Masterclass #2
Engage Number One:
Models for Motivating and Retaining Online Learners (e.g., "TEC-VARIETY")
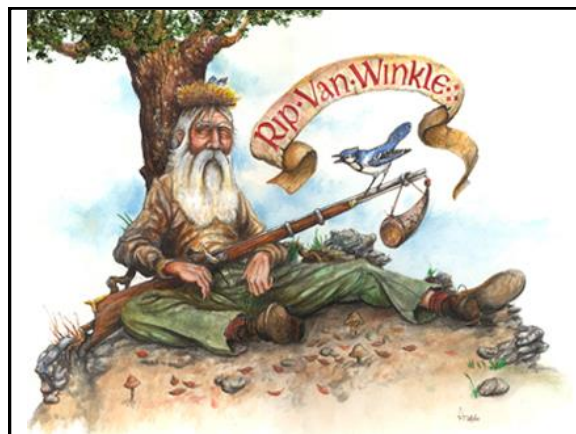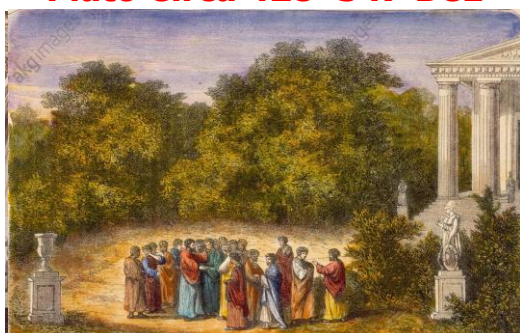
Curtis J. Bonk, Professor, Indiana University
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk/
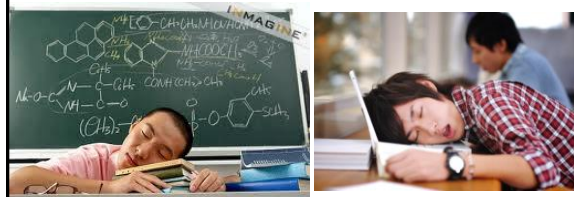

(Circa Confucius 551–479 BCE)

Academos
Plato Circa 428–347 BCE

This Generation of Students

Motivation and Engagement

June 4, 2015
AspirEDU
http://aspiredu.com/solutions/

April 23, 2015
Can Behavioral Tools Improve Online Student Outcomes?
Experimental Evidence from a Massive Open Online Course,
Richard W. Patterson
http://www.ilr.cornell.edu/sites/ilr.cornell.edu/files/cheri_wp165_0.pdf

Learning is More Video-Based
Online Learning Polyglots
http://www.nytimes.com/2012/03/11/nyregion/a-teenage-master-of-language-trails-online-fellowship.html?_r=1&pagewanted=all

Timothy posts videos of himself speaking several languages on YouTube.

Drive: The Surprising Truth About What Motivates Us
Daniel Pink (2009)

Motivation 3.0

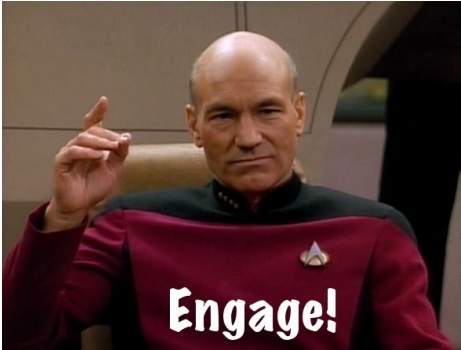**What did Jean-Luc Picard say?**

That's right, Engage!

Engage!

Poll #1: Million Dollar Question: What words come to mind when I say that I want to motivate learners?

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.

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.

