
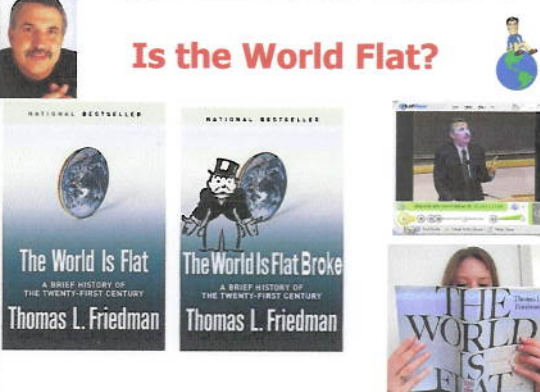


**Stretching the Edges of Technology-Enhanced Teaching: From Tinkering to Tottering to Totally Extreme Learning**

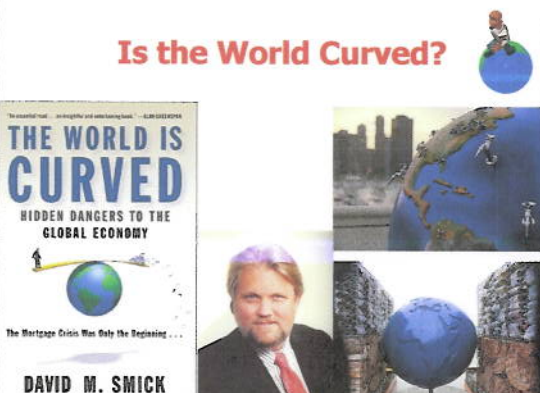
**Curtis J. Bonk, Professor, Indiana University**  
 cjbonk@indiana.edu  
 http://mypage.iu.edu/~cjbonk/



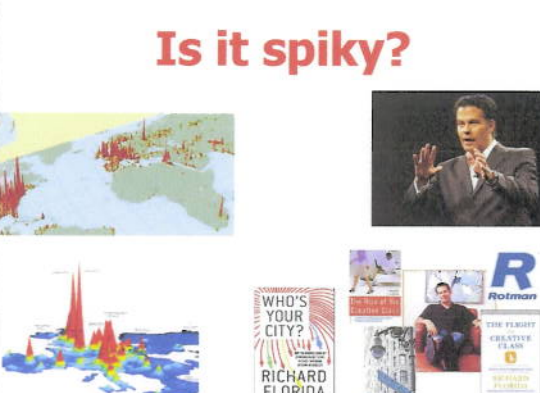
**Is the World Flat?**



**Is the World Curved?**



**Is it spiky?**



**Or is it Open?**






**It is very open!**  
(May 2011, Norway & June 2011 the Philippines)



**Framework #1: WE-ALL-LEARN:**  
Ten Forces that Opened the Learning World

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

**Audience Participation!**

**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.

**Question:  
What is the Web?**


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

=====

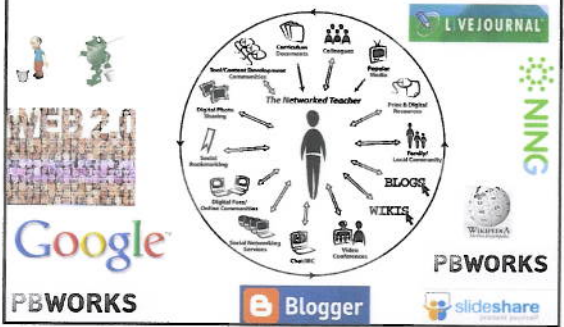
**No, it is a learning tool!**



**Answer:  
The Web of Learning**






**The Web of Learning**



Google  
PBWORKS  
Blogger  
slideshare  
LIVEJOURNAL  
NING  
WIKIS  
BLOGS  
PBWORKS

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

Elements of the Web's Next Generation

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

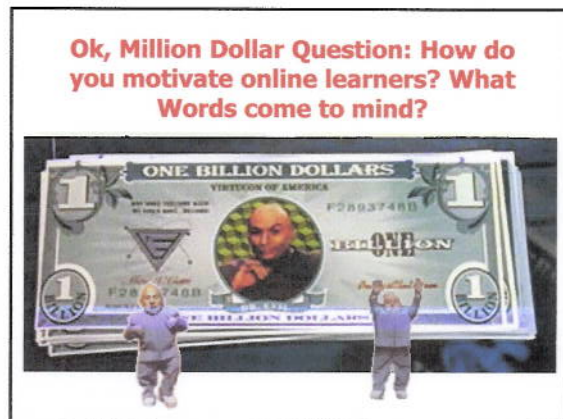
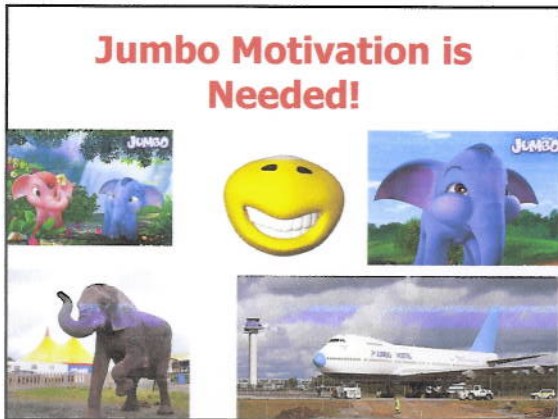


