

## Masterclass Part 1: Adding Some TEC-VARIETY for Online Motivation and Retention

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<http://mypage.iu.edu/~cjbonk/>

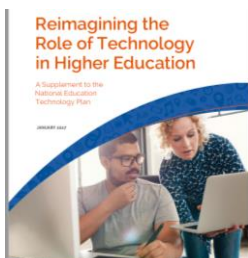


## January 15, 2017 3 Reasons to Read the Higher Ed Supplement to National EdTech Plan (e.g., conversation starter, examples of innovation, cross-section of expertise) Joshua Kim, Inside Higher Ed

<https://www.insidehighered.com/blogs/technology-and-learning/3-reasons-read-higher-ed-supplement-national-edtech-plan-9>



## January 2017 Higher Education Supplement to the National Education Technology Plan U.S. Department of Education, Office of Educational Technology <https://tech.ed.gov/files/2017/01/Higher-Ed-NETP.pdf>



## January 2017 Higher Education Supplement to the National Education Technology Plan U.S. Department of Education, Office of Educational Technology <https://tech.ed.gov/files/2017/01/Higher-Ed-NETP.pdf>

### 'New Normal' Students in Higher Education

**74%** of all undergraduate students have  
at least one nontraditional characteristic

66% transfer between institutions prior to completion	62% work either full or part time	43% attend part time
28% have at least one dependent	35% are enrolled in two-year colleges	63% are first-gen students

Source: National Center for Education Statistics (NCES)

## January 2017 Higher Education Supplement to the National Education Technology Plan U.S. Department of Education, Office of Educational Technology <https://tech.ed.gov/files/2017/01/Higher-Ed-NETP.pdf>

### Design Principles for a Student-Centered Higher Education Ecosystem

- 1. Student-centered learning: Learning is a human activity, and students are the center of the educational experience. The educational system should be designed to support and enhance the learning experience.
- 2. Personalized learning: Learning should be tailored to the individual student's needs, interests, and abilities. The educational system should provide the tools and resources to support personalized learning.
- 3. Collaborative learning: Learning is a social activity, and students should learn from each other. The educational system should provide the tools and resources to support collaborative learning.
- 4. Flexible learning: Learning should be flexible and adaptable to the needs of the student. The educational system should provide the tools and resources to support flexible learning.
- 5. Lifelong learning: Learning is a continuous process, and students should be encouraged to continue their education throughout their lives. The educational system should provide the tools and resources to support lifelong learning.
- 6. Data-driven learning: Learning should be informed by data and analytics. The educational system should provide the tools and resources to support data-driven learning.
- 7. Open learning: Learning should be open and accessible to all students. The educational system should provide the tools and resources to support open learning.
- 8. Transparent learning: Learning should be transparent and accountable. The educational system should provide the tools and resources to support transparent learning.
- 9. Inclusive learning: Learning should be inclusive and welcoming to all students. The educational system should provide the tools and resources to support inclusive learning.
- 10. Sustainable learning: Learning should be sustainable and resilient. The educational system should provide the tools and resources to support sustainable learning.

### Student-Centered Higher Ed Ecosystem



## Poll #1: How many of you cannot keep up with educational technology reports and are frustrated?



**There's so much happening  
that...**



**January 7, 2017**  
**Overworked? Join the club. Here's  
how to handle It.**

Laura Petrecca, USA Today

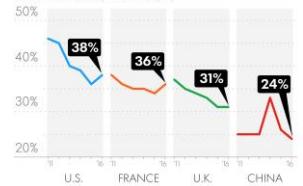
<http://www.usatoday.com/story/money/2017/01/07/overworked-americans/96235044/>

Overworked? Join the club. Here's h

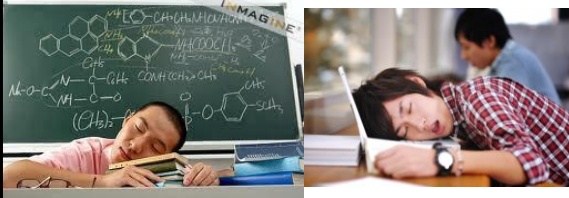


### IS YOUR WORKLOAD EXCESSIVE?

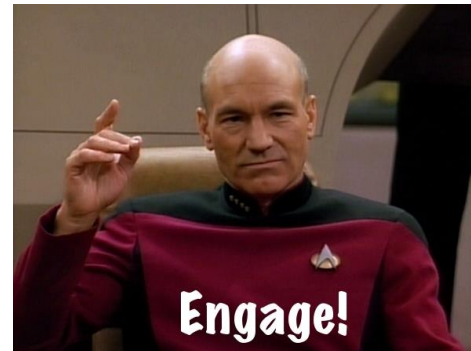
Percentage of employees, comparing 2016 to 2011, who don't think so:



**Needed: New Models of  
Motivation and Engagement**



**What did Jean-Luc Picard say?**



## 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.



**Poll #3: 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

**Introducing the free "TEC-VARIETY"  
Framework...**

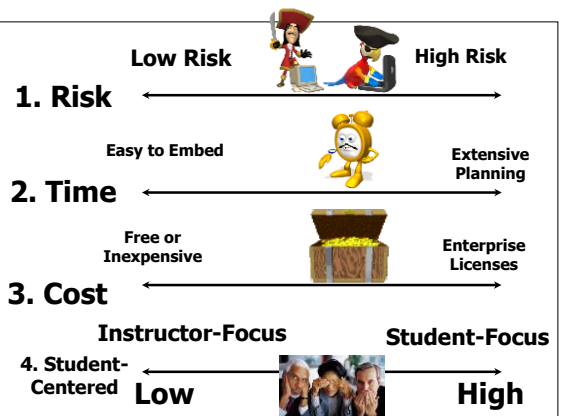
<http://tec-variety.com/>  
<http://tec-variety.com/TEC-VARIETY-Chinese.pdf>