Framework: TEC-VARIETY for Online Motivation and Retention

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

Education 3.0?
Introducing the free "TEC-VARIETY" Framework...
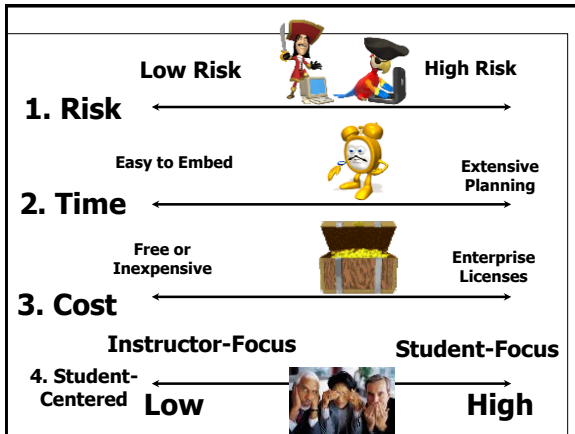http://tec-variety.com/
http://tec-variety.com/TEC-VARIETY-Chinese.pdf

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

在线学习动机与激励：
TEC-VARIETY 模型
——激励和留住在线学习者的 100 个活动
作者：Curtis J Bonk & Elaine Khoo   IU

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

Examples of TEC-VARIETY

1. Tone/Climate: A. Threaded Video Discussions, e.g., Flipgrid
http://flipgrid.com/#429f88c5)
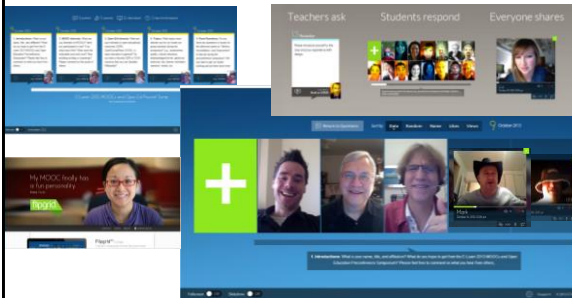
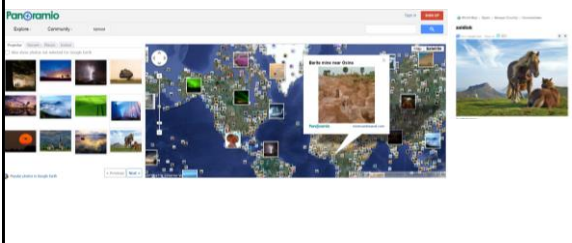## 1. Tone/Climate: B. Share links to Favorite Songs (e.g., Royalty-Free Music
http://incompetech.com/music/royalty-free/; http://freeplaymusic.com/)

1. Tone/Climate: C. Share Visuals of Favorite Places (e.g., Panoramio,
http://www.panoramio.com/)

1. Tone/Climate: D. Instructor Course Introductions
(Theatre 10 Intro Video, October 7, 2014, Elizabeth Dale, West Valley College)
https://www.youtube.com/watch?v=_Wzbzc3QiiA
Chuck Severance, U Michigan/Coursera) in Barcelona
http://www.youtube.com/watch?v=JzNHvmSv8TI
Chuck Severance, University of Michigan
https://www.coursera.org/course/pythonlearn

2. Encouragement, Feedback, etc.: A. Demonstrations and Tutorials
Emerging technology specialist, IU UITS, Nitocris Perez,
May 29, 2014
http://inside.iub.edu/features/videos/2014-05-29-inub-vid-cib.shtml

2. Encouragement, Feedback, etc.: B. Voice/Audio Feedback
Vocaroo: http://vocaroo.com/
http://vocaroo.com/delete/s0x8moQAYAiu/a37bbc9408bb8c95
(Recorded by Curt Bonk for the Open University of China)

2. Encouragement, Feedback, etc.: C. Online Practice Tests and Quizzes (e.g., CPR, Human Embryology Animations)
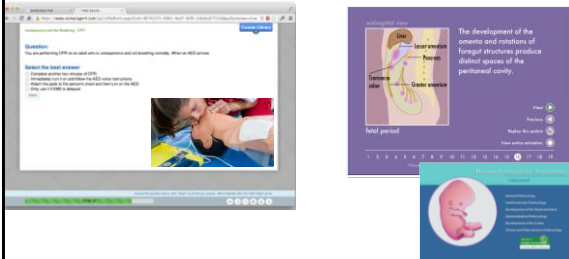
2. Encouragement, Feedback, etc.: D. Blog and Website Polling
(e.g., Poll Everywhere, BlogPolls, BlogPoll, MicroPoll)
http://www.polleverywhere.com/
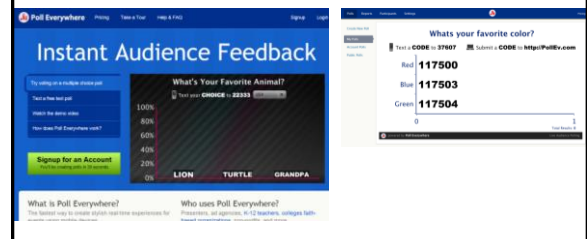
**3. Curiosity, Fun:
Linking Historical Events**
A. May 25, 2001
Man on the moon: Kennedy speech ignited the dream. Richard Stenger, CNN.com
http://edition.cnn.com/2001/TECH/space/05/25/kennedy.moon/

