

## Engaging Teaching with Technology: Introducing the TEC-VARIETY and R2D2 Models

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**January 16, 2019**

## Survey: Online, Blended Dominate Today's Learning Environments

Rhea Kelly, Campus Technology

*Campus Technology's 2018 Teaching with Technology Survey*  
<https://campustechnology.com/articles/2019/01/16/survey-online-blended-dominate-todays-learning-environments.aspx?m=2>

Teaching with Technology Survey

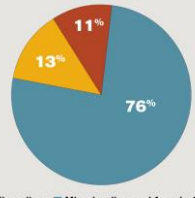
### Survey: Online, Blended Dominate Today's Learning Environments

In our latest Teaching with Technology Survey, the vast majority of faculty members said they teach in either a fully online or blended format.

By Rhea Kelly | 01/16/19



#### TEACHING ENVIRONMENTS



■ Fully online ■ Mixed online and face to face  
■ Exclusively face-to-face

**January 16, 2019**

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Teaching with Technology Survey

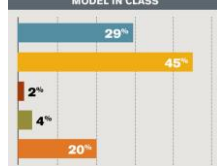
### Survey: Online, Blended Dominate Today's Learning Environments

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By Rhea Kelly | 01/16/19



#### USE OF THE BLENDED OR HYBRID MODEL IN CLASS



■ Yes, all of my classes are blended.  
■ Yes, some of my classes are blended.  
■ No, but they will be within the next year.  
■ No, but I'm exploring the possibility.  
■ No, none of my classes are blended.

**January 16, 2019**

## Survey: Online, Blended Dominate Today's Learning Environments

Rhea Kelly, Campus Technology

*Campus Technology's 2018 Teaching with Technology Survey*  
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Teaching with Technology Survey

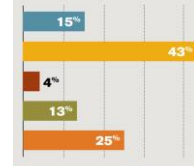
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By Rhea Kelly | 01/16/19

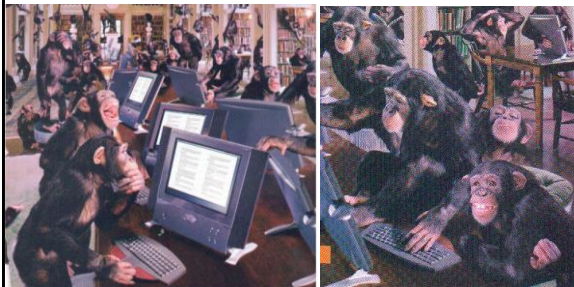


#### USE OF FLIPPED CLASSES



■ Yes, all of my classes are flipped.  
■ Yes, some of my classes are flipped.  
■ No, but they will be within the next year.  
■ No, but I'm exploring the possibility.  
■ No, none of my classes are flipped.

## 12 Blended Learning Examples



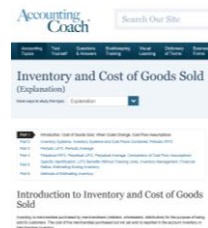
## Blended Solution #1.

**Use the Media to Supplement Content**  
(e.g., Accounting Coach; includes tests, Q&A, visuals, forms, definitions, etc.)  
<http://money.cnn.com/2015/08/19/retirement/retirement-savings-20s/index.html>

### Millennials & Their Money



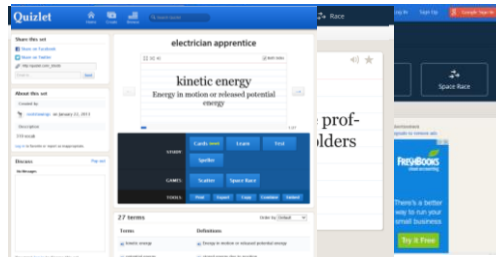
3 tips to getting retirement right in your 20s





## Blended Solution #8. Online Practice Tests and Interactive Flash Cards

<http://quizlet.com/>



## Blended Solution #9. Flipping the Classroom

**January 7, 2015**

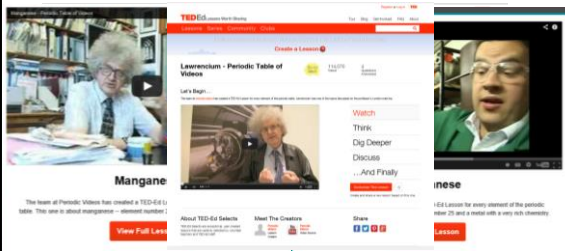
When a Flipped-Classroom Pioneer Hands Off His Video Lectures, This Is What Happens, Jeffrey R. Young, The Chronicle of Higher Education  
<http://chronicle.com/article/When-a-Flipped-Classroom/151831/>



A student watches a video of Norman Nemrow's accounting class. Mr. Nemrow started the video lectures nearly 15 years ago at Brigham Young U. He is now retired, but students still watch him on the screen.