**在线学习动机与激励:  
TEC-VARIETY 模型**

——激励和留住在线学习者的 100 个活动

作者: Curtis J Bonk & Elaine Khoo IU



**Examples of TEC-VARIETY**

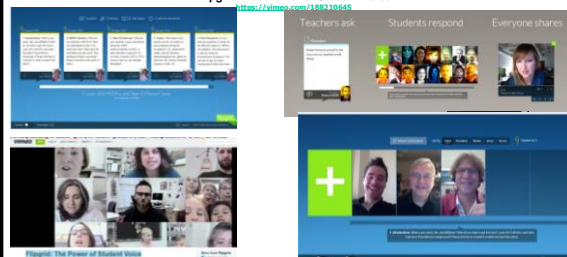


**November 10, 2016**

**1. Tone/Climate:**  
**A. Threaded Video Discussions and Questions  
(e.g., Flipgrid)**

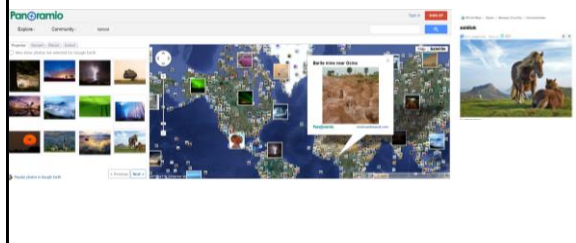
<http://flipgrid.com/#429f88c5>

Flipgrid: The Power of Student Voice



## 1. Tone/Climate: B. Share Visuals of Favorite Places (e.g., Panoramio)

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



## 1. Tone/Climate: C. Instructor Course Introductions

(Theatre 10 Intro Video, October 7, 2014, Elizabeth Dale, West Valley College)

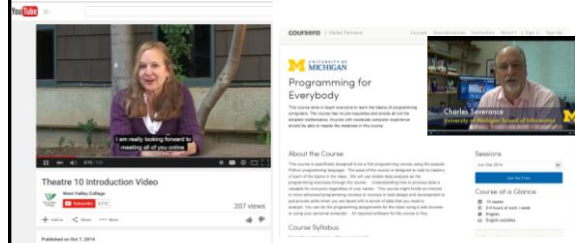
<https://www.youtube.com/watch?v=Wzbcz30iIA>

Chuck Severance, U Michigan/Coursera) in Barcelona

<http://www.youtube.com/watch?v=JzNHvmsV8Tl>

Chuck Severance, University of Michigan

<https://www.coursera.org/course/pythonlearn>



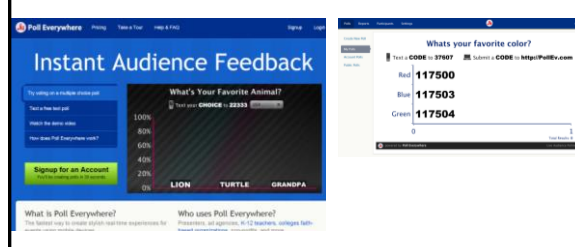
## 2. Encouragement, Feedback: A. Demonstrations and Tutorials (e.g., Jing, Screenr, GoView, Screencast-o-matic, etc.)

<http://inside.iub.edu/features/videos/2014-05-29-inub-vid-cib.shtml>



## 2. Encouragement, Feedback: B. Blog and Website Polling (e.g., Poll Everywhere, BlogPolls, BlogPoll, MicroPoll)

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

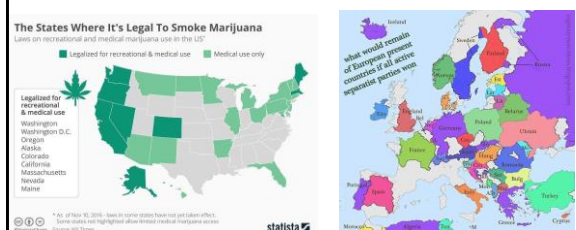


## March 27, 2017 3. Curiosity, Surprise, Intrigue, Unknowns: A. Summary and Comparison Maps #GeoawesomeMapOfTheDay

<https://twitter.com/geoawesomeness>

<https://www.instagram.com/p/BNwgvJfDAq3/>

<https://twitter.com/hashtag/GeoawesomeMapOfTheDay?src=hash>



## 3. Curiosity, Intrigue, Unknowns: 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)

[http://www.cnn.com/2014/11/06/living/oldest-photograph-human-daguerra/index.html?hpt=hp\\_4\\_kong](http://www.cnn.com/2014/11/06/living/oldest-photograph-human-daguerra/index.html?hpt=hp_4_kong)

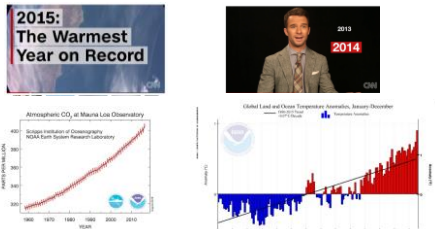




### August 24, 2016 3. Curiosity, Intrigue, Unknowns: C. Multimedia News

Changing opinions on climate change, from a  
CNN meteorologist, Chad Meyers, CNN

<http://www.cnn.com/2016/08/24/opinions/chad-meyers-climate-change-weather/index.html>