**May 25, 2015
3. Curiosity, Fun:**
B. Something in the News
(e.g., Chinese universities move up in world rankings, China Daily)
http://www.cnn.com/2014/12/17/health/healthy-aging/index.html?hpt=hp_t2
http://espn.go.com/sports/endurance/story/_/id/8979487/fauja-singh-101-caps-career-10k-hong-kong
http://www.chinadaily.com.cn/china/2015-05/25/content_20805854.htm
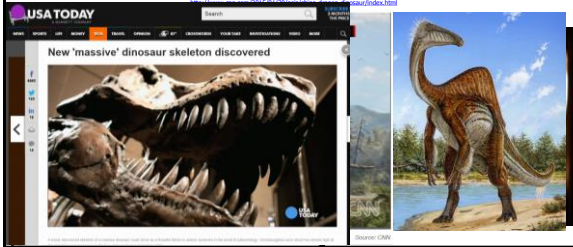
3. Curiosity, Fun:
C. Something in the News
New 'massive' dinosaur skeleton discovered, USA Today,
September 5, 2014 (Dreadnoughtus)
http://www.usatoday.com/story/tech/2014/09/04/dinosaur-skeleton-discovered/15031803/
October 23, 2014: Goofy dinosaur blends Barney and Jar Jar Binks, SF Gate
http://www.sfgate.com/news/science/article/Goofy-dinosaur-blends-Barney-and-Jar-Jar-Binks-5840093.php
Incredible 50-foot 'dragon' dinosaur unearthed by Chinese farmers
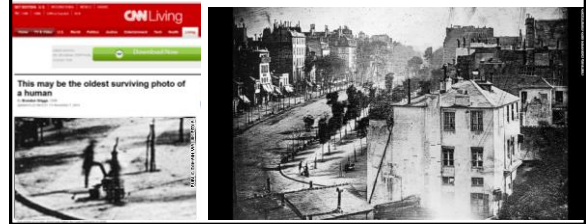**January 20, 2015:** Naomi Ng, for CNN

3. Curiosity, Fun:
D. Something in the News
(e.g., This may be the oldest surviving Photo of a human,
November 7, 2014, CNN, Brandon Griggs; But this
image, taken in Paris, France, in 1838)
http://www.cnn.com/2014/11/06/living/oldest-photograph-human-daguerre/index.html?hpt=hp_t4 kong

June 12, 2015
3. Curiosity, Fun: E. Something
in the News and Infographic
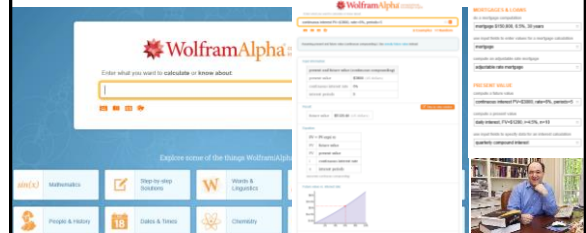Twitter CEO Dick Costolo replaced by co-founder Jack
Dorsey, Laura Onita
http://eandt.theiet.org/news/2015/jun/twitter-costolo-dorsey.cfm

May 25, 2015
3. Curiosity, Fun:
F. Database Searching
(e.g., WolframAlpha)
http://www.wolframalpha.com

