Engage, Number One:
This is the Next Generation

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The Next Generation is Here!

May 20, 2013
The New Greatest Generation: Why Millennials will Save Us All, Time, Joel Stein
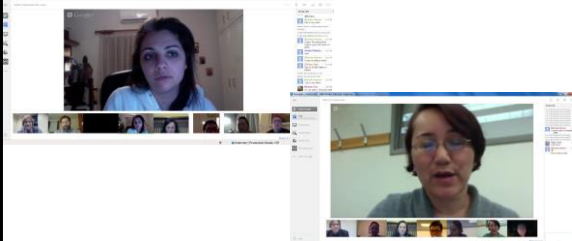http://www.time.com/time/magazine/article/0,9171,2143001,00.html

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The New Greatest Generation:
Why Millennials will Save Us All
Joel Stein, Time, May 20, 2013
http://www.time.com/time/magazine/article/0,9171,2143001,00.html

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Google Hangouts
Class Sync Collaboration and Discussion
(Spring, 2013)

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

What did Jean-Luc Picard say?

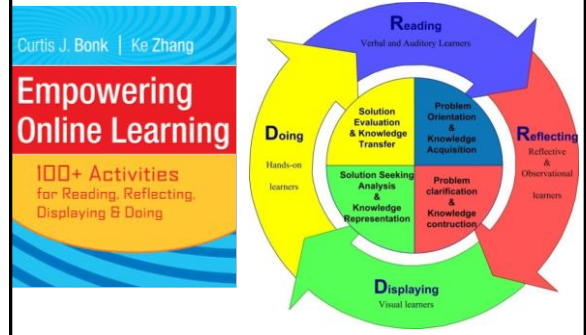## That's right, Engage!
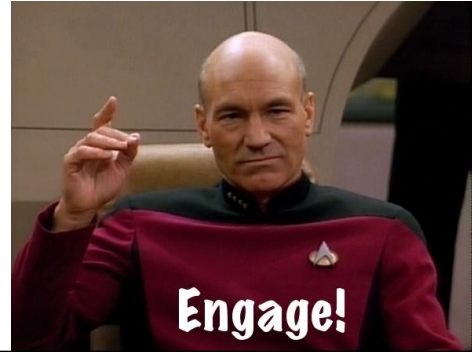
How can technology address diverse learner needs?

Framework #1: The R2D2 Model

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. Follow an Electrician in Twitter
https://twitter.com/MasterElectrics
https://twitter.com/electricians

Read 1b. Twitter Fed Class Discussions
https://twitter.com/MasterElectrics
https://twitter.com/electricians

Read 1c. Free Online Articles, Technical Reports, and Journals

Read 2d.
Expert Blog Posts
http://myelectriciansblog.com/

Read 1e. Interactive Stories
(e.g., Meograph)
http://www.meograph.com/)

Read 1f. Online Crossword Puzzles
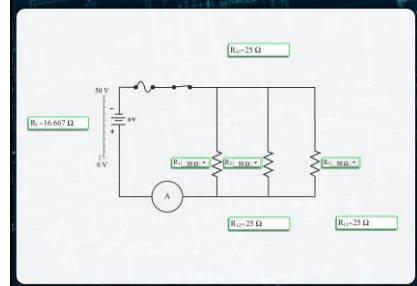(e.g., http://www.eclipsecrossword.com/)

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.
Live Circuit Analysis and Discussion Forum

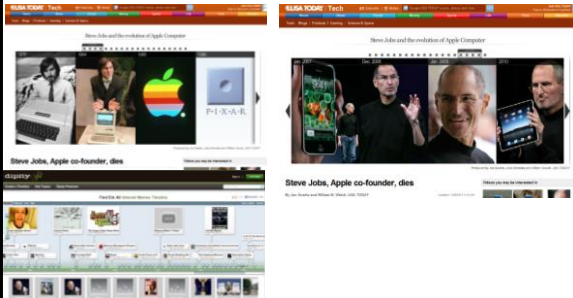## Reflect 2b. Workplace Internship, Practicum, and Field Reflections

Reflect 2c.
Career Reflections in YouTube
http://www.youtube.com/watch?v=WwP9W5rYJfA

