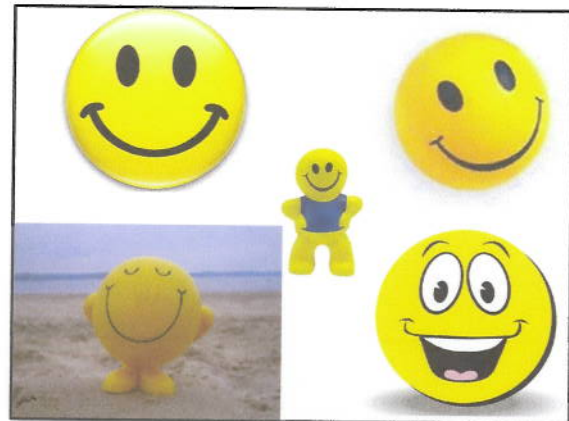


**I am Not Content:
The Future of Education Must Come Today**

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



Unraveling Dilemma 500: Dog Earns M.B.A. Online
 by Lisa Pappalardo

this IS my happy face

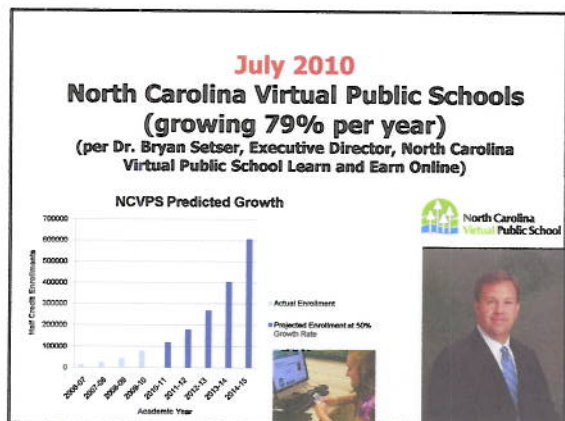
April 2, 2010
**TED talk from Adora Svitak, age 13,
 World's Youngest Teacher**

May 2010 (Paul Kim)
**We Are Going
 Global Mobile!**

■ IN SERVICE
 ■ COMMITTED

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



September 5, 2010 (David Wiley)

Open Source goes to High School (Utah)

<http://www.youtube.com/watch?v=sovve-j3xGk>

Open Source goes to High School

David Wiley, Executive Director, High School of Utah

September 2011

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

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

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

Center for Technology in Learning

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

Bill & Melinda Gates Foundation

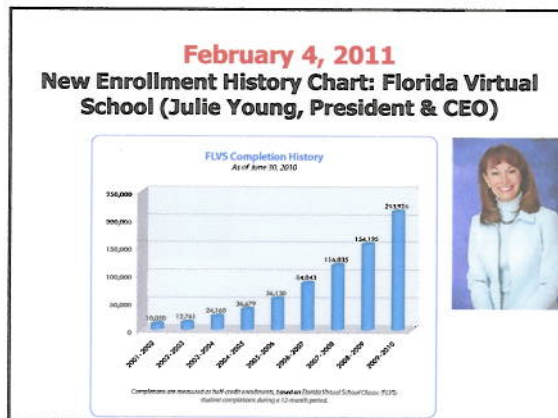
December 15, 2010

Mark Zuckerberg, Time Magazine, Person of the Year

SOCIAL NETWORKING

Top social networking sites

Site	Users (Millions)
Facebook.com	82.2 million
MySpace.com	64.2 million
Twitter.com	20.8 million
Orkut.com	17.4 million
Classmates.com sites	13.8 million
Bebo.com	12.1 million
MyLife.com sites	11.4 million
World Live Profile	10.3 million



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

February 18, 2011
Ten great sites with free teacher resources
eSchool News, Jenna Zwang,
<http://www.eschoolnews.com/2011/02/18/ten-great-sites-of-free-teacher-resources/>

April 12, 2011
NCTM Conference Session, 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.

