Masterclass Part 1: Adding Some TEC-VARIETY for Online Motivation and Retention
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This Generation of Students

September 11, 2016
Welcome, Freshmen. Look at Me When I Talk to You
Jonathan Zimmerman, The Chronicle of Higher Education
http://www.gite.education/events/2017conference/

Needed: New Models of Motivation and Engagement

Poll #1: Do you know what happens to sleeping students?

How do we engage online?
What did Jean-Luc Picard say?

That’s right, Engage!

Poll #2: Million Dollar Question:
What words come to mind when I say that I want to motivate learners?

*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.

Framework: 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
Introducing the free “TEC-VARIETY” Framework...
http://tec-variety.com/

Examples of TEC-VARIETY

1. Tone/Climate:
   A. Threaded Video Discussions and Questions (e.g., Flipgrid)
      http://flipgrid.com/#42988e5

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   B. Share Visuals of Favorite Places (e.g., Panoramio)
      http://www.panoramio.com/

November 10, 2016
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      http://www.panoramio.com/

   C. 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:

A. Demonstrations and Tutorials
Emerging technology specialist, IU UITS, Nitocris Perez, May 29, 2014

B. Online Practice Tests and Quizzes
(e.g., CPR, Human Embryology Animations)

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

3. Curiosity, Surprise, Intrigue, Unknowns:

A. Summary and Comparison Maps
#GeoawesomeMapOfTheDay
https://twitter.com/geoawesomeness
https://www.instagram.com/p/BNwgvJfDAq3/
https://twitter.com/hashtag/GeoawesomeMapOfTheDay?src=hash

B. Multimedia 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)

C. Multimedia News
Changing opinions on climate change, from a CNN meteorologist, Chad Meyers, CNN
January 17, 2016
3. Curiosity, Surprise, Intrigue, Unknowns:
D. Something in the News
https://en.wikipedia.org/wiki/Fauja_Singh

April 29, 2016
3. Curiosity, Intrigue, Unknowns:
E. Something in the News
Treasure trove: Farmer discovers 4,000 Roman coins in Swiss orchard

September 16, 2016
3. Curiosity, Intrigue, Unknowns:
F. Live Science
Best of the E/V Nautilus 2016 Expedition | Nautilus Live (video: 32:28)
http://www.nautiluslive.org/
https://www.youtube.com/watch?v=H412PKHnnU

November 19, 2015
3. Curiosity, Intrigue, Unknowns:
G. Immediate Science
New daddy longlegs named after ‘Lord of the Rings’ character Smeagol, Mary Bowerman, USA Today

August 2, 2016
3. Curiosity, Intrigue, Unknowns:
H. Immediate Science
Mystery whale has scientists shocked, New Whale Species Discovered, CNN

January 14, 2016
3. Curiosity, Intrigue, Unknowns:
I. Immediate Science
Move over T. rex, new dinosaur unveiled, Amanda Jackson, CNN
October 23, 2016
3. Curiosity, Intrigue, Unknowns: J. Immediate Science
Meet Savannasaurus, a new huge dinosaur species, CNN

January 5, 2017
3. Curiosity, Intrigue, Unknowns: K. Immediate Science
Cretaceous footprints show dinosaurs may have hunted in packs, USA Today
http://wwwusatoday.com/story/news/2017/01/05/jurassic-footprints-show-dinosaurs-may-have-hunted-packs/96217224/

April 1, 2016
3. Curiosity, Intrigue, Unknowns: L. Groundbreaking Science
(e.g., 2,500-year-old slab reveals lost language, CNN)
(A team of scientists have uncovered a 2,500-year-old slab that may reveal details about the ancient Etruscan civilization; found in Temple foundation north of Florence, Italy.)

April 1, 2016
3. Curiosity, Intrigue, Unknowns: M. Groundbreaking Science
(e.g., Potential Vikings site in North America spotted from space, Jareen Inman, CNN)

September 7, 2015
3. Curiosity, Intrigue, Unknowns: N. Groundbreaking Science
New ‘Superhenge’? Remains found near Stonehenge, Monica Sarkar, CNN

August 24, 2016
3. Curiosity, Intrigue, Unknowns: O. Groundbreaking Science
Scientists have discovered an Earth-like planet orbiting a nearby star, The Economist
Poll #3:
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. Summary and Comparison Maps
H. Immediate Science

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

   B. Online Test/Quiz Review Games
      (e.g., Jeopardy Rocks)
      https://www.jeopardy.rocks/r511merve/

   C. Voice/Audio Feedback
      Vocaroo: http://vocaroo.com/
      http://vocaroo.com/delete/s0x8moQAYAiu/a37bbc940bb8c95
      (Recorded by Curt Bonk for the Open University of China)

   D. Video Editing and Commenting Tools
      (e.g., TubeChop)

4. Variety, Novelty, Fun, Fantasy:

5. Autonomy, Choice:
   A. Enroll in a MOOC and Reflect
      (e.g., see Class Central)
December 8, 2015
5. Autonomy, Choice:
B. Design Multimedia Glossaries
P540 Final Assignment: Nate Wynne, Supersized Personal Course Glossary
http://natewynne1982.wix.com/p540courseglossary
Ozgur Ondermir, December 2012
http://rd65glossary.shutterfly.com/
Umida Ehmatulieva, Dec. 2011, P540
http://learningplanet.shutterfly.com/

March 13, 2015
5. Autonomy, Choice:
A. 20% Time in Education
Kendal Rasnake & Troy Cockrum, IU

Poll #4:
Any light bulbs going off in your head so far...?
A. Yes definitely***
B. Yes maybe!
C. Not yet (but hopefully soon...)