Reflect 2d.
Reflect on Virtual Timelines
(Dipity, xtimeline, Simile, etc.)
http://www.usatoday.com/tech/news/story/2011-09-22/steve-jobs-dies/50672498/1

Reflect 2e.
Video Reflections on Big Ideas
Final project, Mark Millard, April 22, 2013
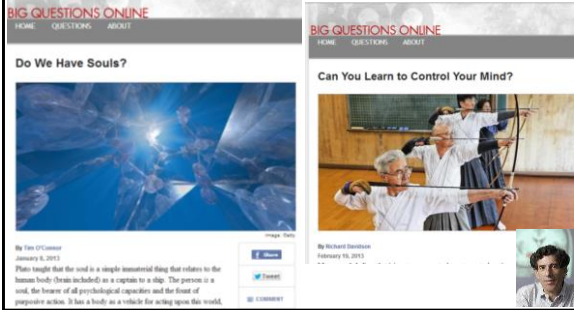Big Ideas in Distance and Flexible Learning (HD)
http://www.youtube.com/watch?v=RAHBRG8YfL0&feature=youtu.be

Reflect 2f.
Big Questions Online (BQO)
(e.g., Do We Have Souls?)
https://www.bigquestionsonline.com/content/do-we-have-souls

3. Visual Learners

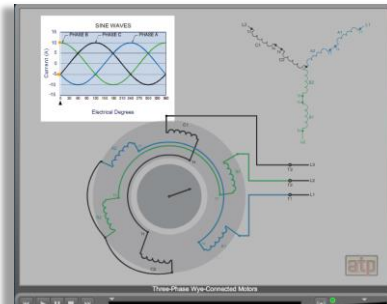- **Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.**
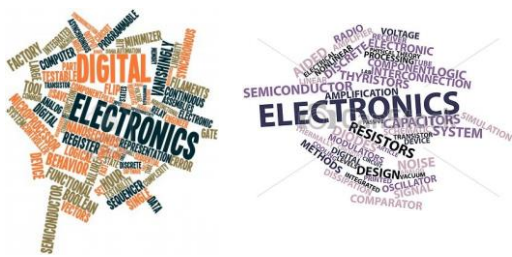

Display 3a.
Simulators (e.g., transformers)
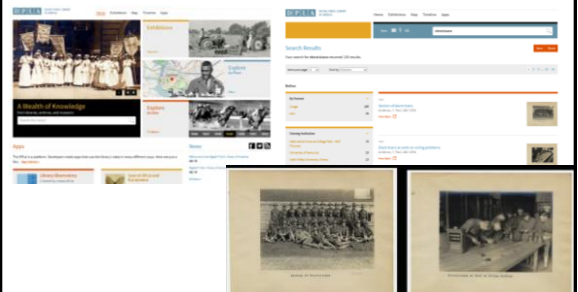

Display 3b.
Video Displays of Theory in Motion

Display 3c. Virtualize Words Used
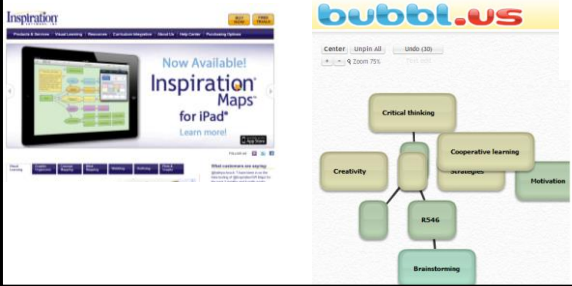### (e.g., Wordle, Tagzedo, Tagul, WordSift, Word It Out)
http://shellyterrell.com/2010/02/14/12-word-cloud-resources-tips-tools/

Display 3d. Visual Library Search
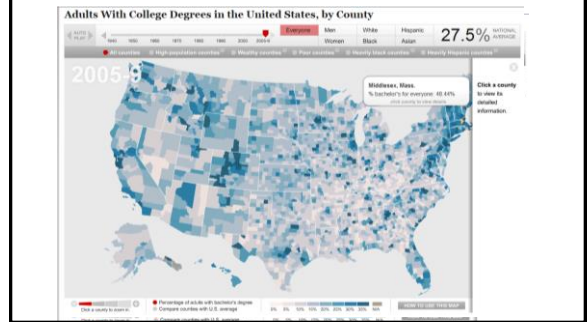### DPLA (Digital Public Library Of America)
http://dp.la/