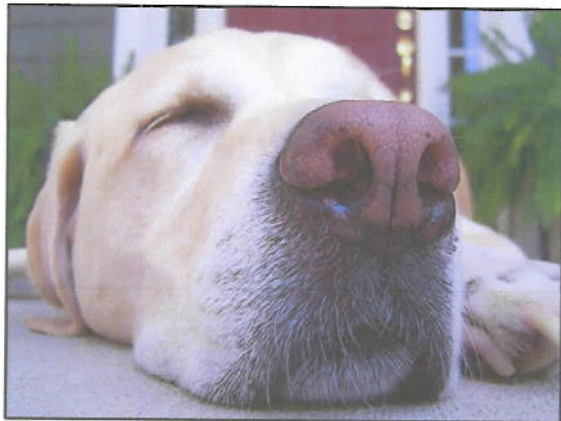
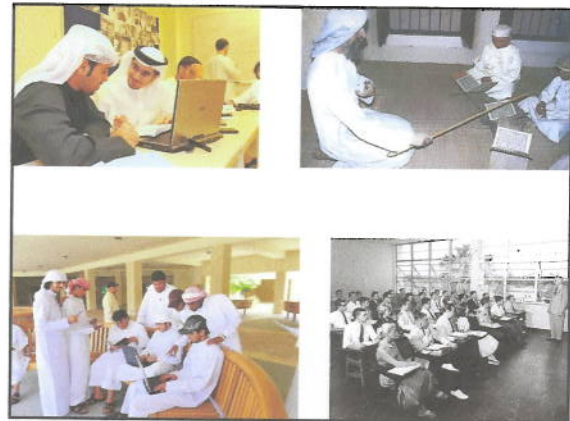
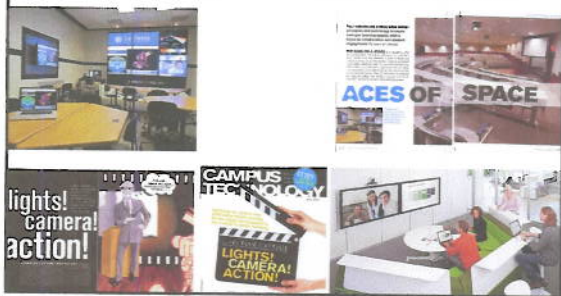
Jen Chauvot and Mimi Lee, Univ of Houston

April 27, 2011
Moodle (41+ million users in 211 countries, 54,000 sites, 4.4+ million courses)

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

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/>

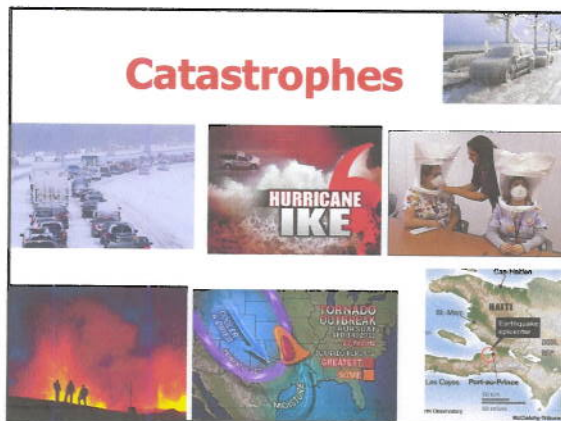
June 2011
1. Lecture Capture: Lights! Camera! Action!, John K. Waters, Campus Technology
2. Aces of Spaces, Jennifer Demski, Campus Tech.



But I am not Content!!!



Catastrophes



Let's Reflect Back 10 Years...



Shovelware

Wii
SHOVELWARE
You paid \$200 to play games... you're not a fan? How dumb are you?

May 24, 2010
Author Nicholas Carr, The Web Shatters Focus, Rewires Brains, Wired
http://www.wired.com/magazine/2010/05/ff_nicholas_carr/



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.