BORED  
MOTIVATION

**A Vision of Today's Students**

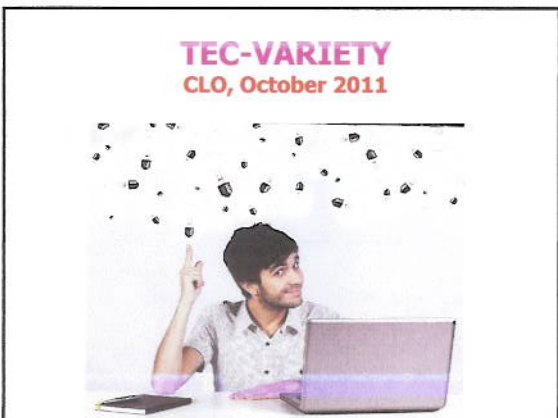
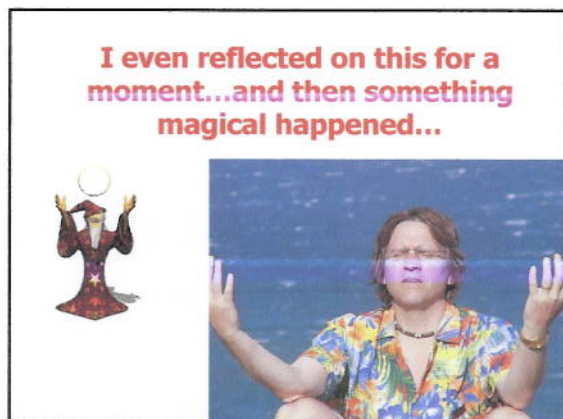


YouTube  
A Vision of Students Today  
My average was 115



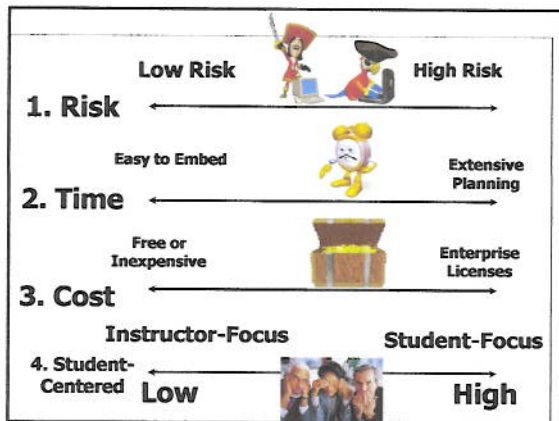
### Motivation Research Highlights (Jere Brophy, Michigan State University)

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.



### Framework #2: TEC-VARIETY 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: Social Ice Breakers

**A. Public Commitments:**  
Have students share how they will fit the coursework into their busy schedules

**B. Favorite Websites**


- Everyone posts 1-2 of their favorite Websites and explain why.
- 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>



### 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.:

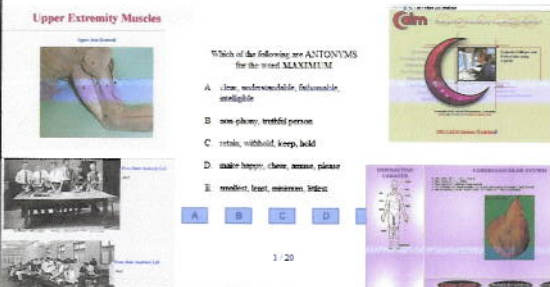
**A. Online Self-Testing** (e.g., self study in vocabulary, anatomy, chemistry, dissection, etc.)

**Upper Extremity Muscles**

Which of the following are ANTONYMS for the word MAXIMUM?


- low, unmovable, defensible, available
- new phone, treacherous person
- retain, withhold, keep, hold
- make happy, cheer, amuse, please
- weakest, least, meagerest, lowest

A B C D



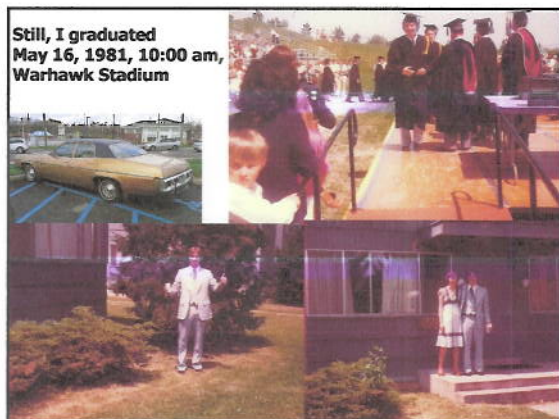
### 2. Encouragement, Feedback, etc.:

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



**2. Encouragement, Feedback, etc.:**  
**C. Vocab Sushi (\$25 for 3 months)**  
<http://www.vocab sushi.com/>

**2. Encouragement, Feedback, etc.:**  
**D. Online Accounting Lessons**  
 (e.g., Lyryx; <https://lifa.lyryx.co>)



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

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

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

**3. Curiosity, Fun: C. Online Database Activities (e.g., WolframAlpha)**  
<http://www.wolframalpha.com/>

The screenshot shows the WolframAlpha search engine interface. The search bar contains the text 'A Quick Introduction to Wolfram Alpha by Stephen Wolfram'. Below the search bar, there are several search results, including a prominent one for 'A Quick Introduction to Wolfram Alpha by Stephen Wolfram' with a thumbnail image of Stephen Wolfram. The interface is clean and modern, with a white background and blue accents.