### January 17, 2016 3. Curiosity, Surprise, Intrigue, Unknowns: D. World Records in the News

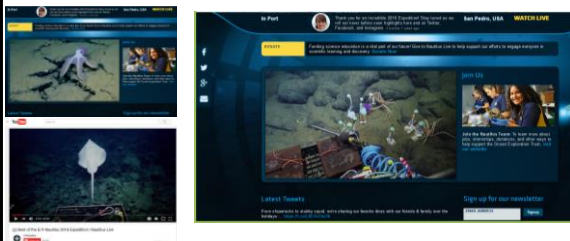
[http://www.cnn.com/2014/12/17/health/healthy-aging/index.html?hpt=hp\\_12](http://www.cnn.com/2014/12/17/health/healthy-aging/index.html?hpt=hp_12)  
<http://cnn.as.com/sports/embarcos/story/16/8779497/fauja-singh-101-cnn-cnn-106-hong-kong>  
[http://en.wikipedia.org/wiki/Fauja\\_Singh](http://en.wikipedia.org/wiki/Fauja_Singh)  
<http://www.sbs.com.au/yourlanguage/hindi/en/articles/2016/04/17/104-year-old-fauja-singh-runs-mumbai-marathon>



### September 16, 2016 3. Curiosity, Intrigue, Unknowns: E. Live Science

Best of the E/V Nautilus 2016 Expedition | Nautilus Live  
(video: 32:28)

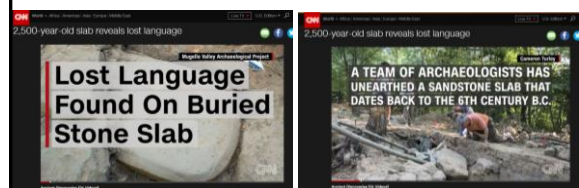
<http://www.nautiluslive.org/>  
<https://www.youtube.com/watch?v=Ht-412PKHmU>



### April 1, 2016 3. Curiosity, Intrigue, Unknowns: F. 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.)

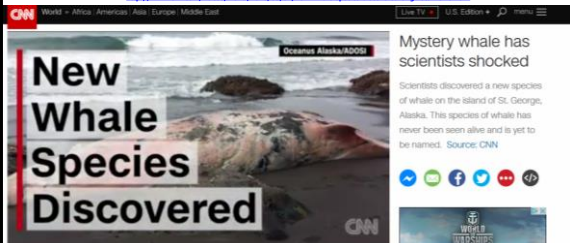
<http://www.cnn.com/videos/world/2016/04/01/italy-etruscan-slab-find-orig-volcan-cnn>



### August 2, 2016 3. Curiosity, Intrigue, Unknowns: G. Immediate Science

Mystery whale has scientists shocked,  
New Whale Species Discovered, CNN

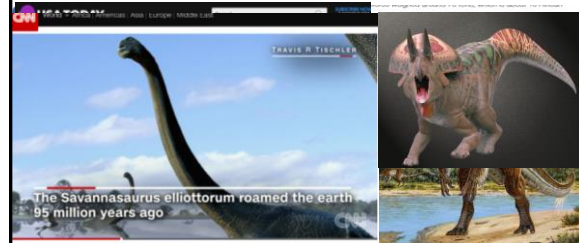
<http://www.cnn.com/videos/world/2016/08/02/new-whale-species-discovered-orig-volcan-etruscan-cnn>



### January 5, 2017 3. Curiosity, Intrigue, Unknowns: H. Immediate Science

Move over T. rex, new dinosaur unveiled, Amanda Jackson, CNN

<http://www.cnn.com/2016/01/14/living/titanosaur-new-dinosaur-on-display-new-york-orig/>



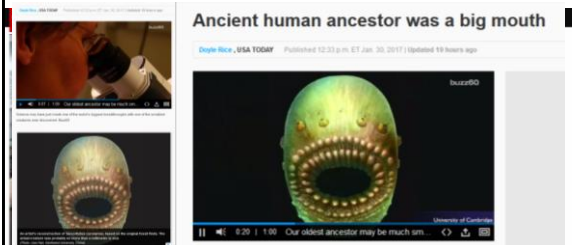
**February 16, 2017**

**3. Curiosity, Intrigue, Unknowns:**

**I. Immediate Science**

Woolly Mammoth Could Be 'De-Extinct' In 2 Years, Scientist Says  
Hillary Hansan, CNN (video: 3:22)

[http://www.huffingtonpost.com/entry/woolly-mammoth-extinct\\_us\\_58a62a7e46037d174264577?hpid=hp\\_hp-top-table-main-mammoth-extinct\\_us\\_58a62a7e46037d174264577](http://www.huffingtonpost.com/entry/woolly-mammoth-extinct_us_58a62a7e46037d174264577?hpid=hp_hp-top-table-main-mammoth-extinct_us_58a62a7e46037d174264577)



**February 19, 2017**

**3. Curiosity, Intrigue, Unknowns:**

**J. New Theories in the News**

We thought New Zealand was an island nation.  
Scientists say it's the tip of a 'hidden continent.'  
Avi Seik, The Washington Post

<http://www.denverpost.com/2017/02/19/new-zealand-zealandia/>



**February 16, 2017**

**3. Curiosity, Intrigue, Unknowns:**

**K. Crowdsourced Science**

NASA wants you — to find a missing planet  
Doyle Rice, USA Today (includes 1:09 video)

<http://www.usatoday.com/story/tech/sciencefair/2017/02/16/planet-9-nasa/58007144/>

Astronomers discover 7 Earth-sized planets orbiting nearby star



**Poll #4:**

**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, Screnr, etc.)
- D. Voice/Audio feedback (Vocaroo)
- E. Crowdsourced Science
- 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.)