3. Curiosity, Fun:
**G. Tracking the Life of a Computer
Scientist (bio.com)**
http://www.biography.com/people/steve-jobs-9354805
http://www.biography.com/people/ada-lovelace-20825323
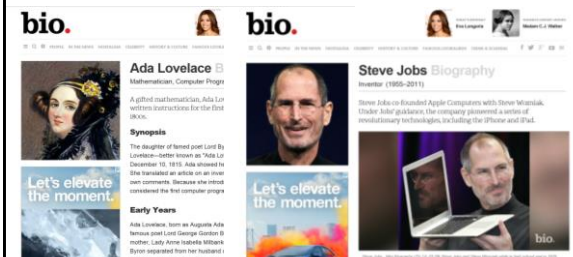
Poll #2:
**Which of these ideas might you
use?**

A. Threaded video discussions (e.g., Flipgrid)
B. Video introductions (instructor or student)
C. Demonstrations and tutorials (Jing, Screenr, etc.)
D. Voice/Audio feedback (Vocaroo)
E. Online practice tests
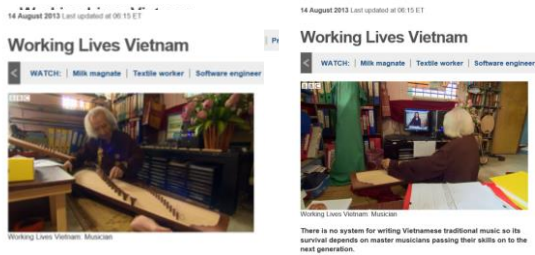F. Something in the news
G. Tracking life of scientist

INTERNET
HIGH-FIVE
PLACE HAND
HERE

4. **V**ariety, Novelty, Fun:
A. Teach from Vietnam to the World
BBC News Asia, August 14, 2013
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

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

March 13, 2015
5. **A**utonomy, Choice:
A. 20% Time in Education
Kendal Rasnake & Troy Cockrum, IU
https://www.dropbox.com/s/tcsr5oae2lcgwuk/20_Time_in_Education-Cockrum_and_Rasnake.mov?n=57312573

March 5, 2015
Pink Time: New approach to student projects promotes passion, learning for its own sake, Virginia Tech News
http://www.collegiatetimes.com/news/virginia_tech/article_4140ba24-ad6b-11e4-b05a-47eb57d77a1e.html
http://www.vtnews.vt.edu/articles/2015/01/012315-cnre-pinktime.html
http://chronicle.com/blognetwork/theubiquitouslibrarian/2015/03/04/confronting-the-unexpected-unlocking-intrinsic-learning/?cid=at&utm_source=at&utm_medium=en

Dr. Tim Baird speaks about his concept of "Pink Time" during the Seventh Annual Conference on Higher Education Pedagogy, February 5, 2015.

August 8, 2015
Pure Genius: Building a Culture of Innovation and Taking 20% Time to the Next Level
Don Wetttrick, dwettrick@gmail.com
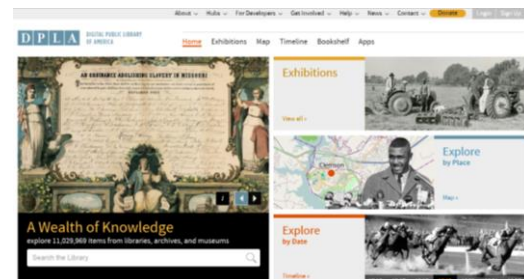http://theinnovationteacher.com/don-wettrick/#.VcYmU87JBjs
http://www.amazon.com/Pure-Genius-Building-Culture-Innovation/dp/0988217627

5. **A**utonomy, Choice:
B. Open Educational Resources (OER)
Digital Public Library of America
http://dp.la/

5. **A**utonomy, Choice:
C. Explore OpenCourseWare and Open Educational Resources
(e.g., MIT OCW, http://ocw.mit.edu/courses/sloan-school-of-management/15-963-management-accounting-and-control-spring-2007/)

5. **A**utonomy, Choice:
D. Video Repositories and Portals
(e.g., Khan Academy, Computer Programming)
https://www.khanacademy.org/computing/computer-programming

5. **A**utonomy, Choice:
E. 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:
F. Enroll in a MOOC and Reflect
(e.g., see Class Central)
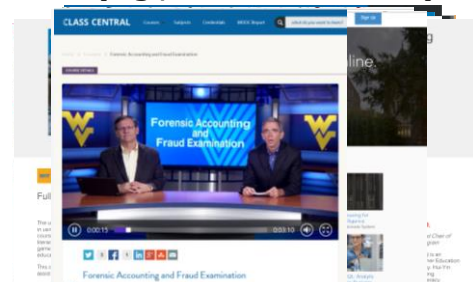
Poll #3:
Any light bulbs going off in your head so far...?

