

Adding Some TEC-VARIETY for Online Motivation and Retention

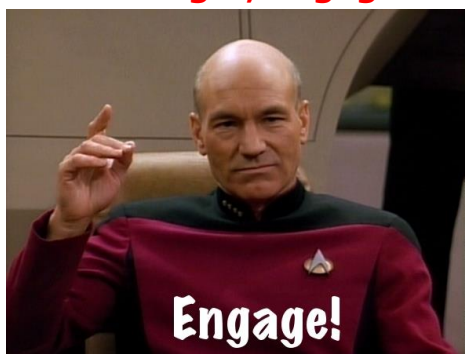
Curtis J. Bonk, Professor, Indiana University
 cjbonk@indiana.edu
<http://mypage.iu.edu/~cjbonk/>



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.
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. **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

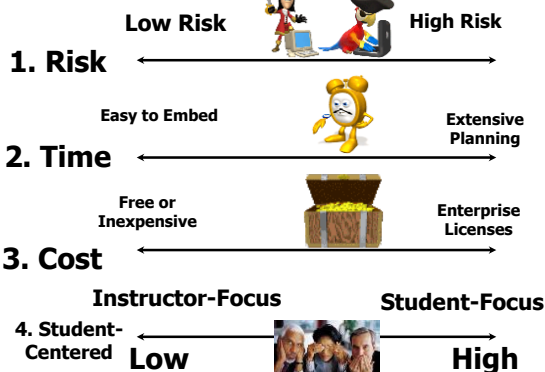
Introducing the "TEC-VARIETY book..."

<http://tec-variety.com/>



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

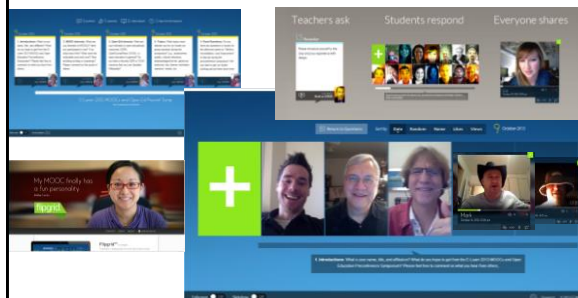


Examples of TEC-VARIETY



1. Tone/Climate: A. Video Introductions, e.g., Flipgrid

<http://flipgrid.com/#429f88c5>



1. Tone/Climate: B. Video Introductions (Office Hours in Other Countries)

Chuck Severance, U Michigan/Coursera) in Barcelona

<http://www.youtube.com/watch?v=JzNHvM5v8T4>

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>



May 29, 2014

May 29, 2014

2. Encouragement, Feedback, etc.: B. Voice Feedback

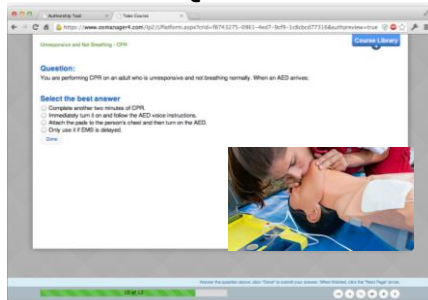
Vocaroo; <http://vocaroo.com/>

<http://vocaroo.com/i/s1ao2YOFyPI3> (Singapore)



© 2007-2013 Vocaroo | [Help](#) | [FAQ](#) | [Privacy](#) | [Terms](#)

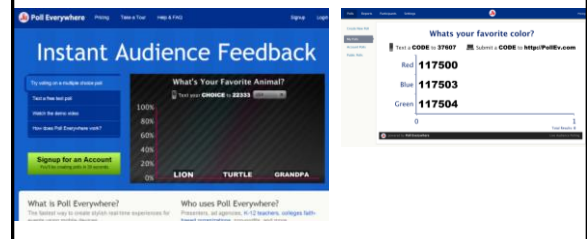
2. Encouragement, Feedback, etc.: C. Online Practice Tests and Quizzes



2. Encouragement, Feedback, etc.: D. Blog and Website Polling

(e.g., Poll Everywhere, BlogPolls, BlogPoll, MicroPoll)