**RANDOM.ORG**

Coin Flipper

You flipped 2 coins of type Irish 42:



Timestamp: 2011-08-13 01:04:43 UTC

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

Dice Roller

You rolled 2 dice:



Timestamp: 2011-08-13 01:14

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

**RANDOM.O**

List Randomizer

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

Random Sequence Generator

Here is your sequence:

1. Bill
2. 9 Arthur
3. 10 Thomas
4. 2 Shelley
5. 7 Stanley
6. 3 Sherman
7. 5 Scales
8. 8 Stephanie
9. 4 Ned
10. 6 Brian

Timestamp: 2011-08-13 01:01

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

**October 5, 2016**

**4. Variety, Novelty, Fun, Fantasy:**

**B. Online Test/Quiz Review Games**

(e.g., Jeopardy Rocks)

<https://www.jeopardy.rock/r511merve/>



#### 4. Variety, Novelty, Fun, Fantasy:

##### C. Voice/Audio Feedback

Vocaroo: <http://vocaroo.com/>  
<http://vocaroo.com/delete/s0x8moQAYAiU/a37bbc9408bb8c95>  
 (Recorded by Curt Bonk for the Open University of China)



#### 4. Variety, Novelty, Fun, Fantasy:

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

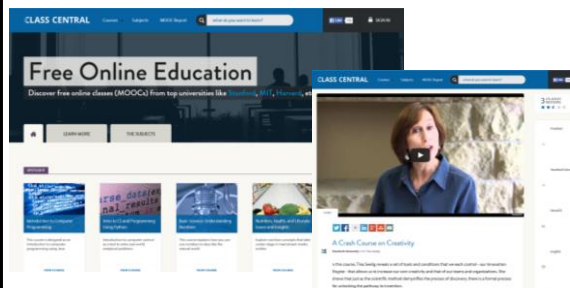
###### How Does It Work?



1. Find the video you want to chop.
2. Select & cut interesting part of the video.
3. Share it with friends.

###### Watch Examples

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



#### February 2, 2017 5. Autonomy, Choice: B. Explore/Browse a MOOC Super-Earths And Life Learn about alien life, how we search for it, and what this teaches us about our place in the universe.

<https://www.edx.org/course/super-earths-life-harvardx-spu30x-1>



#### February 17, 2017 5. Autonomy, Choice: C. Explore Online Databases (e.g., OER World Map <https://oerworldmap.org/>)



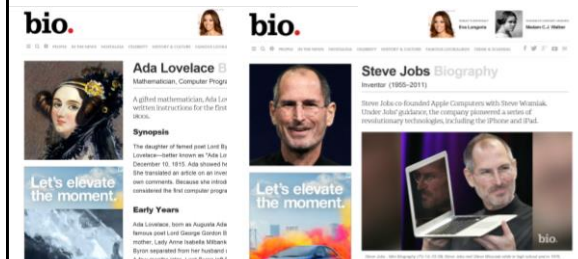
#### December 8, 2015 5. Autonomy, Choice: D. Design Multimedia Glossaries P540 Final Assignment: Nate Wynne, Supersized Personal Course Glossary <http://natewynne1982.wix.com/p540courseglossary> Ozgur Ozdemir, December 2012 <http://r685glossary.shutterstock.com/> Umida Khikmatillaeva, Dec. 2011, P540 <http://learningplanet.shutterstock.com/>



## 5. Autonomy, Choice:

### E. Tracking the Life of a Computer Scientist (e.g., bio.com)

<http://www.biography.com/people/steve-jobs-9354805>  
<http://www.biography.com/people/ada-lovelace-20825323>



**March 13, 2015**

## 5. Autonomy, Choice:

### F. 20% Time in Education

Kendal Rasnake & Troy Cockrum, IU

[https://www.dropbox.com/s/t4c50ae2lcpvuk/20\\_Time\\_in\\_Education-Cockrum\\_and\\_Rasnake.mov?n=57312573](https://www.dropbox.com/s/t4c50ae2lcpvuk/20_Time_in_Education-Cockrum_and_Rasnake.mov?n=57312573)



## Poll #5:

**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, 2015)

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

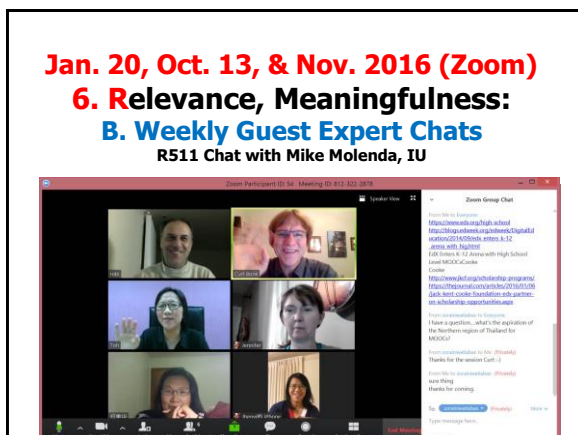


**Jan. 20, Oct. 13, & Nov. 2016 (Zoom)**

## 6. Relevance, Meaningfulness:

### B. Weekly Guest Expert Chats

R511 Chat with Mike Molenda, IU



## 6. Relevance, Meaningfulness:

### C. Case-Based Learning: Instructor Cases

(e.g., Mark Braun, IU)





**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  
<http://www.latimes.com/local/lanow/la-me-wikipedia-science-classes-adv-anap-story.html>



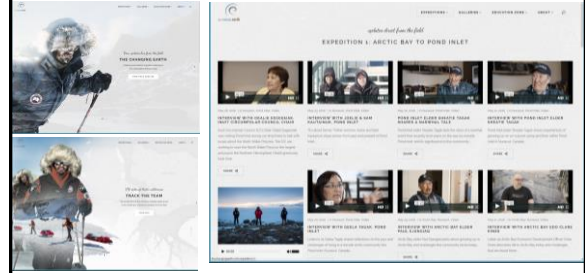
Samantha Erickson, left, of the Wiki Education Foundation; Tina Brock, a dean of the School of Pharmacy at UC San Francisco; and professor Amin Azzam discuss implementing the integration of Wikipedia pages on medical topics with students' work. (David Butow / For The Times)