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

The screenshot shows the Biography.com website. The search bar contains the text 'biography online'. Below the search bar, there are several search results, including a prominent one for 'biography online' with a thumbnail image of a person. The interface is clean and modern, with a white background and blue accents.

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

PS40 Cool Resource Provider and Moderator Sign Up Sheet

The screenshot shows a sign-up sheet for PS40 Cool Resource Provider and Moderator. The sheet is titled 'PS40 Cool Resource Provider and Moderator Sign Up Sheet' and contains a list of names and contact information. The sheet is organized into columns and rows, with a header section and a main body section. The background is white with black text.

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

**RANDOM.ORG** **RANDOM.O**

The screenshot shows the Random.org website. The page is titled 'RANDOM.ORG' and 'RANDOM.O'. It features several interactive tools, including a 'Coin Flipper', a 'Dice Roller', and a 'List Randomizer'. The 'Coin Flipper' shows two coins, one heads and one tails. The 'Dice Roller' shows two dice, one showing a 1 and the other showing a 6. The 'List Randomizer' shows a list of 10 items, including '1. 188', '2. 189', '3. 190', '4. 191', '5. 192', '6. 193', '7. 194', '8. 195', '9. 196', '10. 197'. The interface is clean and modern, with a white background and blue accents.

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


The screenshot shows an online stopwatch website. The page is titled 'www.online-stopwatch.com'. It features a large digital display showing '00:01:39'. Below the display are buttons for 'Start', 'Clear', 'Restart', and 'Back'. The interface is clean and modern, with a white background and blue accents.

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


The screenshot shows an online literature search website. The page is titled 'Class Google Jockeys' and features a grid of search results. The grid contains various images and text, including a person sitting at a desk, a person wearing a headset, and a person in a car. The interface is clean and modern, with a white background and blue accents.

### 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.sapo.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/>



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



Slide 126, same with 100x magnification.


Slide 127, same with 100x magnification.

Slide 128, same with 100x magnification.

Slide 145, same with 100x magnification.

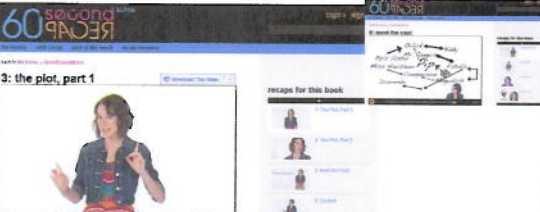
Slide 156, same with 100x magnification.

*I'd like to take the quiz now.*



### 6. Relevance, Meaningfulness: B. 60 Second Recap, Jenny Sawyer

<http://www.60secondrecap.com/>  
 Access 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



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



<http://www.youtube.com/watch?v=ts458kAnqTs>

Open newsroom learning

About  
 Learn. Create. Share. All for free.  
 Play a role in the story of the world's most important resource. Use our online newsroom.




### 7. Interactive, Collaborative: A. Working In Virtual Teams (e.g., Collanos, Ning, Groove, SharePoint, Google Docs)

### 7. Interactive, Collaborative: B. Collaborative Video Annotation

Creating-annotated discussions: An asynchronous alternative, Craig Howard and Rodney Myers, *International Journal of Designs for Learning*, 1(1)  
<http://scholarworks.hu.edu/journals/index.php/ijdl/article/view/853/912>





**7. Interactive, Collaborative:**  
**C. Dr. Monica Rankin's class, UT Dallas, Cuban Revolution (April/May 2011)**  
<http://www.youtube.com/watch?v=ocQMf1kPo98>

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

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

**8. Engagement, Effort:**  
**C. Time Tracker (e.g., Indy Race Tracker, May 29, 2011)**  
[http://www.indygar.com/indycar/track/track.jsp?CH130N101086664740011.indianapolis500/Race\\_Tracker](http://www.indygar.com/indycar/track/track.jsp?CH130N101086664740011.indianapolis500/Race_Tracker)

**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/interaction/2011/mar/22/middle-east-arab-spring-interactive-timeline>

**9. Engagement, Effort:**  
**E. National Geographic Prehistoric Timeline**  
<http://science.nationalgeographic.com/science/prehistoric-world/prehistoric-time-flow.html>

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

North Korea demands apology reparations from Japan over colonial-era...  
 Woman with a large head...  
 Man with a large head...

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

Miguel Lara (Web 2.0 FREEDOM): <https://www.youtube.com/watch?v=BcmCFW99W8>  
 Shuya Xia and Yuse Ma (Blog my online lra): <http://www.youtube.com/watch?v=im7QG99tbc>  
 Julie Rust (Participatory Learning): <http://www.youtube.com/watch?v=cd4TEId05k>  
 Cesar Dagli (Animal perspectives on course): <http://www.youtube.com/watch?v=cDeTEId05k>

### 10. Yields Products, Goals: B. Photo Festivals and Competitions (e.g., COFA at UNSW, Scrapblog, flickr, etc.)

<http://www.youtube.com/watch?v=im7QG99tbc>

### 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

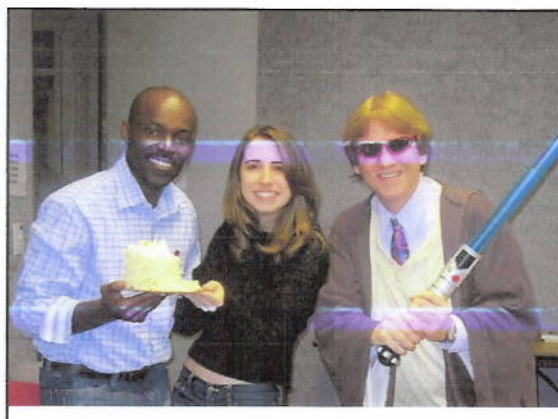
### Do you feel Jumbo Motivation?