March 22, 2011

- 1. Tablets take PC evolution to next level, Scott Martin, USA Today**
- 2. Mark Weiser, Scientific American, 1991, The Computer for the 21st Century**

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

Google
PBWORKS Blogger Slideshare

We are entering a jumping off point...

Elements of the Web's Next Generation

Is the World Flat or Open ?

The World Is Flat
A BRIEF HISTORY OF THE TWENTY-FIRST CENTURY
Thomas L. Friedman

OPENING UP
EDUCATION
The Collective Advancement
of Education Through Open Technology,
Open Content, and Open Knowledge
Rita Kopka and M. Vito Kassar



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"

- 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.

What if our minds were on fire for learning?

A Cycle of Knowledge Building and Sharing

MINDS ON FIRE

Open Education, the Long Tail, and Learning 2.0

MINDS ON FIRE: OPEN EDUCATION, THE LONG TAIL, AND LEARNING 2.0. JOHN SEELY BROWN AND RICHARD ADLER, EDUCAUSE REVIEW, JANUARY-FEBRUARY, 2008.

Curriki, Connexions, OpenCourseWare (e.g., MIT OCW Highlights for High School)

Poll #1: Who finds it hard to keep track of all the technology-related changes today???

TechTrends

Teach the Modern Way!

Nature AND Nurture: Technology

Ten Learning Technology Trends of the Past Year...

September 15, 2010

Timeline of Technology for Teaching, NY Times

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

Technology of the 1980s

Radio Shack TRS-80 Model III

Introduced: July 1980
 Price: US \$699 basic model
 US \$2495 w/ 2DK, dual drives
 CPU: Zilog Z-80, 2.03 MHz
 RAM: 4K, 48K max.
 Ports: Cartridge tape, expansion, serial
 Display: 12-inch SVGA monitor: 64 X 16 text
 Storage: 0, 1, or 2 internal 178K floppy drives
 External cassette @ 500 / 1500 baud
 OS: BASIC in ROM, TRS-DOS on disk

#1. 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)

#2. 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

#3. 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

#4. Video Conferencing/Webcamming

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

Platform	Viewers
Google (YouTube)	14.3 billion
Facebook	727 million
Yahoo!	558 million
Vimeo	549 million
Vevo	487 million
Microsoft	482 million
ADL	348 million
Brink	347 million
Five Interactive (iVysion)	300 million
CBS	287 million

* includes Comedy Central and MTV Source: ComScore Media Intelligence

#5. 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"

PLAY NOW

#6. 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.

#7. 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	
Watson 1,190 pounds 4 years 2,800 processors 200 trillion computations (per second) 15 trillion memory (in bytes)	Human brain 3 pounds 6 million years 1 billion neurons 100,000 trillion computations (per second) 1 trillion memory (in bytes)

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

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

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

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

9. Mobile Tutors, April 7, 2011: Tutor.com Releases First Ed App that Connects Students to an Expert Tutor

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

Tutor.com To Go™ for iPhone, iPad & iPod Touch

#10. Mobile Apps, May 13, 2011: USA Today, Mary Beth Marklein

<http://www.usatoday.com/story/education/2011-05-13/mobile-apps-college-students/41494>

Apps make college easier to access

Nature AND Nurture: Pedagogy

Nature (Technology) Nurture (Pedagogy)

People, Society, Culture, etc.

Frame work #2: The R2D2 Model

CUTRE, J. BOIK | Kai Zhang
Empowering Online Learning
100+ Activities for Reading, Reflecting, Displaying & Doing

The R2D2 Method

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

1. Auditory or Verbal Learners

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

Read 1. Online Article Portals and Databases (e.g., Chronicling America: Historic American Newspapers) (<http://chroniclingamerica.loc.gov/>)

ARTICLE DATABASE FOR 8th CLASS

Reflect 2. Scientist Blog Reflections (The LAST OCEAN Website and The Last Ocean Project; Cassandra Brooks)

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

The screenshot shows a website titled 'MathET Learning Projects' with a sidebar menu and a main content area. The main content area features a 'Mindmaps' section with a list of projects and a central mind map diagram. The mind map has a central node 'Mindmaps' with three main branches: 'Creativity', 'Conceptual Learning', and 'Problem Solving'. Each branch has several sub-nodes.

