Adding Motivation to Online and Blended Courses and Activities with the TEC-VARIETY Model

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

1728: 1ˢᵗ correspondence course advertised Boston
(learn shorthand from Caleb Phillips thru weekly mailed lessons)
The First University Correspondence Course
(University of London, External Program, 1858)
1728-1990s – Generally postal system based
1930s – phonograph and radio
1950s and 1960s – television
**1970s and 1980s – VHS tapes**
1980s and 1990s – DVD

Charles Wedemeyer Quote #1:
"It should be immaterial whether one has learned at the front door or the back door of the Palace of Learning. What one has learned—not where, or how, in what sequence, at what institution, or in what period of time—is the only criterion of supreme importance."
(Charles Wedemeyer, 1981, p. 216)

Took Correspondence & TV Courses
(thanks to Bob Clasen and Charles Wedemeyer, the University of Wisconsin)
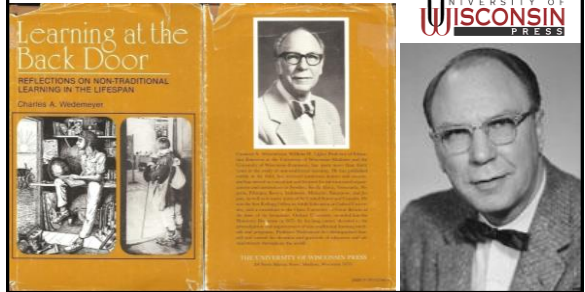
Fall 2014, On Wisconsin
MOOC, Meet MORC (Massive Open Radio Course)
WHA, UW Madison, College of the Air,1933,
Vocational Training dedicated to Agriculture,
and later Home Economics and Typing

MOOC, Meet MORC

May 10, 2013
10 ed-tech tools of the 70s, 80s, and 90s
eSchool News, Meris Stansbury
http://www.eschoolnews.com/2013/05/10/10-ed-tech-tools-of-the-70s-80s-and-90s/print/
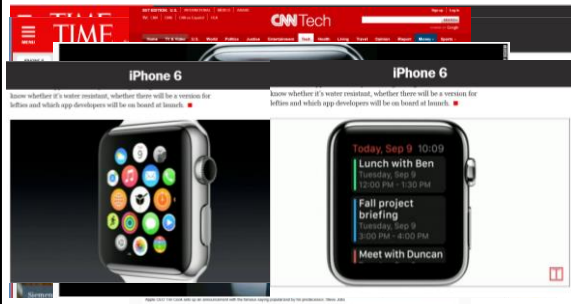
Part I. Learning is Changing
New Technologies =
New Delivery Methods…
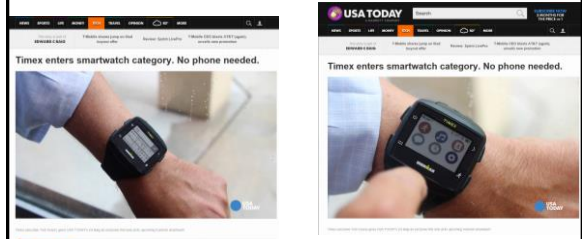

I. Learning is More
Technology-Based

September 9, 2014
I. Learning is More Technology-Based

II. Learning is More Mobile
August 5, 2014
Timex enters smartwatch category. No phone
needed, Edward C. Baig, USA Today,
http://www.usatoday.com/story/tech/columnist/baig/2014/08/05/timex-enters-smartwatch-category-no-phone-needed/13597331/

Audience Poll #1:
I. Who remembers what they were
doing on 911?
II. Who remembers what they were
doing on April 4, 2001?

III. Learning is More Open
June 12, 2014
Open access publisher brings scholarship to
developing world
David Matthews, Times Higher Education
http://www.timeshighereducation.co.uk/news/open-access-publisher-brings-scholarship-to-developing-world/2013833.article

June 16, 2014

Metra Mehran is a college student in Political Science and Public Administration in Afghanistan.
Afghanistan Student Keynote, by Elliott Masie
Learning 2014, October 26-29, 2014
http://www.learning2014.com/blog/item/afghanistan-student

VI. Learning is More Flipped
August 1, 2014

Get schools out of the 1890s, Newt Gingrich, CNN
http://www.cnn.com/2014/08/01/opinion/gingrich-schools-blended-teaching-technology/index.html?hpt=hp_t3

VII. Learning is More Video-Based
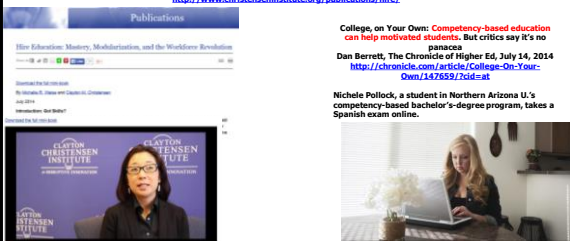## July 2014

FlipforLearning: http://www.flipforlearning.com/
uTutor.me: http://www.ututor.me/