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

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

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

### Where Are You R2D2?: Introducing Read, Reflect, Display, and Do Model



### Framework #3: The R2D2 Method

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

### 1. Auditory or Verbal Learners

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

### Read 1a. Learning Planet: Interactive Glossary

Umida Khikmatillaeva, Dec. 2011, P540  
<http://learningplanet.shutterfly.com/>

### Read 1b. Listen or Read to Open Access Expert Podcast Shows and Blogs

## 2. Reflective and Observational Learners

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

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

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

## 3. Visual Learners

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

### Display 3a. Wordle

A Pedagogy of Abundance or a Pedagogy to Support Human Beings? Participant Support on Massive Open Online Courses, IRRODL, Kop, Fourmier, & Sui Fai Mak, November 2011  
<http://www.irrodl.org/index.php/irrodl/article/view/1041/2025>

Figure 4. PLENK2010 Wordle.

### Display 3b. Videos for clinical education (Sungkyunkwan University School of Medicine, [www.mededu.or.kr](http://www.mededu.or.kr))

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

The image shows two examples of mind mapping. On the left is a screenshot of the 'collaborative online mind mapping' interface. On the right is a sample mind map from Bubbl.us with a central node 'Critical Thinking' and branches for 'Creativity', 'Cooperative Learning', 'Metacognition', 'Habits', and 'Reasoning'.

### Display 3d. Interactive Biology

<http://www.interactive-biology.com/2659/062-pressure-changes-during-breathing/>

The screenshot shows an interactive biology website. It features a 3D diagram of the human respiratory system with labels for the trachea, bronchi, and lungs. Below the diagram is a list of topics including 'The Circulatory System' and 'The Respiratory System'.

### 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.

The image includes a circular diagram with four quadrants: 'Doing' (top-left), 'Thinking' (top-right), 'Feeling' (bottom-right), and 'Acting' (bottom-left). Surrounding this diagram are several small images showing students engaged in hands-on activities, such as using manipulatives, role-playing, and working with materials.

### Do 4a. Singing YouTube Summaries

Daniel Halluska, P540, Fall 2011  
<http://www.youtube.com/watch?v=tOL7lrGsqnw>

The image shows a collage of four YouTube video thumbnails. Each thumbnail features a student singing and holding a sign with text related to a math concept, such as 'I don't actually each math, it was' and 'The sum of two numbers is 100. The difference between the numbers is 40. What are the numbers?'.

### Do 4b. Prezi Summaries


Dylan Wajda-Levie, P540, Fall 2011  
<http://prezi.com/2012/01/08/learning-theories-in-ps40/>

The image shows two screenshots of Prezi presentations. The first is titled 'Is The World Open?' and the second is titled 'Learning Theories in PS40'. Both presentations use a non-linear, zoomable format to display text and images.

### Do 4c. Podcast Productions and Shows


The image shows a collage of images related to podcast production. It includes photos of students in a recording studio setting, wearing headphones and speaking into microphones. There is also a screenshot of a podcast player interface showing a 'podomatic' logo.

### Do 4d. Paired Article Critiques in Blogs

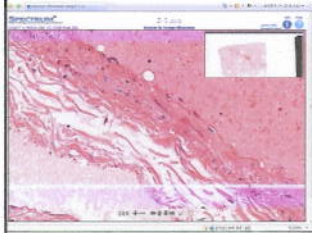



- Students sign up to give feedback on each other's article reviews posted to their blogs.

Article	Student Critique	Student Peer Review
Aubrey, J.B. (2007). <i>Does the Consistency of Inquiry Framework Predict Outcomes in Online JBLA Courses?</i>	<a href="#">Stephan Meyer</a>	Laraine Ryan
	<a href="#">Carolyn Parrish</a>	Karen Leonard
	<a href="#">Lin Yu</a>	Fiona Liu
	<a href="#">Alex Dineley</a>	Levi Ashman
Meyer, K.A. (2003). <i>Face-to-Face versus Threaded Discussions: The Role of Time and Higher-Order Thinking</i>	<a href="#">Laraine Ryan</a>	Paul Anderson
	<a href="#">Hagit Dineley</a>	Yvonne Toney
	<a href="#">Nancy Arora</a>	Carolyn Parrish
	<a href="#">Karen Leonard</a>	Lin Yu
Slez, P., Li, C.S. and Pickens, A. (2006). <i>A study of teaching persistence and student sense</i>	<a href="#">Francis Wilkinson</a>	Alex Dineley
	<a href="#">Heather Stewart</a>	Stefan Harposch
	<a href="#">David Wilson</a>	Nancy Arora



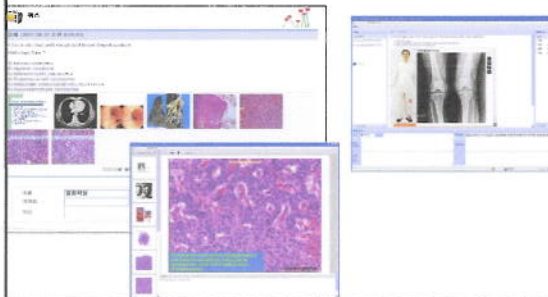
### Do 4e. Virtual Microscopes (Sungkyunkwan University School of Medicine, www.mededu.or.kr)

Stomach, endoscopic examination and biopsy. Poorly differentiated tubular adenocarcinoma.