## Blended Solution #10. Videos with Test Questions (e.g., TEDEd) (Lessons about every single element on the periodic table)

[http://ed.ted.com/periodic-table/videos?source=TED-Ed%20channel&page=92615446&2613\\_26\\_215\\_15\\_20\\_Media\\_and\\_Technology\\_in\\_Education\\_Lessons%20about%20every%20single%20element%20on%20the%20periodic%20table](http://ed.ted.com/periodic-table/videos?source=TED-Ed%20channel&page=92615446&2613_26_215_15_20_Media_and_Technology_in_Education_Lessons%20about%20every%20single%20element%20on%20the%20periodic%20table)



## Blended Solution #11. Video Tutorials, Demonstrations, and How-To's

Investopedia (videos, tutorials, etc.)

(Jing, GoView, Screenr, Overstream, Screencast-o-Matic)

<http://www.investopedia.com/video/play/deferred-revenue/>

Deferred Revenue



## July 11, 2018 Blended Solution #12. Streaming Live Events Keynote talks at EdMedia 2018: World Conference on Educational Media and Technology

<http://www.learn2lib.org/talks/CEdMedia/2018/>

Zoom link: <https://lu.zoom.us/j/263198784>



## Model #1: Best Practices for Online and Blended learning: Introducing the TEC-VARIETY Model

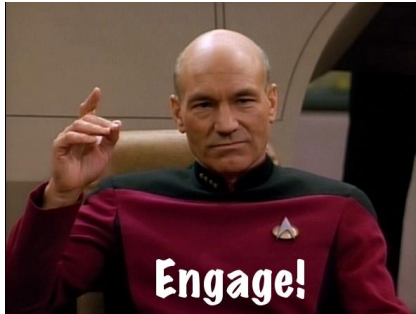
<http://tec-variety.com/>

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

在线学习动机与激励:  
TEC-VARIETY 模型  
——激励模型在在线学习中的应用

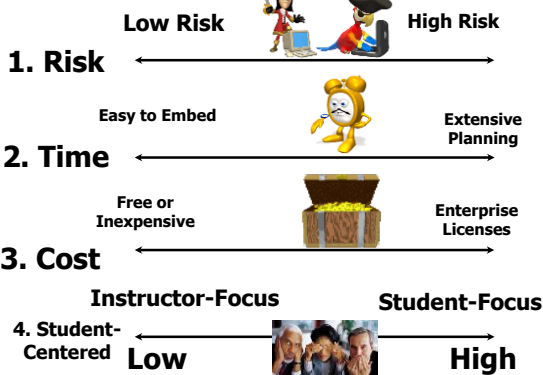


## Poll #1: What did Jean-Luc Picard say?

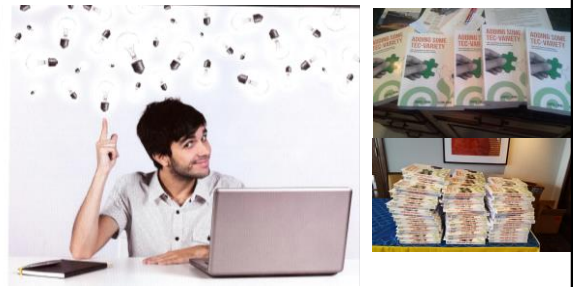


## Motivation Research Highlights (Jere Brophy, Michigan State University)

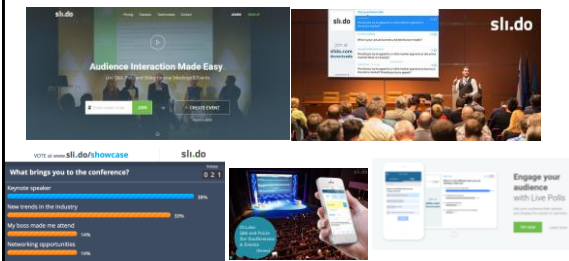
1. **Supportive**, appropriate **challenge**, **meaningful**, moderation/optimal.
2. Teach **goal setting** and self-reinforcement.
3. Offer **rewards** for good/improved performance.
4. Novelty, **variety**, **choice**, adaptable to interests.
5. Game-like, **fun**, fantasy, curiosity, suspense, active.
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.