September 22, 2014
110 Foot Engagement,
Elliott Masie's Learning 2014

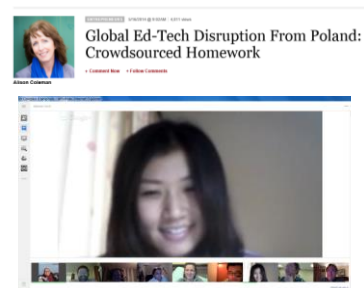http://www.learning2014.com/index.php/item/110-foot-screen-engagement.html

VIII. Learning is More Competency-Based
July 31, 2014

Hire Education: Mastery, Modularization, and the Workforce Revolution, Michelle R. Weise and Clayton M. Christensen, The Christensen Institute
http://www.christenseninstitute.org/publications/hire/

College, on Your Own: Competency-based education can help motivated students. But critics say it's no panacea
Dan Berrett, The Chronicle of Higher Ed, July 14, 2014
http://chronicle.com/article/College-On-Your-Own/147659/?cid=at

Nichole Pollock, a student in Northern Arizona U.'s competency-based bachelor's-degree program, takes a Spanish exam online.

IX. Learning also is More Collaborative
May 16, 2014

X. Learning is More Modifiable
Inside Look: Learning Spaces, Meeting classroom teaching and collaboration expectations, University Business, Feb. 22, 2013
http://www.universitybusiness.com/article/inside-look-learning-spaces

XI. Learning is More Comfortable
Design for Students, with Students, "Hub Central", the $42 million University of Adelaide learning hub opened in October 2011, May 8, 2012, Mike Roberts
http://designbuildsource.com.au/design-for-students-with-students

XII. Learning is More Ubiquitous
Flexible displays bend what's possible for computers, Jon Swartz, USA Today (May 4, 2012)

September 16, 2014
Panipat Teen Develops Device to Convert Breath Into Words, NDTV
http://www.ndtv.com/article/offbeat/panipat-teen-develops-device-to-convert-breath-into-words-591199?site=classic

Place the sensor under the nose or mouth as per your convenience.

Make short exhales (sniffs) to send Dots as in the Morse Code.

Make little longer exhales to send Dashes as in the Morse Code.

Wait for a beep from Earclip after completion of word.

Repeat the same steps for other words, phrases and sentences.

Let TALK do its magic and speak out your expression.

XIII. Learning is More Instantaneous
April 9, 2013
HER Computer fashions face social test: Can wearable computers fit in? Scott Martin, USA Today
http://www.usatoday.com/story/tech/2013/04/06/google-apple-iwatch-glass-jawbone-nike-microsoft-samsung/1979419/
(i.e., magnify moles or injuries, see vital signs, live stream surgeries, access previous PT sessions, access research and drug info, etc.)
http://www.fiercemobilehealthcare.com/story/google-glasses-could-have-strong-potential-healthcare-use/2013-03-18

IVX. Learning is More On Demand
May 5, 2014
Mobile MOOCs: New platform challenges conventional MOOCs
eCampus News (https://coursmos.com/)
http://www.ecampusnews.com/top-news/new-platform-challenges-conventional-moocs/print/

XV. Learning is More Personal
August 5, 2014
OpenStax Aims To Bring Free Digital Textbooks to High Schools, David Nagel, THE Journal
http://thejournal.com/articles/2014/08/05/openstax-aims-to-bring-free-digital-textbooks-to-high-schools.aspx

XVI. Learning is More Global
August 1, 2014
Can You Really Teach a MOOC in a Refugee Camp?, Chronicle of Higher Education, Steve Kolowich
http://chronicle.com/blogs/wiredcampus/can-you-really-teach-a-mooc-in-a-refugee-camp/54191?cid=at&utm_source=at&utm_medium=en

Two men living in Dadaab, a refugee camp in Kenya, would watch lecture videos and take online quizzes at a nearby United Nations compound. (InZone)

January 2014
XVII. Learning is More Online
Grade Change: Tracking Online Education in the United States, 2013, The Sloan Consortium, I. Elaine Allen & Jeff Seaman, 2013 Survey of Online Learning Report and 2014 data from Indiana University
http://sloanconsortium.org/publications/survey/grade-change-2013
Direct connect: http://www.onlinelearningsurvey.com/reports/gradechange.pdf

June 15, 2014
Starbucks offers workers 2 years of free college, CNN Money, Gregory Wallace (from Arizona State online programs)
http://money.cnn.com/2014/06/15/news/economy/starbucks-schultz-education/index.html?hpt=hp_t2

XVIII. Learning is More Self-Directed
February 2013, TED Talks
(**Build a School in the Cloud; Self-Organized Learning Environments (SOLEs), TED Talk from Sugata Mitra**
http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud.html

XIX. Learning is More Adventurous
Aaron Doering, Chasing Seals, TEDx
http://chasingseals.com/

XX. Learning is More Massive
Sample Course: Open Knowledge:
Changing the Global Course of Learning
September 2, 2014 to December 12, 2014, Stanford
https://class.stanford.edu/courses/Education/OpenKnowledge/Fall2014/about#
Softcover ($30): http://www.parlorpress.com/invasion_of_the_moocs
Free (PDF): http://www.parlorpress.com/pdf/invasion_of_the_moocs.pdf

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Things are heating up!
http://routledge-ny.com/books/details/9781138807419/