**January 20, 2017**

## 6. Relevance, Meaningfulness:

### E. The Changing Earth

<http://thechangingearth.com/>



## 7. Interactive, Collaborative:

### A. Negotiate Meanings Online

(e.g., PiratePad: <http://meetingwords.com/>)  
<http://blogs.elon.edu/technology/6-collaborative-writing-applications-for-group-projects-or-papers/>  
 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](http://padlet.com/zaid_alsagoff/engage)



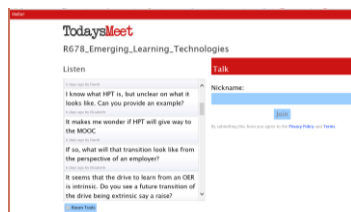
## 7. Interactive, Collaborative:

### C. Backchannel Chat (TodaysMeet)

<https://todaysmeet.com/>

R678\_Emerging\_Learning\_Technologies

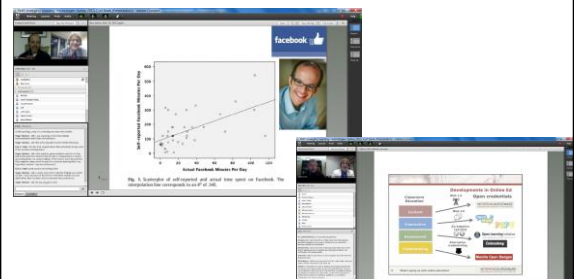
[https://todaysmeet.com/R678\\_Emerging\\_Learning\\_Technologies](https://todaysmeet.com/R678_Emerging_Learning_Technologies)



## 7. Interactive, Collaborative:

### D. Guest Speaker Quotes

(Rey Junco, February 25, 2013)



## Poll #6: Which of these ideas might you use?

- A. Student designed multimedia glossaries
- B. Edit Wikipedia pages
- 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 Zoom
- 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**

<http://www.usatoday.com/story/news/nation/2014/10/22/immigration-diversity-100-years/2111131/>

### Rising diversity, state by state

The USA TODAY Diversity Index shows on a scale from 0-100 the chance that two random people are different by race and ethnicity.



Source: USA TODAY analysis by Paul Overberg of data from Census Bureau, NHGIS at University of Minnesota and ProximityOne. Frank Pappa, USA TODAY.

## 8. Engagement, Involvement: B. Interactive Timelines (Dipity, xtimeline, Simile, etc.)

<http://www.usatoday.com/story/news/nation/2014/10/22/immigration-diversity-100-years/2111131/>  
<http://usatoday30.usatoday.com/tech/news/story/2011-09-22/steve-jobs-dies/50672498/1>  
<http://www.cnet.com/news/steve-jobs-a-timeline/>



**March 30, 2017**

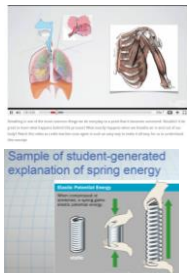
## 8. Engagement, Involvement: B. Interactive Timelines Simplifying Timeline Creation with TimelineCurator

Amy Cavender, The Chronicle of Higher Education  
<http://www.chronicle.com/blog/post/simplifying-timeline-creation-with-timelinecurator/63632>

(Dipity, xtimeline, Simile, etc.)



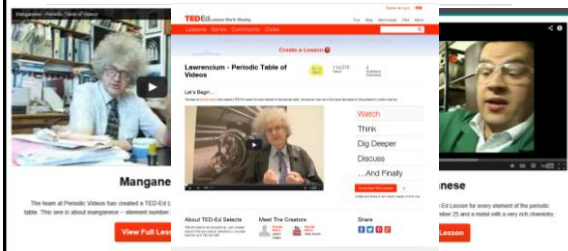
## 8. Engagement, Involvement: D. Interactive Labs and Simulations <http://phet.colorado.edu/en/simulation/energy-skate-park>



## 8. Engagement, Involvement: E. Videos with Test Questions (e.g., TEDEd)

(Lessons about every single element on the periodic table)

[http://ed.ted.com/periodic-table-video-lesson-source=TED-Ed+Subscribers&utm\\_campaign=521185&utm\\_medium=email&utm\\_term=.1](http://ed.ted.com/periodic-table-video-lesson-source=TED-Ed+Subscribers&utm_campaign=521185&utm_medium=email&utm_term=.1)



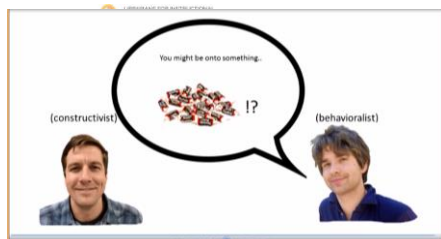
**December 13, 2016**

**9. Tension, Challenge, Controversy, etc.:**

**A. Controversial Issue Debates**

Librarians for Instructional Technology, Latrice Booker, R511, Fall 2016

<http://bookerlr2000.wixsite.com/librariansforit/cognitivism>  
R511: Pedagogical Values from the Classroom to the Library: A Constructivist Approach, R511: Risk and Risk



**October 16, 2015**

**9. Tension, Challenge, Controversy, etc.:**

**B. Case Learning from the News**  
(e.g., Newseum Ed)

<https://newseum.org/>



**10. Yields Products, Goals:**

**A. Facebook Course Page (R546)**

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



**10. Yields Products, Goals:**

**B. Database Collection Tools**

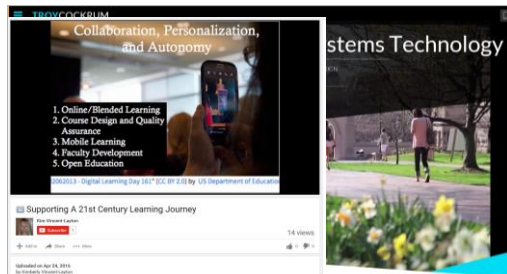
Design Article Database in Pinterest,  
Meina Zhu and Jennifer Weebek