Food consumption. Adenocarcinoma carcinoma with multiple long mucosa with lymphovascular growth.

### Do 4f. Virtual Quizzes (Sungkyunkwan University School of Medicine, www.mededu.or.kr)




### Do 4g. Wikibook or Wikipedia Editing or Critiques

- Ask students to critique a wikibook or page from Wikipedia

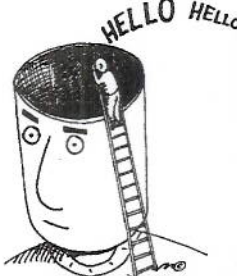


### Try the R2D2 and TEC-VARIETY! Poll #2: Is your brain mush?

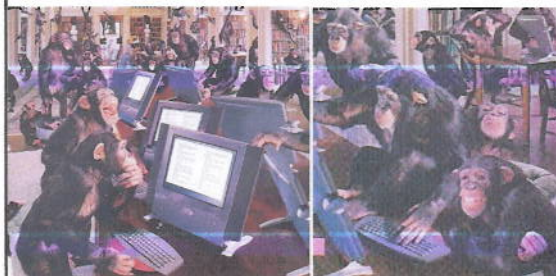
- Yes.
- No.
- Not sure yet...



Ugh... my brain is turning into mush. Gotta take some FIVE OFF



### Framework #4: From Tinkering to Tottering to Totally Extreme Learning...



## Tinkering

WE WERE REDUCED TO...  
MAPPING SHADOW PEOPLE

**TINKERING**

"I'm a Tinker  
therefore I Tinker"

**tinkering**  
things

### Tinker #1. Video Scenario Learning Accounting Interviews and Preparatory Course Review Modules (Franklin University, cost and forensic accounting course)

<http://video.franklin.edu/franklin/coc2/managerialAccounting/cost-behavior-player.html>  
<http://video.franklin.edu/franklin/coc2/362/common/traudScenario63.html>

**Cost Behavior**

Variable Cost	Fixed Cost
<ul style="list-style-type: none"> <li>Material cost</li> <li>Hourly wages for production workers</li> <li>Hourly cost for renting equipment</li> <li>Hourly cost for electricity</li> <li>Hourly cost for depreciation</li> </ul>	<ul style="list-style-type: none"> <li>Salaries for production supervisors</li> <li>Depreciation on factory building</li> <li>Depreciation on factory equipment</li> <li>Property taxes</li> </ul>

Cost behavior is the way cost tends to change in the level of business activity.

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

**Magnetic Disks**

What are tracks and sectors?

Tracks are concentric circles on the disk surface. Sectors are wedges of the disk surface.

Number of sectors per track = 512 bytes of data.

Preventing premature disk failure and water damage is essential.

### Tinker #3. Timeline Tools (e.g., USA Today, August 26, 2011)

<http://www.usatoday.com/story/2011/08/26/king-jr-memorial-washington/4968490>

**Martin Luther King Jr. Memorial in Washington: A closer look**

### Tinker #3. Timeline Tools (e.g., Steve Jobs' career, CNN, August 24, 2011)

[http://www.cnn.com/2011/TECH/innovations/08/24/steve.jobs.timeline/index.html?hpt=hp\\_top2](http://www.cnn.com/2011/TECH/innovations/08/24/steve.jobs.timeline/index.html?hpt=hp_top2)

### Tinker #4. Video Animations and Simulations

**3D Human Anatomy**

Cube Test

### Tinker #5. Collaborative Groups (Google Docs, Ning, Google Groups, MSN Groups, Yahoo Groups)

Google docs

Ning in Education

Ning

### Tinker #6. Case Learning and Role Play (Kelley Direct, IU)

Working with the CEO

KELLEY SCHOOL OF BUSINESS  
INDIANA UNIVERSITY  
BLOOMINGTON, IN

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

perception lab

PSYCHEXPERIMENTS  
Psychology Experiments on the Web

Participate in Experiments

Top Ten Online Psychology Experiments  
By SANDRA KANE  
Psych Central  
List of 100 Web