MOOCs and Open
Education Around
the Word
By Bonk, Lee, Reeves, & Reynolds

MOOCs and Open Education Around the World
http://routledge-ny.com/books/details/9781138807419/

Let's Review:
Learning is Changing...
(i.e., it's more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)

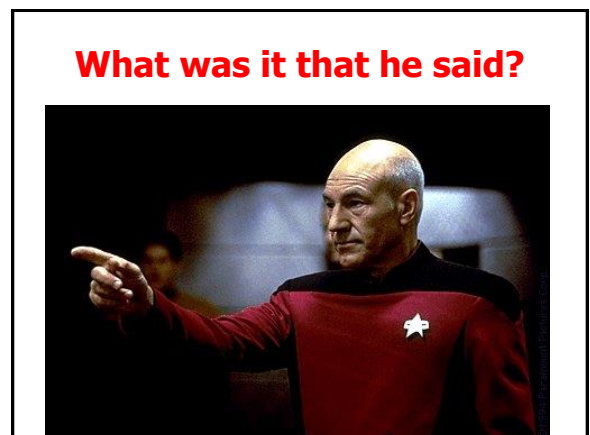**Frank Basile, an aircraft technician, took an MITx course on circuits and electronics to increase his knowledge.**
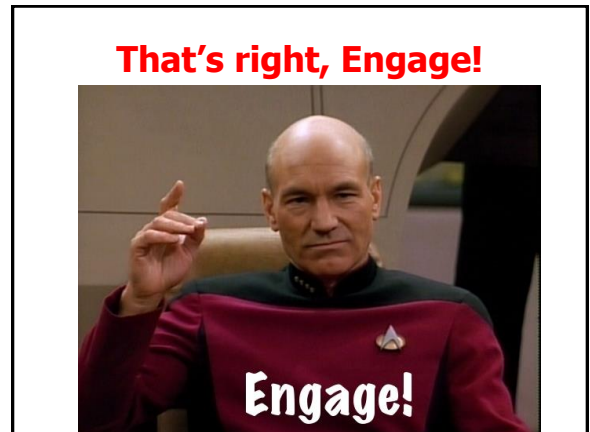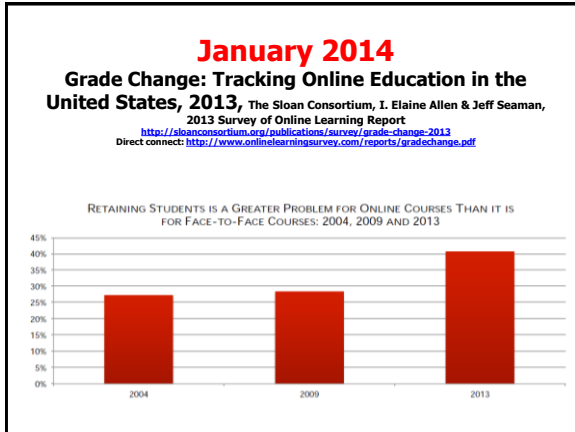
Joe Alfonso, a financial adviser from Oregon, is taking the online finance course as a "refresher."

Audience Poll #2:
Are we going crazy yet?
Any questions?

New Instructor Roles
(Concierge, Curator, Counselor, etc.)

January 2014

Grade Change: Tracking Online Education in the United States, 2013, The Sloan Consortium, I. Elaine Allen & Jeff Seaman, **2013 Survey of Online Learning Report**
http://sloanconsortium.org/publications/survey/grade-change-2013
Direct connect: http://www.onlinelearningsurvey.com/reports/gradechange.pdf

RETAINING STUDENTS IS A GREATER PROBLEM FOR ONLINE COURSES THAN IT IS FOR FACE-TO-FACE COURSES: 2004, 2009 AND 2013

Motivation and Engagement

What did Jean-Luc Picard say?

That's right, Engage!

How do we engage online?

What was it that he said?

Audience Poll #3:
What does engagement look like?
NASA's spacey Google+ Hangout
http://cosmiclogphonews.com/_news/2013/02/22/17057588-nasas-spacey-google-hangout-

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.
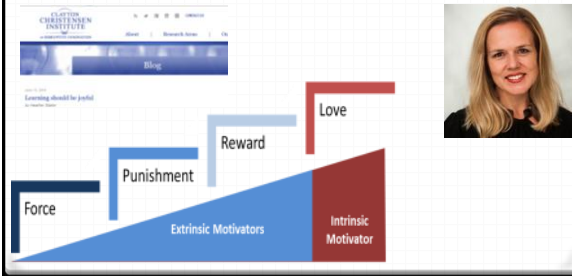10. Make content **personal**, concrete, familiar.

June 13, 2014
Learning should be joyful,
Heather Stacker, Blog Post, Clayton Christensen Institute
http://www.christenseninstitute.org/learning-should-be-joyful/

Intrinsic Motivation

"…**innate propensity to engage one's interests and exercise one's capabilities, and, in doing so, to seek out and master optimal challenges**

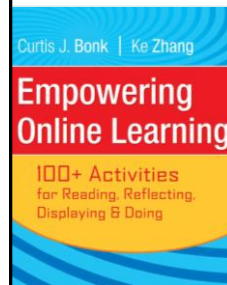(i.e., it emerges from needs, inner strivings, and personal curiosity for growth)

See: Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. NY: Plenum Press.

