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

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Change not possible as an accountant...
(Life as a CPA, 1981-1986)

Decided to Read, Read, Read...
(e.g., People like Albert Bandura, Howard Gardner, Roger Schank, Elliot Soloway, etc.)

Fast Forward 25 Years...
"Anyone can now learn anything from anyone at any time."

September 14, 2012
The Next 30 Years, USA Today,
http://www.usatoday.com/video/news/1839139560001

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From Tinkering to Tottering to Totally Extreme Learning...

Tinkering

Tinker #1.
Cases and Video Scenario Learning
(Franklin University, cost and forensic accounting course)
http://video.franklin.edu/Franklin/acct/managerialAccounting/cost-behavior-player.html
http://video.franklin.edu/Franklin/acct/342/common/fraudScenario02.html

Tinkering #2.
Tracking the Life of a Scientist
(e.g., Brian J. Ford, independent scientist)
http://www.youtube.com/user/tellymonitor#p/a/u/1/LhGeApsKjasr
http://www.labnews.co.uk/news/prehistoric-revolution/
http://www.youtube.com/embed/kjmNnRFHCzk?rel=0

Tinker #4.
Using Online Encyclopedias
(e.g, the Encyclopedia of Earth:
http://www.eoearth.org/)
http://en.wikipedia.org/wiki/Encyclopedia_of_Earth

Tinker #5.
Educational Videos: TED-Ed
http://education.ted.com/

Tinker #5. Interactive Event Timeline
Arab spring: an interactive timeline of Middle East protests,
The Guardian, Garry Blight & Sheila Pulham, July 12, 2011
http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-protest-interactive-timeline

Tinker #6. Predict outcomes (June 26, 2012)
(e.g., Interactive Political Maps: Huffington Post)
http://elections.huffingtonpost.com/2012/romney-vs-obama-electoral-map#cartogram

Tottering

Totter #1.
Wikibooks, Wiki-Glossaries, Wiki-Syllabi
(Ron Owston, York University, Toronto)

Totter #2.
Georgetown Learning Initiatives
Soliya Connect
http://gli.georgetown.edu/#soliya

Totter #3. Combining Asynchronous and Synchronous Events

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

Totter #5. Lessons on iPad
(e.g., ShowMe: http://www.showme.com/)

Totter #6. Student Collaborative
Knowledge Building and Sharing
(e.g., Popplet: http://popplet.com/

Totter #7.
Student Films and Documentaries
http://vimeo.com/33090590/ (Verily)
http://vimeo.com/33123125 (Anjali)
http://www.youtube.com/watch?v=IQZHvuZ3rbw&feature=youtu.be (Yue)

We are entering a jumping off point...

You Want Totally Extreme?
Apple's new 'spaceship' campus: What will the neighbors say?, Doug Gross, CNN, May 22, 2012
http://www.cnn.com/2012/05/22/tech/innovation/new-apple-campus/index.html?hpt=hp_bn11
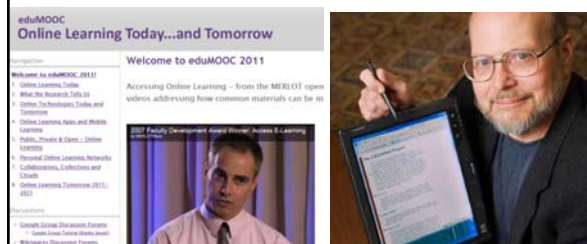
Totally Extreme #1. May 4, 2012
Bendable Displays/Screens
Flexible displays bend what's possible for computers, Jon Swartz, USA Today
http://mediagallery.usatoday.com/Flexible+screen+displays/G3657.A12064

Components of the wrist-worn display prototype developed at HP Labs are shown in this illustration. When completed, the device will incorporate a working flexible display powered by solar cells.