A. Yes definitely***

B. Yes maybe!

C. Not yet (but hopefully soon...)

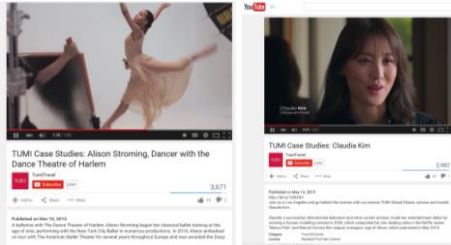## 6. **R**elevance, Meaningfulness:
A. Guest Chats (e.g., Emily Hixon, January 20, 2015)
https://connect.iu.edu/p259wpiabg9/

6. Relevance, Meaningfulness:
B. Case-Based Learning: TUMI Case Studies: Claudia Kim and
Alison Stroming, Dancer with the Dance Theatre of Harlem
(March 20, 2015 and May 13, 2015)
https://www.youtube.com/watch?v=onhgDnslHgY
https://www.youtube.com/watch?v=v5c7PT5tEFQ

6. Relevance, Meaningfulness:
C. Case-Based Learning: Instructor Cases
(e.g., Mark Braun, IU)

7. Interactive, Collaborative:
A. Negotiate Meanings Online
(e.g., PiratePad: http://meetingwords.com/)
http://blogs.elon.edu/technology/6-collaborative-writing-applications-for-group-projects-or-papers/
MeetingWords, Google Docs, NowComment, MixedInk

7. Interactive, Collaborative:
B. Virtual Sharing Walls, April 6, 2015
e.g., Padlet (What is your secret recipe to engage?)
http://padlet.com/zaid_alsagoff/engage

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

Poll #4:
Which of these ideas might you use?

A. Online cases
B. 20 percent time learning
C. Guest chats with former students
D. Negotiate meanings online (e.g., PiratePad)
E. Enroll in a MOOC
F. Discussion in Google Hangouts

8. Engagement, Effort:
A. Interactive Multimedia E-Books
June 10, 2014, Chronicle of HE, 300 images, more
than 700 notes and explanations, multimedia annotations,
video commentary, and two dozen videos.
Digital Dubliners: **http://digitaldubliners.com/**
James Joyce: **http://joyceways.com/**

July 27, 2015
8. Engagement, Effort:
B. iPhone Virtual Tour and Games

8. Engagement, Effort:
C. Intercultural learning
Virtual and on-site exchanges between York University students, refugee students
on the Thai Burma border and displaced migrant students in Ranong, Thailand, and
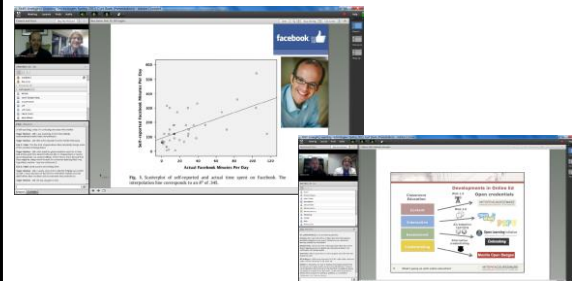York University, Toronto, Canada
http://aifprojects.yorku.ca/projects/intercultural-learning-thailand-2012-13/