Audience Poll #4:
How can technology address diverse learner needs?
(and how can we engage the borg?)
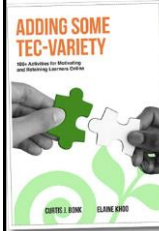

Framework: The R2D2 Model

Framework: TEC-VARIETY for Online Motivation and Retention
(May 2014)

1. **T**one/Climate: Psych Safety, Comfort, Belonging
2. **E**ncouragement, Feedback: Responsiveness, Praise, Supports
3. **C**uriosity: Surprise, Intrigue, Unknowns
   ...
4. **V**ariety: Novelty, Fun, Fantasy
5. **A**utonomy: Choice, Control, Flexibility, Opportunities
6. **R**elevance: Meaningful, Authentic, Interesting
7. **I**nteractive: Collaborative, Team-Based, Community
8. **E**ngagement: Effort, Involvement, Investment
9. **T**ension: Challenge, Dissonance, Controversy
10. **Y**ields Products: Goal Driven, Purposeful Vision, Ownership

Introducing the "TEC-VARIETY book...
http://tec-variety.com/

ADDING SOME TEC-VARIETY
100+ Activities for Motivating and Retaining Learners Online

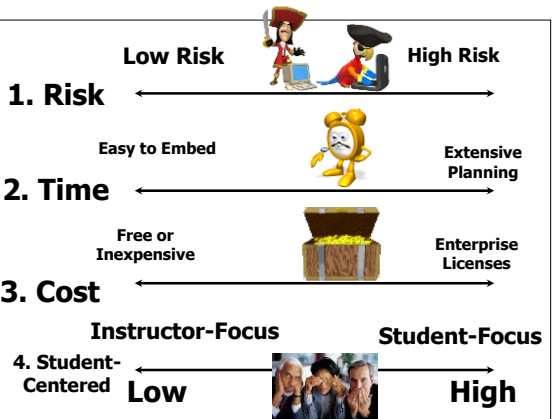CURTIS J. BONK   ELAINE KHOO

What motivates?
1. **T**one/Climate: Psychological Safety, Comfort, Sense of Belonging
2. **E**ncouragement: Feedback, Responsiveness, Praise, Supports
3. **C**uriosity: Surprise, Intrigue, Unknowns
4. **V**ariety: Novelty, Fun, Fantasy
5. **A**utonomy: Choice, Control, Flexibility, Opportunities
6. **R**elevance: Meaningful, Authentic, Interesting
7. **I**nteractivity: Collaborative, Team-Based, Community
8. **E**ngagement: Effort, Involvement, Investment
9. **T**ension: Challenge, Dissonance, Controversy
10. **Y**ielding Products: Goal Driven, Purposeful Vision, Ownership
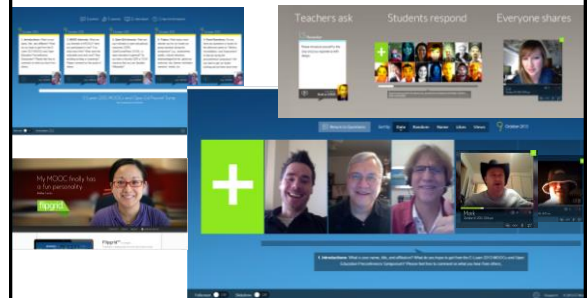
Every Chapter is Free in TEC-VARIETY...
### http://tec-variety.com/freestuff.php

Examples of TEC-VARIETY

1. **Risk** — Low Risk / High Risk
2. **Time** — Easy to Embed / Extensive Planning
3. **Cost** — Free or Inexpensive / Enterprise Licenses
4. **Student-Centered** — Instructor-Focus / Student-Focus — Low / High

1. **T**one/Climate: A. Video Introductions, e.g., Flipgrid
http://flipgrid.com/#429f88c5)

1. Tone/Climate:
B. Share Visuals of Favorite Places
(e.g., Panoramio,
http://www.panoramio.com/)
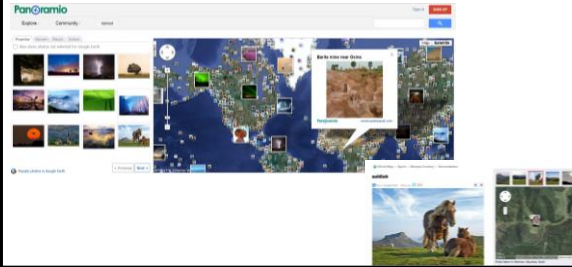
2. Encouragement, **Feedback,**
etc.: A. Voice Feedback
Vocaroo; http://vocaroo.com/
http://vocaroo.com/i/s0QRtmhJ27MK **(UIS)**