<https://www.pinterest.com/zhuaina0000/r-678-emerging-learning-technology/>  
<https://www.pinterest.com/jennifertweebek/emerging-learning-technologies/>



**10. Yields Products, Goals:**  
**C. Student Created Recap Videos**

Piercarlo Abates: <http://www.youtube.com/watch?v=-TURzH00aU>  
Qi Li, Gangnam: <http://www.youtube.com/watch?v=7Q429qzaU8>  
Miguel Lara (Web 2.0 FREEDOM!): <http://www.youtube.com/watch?v=8cmCFW0W18>  
Kendal Rasnake (Is IT Right For You?): <http://www.youtube.com/watch?v=M3GUD1CIGW>  
Kindredly: <http://www.youtube.com/watch?v=4G3R...>

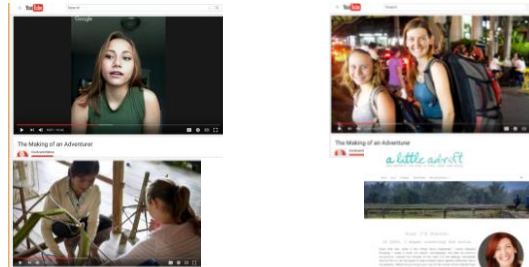


**10. Yields Products, Goals:**  
**D. Student Created Documentaries**

R678 Final Projects, April 2016

The Making of an Adventurer (video), Troy Cockrum

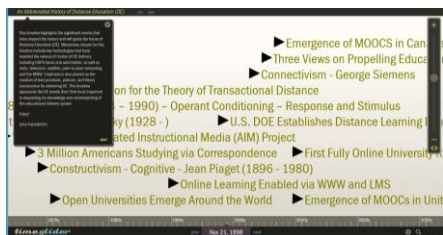
<https://www.youtube.com/watch?v=ew6e7Chd9I8>



**March 12, 2016**

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

R678 John Falchi, Timeglider, An Abbreviated History of Distance Education  
[http://timeglider.com/?/50843d8903a480087min\\_zoom=1&max\\_zoom=100](http://timeglider.com/?/50843d8903a480087min_zoom=1&max_zoom=100)



## Poll #7:

**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**

### What motivates?

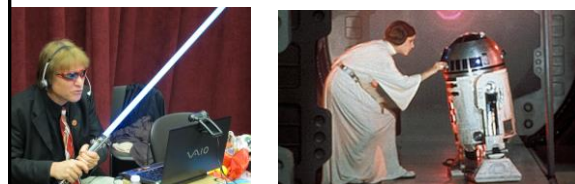
1. Tone/Climate: Psychological Safety, Comfort, Sense of Belonging
2. Encouragement: Feedback, Responsiveness, Praise, Supports
3. Curiosity: Surprise, Intrigue, Unknowns
4. Variety: Novelty, Fun, Fantasy
5. Autonomy: Choice, Control, Flexibility, Opportunities
6. Relevance: Meaningful, Authentic, Interesting
7. Interactivity: Collaborative, Team-Based, Community
8. Engagement: Effort, Involvement, Investment
9. Tension: Challenge, Dissonance, Controversy
10. Yielding Products: Goal Driven, Purposeful Vision, Ownership

## Masterclass Part 2:

**Where are You R2D2?: Addressing Diverse Online Learner Needs with the Read, Reflect, Display, and Do Model**

Curt Bonk, Professor, Indiana University  
cjbbonk@indiana.edu

<http://mypage.iu.edu/~cjbbonk>



## Addressing Learning Styles with R2D2

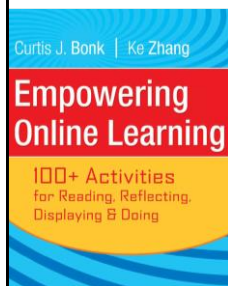


**Question: How can technology address diverse learner needs?**





## Model #2: The R2D2 Model: Read, Reflect, Display, Do...

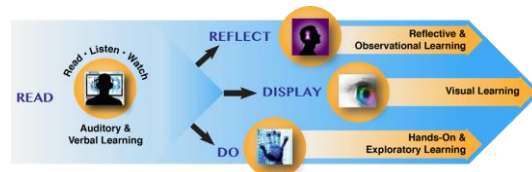


**August 12, 2015**

## Create Engaging Learning Experiences

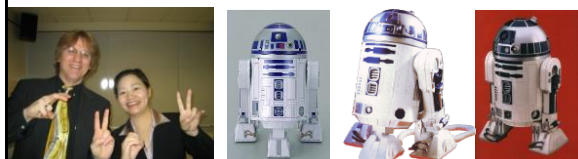
Image adapted from Bonk, C.J. & Zhang, K. (2008). Empowering online learning: 100+ activities for reading, reflecting, displaying, & doing. San Francisco, CA: Jossey-Bass.

Southern Illinois University, Carbondale, Illinois  
Heidi Jung and Cheryl L Bosarge  
Instructional Designer  
Center for Teaching Excellence  
Heidi Lynn Jung [hjung@siu.edu](mailto:hjung@siu.edu)  
Cheryl L Bosarge [cbosarge@siu.edu](mailto:cbosarge@siu.edu)



## 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.



**January 20, 2016**  
**Read 1a. Podcasts**

IU Bloomington podcast series to launch Jan. 24, Steve Hinnefeld, IU Newsroom

[http://inside.indiana.edu/handlines/2016-01-20-new-campus-podcast.html?utm\\_source=2016-01-20&utm\\_medium=newsletter&utm\\_campaign=Something-in-the-air&utm\\_term=.2016-inside-sub-distribution](http://inside.indiana.edu/handlines/2016-01-20-new-campus-podcast.html?utm_source=2016-01-20&utm_medium=newsletter&utm_campaign=Something-in-the-air&utm_term=.2016-inside-sub-distribution)



IU's Media School dean James Shanahan, at left, will host a new campus podcast. Senior Luqmann Ruth will read the news for the inaugural podcast. | PHOTO BY JENNIFER PIUREK, OFFICE OF THE PROVOST

## Read 1b. Collect Oral Histories

e.g., Joan Kang Shin, George Mason University, has her students write "This I believe" Statements.