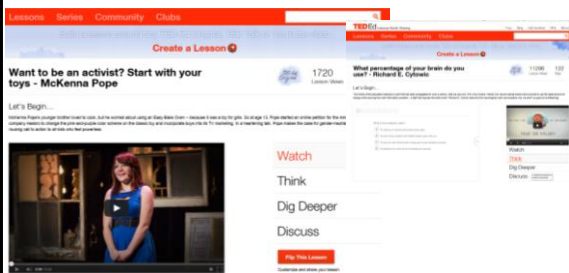
<http://www.pollerywhere.com/>



3. Curiosity, Fun: A. Videos and Online Quizzes

(e.g., Want to be an activist? Start with your toys - McKenna Pope, TEDEd)

<http://ed.ted.com/lessons/want-to-be-an-activist-start-with-your-toys-mckenna-pope/watch>



March 15, 2015

3. Curiosity, Fun: B. Something in the News

(e.g., Protesters stage anti-robot rally at SXSW, USA Today, Jon Swartz)

http://www.cnn.com/2014/12/17/health/healthy-aging/index.html?hpt=hp_12
http://money.cnn.com/2014/11/02/pf/college-for-profit-college-degre/index.html?hpt=hp_15
http://enm.as.com/sports/endurance/story/_/id/8978487/fauja-singh-101-cases-cancer-10k-things-long
<http://www.usatoday.com/story/tech/2015/03/14/saw-robot-at-protest-artificial-intelligence/24772971/>



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/2014/09/05/dinosaur-skeleton-discovered/15031803/>

October 23, 2014: Goofy dinosaur blends Barney and Jar Jar Binks, SF Gate

<http://www.sfgate.com/entertainment/article/Incredible-10-foot-'dragon'-dinosaur-unearthed-by-Chinese-farmers-10154799.php>

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



3. Curiosity, Fun:

E. 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>

bio.



3. Curiosity, Fun:

F. Tracking the Life of a Computer Scientist (Wikipedia)

http://en.wikipedia.org/wiki/Vannevar_Bush

JULY 1945

As We May Think

VANNEVAR BUSH | JUL 1 1945, 12:00 PM ET



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 coach pupils across the globe.

<http://www.bbc.com/news/world-asia-23497552>



4. Variety, Novelty, Fun, Fantasy:

B. Random Lists (Random.org—clocks, coins, playing cards, dice, integers, passwords, jazz scales, lists, sequences, etc.)

RANDOM.ORG

RANDOM.O

Coin Flipper

You Request 2 coins of type 31414:



Timestamp: 2011-08-13 01:43 UTC

[Flip Again](#) [Go Back](#)

Dice Roller

You rolled 2 dice:



Timestamp: 2011-08-13 01:43 UTC

[Roll Again](#) [Go Back](#)

List Randomizer

There were 10 items in your list. Here they are in random order:

Random Sequence Generator

Here is your sequence:	
1. Bill	10
2. Arthur	10
3. Thomas	10
4. Shelley	10
5. Shirley	10
6. Sharon	10
7. Susan	10
8. Stephanie	10
9. Ted	10
10. Brian	10

Timestamp: 2011-08-13 01:43 UTC

[Roll Again](#) [Go Back](#)

March 13, 2015

**5. Autonomy, Choice:
A. 20% Time in Education**

Kendal Rasnake & Troy Cockrum, IU

https://www.dropbox.com/s/tcr50a28eqwz/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_41409a24-adeb-11e4-b05a-47eb57d7a1e.html
<http://www.vtnews.vt.edu/articles/2015/01/012315-core-pinktime.html>
<http://chronicle.com/blogs/network/education/2015/03/04/confirming-the-unexpected-unlocking-intellect>

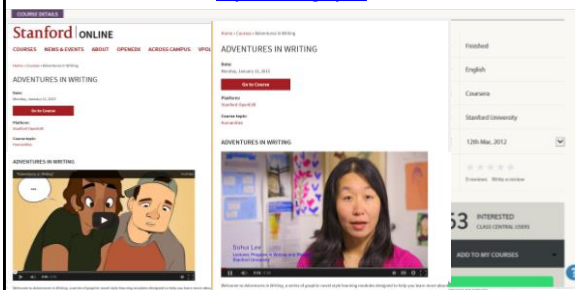


Dr. Tim Baird speaks about his concept of "Pink Time" during the Seventh Annual Conference on Higher Education Pedagogy, February 5, 2015.