2. Encouragement, **Feedback,**
etc.: B. Blog and Website Polling
(e.g., Poll Everywhere, BlogPolls, BlogPoll, MicroPoll)
http://www.polleverywhere.com/
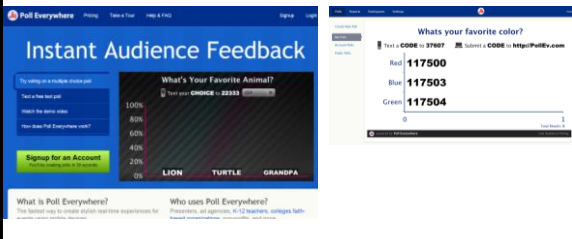
May 29, 2014
2. Encouragement, Feedback, etc.:
C. Demonstrations and Tutorials,
Emerging technology specialist, IU UITS, Nitocris Perez
http://inside.iub.edu/features/videos/2014-05-29-inub-vid-cib.shtml

3. Curiosity, Fun:
A. Something in the News
New 'massive' dinosaur skeleton discovered, USA Today,
September 5, 2014 (Dreadnoughtus)
http://www.usatoday.com/story/tech/2014/09/04/dinosaur-skeleton-discovered/15031803/

3. Curiosity, Fun:
B. Something in the News
(e.g., Fauja Singh, 101, finishes last race, February 24, 2013)
http://espn.go.com/sports/endurance/story/_/id/8979487/fauja-singh-101-caps-career-10k-hong-kong

3. Curiosity, Fun:
C. Online Quiz Games
Jeopardy Labs
https://jeopardylabs.com/play/ganttpardy

3. Curiosity, Fun:
D. 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/

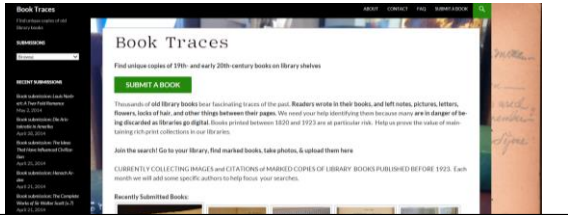## 3. Curiosity, Fun:
E. Historical Document Analyses
e.g., Book Traces
Find unique copies of 19th- and early 20th-century books on library shelves
http://www.booktraces.org/

3. Curiosity, Fun:
F. Cultural Blogs (e.g., Dr. Kim Foreman, San Fran State Univ, Come and See Africa Blog;
http://comeandseeafrica.blogspot.com/)
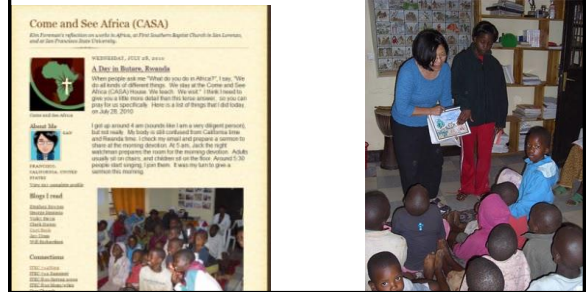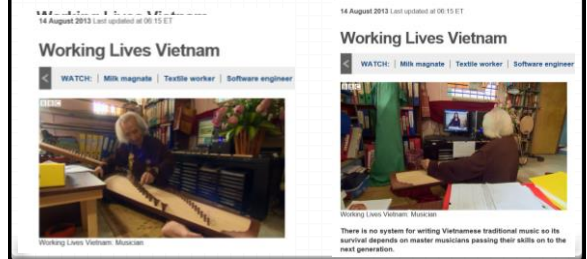

4. Variety, Novelty, Fun:
A. External Guests
(e.g., Jay Cross, Internet Time Group)

4. Variety, Novelty, Fun:
B. External Guests
Working Lives Vietnam, August 14, 2013, BBC News Asia
Even though he is now very elderly Vinh Bao (age 96) still teaches music, using his computer to coach pupils across the globe.
http://www.bbc.com/news/world-asia-23497559

5. Autonomy, Choice:
C. Design Multimedia Glossaries
Ozgur Ozdemir, December 2012
http://r685glossary.shutterfly.com /
Umida Khikmatillaeva, Dec. 2011, P540
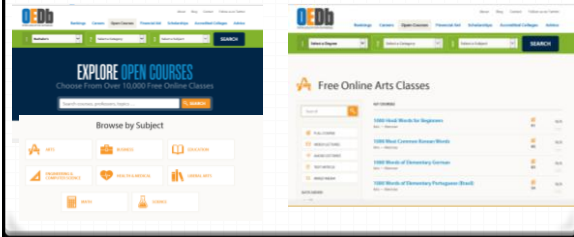http://learningplanet.shutterfly.com/

5. Autonomy, Choice:
D. Enroll in a MOOC and Reflect
Open Knowledge: Changing the Global Course of Learning
September 2, 2014 to December 12, 2014, Stanford
https://class.stanford.edu/courses/Education/OpenKnowledge/Fall2014/about#

June 17, 2014
5. Autonomy, Choice:
E. Open Education Database
Class Central
https://www.class-central.com/
http://oedb.org/open/

5. Autonomy, Choice:
F. Class Central
https://www.class-central.com/
http://oedb.org/open/

5. Autonomy, Choice:
G. Visual Library Search
Digital Public Library of America
http://dp.la/
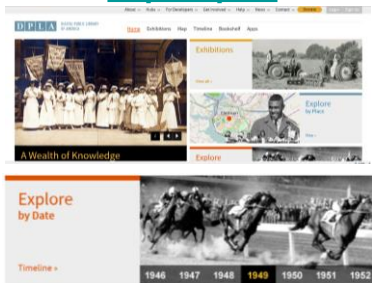
5. Autonomy, Choice:
H. Attend Webinar (pick weeks and reflecti)
Cathy Davidson, The End of Higher Education
http://connectedcourses.net/thecourse/why-we-need-a-why/

5. **A**utonomy, Choice:
I. Online Learning Object Repositories and Portals (shared content)
April 23, 2014
Shakespeare's Dictionary? Skepticism Abounds,
Chronicle of Higher Education, Jennifer Howard
http://shakespearesbeehive.com/barets-alvearie

Audience Poll #3:
Whu had light bulb going off in your heads so far...? If so, were?

