Learning is Changing Part II: Models for Motivating and Retaining Online Learners (TEC-VARIETY AND R2D2)

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Language Learning is Changing!

Learning is More Collaborative
May 5, 2014
Technology Provides Foreign-Language Immersion at a Distance,
Danya Perez-Hernandez, Chronicle of Higher Education,
http://chronicle.com/article/Technology-Provides/146369/?cid=at&utm_source=at&utm_medium=en

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

Learning is More Ubiquitous
Learn Anytime, Always On/Mobile
“Everything I need to do today, I can do on my phone,” says Robert Johnson (Louisville, KY)...He often grades papers and communicates with students from a cafe near his home.

Learning is More Self-Directed
iPod Learning from MIT OCW
(e.g., Wendy Ermold, University of Washington)
Motivation and Engagement

What did Jean-Luc Picard say?

That's right, 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.
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)


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

Education 3.0?
Introducing the free “TEC-VARIETY” Framework...

http://tec-variety.com/

Examples of TEC-VARIETY

1. Tone/Climate: A. Threaded Video Discussions, 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. Demonstrations and Tutorials**
   
   Emerging technology specialist, IU UITS, Nitocris Perez, May 29, 2014
   

3. **Encouragement, Feedback, etc.:**
   
   **B. Voice/Audio Feedback**
   
   Vocaroo: http://vocaroo.com/
   
   http://vocaroo.com/delete/sd8x8moQAYAiu/a37bb9c408bb8c95
   
   (Recorded by Curt Bonk for the Open University of China)

4. **Encouragement, Feedback, etc.:**
   
   **C. Online Practice Tests and Quizzes (e.g., CPR, Human Embryology Animations)**

5. **Encouragement, Feedback, etc.:**
   
   **D. Class Facebook Group**
   
   Dr. Bonk’s creative fun time group (R546)
   
   https://www.facebook.com/groups/830496290323899/
3. Curiosity, Fun:
A. 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

May 25, 2015
3. Curiosity, Fun:
B. Something in the News (e.g., Chinese universities move up in world rankings, China Daily)
http://www.cn.com/2015/01/30/asia/china-dragon-dinosaur/index.html

3. Curiosity, Fun:
C. Something in the News
New ‘massive’ dinosaur skeleton discovered, USA Today, September 5, 2014 (Dreadnoughtus)
October 23, 2014: Goofy dinosaur blends Barney and Jar Jar Binks, SF Gate
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)

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, Screenc, etc.)
D. Voice/Audio feedback (Vocaroo)
E. Online practice tests
F. Something in the news
G. Tracking life of scientist

4. Variety, 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 teach pupils across the globe.
4. Variety, Novelty, Fun, Fantasy:
B. Random Lists (Random.org—clocks, coins, playing cards, dice, integers, passwords, jazz scales, lists, sequences, etc.)

5. Autonomy, Choice:
B. Enroll in a MOOC and Reflect (e.g., see Class Central)

5. Autonomy, Choice:
D. Design Multimedia Glossaries
Ozgur Ozdemir, December 2012
http://685glossary.shutterfly.com/
Umida Khikmatillaeva, Dec. 2011, P540
http://learningplanet.shutterfly.com/

5. Autonomy, Choice:
E. Design Article Database in Pinterest, Jenny Webeck
https://www.pinterest.com/jennifertwebeck/emerging-learning-technologies/

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

5. Autonomy, Choice:
C. Attend Webinar (pick weeks and reflect)
Cathy Davidson, The End of Higher Education
http://connectedcourses.net/thecourse/why-we-need-a-why/
5. Autonomy, Choice:
F. Design Article Database in Facebook, Jenny Webeck
https://www.facebook.com/JennyBELTT/timeline

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. Relevance, Meaningfulness:
A. Guest Chats (e.g., Emily Hixon, January 20, 2015)
https://connect.iu.edu/p259wpig9/

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

7. Interactive, Collaborative:
A. Negotiate Meanings Online
(e.g., PiratePad: http://meetingwords.com/)
MeetingWords, Google Docs, NowComment, MixedInk

B. Backchannel Chat (TodaysMeet)
https://todaysmeet.com/
R678_Emerging_Learning_Technologies
https://todaysmeet.com/R678_Emerging_Learning_Technologies
7. Interactive, Collaborative:
C. Q&A Web Conferencing
(Adobe Connect, Jabber, iMeet, GoToMeeting, etc.)
https://connect.iu.edu/p259wpiabg9/

7. Interactive, Collaborative:
D. 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. Student designed multimedia glossaries
B. Article database in Pinterest
C. Guest chats with former students
D. Negotiate meanings online (e.g., PiratePad)
E. Backchannel chat (Today's meet)
F. Class Facebook group
G. 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/