Totally Extreme #2. Open Teaching and Massive Open Online Courses (i.e., MOOC, David Wiley, George Siemens, Ray Schroeder)
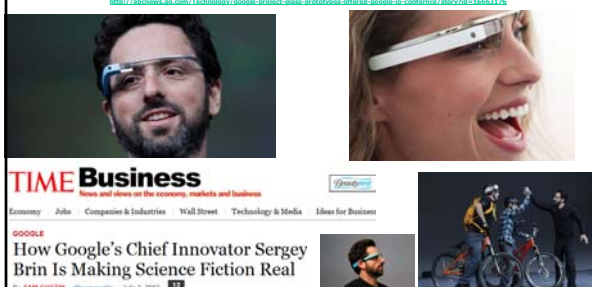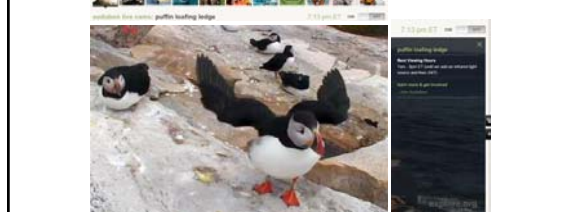

Totally Extreme #3. June 27, 2012
Google Glass
ABC News, Google I/O Conference: Project Glass Prototype For Sale
http://abcnews.go.com/Technology/google-project-glass-prototypes-offered-google-io-conference/story?id=16663176

Totally Extreme #4. June 27, 2012
Remote Animal Streaming
**Remote Maine puffin colony up close on HD web cam
Clarke Canfield, The Stateman, June 27, 2012**
http://www.statesman.com/business/technology/remote-maine-puffin-colony-up-close-on-hd-2405257.html

This still frame from streaming online video, provided by explore.org, the Annenberg Foundation and the National Audubon Society, shows puffins on the shore of Seal Island, Maine, Wednesday, June 27, 2012. The island is the habitat for the largest puffin colony in the U.S.

Totally Extreme #5. Adventure Learning about the Environment
(e.g., North of 60, GeoThentic, Earthducation, see Aaron Doering, Chasing Seals; http://chasingseals.com/)

Impossible2Possible
http://impossible2possible.com/home

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

**Michael Perham
(Sept 17, 2012)**
http://www.mikeperham.tv/

Totally Extreme #6.
iPod Learning from MIT OCW
(e.g., Wendy Ermold, University of Washington)

Totally Extreme #7.
MBAs from War Zones...!

Totally Extreme #8.
Kids Learn Online, Teach Online
(e.g., the World's Youngest Teacher; Adora Svitak)

Totally Extreme #9. 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

Totally Extreme #10.
Telepresence, Virtual Presenters, and Teleportec Systems (e.g., Cisco and HP)

Totally Extreme #11.
Online Language Learning and Conversations
(e.g., PalTalk, iTalki, OpenLanguage, Babbel)

Totally Extreme #12. Virtual Mentoring
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

Totally Extreme #13. June 3, 2012
Tutor/Mentor Connection (Chicago)
http://www.tutormentorprogramlocator.net/InteractiveMap.aspx

Totally Extreme #14. May 8, 2012
"Project Re: Brief | Coca-Cola | Mobile Ad Demo"
http://www.youtube.com/watch?v=45Z-GevoYB8&feature=relmfu

Totally Extreme #15.
Blogging Field Archeology Research
(e.g., Lily Henry Roberts, UCLA digging in Hope, BC, Stó:lō First Nation people from 12,000 years ago)

Totally Extreme #16.
Shared Online History Videos
(e.g., "History for Music Lovers" with over 50 songs including: Trojan War "Tainted Love" by Soft Cell; Charlemagne "Call Me" by Blondie, Cleopatra, Napoleon, Shakespeare, the Vikings)

Totally Extreme #17.
Students/Instructors Publish Own Books
(e.g., Apple's new electronic textbook initiative)

Totally Extreme #18. Pocket School and Videoconferencing in Developing World
(Paul Kim, Stanford and Seeds for Empowerment in Rwanda, India, Mexico, Tanzania, etc.)

February 2012
Seeds for Empowerment, Tanzania
Getting Juice for Technology (generator)

February 2012
Seeds for Empowerment, Tanzania
(Paul Kim turning it on!)

February 2012
SMILE: Stanford Mobile Inquiry-based Learning Environment

February 2012
Seeds for Empowerment, Tanzania
(Alex Bonk and the kids...)

Extreme Learning Website
www.extreme-learning.com

Visual Representation of the Dimensions and Impact of Extreme Learning

DREAMS: Design Research for an Engaging and Active Mobile System

Sample HOPES Stories

What are your Extreme Learning HOPES and DREAMS?
Website: www.Extreme-Learning.com
Slides at: TrainingShare.com
Book: http://worldisopen.com/
Dr. Curt Bonk – CJBonk@Indiana.edu
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