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6. **R**elevance, Meaningfulness:
A. Case-Based Learning: Instructor Cases
(e.g., Mark Braun, IU)

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6. **R**elevance, Meaningfulness:
B. Collect and Listen to Interactive Stories
(e.g., Meograph: http://www.meograph.com/)
Timelines with Oral Histories, Slavery and the Making of America
Time and Place, PBS
Slavery/timeline/1857.html

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7. **I**nteractive, Collaborative:
A. Collaboration and Discussion in Google Hangouts, Jabber, Skype, etc
(January 29 and February 25, 2013)

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7. **I**nteractive, Collaborative:
B. Negotiate Meanings Online
(e.g., PiratePad: http://meetingwords.com/)
MeetingWords is a simple text editor for the web.
Your text is saved on the web, and more than one person can edit the same document at the same time.
Everybody's changes are instantly reflected on all screens. Work together on meeting notes, brainstorming sessions, homework, team programming and more!

7. Interactive, Collaborative:
**C. Virtualize Words Used
(e.g., Wordle, Tagzedo, Tagul,
WordSift, Word It Out)**
http://shellyterrell.com/2010/02/14/12-word-cloud-resources-tips-tools/
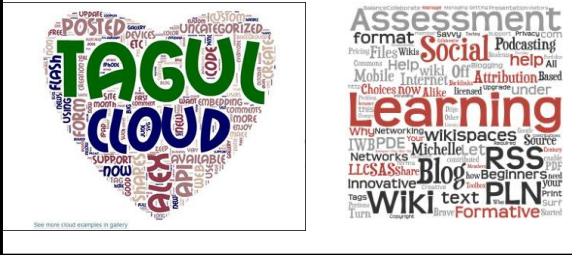
8. Engagement, Effort:
A. Student Generated Timelines,
(e.g., Dipity, Simile, Xtimeline, Timeglider, Meograph)
(e.g., Raymond Chandler, The Big Sleep, Kate Hurd)
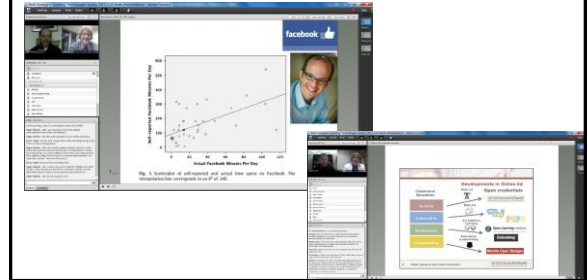http://hurdinsuranceagency.com/thebigsleep/

8. Engagement, Effort:
B. Virtual Timelines from News Media
**(How Facebook changed our lives, Marco della Cava, USA Today,
February 3, 2014)**
http://www.usatoday.com/story/tech/2014/02/02/facebook-turns-10-cultural-impact/5063979/
http://www.usatoday.com/tech/news/story/2011-09-22/steve-jobs-dies/50672498/1
http://www.usatoday.com/news/destinations/story/2011-08-25/Martin-Luther-King-Jr-Memorial-in-Washington-A-closer-look/50136470/1?csp=34news
http://www.usatoday.com/story/life/movies/2013/04/10/harrison-ford-jackie-robinson/2001783/

8. Engagement, Effort:
C. Guest Speaker Quotes
(Rey Junco, February 25, 2013)

8. Engagement, Effort:
D. Big Issue Reflections
**(Big Questions Online (BQO)), May 27, 2014
(e.g., What makes us generous? What is the difference
between knowledge and understanding?)**
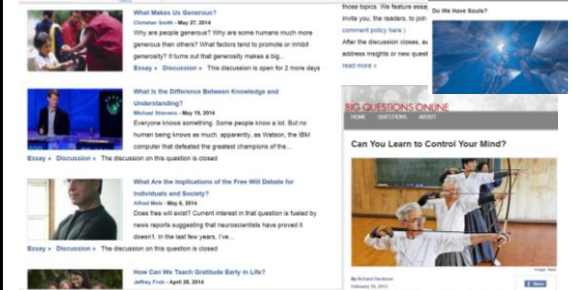
8. Engagement, Effort:
E. Interpreting Infographics
Millennials Will Soon Rule The World: But How Will They Lead,
Forbes, September 12, 2014, Josh Bersin
http://www.forbes.com/sites/joshbersin/2013/09/12/millenials-will-soon-rule-the-world-but-how-will-they-lead/

