CHRON'. The page features a grid of video thumbnails, a 'Technology' category, and a video titled 'John's Final Video' showing a person in a classroom setting.

### Totter #14. Student YouTube Products

<http://www.youtube.com/watch?v=xiwS1ryPzsQ>  
[http://www.youtube.com/watch?v=x3FJy4Pn\\_E](http://www.youtube.com/watch?v=x3FJy4Pn_E)  
<http://www.youtube.com/watch?v=eD1awpaSuP0>

A screenshot of YouTube video thumbnails. One prominent thumbnail is titled 'FREEDOM' and lists 'Flexibility', 'Responsibility', 'Empowerment', 'Collaboration', 'Digital Content', 'Open Resources', and 'Motivation'. Another thumbnail is titled 'Virtual Learning - Is it for You?'.

### Totter #15. Podcast Productions and Virtual Performances for students of pronunciation class (e.g., Tzu-Su Chen, Taiwan)

A collage of various media related to podcasting and virtual performances. It includes a 'podomatic' logo, a podcast cover with the text 'Hey Jude, don't make it bad. Take a sad song and make it better.', a 'tsuyi hseh's Podcast' cover, and a poster for 'TWELVE NIGHT LIVE PLAY'.

### Totally Extreme Learning

A collage of images related to extreme learning. It includes a person on a treadmill, a graphic for 'HURRICANE IKE', a map of Haiti showing an earthquake epicenter, a person playing a guitar, and a group of people sitting on the floor.

**Totally Extreme #1. 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


**Totally Extreme #2. Live Expeditions**  
 (Oceanographer touts deep sea web surfing; Nautilus Live allows people to watch expeditions live & listen to scientists in control rooms as discoveries made, eSchool News, June 2010, Deep-sea images reveal colorful life on ocean's floor, Sept. 2010))




**Totally Extreme #3. Live Science**  
 (e.g., Human brain dissections, colossal squids discovered and investigated)




**Totally Extreme #4. Immediate Science**  
 Ida (a transitional species) 47-Million-Year-Old Fossil the Missing Link? (May 20, 2009)



**Totally Extreme #5. Armchair Archeology**  
**UCLA Summer Digs Program**



**Totally Extreme #6. Google Earth**  
**Archeology (David Thomas, Archeologist, La Trobe University, Australia)**





**Totally Extreme #7. Adventure Learning, GeoThentic, Earthducation, Polar Husky, GoNorth (Aaron Doering, Univ of Minnesota), Impossible to Possible, Ray Zahab**



**Totally Extreme #7b. Teen Solo Sailing. May 2010, Jessica Watson became the youngest person ever to sail solo, non-stop and unassisted around the world.**

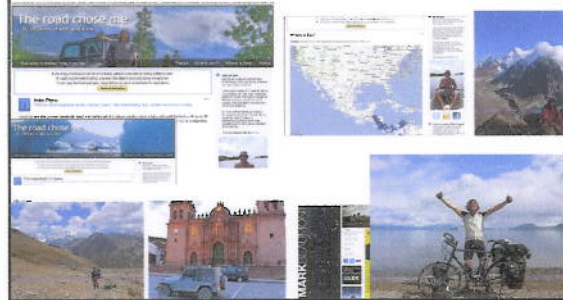


Abby Sunderland's blog

**Totally Extreme #8. The LAST OCEAN Website and The Last Ocean Project**  
<http://www.lastocean.com/> and <http://lastocean-project.org/>; Cassandra Brooks



**Totally Extreme #9. Adventure Learning (cars and bikes)**  
Dan Grec and Mark Beaumont



**Totally Extreme #10. 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=I2>



**Totally Extreme #11. On-Demand Multi-Participant Synchronous Conferencing**



**Totally Extreme #12. International and Global Education and Competitions**  
 (e.g., Global Game Jams, online role play, Global Videoconferencing)

Global Game Jam

**Totally Extreme #13. 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

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 #14. 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.)

**Totally Extreme #15. Telepresence and Teleportec Systems (e.g., Cisco and HP)**

**Poll #1: How many ideas did you get?**

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.

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



## 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)