8. Engagement, Effort:
D. Simulations (e.g., business, science, medicine)

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

8. Engagement, Effort:
F. Expert Question and Answer Sessions
http://www.oise.utoronto.ca/dr/Research_Projects/index.html
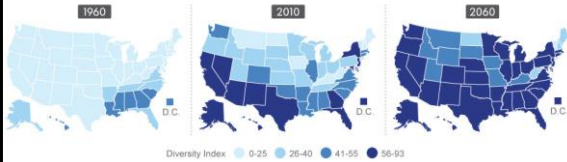
8. Engagement, Effort:
G. Interactive Timeline Maps,
October 22, 2014, Second immigration wave lifts diversity to record high, Edward Greg Toppo and Paul Overberg, USA Today
http://www.usatoday.com/longform/news/nation/2014/10/21/diversity-race-ethnicity-change-100-years/16211133/

8. Engagement, Effort:
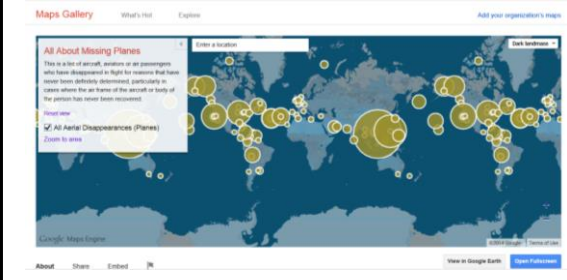**H. Interactive Map Timelines**
(adults with college degrees by county, May 7, 2012)
http://todayscampus.com/article/Keith_Hampson_Interviews_Josh_Keller_on_Interactive_Graphics_for_Higher_Education
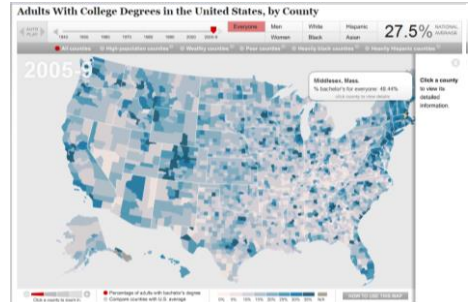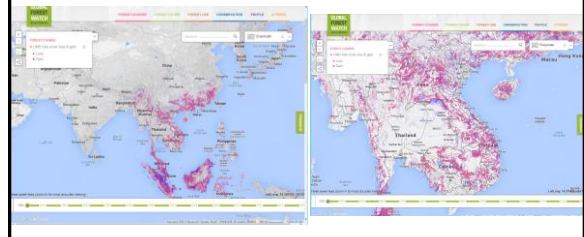

8. Engagement, Effort:
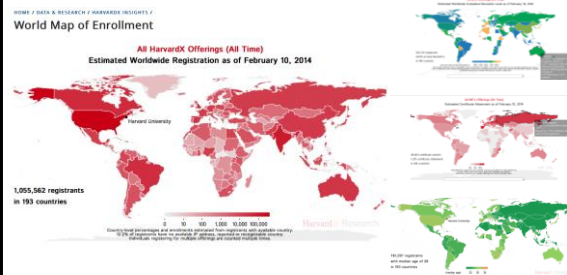**I. Google Map Gallery**
September 16, 2014
http://maps.google.com/gallery/

8. Engagement, Effort:
J. 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. Engagement, Effort:
K. Data Visualization Tools (Harvard and MIT MOOCs) Lawrence Biemiller, February 20, 2014, Chronicle of Higher Education
http://chronicle.com/blogs/wiredcampus/harvard-and-mit-release-visualization-tools-for-trove-of-mooc-data/50631?cid=pm&utm_source=pm&utm_medium=en