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

8. Engagement, Effort:
C. Interactive Timeline Maps,
October 22, 2014, Second immigration wave lifts diversity to
record high, Edward Greg Toppo and Paul Overberg, USA Today
8. Engagement, Effort:
D. Google Map Gallery
September 16, 2014
http://maps.google.com/gallery/

8. Engagement, Effort:
E. 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:
F. Data Visualization Tools (Harvard and MIT MOOCs)
Lawrence Biemiller, February 20, 2014, Chronicle of Higher Education

March 13, 2015
9. Tension, Challenge, etc.:
B. 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

January 23-25, 2015
9. Tension, Challenge, etc.:
C. Global Game Jam
25,000 participants. 518 jam sites. Egypt had more than 800 participants. Over 5,000 games made. Includes Belarus, Cuba, Ecuador, Faroe Islands, Georgia, Ghana, Guatemala, Guernsey and Luxembourg as first time participants.
http://globalgamejam.org/news/ggj15-closes (reflect, discuss, etc.)

July 10, 2014
9. Tension, Challenge, etc.:
C. Controversial Issue Debates
Scholarly journal retracts 60 articles, smashes ‘peer review ring’, Fred Barbash, Washington Post

9. Tension, Challenge, etc.: C. Controversial Issue Debates
Scholarly journal retracts 60 articles, smashes ‘peer review ring’, Fred Barbash, Washington Post
10. Yields Products, Goals:
A. Student Created Mobile Apps
   Mintian Guo: [http://myapp.is/r685final](http://myapp.is/r685final)

B. Student Created Videos
   - [Mintian Guo](http://myapp.is/r685final)
   - [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)

C. Interactive Archive/Gallery of Exemplary First-Year Writing Projects
   (Fresh Writing, University of Notre Dame, September 24, 2014; [https://freshwriting.nd.edu/](https://freshwriting.nd.edu/))

Poll #5:
Which of these ideas might you use?
A. Guest speaker quotes
B. Data visualization tools
C. Challenge debates (cage matches?)
D. Student designed video productions
E. Student designed e-books
F. Goal setting tools
G. Gallery of exemplary work

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

Recap and Reflect with Neighbor for 1-2 minutes...
Or Explore Websites from this Session!
Or Find the lieu...
Take a quick 1-2 minute break...
Where Are You R2D2?: Addressing Diverse Learner Needs with the Read, Reflect, Display, and Do Model

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This Generation of Students

Addressing Learning Styles

Question: How can technology address diverse learner needs?

Framework #2: 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. Collect and Listen to Interactive Stories
   (e.g., Meograph: http://www.meograph.com/)

Read 1b. Twitter Fed Class Discussions
   Live-Tweeting Assignments: To Use or Not to Use?
   - The Chronicle of Higher Education, Adeline Koh
   http://chronicle.com/blogs/profhacker/live-tweeting-assignments-to-use-or-not-use/58949

Read 1c. Grammar 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)), Feb 3, 2015
(e.g., Is curiosity essential for human flourishing?)
https://www.bigquestionsonline.com/content/are-we-have-souls

Reflect 2b. Interpreting Infographics
July 24, 2014
Woman in Computer Science
http://graduatedegrees.online.njit.edu/mscs-resources/mscs-infographics/women-in-computer-science/

Reflect 2c. Workplace Internship, Practicum, and Field Experiences

Reflect 2d. Reflect on Virtual Timelines
(Dipity, xtimeline, Simile, etc.)

Reflect 2e. Cultural Blogs
(e.g., Dr. Kim Foreman, San Fran State Univ, Come and See Africa Blog;
http://comeandseeafrica.blogspot.com/)
Poll #6:
Any light bulbs going off in your head so far...?
A. Yes definitely
B. Maybe
C. No

3. Visual Learners
• Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

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

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

Display 3c. (April 28, 2015)
Concept Mapping and Timeline Tools
(Bubbl.us, Cmap, Gliffy, Spicynodes, or Mindomo)
http://www.spicynodes.org/index.html

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.
February 8, 2015
Do 4a. Recap Discussion (e.g., Prezi from Thuy Han for R678 class Week 4)

Poll #7: Which do you prefer...
(A) TEC-VARIETY or (B) R2D2?

Poll #8: How many ideas did you get from this talk?
1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2...just 2!
4. Do I hear 3? 3!!!!
5. 4-5.
6. 5-10.

Where are we headed?
Where is Education 3.0?

Do 4b. Student Music Recordings of Course Content
April 26, 2015
IST Groove Song, Jeffrey Jenkins, R511: https://soundcloud.com/jeffjenkins25/ist-groove
The World is Open, Jill Kaufman, R678: https://www.youtube.com/watch?v=ZRGV0Mg5Vmw&feature=youtu.be
Daniel Halluska, P540: http://www.youtube.com/watch?v=10574报酬

Any Questions or Comments?
Try TEC-VARIETY...Try R2D2
Slides at: TrainingShare.com
Papers: PublicationShare.com
Free Book: http://tec-variety.com/
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