### Tinker #8. Reading from Open Access Journals; Listen to Open Access Podcasts

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

Military History Podcast

MILITARY PODCAST

MILITARY PODCASTS

### 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/LhGeApsKjaar>

Brian J Ford  
Research on the microscopes of Robert Brown

Watch as the IBC fail to recreate the experiments

Inter Micro 2010  
Chicago, IL  
An Evening with Brian  
12 July 2010

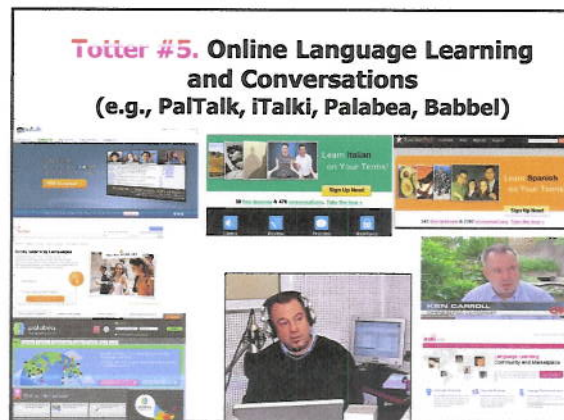
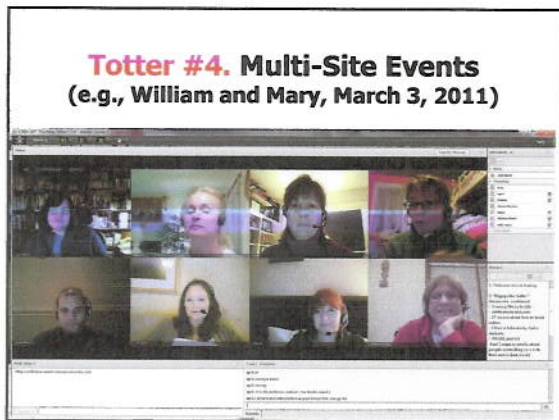
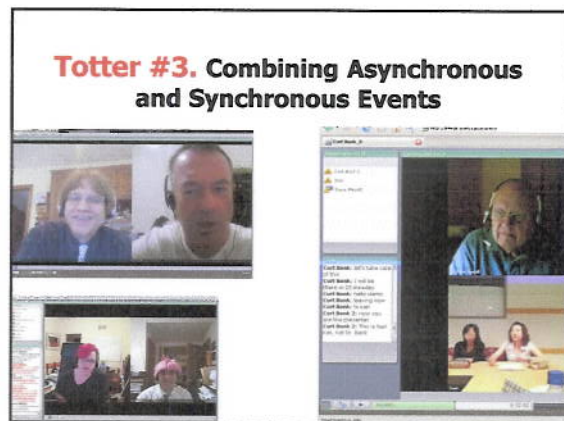
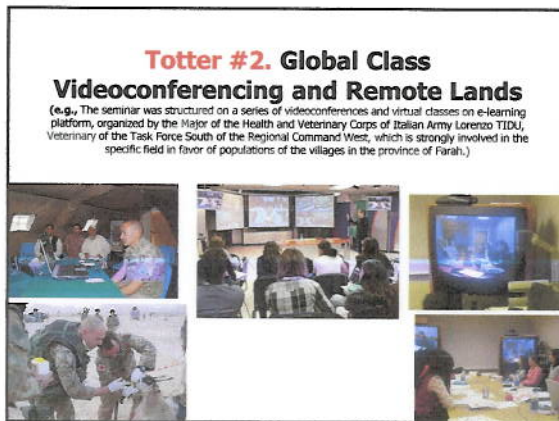
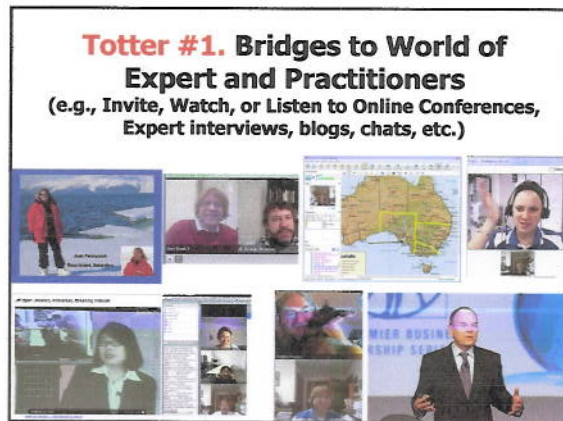
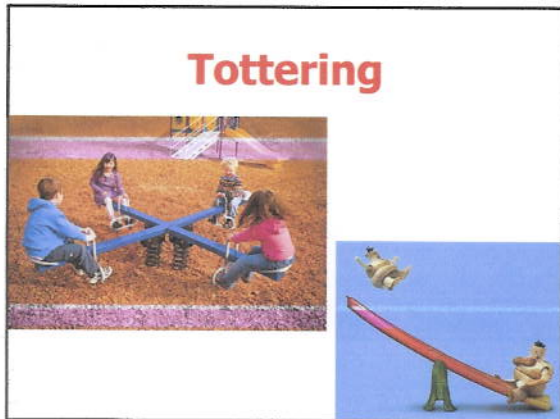
The great question - could Brown have viewed Brownian Movement?  
On the [old page](#) you can see what Brown saw

### 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.)

United Nations World Digital Library

Turning the Pages





### Totter #6. Wikibooks, Wikipedia editing, wiki syllabi, wiki glossaries (Ron Owston, York University, Toronto)

Web 2.0 and Emerging Learning Technologies

### Totter #7. Podcast Productions and Virtual Performances for students of pronunciation class (e.g., Tzu-Su Chen, Taiwan)

### Totter #8. Video Blogging

### Totter #9. Uploading Mobile Books (e.g., BookRix, <http://www.bookrix.com/>)

### Totter #10. Student Film Competitions Verily Tan, Recollections from R685, Fall 2011 <http://vimeo.com/33090590/> (Verily) <http://vimeo.com/33123125/> (Anjali) <http://www.youtube.com/watch?v=IQZHvuZ3rbw&feature=youtu.be> (Yue)

### Totally Extreme Learning

**Totally Extreme #1. Immediate Science**  
**Ida (a transitional species) 47-Million-Year-Old Fossil**  
*the Missing Link?* (May 20, 2009)

The screenshot shows a news article titled "THE MISSING LINK UNCOVERING OUR EARLIEST ANCESTOR". It features a large image of the fossil 'Ida' and a smaller image of a primate. Below the main image, there is a section titled "Ida's World" with a sub-headline "Did the earliest 'Ida' live with the ape-like of the Eocene? It could be". There are also several smaller images and text snippets related to the fossil's discovery and significance.