Do 4. Podcast Productions and Shows (give kids the power!)

A collage of four photographs showing students in a recording studio. The top-left photo shows a student wearing headphones and speaking into a microphone. The top-right photo shows a student sitting at a desk with a laptop and microphone. The bottom-left photo shows a group of students sitting together, some looking at a laptop. The bottom-right photo shows a student sitting at a desk with a laptop and microphone.

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

A collage of five photographs showing students in a classroom. The top-left photo shows a student looking bored. The top-middle photo shows a student with a 'BORED' sign. The top-right photo shows a student with a 'MOTIVATION' sign. The bottom-left photo shows a student looking bored. The bottom-right photo shows a student looking bored.

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

A large one-billion dollar bill with a cartoon character on it. Two small figures are standing in front of the bill, one on the left and one on the right.

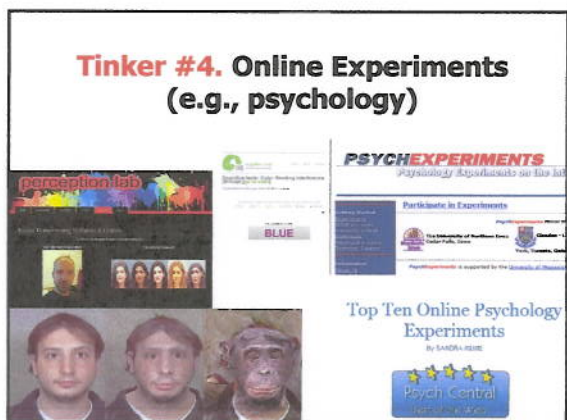
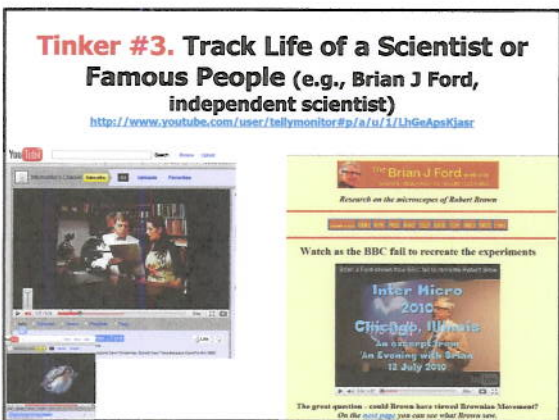
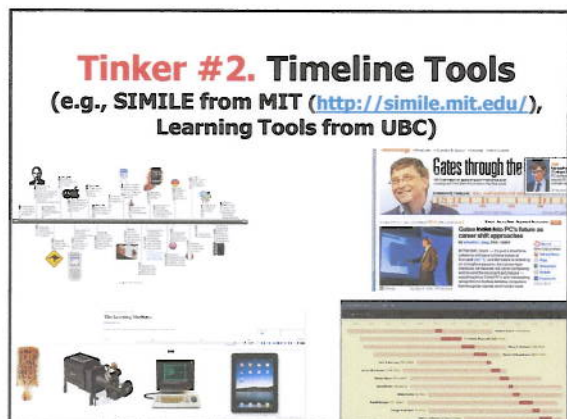
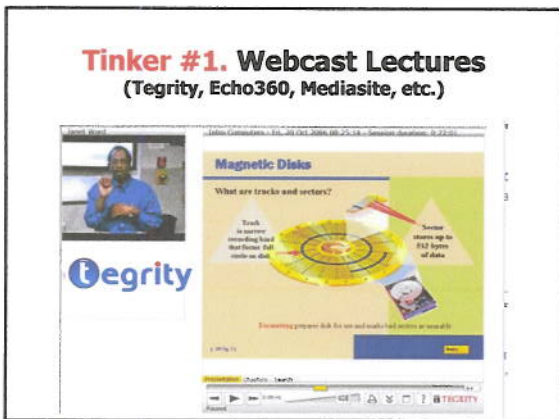
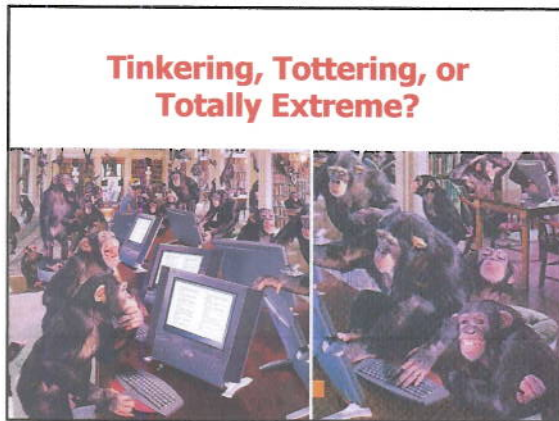
Framework #3: TEC-VARIETY Model for Online Motivation and Retention