(EFL teachers around the world interview elders in their community for a rich database of oral histories and documentaries for social change)

Oral History Society: <http://www.ohs.org.uk/>



## Read 1c.

### Exploring Various Resources to Track the Life of a Prominent People

(e.g., Vannevar Bush in Atlantic Monthly, Wikipedia, Time, etc.)

[http://en.wikipedia.org/wiki/Vannevar\\_Bush](http://en.wikipedia.org/wiki/Vannevar_Bush)

JULY 1945

## As We May Think

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

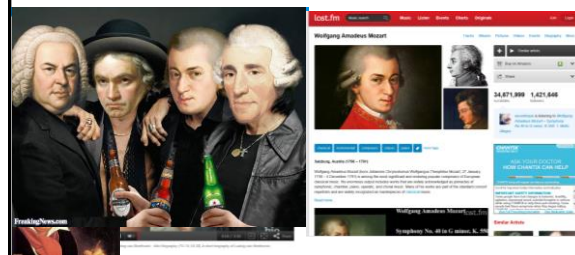


## Read 1d.

### Reading Life Histories (OER, bio.com; Mozart: http://www.mozartproject.org/)

<http://www.mozartproject.org/>

<http://www.biography.com/people/bob-marley-9399524>

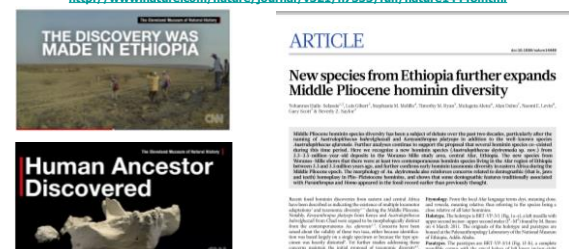


May 28, 2015

## Read 1e. Open Access Scientific Reports/Studies

New species from Ethiopia further expands Middle Pliocene hominin diversity, Nature

<http://www.cnn.com/2015/05/28/africa/ethiopia-fossil-hominin-ancestor/index.html>  
<http://www.nature.com/nature/journal/v521/n7553/full/nature14448.html>

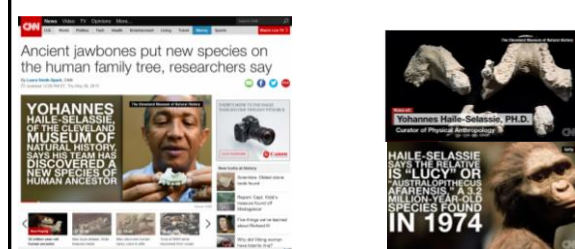


May 28, 2015

## Read 1e. Immediate Science

Ancient jawbones put new species on the human family tree, researchers say, Laura Smith-Spark, CNN

<http://www.cnn.com/2015/05/28/africa/ethiopia-fossil-hominin-ancestor/index.html>



## 2. Reflective and Observational Learners

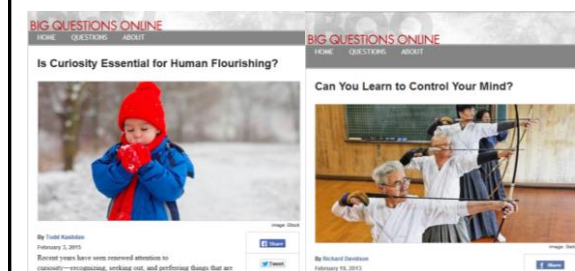
- Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives



## 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/do-we-have-souls>



15









## October 31, 2014 Display 3L. Live Science

**Penguin Science (Penguin Cam) Jean Pennycook**  
<http://www.penguinscience.com/>  
<http://www.thistle.org/pcam2/images.shtml>



## December 15, 2016

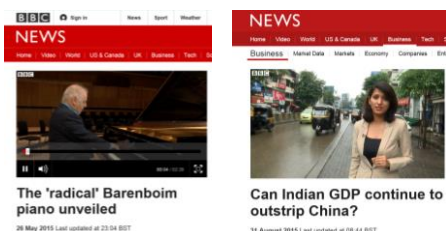
### Display 3m. Interactive Media Timelines

**The Digital Era: How 50 years of the information age transformed college forever, Ben Myers & Erica Lusk, The Chronicle of Higher Education**  
<http://www.chronicle.com/interactives/50-years-of-technology>



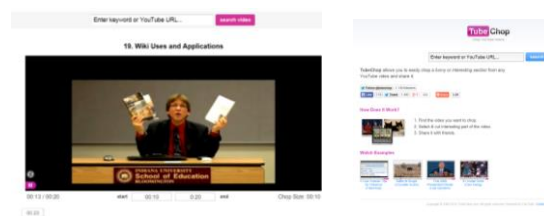
## Display 3n. Short Educational Videos:

**CNN, BBC, TED, TED-Ed, ForATV**  
**BBC One-Minute World News (August 31, 2015)**  
<http://www.bbc.com/news/business-34105708>



## Display 3o. Short Video Anchors

**(e.g., TubeChop of V-PORTAL: Video Primers in an Online Repository of e-Teaching and Learning)**  
**Curt Bonk: <http://www.tubechop.com/watch/378752>**