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

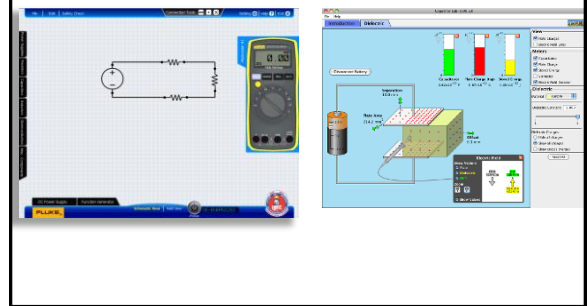**Display 3f.** Interactive Map Timelines (adults with college degrees by county, May 7, 2012)

http://todayscampus.com/article/Keith_Hampson_Interviews_Josh_Keller_on_Interactive_Graphics_for_Higher_Education
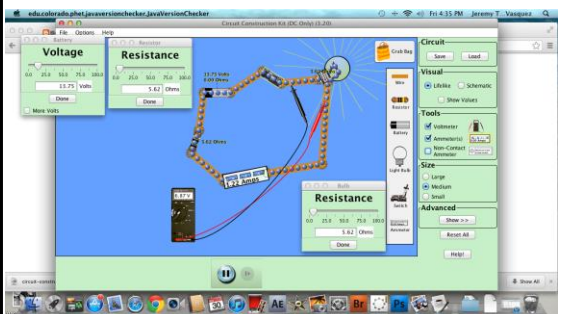

4. Tactile/Kinesthetic Learners

• **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.**
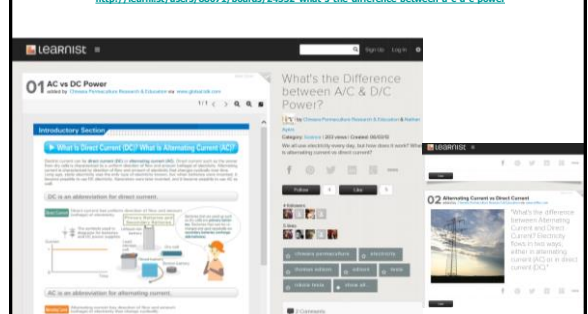

Do 4a.
Lab Simulators

Do 4b.
DC Circuit Construction Kits

Do 4c. Student Expertise
(e.g., AC vs. DC Power in Learnist)

http://learni.st/users/88671/boards/24552-what-s-the-difference-between-a-c-d-c-power

Do 4d.
Survey Research and Market Analysis
(e.g., SurveyShare, Zoomerang, SurveyMonkey)

Do 4e. Podcast Productions and Shows

Do 4f. Student Mobile App Creation
The App Builder: http://www.theappbuilder.com/
Mintian Guo (April 2013): http://myapp.is/r685final

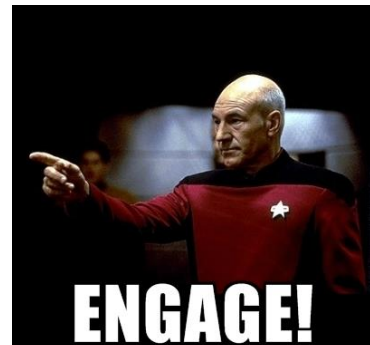
Poll #1: What phase of the R2D2 Method did you get the most ideas from ?
A. Read (Auditory and Verbal Learners)
B. Reflect (Reflective Learners)
C. Display (Visual Learners)
D. Do (Tactile, Kinesthetic, Exploratory Learners)

What was it that he said?

That's right, Engage!

Where would we all like to work?

ENGAGE UNIVERSITY

Sleepy U?

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.

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.

Ok, Million Dollar Question: What words come to mind when I say that I want to motivate learners?