**5. Autonomy, Choice:
B. Class Central**

Gaming Literacy and Learning, MOOC in Canvas, Hui-Yin Hsu & Dr. Shiang-Kwei Wang

<https://www.class-central.com/>
<http://oedb.org/open/>



5. Autonomy, Choice:

C. Attend Webinar (pick weeks and reflecti)

Cathy Davidson, The End of Higher Education

<http://connectedcourses.net/thecourse/why-we-need-a-why/>



**5. Autonomy, Choice:
D. Design Multimedia Glossaries**

Ozgur Ozdemir, December 2012

<http://r685glossary.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/>

EDED 5372 Emerging Trends and Issues in Instructional Technology



5. Autonomy, Choice:

F. Design Article Database in Facebook, Jenny Webeck

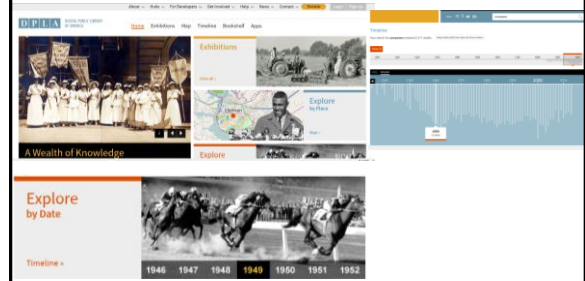
<https://www.facebook.com/JennyBELTT/timeline>



5. Autonomy, Choice:

G. Visual Library Search Digital Public Library of America

<http://dp.la/>



5. Autonomy, Choice:

H. Online Learning Object Repositories and Portals (e.g., Computer Programming)

<https://www.khanacademy.org/computing/computer-programming>



6. Relevance, Meaningfulness:

A. Guest Chats (e.g., Emily Hixon, January 20, 2015)

<https://connect.iu.edu/p259wpiabg9/>



6. Relevance, Meaningfulness:

B. Video Scenario Learning Accounting Interviews and Preparatory Course Review Modules (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/fraudScenario2.html>



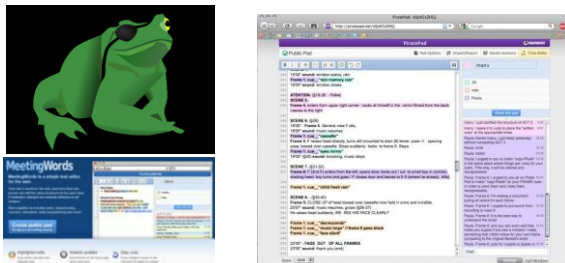
6. Relevance, Meaningfulness:

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



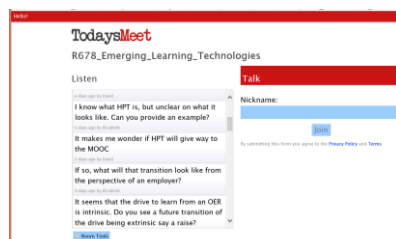
7. Interactive, Collaborative: A. Negotiate Meanings Online (e.g., PiratePad: <http://meetingwords.com/>)

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!



January 27, 2015 7. Interactive, Collaborative: B. Backchannel Chat (TodaysMeet)

<https://todaysmeet.com/>
R678_Emerging_Learning_Technologies
https://todaysmeet.com/R678_Emerging_Learning_Technologies



October 4, 2014 7. Interactive, Collaborative: C. R546 Facebook Group Dr. Bonk's creative fun time group (R546) <https://www.facebook.com/groups/830496290323899/>