## March 10, 2016 Display 3p. Videostreamed Conferences

**Watch SXSWedu Live, Connie Yowell**  
[http://sxswedu.com/live/tvrm\\_campaign=56ix+2016&utm\\_source=ch&utm\\_medium=email&utm\\_content=271444698\\_haenc=p2](http://sxswedu.com/live/tvrm_campaign=56ix+2016&utm_source=ch&utm_medium=email&utm_content=271444698_haenc=p2)  
[http://www.sxswedu.com/live/tvrm\\_campaign=56ix+2016&utm\\_source=ch&utm\\_medium=email&utm\\_content=271444698\\_haenc=p2](http://www.sxswedu.com/live/tvrm_campaign=56ix+2016&utm_source=ch&utm_medium=email&utm_content=271444698_haenc=p2)



## November 12, 2016

### Display 3q. Online Documentaries and Films

**Drokpa (Yan Chun Su is a self-taught documentary filmmaker currently based in Colorado.)**  
<http://www.drokpa.com/>



**October 6, 2016**  
**Display 3r. Explanatory Videos**  
**Why Governments Should Invest in Innovation, Bill Gates, YouTube (1:19)**

<https://www.youtube.com/watch?v=TJNYNWQ4ak>



**4. Tactile/Kinesthetic Learners**

- Tactile/kinesthetic senses can be engaged in the learning process as role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.

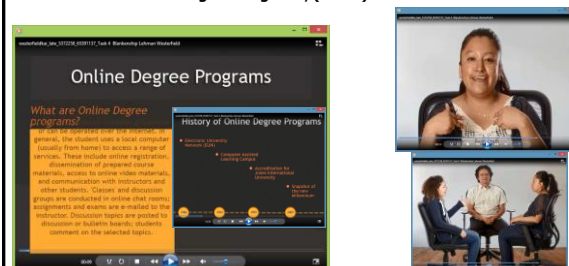


**Do 4a. Goal Setting Tools**  
 (e.g., I Done This, Milestone Planner, and 43 Things)



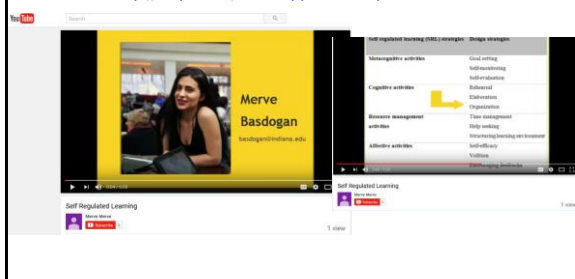
**October 26, 2016**  
**Do 4b. Student Created Marketing and Explanatory Videos**

R511, Kai Westerfield, Jennifer Blankenship, And Colbi Lehman, Online Degree Programs, (11:54) Go Animate



**October 26, 2016**  
**Do 4c. Student Exploration Video**  
 R511, Merge Basdogan, Self-Regulated Learning (6:08)

<https://www.youtube.com/watch?v=51FpopGmktc&feature=youtu.be#t=3.346633>



**October 26, 2016**  
**Do 4d. Student Research Recap Video**  
 R511, Rob Elliot, Erin Milanese, and Patrick Walsh  
**Traditional Textbook (8:11)**

<https://drive.google.com/file/d/418823NCROUd5NE5Dw3L6UpW6/view>



## Do 4e. Student Website Development

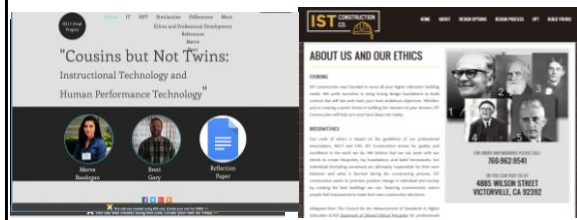
**R511 Final Projects, April 2016**

IT and HPT Comparison (Website), Doug Hsu  
<http://dougandindra.wix.com/r511finalproject>

"IST Construction, Co."

Rob Elliot, Patrick Walsh, Erin Milanese, R511, December 2016  
<http://reliott.net/istconstruction/index.php>

"Cousins but Not Twins: Instructional Technology and Human Performance Technology,"  
 Merve Basdogan and Brett Gary, R511, December 2016  
<http://educbasdogan.wixsite.com/r511final>



## Do 4f. Using TEDEd Lessons to engage students

**collaboratively: Teach Theory in Fun way**

Frank Di Silvestro & Umida Khikmatillaeva, Adult Ed, IST, IU

**January 2017**

Liz Coleman's call to reinvent liberal arts education

Let's Begin...

Watch  
Think  
Dig Deeper  
Discuss

**ACTIVITY ELEMENTS**

Video related to a theory  
Multiple choice questions  
Open ended questions  
Discussion questions  
Resources

Tasks: Content exploration, watching videos, asking questions, sharing resources, and going beyond the classroom

## Poll #8: Which do you prefer... (A) TEC-VARIETY or (B) R2D2?



### What motivates?

1. **Time/Climate:** Psychological Safety, Comfort, Sense of Belonging
2. **Encouragement:** Feedback, Responsiveness, Praise, Supports
3. **Curiosity:** Surprise, Inquire, Unleash
4. **Variety:** Novelty, Fun, Fantasy
5. **Autonomy:** Choice, Control, Flexibility, Opportunities
6. **Relevance:** Meaningful, Authentic, Interacting
7. **Interactivity:** Collaborative, Team-Based, Community
8. **Engagement:** Effort, Involvement, Investment
9. **Tension:** Challenge, Dissonance, Controversy
10. **Yielding Products:** Goal Driven, Purposeful Vision, Ownership

## Poll #9: 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.
7. More than 10.



## Poll #10: Three Words from this Session...?

**e.g., "I am happy!" and...  
My minions are happy!**



## Any Questions or Comments?

Slides at: [TrainingShare.com](http://TrainingShare.com)

Papers: [PublicationShare.com](http://PublicationShare.com)

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

Dr. Curt Bonk – [CJBonk@Indiana.edu](mailto:CJBonk@Indiana.edu)