**Totally Extreme #2. Live Science**  
 (Nautilus Live allows people to watch expeditions live & listen to scientists in control rooms a discoveries made)

This collage features several images from the Nautilus Live project. It includes a person in a blue jacket, a person in a white lab coat, and various underwater scenes. The text "NAUTILUS LIVE" is visible at the top left, and "OKEANOS" is visible at the bottom right.

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

The collage shows various scenes from the UCLA Summer Digs program. It includes a person working at a desk, a person in a white lab coat, a person in a blue shirt, and a group of people in a field. There are also several smaller images and text snippets related to the program.

**Totally Extreme #4. Adventure Learning**  
 (e.g., GeoThentic, Earthducation, Polar Husky, GoNorth; Aaron Doering, Univ of Minnesota; cars and bikes--Dan Grec and Mark Beaumont)

This collage features images from various adventure learning programs. It includes a person on a bicycle, a person in a white lab coat, a person in a blue shirt, and a person in a white lab coat. There are also several smaller images and text snippets related to the programs.

**Totally Extreme #5. The Last Ocean Project, Ice Stories, and Shark Theater** (24 foot inflatable screen (and outdoor ocean theater) to tiny island communities) <http://www.lastocean.com/> and <http://lastocean-project.org/>; Cassandra Brooks

The collage shows images from the Last Ocean Project, including a large inflatable screen, a person in a white lab coat, and a person in a blue shirt. There are also several smaller images and text snippets related to the project.

**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/01/14/cnnheroes.stokes/index.html?hpt=T2>

This collage features images from a CNN article about virtual mentoring. It includes a person in a white lab coat, a person in a blue shirt, and a person in a white lab coat. There are also several smaller images and text snippets related to the article.

### Totally Extreme #7. Open Teaching and Massive Open Online Courses (i.e., MOOC, David Wiley, George Siemens, Ray Schroeder)

eduMOOC  
Online Learning Today...and Tomorrow

Welcome to eduMOOC 2011

Activating Online Learning - From the MOOC11 open website, addressing how content providers can be in

edMOOC 2011

- 1. Online Learning Today
- 2. Why do we need MOOCs?
- 3. Online Technologies, Tools and Software
- 4. Online Learning: Pros and Risks
- 5. Models, Trends & Cases - Online Learning
- 6. Research Online Learning: Methods
- 7. Collaborative, Collaborative and Cloud
- 8. Online Learning: Tomorrow 2011, 2012

Faculty Online Education Trends

- 1. Online Learning Management
- 2. Massive Open Online Courses
- 3. Social Media
- 4. MOOCs
- 5. MOOCs
- 6. MOOCs
- 7. MOOCs
- 8. MOOCs
- 9. MOOCs
- 10. MOOCs
- 11. MOOCs
- 12. MOOCs
- 13. MOOCs
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- 19. MOOCs
- 20. MOOCs

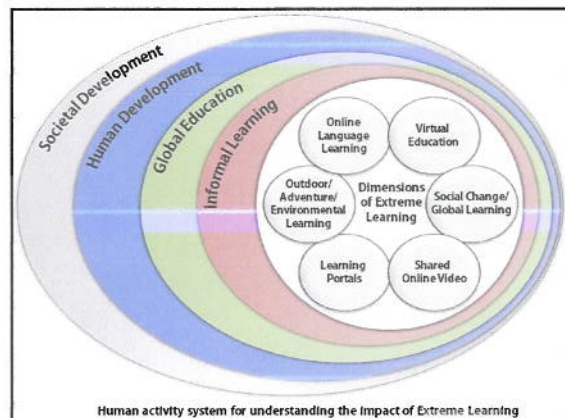
### Totally Extreme #8. International and Global Education and Competitions (e.g., Global Game Jams, online role play, Global Videoconferencing)