Framework #2: 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
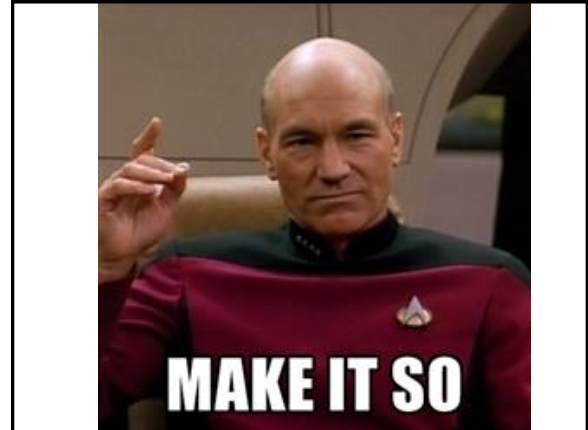
Examples of TEC-VARIETY

1. **T**one/Climate: Social Ice Breakers

A. 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. **T**one/Climate: B. Video Course Intros
http://www.youtube.com/watch?v=jWOUygSnKLQ

2. **E**ncouragement, Feedback, etc.: A. Voice Feedback
Vocaroo; http://vocaroo.com/
http://vocaroo.com/i/s1Zr7Qp9D3Wm

2. **E**ncouragement, Feedback, etc.: B. Quizlet (online quiz tools)
http://quizlet.com/
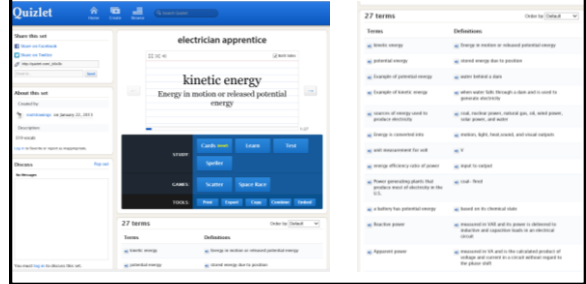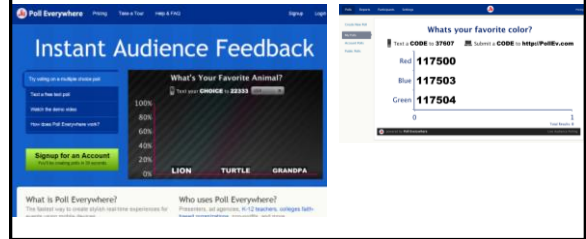

2. **E**ncouragement, Feedback, etc.: C. Create Screencasts
(Jing, GoView, Screenr, slide from Zaid Ali Alsagoff [zaid.alsagoff@gmail.com])

2. **E**ncouragement, Feedback, etc.: D. Blog and Website Polling
(e.g., Poll Everywhere, BlogPolls, BlogPoll, MicroPoll)
http://www.polleverywhere.com/

2. **E**ncouragement, Feedback, etc.: E. Student response systems
(e.g., Socrative; http://www.socrative.com/how-it-works.php

3. **C**uriosity, Fun, Fantasy, Control: A. Online Database Activities
(e.g., WolframAlpha)
http://www.wolframalpha.com/

3. Curiosity, Fun:
B. Something in the News
(e.g., Sports Illustrated, NFL, Superdome warned about power outage before Super Bowl XLVII, February 5, 2013)
http://sportsillustrated.cnn.com/nfl/news/20130205/super-bowl-power-outage.ap/

The lights in the Superdome went out shortly after Jacoby Jones' 108-yard return TD to start the second half.

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

3. Curiosity, Fun:
D. Create Cartoons, Movies, and Animations (e.g., Go Animate, xtranormal, PowTown, etc.)
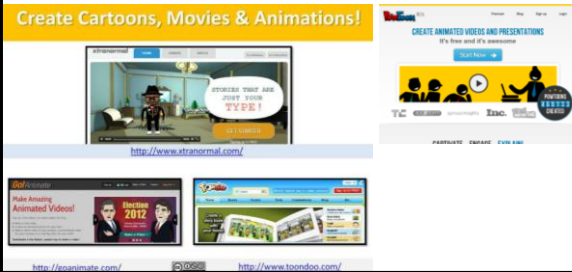
4. Variety, Novelty:
A. Record Webinars and Guest Expert Talks