6. Relevance, Meaningfulness:
A. Weekly Synchronous Guest Chats
(e.g., Emily Hixon, January 20, 2016)
https://connect.iu.edu/p239wpiabg9/

Jan. 20, Oct. 13, & Nov. 2016 (Zoom)
6. Relevance, Meaningfulness:
B. Weekly Guest Expert Chats
RS11 Chat with Mike Molenda, IU
6. Relevance, Meaningfulness:

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

Stomach, endoscopic examination and biopsy:
Poorly differentiated tubular adenocarcinoma

I’d like to take the quiz now.

September 20, 2016

6. Relevance, Meaningfulness:

D. Editing Wikipedia Pages

College students take to Wikipedia to rewrite the wrongs of Internet science, Rosanna Xia, LA Times


Samantha Erickson, left, of the Wiki Education Foundation; Tina Brock, a dean of the School of Pharmacy at UC San Francisco; and professor Amin Azzam discuss implementing the integration of Wikipedia pages on medical topics with students' work. (David Butow / For The Times)

6. Relevance, Meaningfulness:

E. Case Demonstrations
(e.g., 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

June 12, 2015

6. Relevance, Meaningfulness:

F. News Infographics

Twitter CEO Dick Costolo replaced by co-founder Jack Dorsey, Laura Onita


7. Interactive, Collaborative:

A. Negotiate Meanings Online
(e.g., PiratePad: http://meetingwords.com/)

MeetingWords, Google Docs, NowComment, MixedInk

7. Interactive, Collaborative:

B. Virtual Sharing Walls

e.g., Padlet (What is your secret recipe to engage?)

http://padlet.com/zaid_alsagoff/engage
7. Interactive, Collaborative: 
C. Backchannel Chat (TodaysMeet) 
https://todaysmeet.com/ 
R678_Emerging_Learning_Technologies 
https://todaysmeet.com/R678_Emerging_Learning_Technologies

7. Interactive, Collaborative:  
D. Guest Speaker Quotes  
(Rey Junco, February 25, 2013)

7. Interactive, Collaborative:  
E. Synchronous Interactions  
(e.g., Skype, Zoom, Google Hangouts, Flat Connections, etc.)

Poll #4: Which of these ideas might you use?  
A. Student designed multimedia glossaries  
B. Online case demonstrations  
C. 20 percent time learning  
D. Guest chats with former students  
E. Negotiate meanings online (e.g., PiratePad)  
F. Enroll in a MOOC  
G. Discussion in Google Hangouts  
H. Guest speaker quotes

8. Engagement, Involvement:  
A. Interactive Maps Timelines  
October 22, 2014, Second immigration wave lifts diversity to record high, Edward Greg Toppo and Paul Overberg, USA Today

8. Engagement, Involvement:  
B. Interactive Map Timelines  
(adults with college degrees by county, May 7, 2012)
8. Engagement, Involvement:
   C. Interactive Timelines
   (Dipity, xtimeline, Simile, etc.)

8. Engagement, Involvement:
   D. Interactive Labs and Simulations
   http://phet.colorado.edu/en/simulation/energy-skate-park

8. Engagement, Involvement:
   E. Decision Making Simulations

8. Engagement, Involvement:
   F. Videos with Test Questions (e.g., TEDEd)
   (Lessons about every single element on the periodic table)

December 13, 2016
9. Tension, Challenge, Controversy, etc.:
   A. Controversial Issue Debates
   Librarians for Instructional Technology, Latrice Booker, R511, Fall 2016
   http://bookers2000.wixsite.com/librariansfort/cognitivism

October 16, 2015
9. Tension, Challenge, Controversy, etc.:
   B. Case Learning from the News
   (e.g., Newseum Ed)
   http://newseum.org
10. Yields Products, Goals:
A. Facebook Course Page (R546)
https://www.facebook.com/JennyBELTT/

B. Student Created Mobile Apps
The App Builder: http://www.theappbuilder.com/
Mintian Guo: http://myapp.is/r685final

C. Student Created Recap Videos
Piercarlo Abate: http://www.youtube.com/watch?v=--TURzHO0aU
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=8cmCFWi9lW8
Kendal Rasnake (Is IT Right For You?): https://www.youtube.com/watch?v=MJ3GUDICIGw

D. Student Created Documentaries
R678 Final Projects, April 2016
The Making of an Adventurer (video), Troy Cockrum
https://www.youtube.com/watch?v=ew6e7Chd9I8

E. Student Created Websites
“IST Construction, Co.,” Rob Elliot, Patrick Walsh, Erin Milanese, R511, Fall 2016
http://relliott.net/istconstruction/index.php

F. Database Collection Tools
Design Article Database in Pinterest, Meina Zhu and Jennifer Weebeck
https://www.pinterest.com/zhumeina0000/r678-emerging-learning-technology/
https://www.pinterest.com/jennifertwebeck/emerging-learning-technologies/
March 12, 2016

10. Yields Products, Goals:
G. Student Generated Timelines, Taxonomies, and Concept Maps

R678 John Falchi, Timoglider, An Abbreviated History of Distance Education

http://timeglider.com/t/50843d8903a48008?min_zoom=1&max_zoom=100

December 13, 2016

10. Yields Products, Goals:
H. Student Infographics, Charts, and Maps
(e.g., Piktochart)

Brittany Campbell, Brooke Welti, Kevin McCracken, R511, Fall 2016
https://magic.piktochart.com/output/18501778-r511?presentation=true

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

A. Interactive map timelines
B. Facebook course page (or Pinterest)
C. Issue challenges, role plays, and debates
D. Student designed course recap videos
E. Student created websites
F. Student infographics
G. Interactive timeline tools
H. Videos with test questions

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

Any Questions or Comments?

Slides at: TrainingShare.com
Papers: PublicationShare.com
Free book: http://tec-variety.com/
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