Active Learning with Technology: Myths, Magic, and Mucho Motivation

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Poll Question #1:
I’m Happy…Are you Happy?

The End of Shovelware?

Tech #1. MOOCs
August 5, 2013,
By Kannan Sankaran, Epoch Times
http://www.theepochtimes.com/n3/229640-5-best-moocs-for-free-online-higher-education/

Tech #2. Online Study Groups
Open Study
http://openstudy.com/
Tech #3. Digital Books

Tech #4. Online Language Learning
(e.g., 300,000 people per month listening to ChinesePod, co-hosted by Jenny Zhu, John Pasden, and Ken Carroll)

Tech #5. Learning Portals, April 3, 2012
Google Art Project, NBC Nightly News
http://www.msnbc.msn.com/id/3032619/vp/46945508#46945508

Tech #6. Experts Apprenticeship via Our Glasses

Poll #2: Is this a revolution in education today?
A. Yes...
B. No...
My dog is content….

I am not Content!!!

Who needs online and blended learning?
(Katrina, August 2005; Ike, Sept 2008; Irene, August 2011; Isaac, August 2012)

Those where there are diseases and outbreaks…(SARS, 2003; H1N1, 2009-2010)

May 24, 2010
Author Nicholas Carr, The Web Shatters Focus, Rewires Brains, Wired
http://www.wired.com/magazine/2010/05/ff_nicholas_carr/
Do you ever sleep through your classes?

What was it that he said?

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)


Motivation Research Highlights
(Jere Brophy, Michigan State University)

1. Supportive, appropriate challenge, meaningful, moderation/optimal.
2. Teach goal setting and self-reinforcement.
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 #1: TEC-VARIETY 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

Examples of TEC-VARIETY

1. Tone/Climate: B. Share Visuals
   (e.g., Panoramio, http://www.panoramio.com/)

1. Tone/Climate: B. Video Course Intros
   http://www.youtube.com/watch?v=iWOUyqSnKLo
2. Encouragement, Feedback, etc.: A. Create Screencasts
(Jing, GoView, Screenr, slide from Zaid Ali Alsagoff
[zaid.alsagoff@gmail.com])

2. Encouragement, Feedback, etc.: B. Voice Feedback
Vocaroo: http://vocaroo.com/
http://vocaroo.com/i/s0HLTZewwtVN (ICU)

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

2. Encouragement, Feedback, etc.: D. Quizlet (online quiz tools)
http://quizlet.com/

3. Curiosity, Fun:
A. Something in the News
(e.g., Fauja Singh, 101, finishes last race, February 24, 2013)

3. Curiosity, Fun:
B. Create Cartoons, Movies, and Animations (e.g., Go Animate,
xtranormal, PowToon, etc.)
3. Curiosity, Fun, Fantasy, Control: C. Online Database Activities  
(e.g., WolframAlpha)  
http://www.wolframalpha.com/

4. Variety, Novelty, Fun:  
A. Random Lists  
(Random.org—clocks, coins, playing cards, dice, integers, passwords, jazz scales, lists, sequences, etc.)

5. Autonomy, Choice:  
A. Web Exploration Assignments

Poll #3:  
Which of the first 5 motivational principles will you use the most?  
A. Tone/Climate  
B. Encouragement/Feedback  
C. Curiosity/Fun  
D. Variety/Novelty  
E. Autonomy/Choice/Flexibility

6. Relevance, Meaningfulness:  
A. Video Scenario Learning  
(Franklin University, cost and forensic accounting course)  
https://video.franklin.edu/Franklin/acct/managerialAccounting/cost-historical-player.html  
http://video.franklin.edu/Franklin/acct/342/common/fraudScenario02.html  
http://www.youtube.com/watch?v=cJmosLSUgQ8&list=TLzymmALKW1TI

6. Relevance, Meaningfulness:  
B. Design Multimedia Glossaries  
Ozgur Ozdemir, December 2012  
http://r685glossary.shutterfly.com/  
Umida Khikmatillaeva, Dec. 2011, P540  
http://learningplanet.shutterfly.com/)
7. Interactive, Collaborative:
A. Collaboration and Discussion in Google Hangouts
(January 29 and February 25, 2013)

7. Interactive, 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!

http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-protest-interactive-timeline

8. Engagement, Effort:
B. Timelines with Oral Histories, Slavery and the Making of America Time and Place, PBS
http://www.pbs.org/wnet/slavery/timeline/1857.html

8. Engagement, Effort:
also: Visualizing Emancipation

9. Tension, Challenge, etc.:
A. Game Show Final Project, April 25, 2011, Kim Seeber
Website: http://mypage.iu.edu/~kseeber/web2.0technology.swf
9. Tension, Challenge, etc.: B. Decision-Making Scenarios (e.g., Articulate Storyline)

10. Yields Products, Goals: A. Final Product Video Summaries
Piercarlo Abate: http://www.youtube.com/watch?v=_TUrH290000
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=8cmCFW8W8

Poll #4:
Which of the last 5 motivational principles will you use the most?
A. Relevance/Meaningfulness
B. Engagement/Effort
C. Interactive/Collab/Community
D. Tension/Challenge/Dissonance
E. Yielding Products/Goals

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

What did Jean-Luc Picard say?
That’s right, Engage!
How can technology address diverse learner needs?

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. Collect and Listen to Interactive Stories
(e.g., Meograph: http://www.meograph.com/)

Read 1b. Listen to Open Access Podcast Shows (and write papers)
**Read 1c. Grammer Checkers**
(e.g., Grammarly, Ginger, GrammarCheck, PaperRater, and SpellCheckPlus)
http://www.grammarly.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. Big Issue Reflections**
(Big Questions Online (BQO)), January 8, 2013
(e.g., Do We Have Souls?)
http://www.bigquestionsonline.com/content/do-we-have-souls

**Reflect 2b. Reflect on Virtual Timelines**
(Dipity, xtimeline, Simile, etc.)
http://www.usatoday.com/story/life/movies/2013/04/10/harrison-ford-jackie-robinson/2001783/

**Reflect 2c. Cultural Blogs**
(e.g., Dr. Kim Foreman, San Fran State University, Come and See Africa Blog; http://comeandseeafrica.blogspot.com/)

**3. Visual Learners**
- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.
Display 3a. Virtualize Words Used (e.g., Wordle, Tagzeda, Tagul, WordSift, Word It Out)
http://shellyterrell.com/2010/02/14/word-cloud-resources-tips-tools/

Display 3b. 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

Display 3c. Videos for clinical education
(Sungkyunkwan University School of Medicine, www.mededu.or.kr)

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. Student Class Documentaries
Umida's R546 Documentary Project
http://www.youtube.com/watch?v=EMLTzqCV_SA

Do 4b. Student Mobile App Creation
The App Builder: http://www.theappbuilder.com/
Mintian Guo (April 2013): http://myapp.is/r685final
Do 4c. Singing YouTube Summaries
Daniel Halluska, PS40, Fall 2011
http://www.youtube.com/watch?v=tOL7lrGsqnw

Poll #5: 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)

Poll #6: Any light bulbs going off in your head now...?
A. Yes definitely
B. Maybe
C. No

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