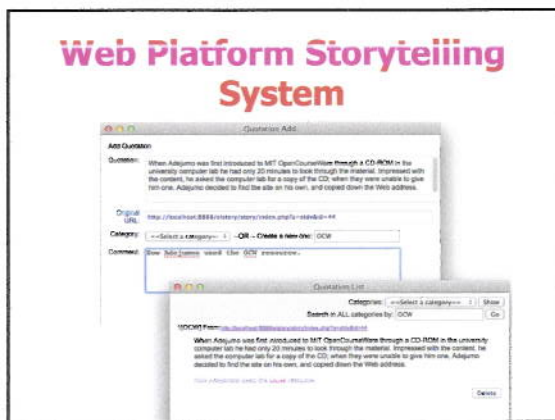
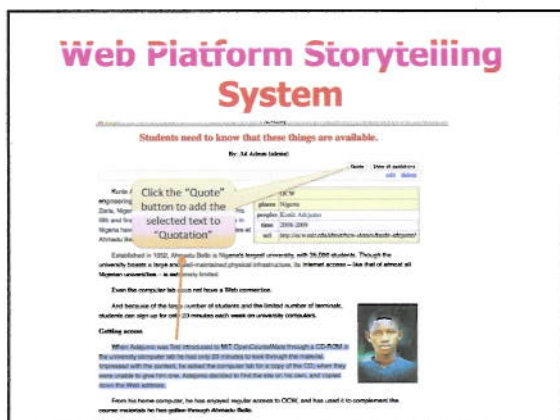
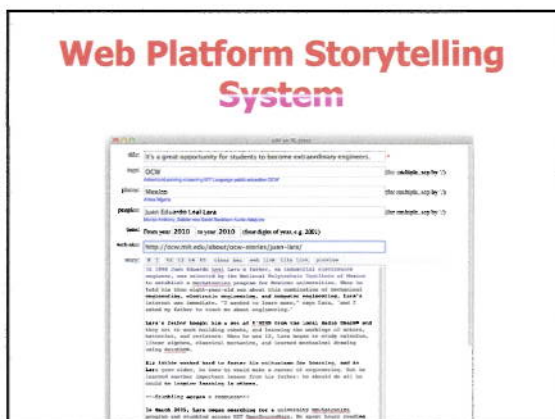
Global Game Jam

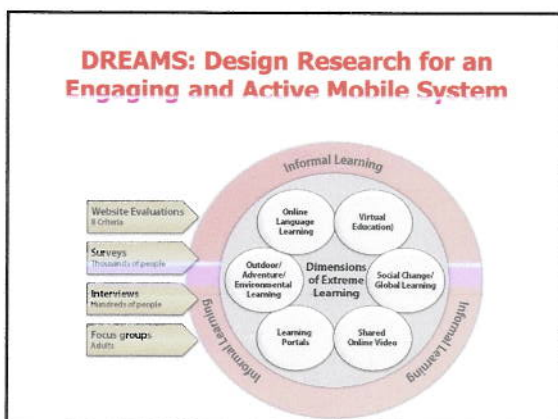
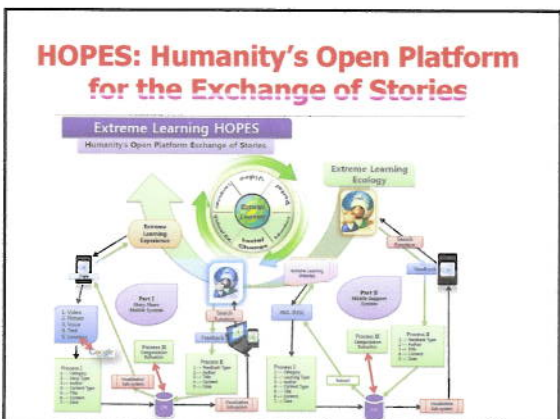
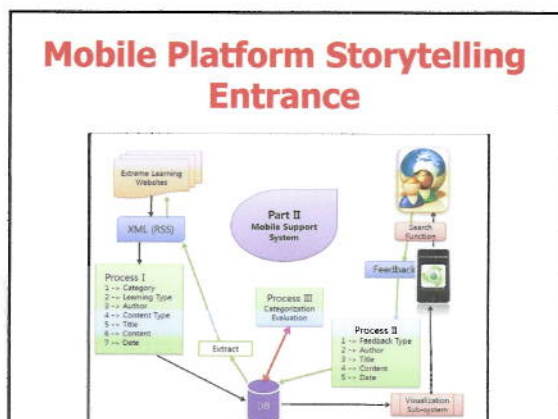
### Totally Extreme #9. Telepresence and Teleportec Systems (e.g., Cisco and HP)

### Totally Extreme #10. Military Mobile Learning and MBAs from War Zones (u.s. Army Learning Concept for 2015; 2011, January 15). <http://www.youtube.com/watch?v=K09NGAV3-3k> (4:26 minutes)

### Is this a revolution?







- ### DREAMS: Design Research for an Engaging and Active Mobile System
- Online Language Learning Sites:** Babbel, Livemocha, ChinesePod, English Central, BBC-Languages, Mixxer, Voxpop, Kan Talk, Ling, Vocab Sushi, InterPals.
  - Outdoor/Adventure Learning:** Polar Husky, Earthducation, the Last Ocean Project, Impossible2Possible, Roadtrip Nation, Explo.tv, Explorers Web, Nautilus Live.
  - Social Change/Global Education:** The Flat Classroom Project, Link TV, Soliya, ePals, IEARN, Free Rice, MGDFive.com, Infinite Family, Omnium Extension Projects.
  - Virtual Education:** Khan Academy, Open Yale, Wolfram Alpha, MIT OCW, Sophia, Peer 2 Peer University, Florida Virtual School, Wikiversity, Open High School of Utah.
  - Learning Portals:** JaneAustin.org, Einstein Archives Online, Shakespeare Online, Jane Goodall Institute, Curriki, MERLOT, Connexions, Encyclopedia of Life, Squidoo.
  - Shared Online Video:** Link TV, Book TV, Current TV, YouTube EDU, School Tube, Big Think, Fora TV, Clip Chef, Wonder How To, Howcast, TV Lesson, MIT World, Academic Earth, BBC Video Nation, CNN Presents, History for Music Lovers.

### Time to Stretch the Edges?

**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)**