8. **E**ngagement, Effort:
F. Interactive Map Timelines
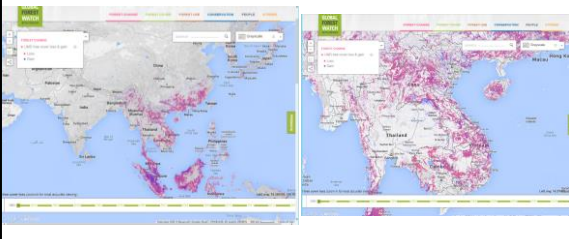(adults with college degrees by county, May 7, 2012)
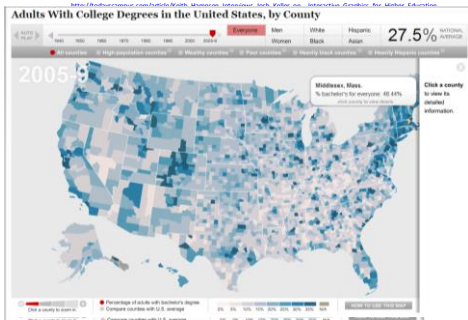
8. **E**ngagement, Effort:
G. Data Visualization Tools (Harvard and MIT MOOCs) Lawrence Biemiller, February 20, 2014, Chronicle of Higher Education
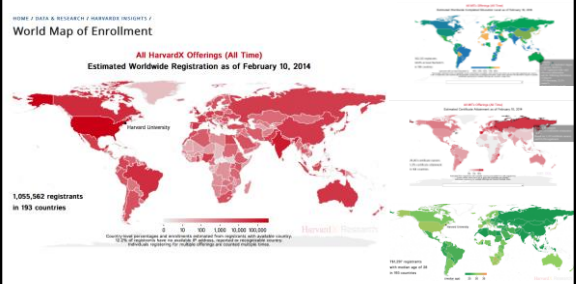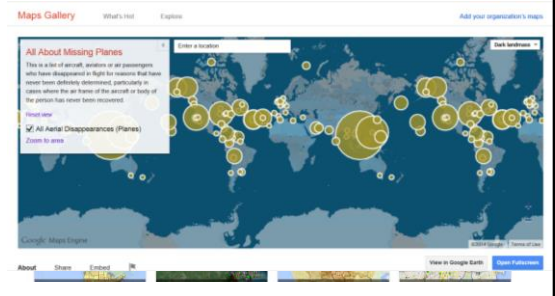

8. **E**ngagement, Effort:
H. Map Trend Interpretations
e.g., Global Forest Watch (April 2014)
http://www.globalforestwatch.org/map/3/-3.72/27.00/ALL/grayscale/loss/596

8. **E**ngagement, Effort:
I. Google Map Gallery
September 16, 2014
http://maps.google.com/gallery/

8. **E**ngagement, Effort:
J. Medical Simulations and Practice Cases
The School of Medicine, University of Virginia
http://uvamagazine.org/articles/adjusting_the_prescription/

The newly expanded Medical Simulation Center lets medical trainees practice skills and case scenarios in clinical settings that mimic actual situations. Outside the operating room, a technology specialist manipulates vital signs on a patient simulator and controls the cameras recording the session.

8. **E**ngagement, Effort:
K. Interactive Multimedia E-Books
'Dubliners' Comes to Life in Boston College's Annotated E-Book,
Avi Wolfman-Arent, The Chronicle of Higher Education, June 10, 2014
http://chronicle.com/blogs/wiredcampus/dubliners-comes-to-life-in-boston-colleges-annotated-e-book/53175?cid=pm&utm_source=pm&utm_medium=en
Digital Dubliners: **http://digitaldubliners.com/**
http://joyceways.com/

o Using Apple's **iBooks Author** software, **they infused the text with critical analysis, multimedia annotations, and video commentary from Joyce scholars.** The result now lives on iTunes, where anyone, anywhere, can use it free. The e-book, according to its creators, contains about 300 images, more than 700 notes and explanations, and two dozen videos.

9. Tension, Challenge, etc.:
A. Online Math Competitions
(i.e., Math March Madness, Greg Toppo, March 26, 2013, USA Today)
http://www.stargazette.com/article/20130326/NEWS02/303260008/Fibonacci-Final-Four-Math-March-Madness-coming

Fibonacci Final Four? Math March Madness coming

9. Tension, Challenge, etc.:
B. Vocabulary Competitions (e.g., Kids learning new words
at warp speed, January 14, 2014, Greg Toppo (Georgia Scurletis, Dir of Curriculum Development, for
Vocabulary.com (Thinkmap) presents a banner to Marc Williams, Brooklyn Technical High School)
http://www.usatoday.com/story/news/nation/2014/01/13/vocabulary-schools-online-competition-education-students-teachers/4455087/
Vocabulary.com: https://www.vocabulary.com/

July 10, 2014
9. Tension, Challenge, etc.:
C. Controversial Issue Debates
Scholarly journal retracts 60 articles, smashes 'peer
review ring', Fred Barbash, Washington Post
http://www.washingtonpost.com/news/morning-mix/wp/2014/07/10/scholarly-journal-retracts-60-articles-smashes-peer-review-ring

Morning Mix
Scholarly journal retracts 60 articles,
smashes 'peer review ring'