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: B. Video Course Intros from Instructors.

Yun Yun Chow, Open U Malaysia
Making Art Lessons Come Alive with Web 2.0
<http://www.youtube.com/watch?v=B09rqJD1GXo>

The screenshot shows a YouTube video player. The video title is 'Making Art Lessons Come Alive with Web 2.0'. The video shows a group of students sitting around a table, looking at a laptop. A small inset video shows a person speaking.



Tinker #5. Educational Simulations

3D Human Anatomy
Color Pass

Tinker #6. Online Self-Testing (e.g., self study in accounting, vocabulary, anatomy, chemistry, dissection, etc.)

Calm - Computer Assisted Learning Modules

Upper Extremity Muscles

Tinker #7. Anchored Instruction with Shared Online Video

TED TALKS
IDEAS WORTH SPREADING

Tinker #8. 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.)

Tottering

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

Totter #2. Global Class Videoconferencing

Totter #3. Video Blogging and Podcasting

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

Totter #4. Wikibooks, Wikipedia editing, wiki syllabi, wiki glossaries

Web 2.0 and Emerging Learning Technologies
From Wikibooks to Wikiversity syllabi collection

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)

Ida's World
Could he not have his stand with the spirit of the Cause of Ida?

Totally Extreme #3. Armchair Archeology
UCLA Summer Digs Program

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

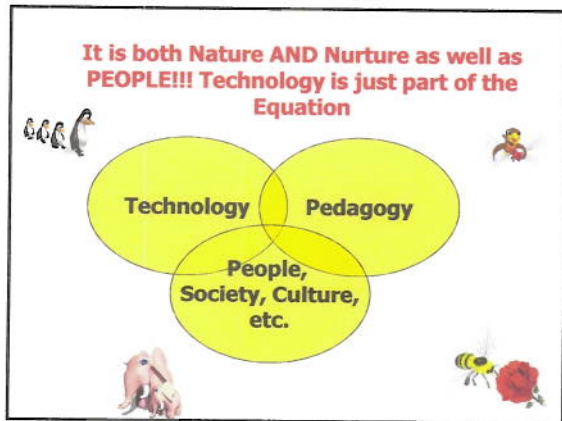
Totally Extreme #5. Adventure Learning
 (e.g., GeoThentic, Earthducation, Polar Husky, GoNorth; Aaron Doering, Univ of Minnesota; cars and bikes--Dan Grec and Mark Beaumont)

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.)

Abby Sunderland's blog

Totally Extreme #7. 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?opt=TX>

Totally Extreme #8. 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.)



Any Extreme Questions and Comments?

Slides at: TrainingShare.com

Papers: PublicationShare.com

Book: <http://worldisopen.com/>

Email: curt@worldisopen.com

The Future