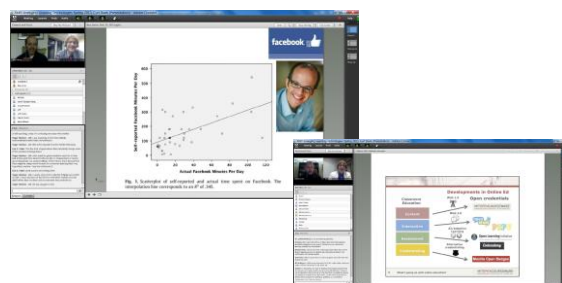
7. Interactive, Collaborative: D. Multiple Guest Experts Sara de Freitas and Jim Hensman, U of Coventry, UK (<https://connect.lsu.edu/p21et1yx565x/>) Jay Cross, Berkeley (<https://connect.lsu.edu/p4bysoromh/>)



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

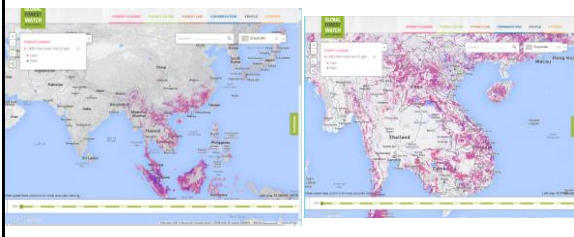


8. Engagement, Effort: F. Guest Speaker Quotes (Rey Junco, February 25, 2013)



8. Engagement, Effort: G. Map Trend Interpretations e.g., Global Forest Watch (April 2014)

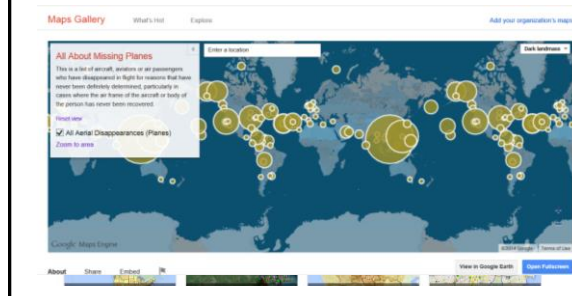
<http://www.globalforestwatch.org/map/3/-3.72/27.00/ALL/grayscale/loss/596>



8. Engagement, Effort: H. Google Map Gallery

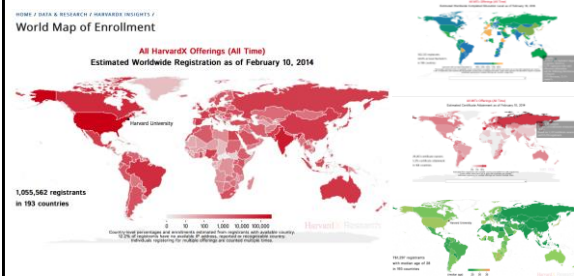
September 16, 2014

<http://maps.google.com/gallery/>



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

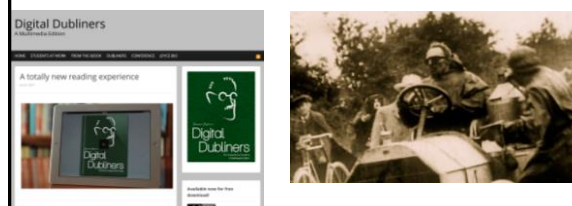
http://chronicle.com/blogs/technology/harvard-and-mit-release-visualization-tools-for-draw-of-mooc-data/205331/list-products_sourcecamakun_mindlucan



8. Engagement, Effort: J. 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/>



9. Tension, Challenge, etc.: A. Cage Matches or Debates (with online audience topical suggestions) Cage Match on MOOCs at SXSWedu 2013 (Curt Bonk & Chuck Severance)

<http://chronicle.com/blogs/technology/sxswedu-2013-south-by-southwest-education-event-london-diy-education-entrepreneurs-and-educators/42777>

<https://soundcloud.com/sxswedu/cage-match-the-massive-open>



Bonk

Severance

March 15, 2015 9. Tension, Challenge, etc.: B. 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-gender-gap-chic-technology-gender-gap/2480869/>