9. Tension, Challenge, etc.:
D. Cage Matches or Debates
(with online audience topical suggestions)
Cage Match on MOOCs at SXSWedu 2013
(Curt Bonk & Chuck Severance)
http://chronicle.com/blogs/wiredcampus/at-south-by-southwest-education-event-tensions-divide-entrepreneurs-and-educators/42777
https://soundcloud.com/sxswedu/cage-match-the-massive-open

10. Yields Products, Goals:
**A. Course Video Summaries and Multimedia Team
Assignments (April. 24, 2014)**
Piercarlo Abate: http://www.youtube.com/watch?v=_-TURzH00aU
Qi Li, Gangnam: http://www.youtube.com/watch?v=7Q429lqxZaU&feature=youtu.be
Miguel Lara (Web 2.0 FREEDOM): http://www.youtube.com/watch?v=8cmCFWi9IW8

10. Yields Products, Goals:
B. Student Class Documentaries
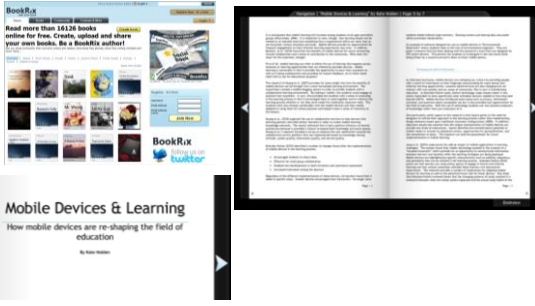Umida's R546 Documentary Project
http://www.youtube.com/watch?v=EMLTzqCV_5A

10. Yields Products, Goals:
C. Business Plans and Virtual
Mentoring toward Goals,
September 22, 2014, Chronicle of HE
http://chronicle.com/article/Start-Up-Slow-Down/148923/?cid=at

September 22, 2014
Start Up, Slow Down
Under pressure to take an invention to market, MIT grad students must push their academic work aside

By Paul Voosen
Cambridge, Mass.

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10. Yields Products, Goals:
D. Goal Setting Tools
(e.g., I Done This, Milestone Planner, and 43 Things)

iDoneThis

43Things

Changing your life is hard.
Doing it by yourself is harder.

Start listing your goals now...

Awesomeness
Reminders

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10. Yields Products, Goals:
E. Uploading Mobile Books
(e.g., BookRix, http://www.bookrix.com/

Mobile Devices & Learning
How mobile devices are re-shaping the field of education
By Kate Holden

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10. Yields Products, Goals:
F. Student Mobile App Creation
The App Builder: http://www.theappbuilder.com/
Mintian Guo (April 2013): http://myapp.is/r685final

Te-Ch
ver: 1.0
Designed by: M.G.

YOU are TheAppBuilder!

Commitments:
Stop and Share:
Which principle(s) of TEC-VARIETY will you use?

Tone/Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products

COMMITMENT
Success is largely a matter of hanging on after others let go.

Poll #4: Which do you prefer...
R2D2 or TEC-VARIETY?

ADDING SOME
TEC-VARIETY

What motivates?
1. **T**one/Climate: Psychological Safety, Comfort, Sense of Belonging
2. **E**ncouragement: Feedback, Responsiveness, Praise, Supports
3. **C**uriosity: Surprise, Intrigue, Unknowns
4. **V**ariety: Novelty, Fun, Fantasy
5. **A**utonomy: Choice, Control, Flexibility, Opportunities
6. **R**elevance: Meaningful, Authentic, Interesting
7. **I**nteractivity: Collaborative, Team-Based, Community
8. **E**ngagement: Effort, Involvement, Investment
9. **T**ension: Challenge, Dissonance, Controversy
10. **Y**ielding Products: Goal Driven, Purposeful Vision, Ownership

Reading
Verbal and Auditory Learners

Reflecting
Reflective & Observational Learners

Doing
Hands-on learners

Displaying
Visual learners

Problem Orientation & Knowledge Acquisition
Solution Evaluation & Knowledge Transfer
Solution Seeking Analysis & Knowledge Representation
Problem clarification & Knowledge construction

I just Love It when they "make it so!"

February 20, 2013
Star Trek-like holodeck may be closer to reality than you think
Matt Hartley, Financial Post, Canada
http://business.financialpost.com/2013/02/20/star-trek-like-holodeck-may-be-closer-to-reality-than-you-think/?__lsa=054d-d58d

Star Trek-like holodeck may be closer to reality than you think

Charles Wedemeyer Quote #2:
"If America is on the threshold of becoming a Learning Society, non-traditional learning may be its most genuine ingredient."
(Charles Wedemeyer, 1981, p. 219)

December 13, 2013
Former MIT president Charles M. Vest dies at 72
As the Institute's leader from 1990 to 2004, he sparked a period of dynamism.
Steve Bradt, MIT News Office
http://web.mit.edu/newsoffice/2013/former-mit-president-charles-m-vest-dies-at-72-1213.html

MITnews

Time to Stop and Think:
Explore Websites from this Session!
Find the lieu...
Take a break...

Any Questions?
Try TEC-VARIETY...
Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://tec-variety.com/
Dr. Curt Bonk – CJBonk@Indiana.edu