5. Autonomy, Choice:
A. Assign to Explore and Rate Web Resources
(e.g., International Brotherhood of Electrical Workers (IBEW))

Poll #2: (Tone, Encouragement, Curiosity, Variety, Autonomy)
Any light bulbs going off in your head so far...? If so, where?
A. Yes definitely
B. Maybe
C. No
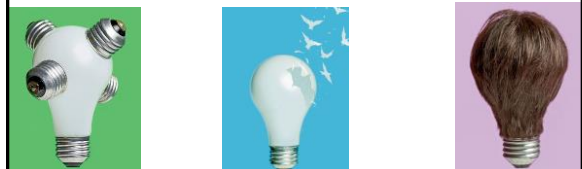
6. Relevance, Meaningfulness:
A. Video Demonstrations
http://learni.st/users/50744/boards/9521-basic-electric-circuits
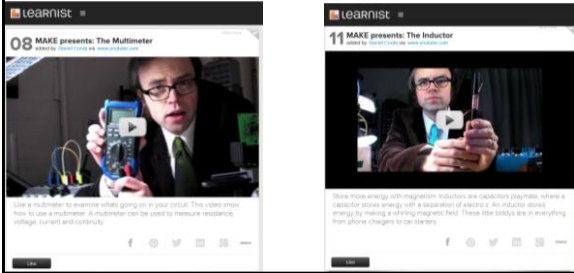
6. Relevance, Meaningfulness:
B. Video Scenario Learning
**(Franklin University, cost and forensic accounting course)**
http://video.franklin.edu/Franklin/acct/managerialAccounting/cost-behavior-player.html
http://video.franklin.edu/Franklin/acct/342/common/fraudScenario02.html
http://www.youtube.com/watch?v=cJmosLSUgQ8&list=TLzymmALKW1TI

7. Interactive, Collaborative:
A. Interactive Exercises
(e.g. Branch Circuit terminations)
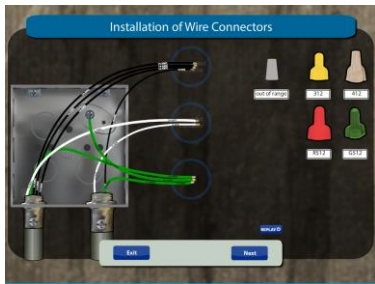
7. Interactive, Collaborative:
B. Collaboration and Discussion in Google Hangouts
(January 29 and February 25, 2013)
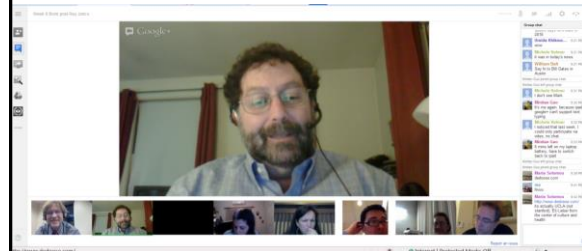
7. Interactive, Collaborative:
C. Negotiate Meanings Online
(e.g., PiratePad: http://meetingwords.com/)
MeetingWords is a simple text editor for the web.
Your text is saved on the web, and more than one person can edit the same document at the same time.
Everybody's changes are instantly reflected on all screens. Work together on meeting notes, brainstorming sessions, homework, team programming and more!
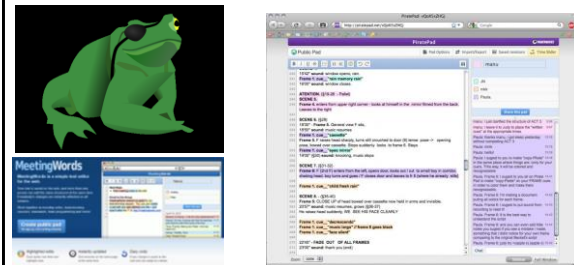
8. Engagement, Effort:
A. Installation Practices
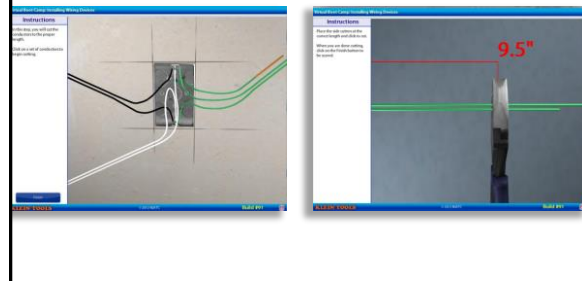
8. Engagement, Effort:
B. Life on Timeline
Jimmy Wales' Wikipedia, March 19, 2013, Wired Magazine
http://www.wired.com/wiredenterprise/2013/03/jimmy-wales-wikipedia/2/
http://www.pbs.org/wgbh/amex/edison/timeline/index_2.html
http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-protest-interactive-timeline