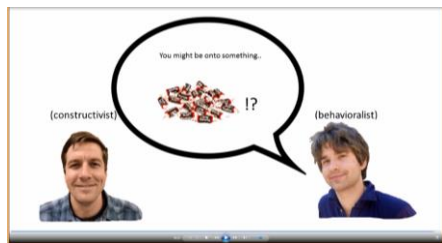
March 13, 2015

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



March 13, 2015

9. Tension, Challenge, etc.:

D. Controversial Issue Debates

Gamification, Jeff Jenkins and Melody Childs, IU

<https://www.youtube.com/watch?v=DYe85LMiq5w>

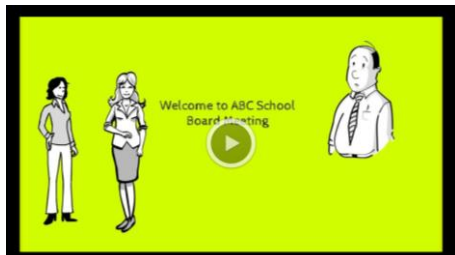


March 13, 2015

9. Tension, Challenge, etc.:

E. Controversial Issue Debates: Flipped Classroom, Board Meeting, Nora and Lauren, IU

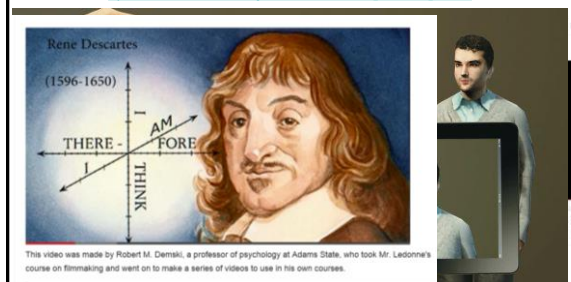
<https://www.dropbox.com/sh/gqjknepfjmdxc/AAAuQ9JC8cEaBt8C-ZLxPuCa?dl=0#file-multi-603ea104-0935-a723-1329.mpl>



10. Yields Products, Goals:

A. Course Video Summaries and Multimedia Team Assignments (April. 24, 2014)

Piercarlo Abate: <http://www.youtube.com/watch?v=-TURzh00au>
 Qi Li, Gangnam: <http://www.youtube.com/watch?v=7Q4299pZaU8&feature=youtu.be>
 Miguel Lara (Web 2.0 FREEDOM): <http://www.youtube.com/watch?v=8cmCFW9IW8>
http://chronicle.com/article/Multimedia-Assignments-Not-1455939/106-edukim_source=edukim_medium=me



This video was made by Robert M. Demski, a professor of psychology at Adams State, who took Mr. Ledonne's course on filmmaking and went on to make a series of videos to use in his own courses.

10. Yields Products, Goals:

B. Uploading Mobile Books

(e.g., BookRix, <http://www.bookrix.com/>)



10. Yields Products, Goals:

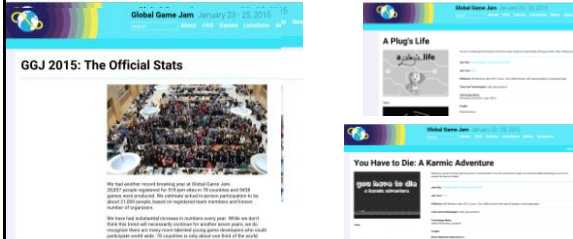
C. Student Mobile App Creation

The App Builder: <http://www.theappbuilder.com/>
 Mintian Guo (April 2013): <http://myapp.is/r685final>



January 23-25, 2015 10. Yields Products, Goals: D. 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.)



10. Yields Products, Goals: E. Business Plans and Virtual Mentoring toward Goals, September 22, 2014, Chronicle of HE

<http://chronicle.com/article/Start-Up-Slow-Down/148923?cid=at>



10. Yields Products, Goals: F. Goal Setting Tools (e.g., I Done This, Milestone Planner, and 43 Things)



10. Yields Products, Goals: G. Fresh Writing, Interactive Archive of Exemplary First-Year Writing Projects (University of Notre Dame, September 24, 2014) <https://freshwriting.nd.edu/>



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?

Try TEC-VARIETY...

Slides at: TrainingShare.com

Papers: PublicationShare.com

Book: <http://tec-variety.com/>

Dr. Curt Bonk – CJBonk@Indiana.edu