March 15, 2015
9. Tension, Challenge, etc.:
A. Controversial Issue Debates
SXSW: Tackling the growing gender gap in technology
**Mike Snider, USA Today**
http://www.usatoday.com/story/tech/2015/03/15/sxsw-geek-girls-chic-technology-gender-gap/24808699/
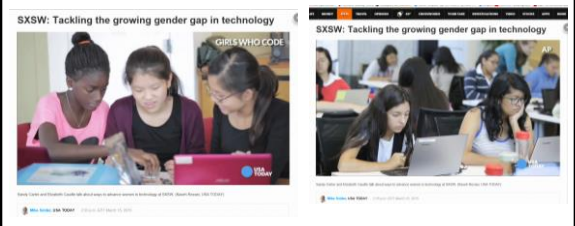
August 20, 2015
9. Tension, Challenge, etc.:
B. Controversial Issue Debates
U.S. sees big spike in black and Hispanic women entrepreneurs, Tanzina Vega, CNN Money
http://money.cnn.com/2015/08/19/smallbusiness/minority-women-entrepreneur/index.html?iid=SF_LN
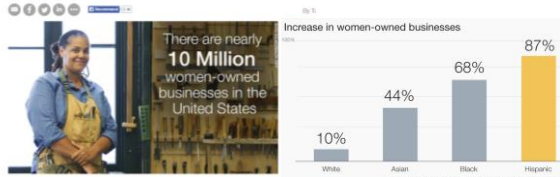
March 13, 2015
9. Tension, Challenge, etc.:
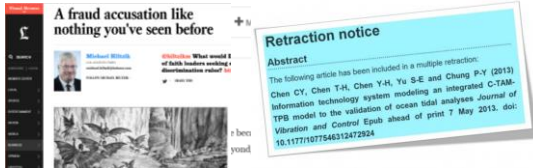### C. Controversial Issue Debates
R511 Midterm Video How to Create an Authentic Environment in a Content-Driven School?, R511, Nick and Nik
https://www.youtube.com/watch?v=Bcr3_aZT_xQ&feature=youtu.be

July 10, 2014
9. Tension, Challenge, etc.:
D. 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
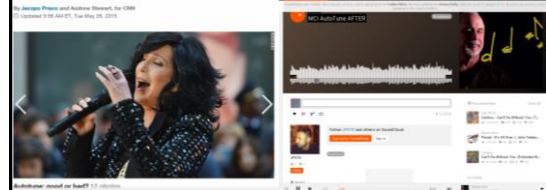

May 26, 2015
9. Tension, Challenge, etc.:
E. Controversial Issue Debates:
Auto-Tune (The invention that changed music forever, Jacopo Prisco and Andrew Stewart, CNN)
http://www.cnn.com/2015/05/26/tech/autotune-inventor-mci/index.html
https://soundcloud.com/jacopo-prisco/mci-autotune-after

10. Yields Products, Goals:
A. Design Multimedia Glossaries
Ozgur Ozdemir, December 2012
http://r685glossary.shutterfly.com /
Umida Khikmatillaeva, Dec. 2011, P540
http://learningplanet.shutterfly.com/

10. Yields Products, Goals:
B. Mobile Books and Wikibooks
(e.g., BookRix, http://www.bookrix.com/)

10. **Y**ields Products, Goals:
C. Student Created Videos

Piercarlo Abate: http://www.youtube.com/watch?v=_-TURzHO0aU
Qi Li, Gangnam: http://www.youtube.com/watch?v=7Q429IqxZaU&feature=youtu.be
Miguel Lara (Web 2.0 FREEDOM): http://www.youtube.com/watch?v=8cmCFWi9IW8
Kendal Rasnake (Is IT Right For You?): https://www.youtube.com/watch?v=MJ3GUDICIGw

Welcome To Instructional Systems Technology

Poll #5:
Which of these ideas might you use?

A. Guest speaker quotes
B. Data visualization tools
C. Issue challenges, role plays, and debates
D. Student designed video productions
E. Student designed e-books
F. Map trends
G. Interactive timeline tools

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

Recap and Reflect with Neighbor:
Explore Websites from this Session!
Or Find the lieu...

Take a quick 15 minute break...

ADDING SOME TEC-VARIETY

What motivates?
1. **Tone/Climate:** Psychological Safety, Comfort, Sense of Belonging
2. **Encouragement:** Feedback, Responsiveness, Praise, Supports
3. **Curiosity:** Surprise, Intrigue, Unknowns
4. **Variety:** Novelty, Fun, Fantasy
5. **Autonomy:** Choice, Control, Flexibility, Opportunities
6. **Relevance:** Meaningful, Authentic, Interesting
7. **Interactivity:** Collaborative, Team-Based, Community
8. **Engagement:** Effort, Involvement, Investment
9. **Tension:** Challenge, Dissonance, Controversy
10. **Yielding Products:** Goal Driven, Purposeful Vision, Ownership