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

9. Tension, Challenge, etc.:
A. Reflect on Ethical Dilemmas

9. Tension, Challenge, etc.:
B. Decision-Making Scenarios
(e.g., Articulate Storyline)
http://articulate.demos.s3.amazonaws.com/broken_co-worker/story.html

10. Yields Products, Goals:
A. Final Product Video Summaries
Piercarlo Abate: http://www.youtube.com/watch?v=_-TURzHO0aU
Miguel Lara (Web 2.0 FREEDOM): http://www.youtube.com/watch?v=8cmCFWi9lW8

10. Yields Products, Goals:
B. Course Recap Prezi Presentations
Jeff Pankin, MIT, Prezi, Emerging Learning Technologies
http://prezi.com/tzbawrgjmsf/emerging-learning-technologies/?auth_key=4ec2f45a718fab699b35ea460e91a46d9e1bdac7
Jeffrey Barnette, Today's World
http://prezi.com/-ijzyothst-r/r685-final-project

10. Yields Products, Goals:
C. Video Blogs
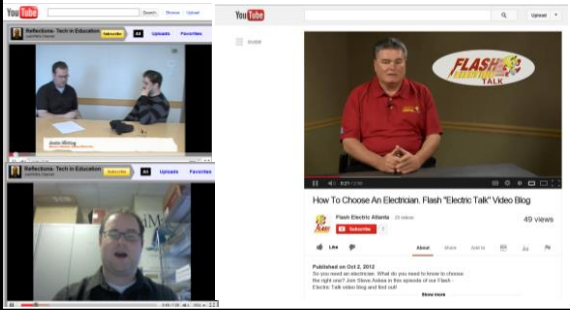
Commitments:
Stop and Share:
Which principle(s) of TEC-VARIETY will you use?
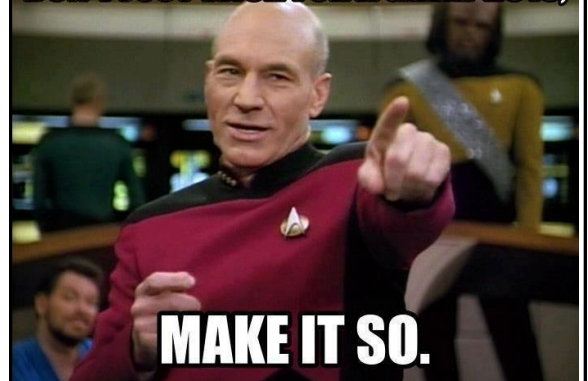
Tone/Climate
Encouragement, Feedback
Curiosity

Variety
Autonomy
Relevance
Interactive
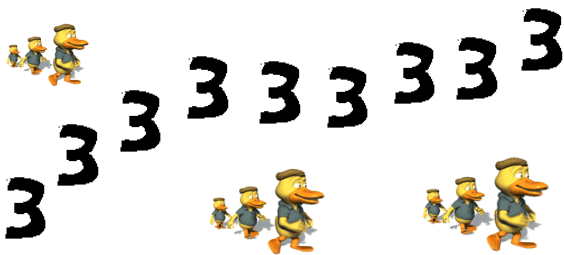**E**ngagement
Tension
Yields Products

Poll #3:
Do you feel "MOTIVATED" to try any of this out?
A. Yes, R2D2
B. Yes, TEC-VARIETY
C. Yes, both
D. Neither

DON'T JUST WISH FOR A GREAT 2013,
MAKE IT SO.

Stop and Share:
Three Words from Today's Session!

Any Questions?
Try the R2D2 Model!
Try TEC-VARIETY too...

Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/
Email: curt@worldisopen.com