## Examples of TEC-VARIETY



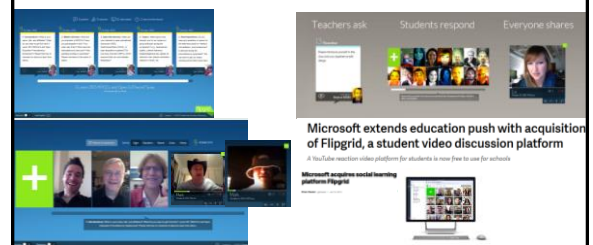
## April 3, 2017 1. Tone/Climate: A. Sli.do <https://www.sli.do/>



## June 18, 2018 1. Tone/Climate: B. Threaded Video Discussions and Questions (e.g., Flipgrid)

Microsoft acquires social learning platform Flipgrid, Brian Heater, TechCrunch

<https://techcrunch.com/2018/06/18/microsoft-acquires-social-learning-platform-flipgrid/>





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

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

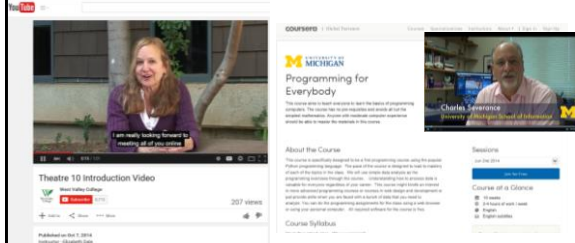
<https://www.youtube.com/watch?v=Wzbzc3QjIA>

Chuck Severance, U Michigan/Coursera) in Barcelona

<http://www.youtube.com/watch?v=JzNHvmsv8T1>

Chuck Severance, University of Michigan

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

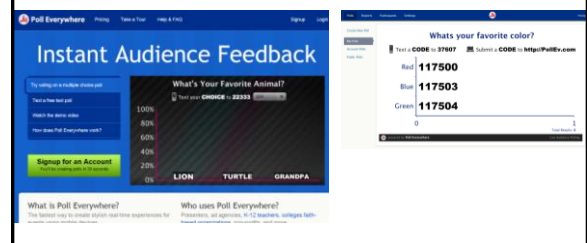


## 2. Encouragement, Feedback:

### A. Blog and Website Polling

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

<http://www.poll.everywhere.com/>



## 2. Encouragement, Feedback: B. Voice/Audio Feedback

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



## 3. Curiosity, Intrigue, Unknowns:

### A. 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-daguerre/index.html?hpt=hp\\_t4\\_kong](http://www.cnn.com/2014/11/06/living/oldest-photograph-human-daguerre/index.html?hpt=hp_t4_kong)



## 3. Curiosity, Intrigue, Unknowns: B. 1st woman to officially run Boston Marathon does it again, 50 years later

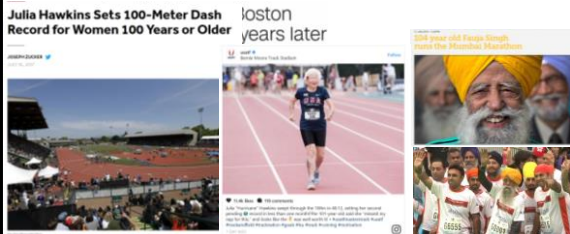
Emanuella Grinberg, CNN, USA Today

<http://www.cnn.com/2017/04/17/us/boston-marathon-kathrine-svitzer-trnd/index.html>

July 16, 2017

Julia Hawkins Set 100-Meter Dash Record for Women 100 Years or Older

<http://www.hawkins.com/2017/04/17/100-year-old-female-sets-100-meter-dash-record-in-100-years/>



## September 27, 2018

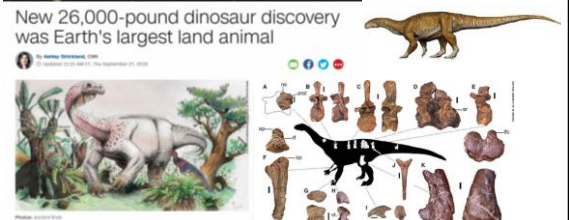
### 3. Curiosity, Intrigue, Unknowns:

#### C. Scientific Discoveries

New 26,000-pound dinosaur discovery was Earth's largest land animal

Ashley Strickland, CNN

<https://www.cnn.com/2018/09/27/world/new-giant-dinosaur-brontosaurus-relative/index.html>



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

##### A. Random Lists

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

The screenshot shows the Random.org website. On the left, the 'Coin Flipper' tool is displayed with two virtual coins and a timestamp of 2011-08-13 01:04:43 UTC. On the right, the 'Dice Roller' tool is shown with two virtual dice and a timestamp of 2011-08-13 01:14. Both tools have 'Roll Again' and 'Go Back' buttons.

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

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

(e.g., Jeopardy Rocks)

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

The screenshot shows the Jeopardy Rocks game interface. It features a grid of questions with values ranging from \$100 to \$500. To the right, there is a Jeopardy! board with a blue background and white text, displaying a question about Bandura's (1961) study on social behaviors.

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

##### C. Kahoot!

<https://getkahoot.com/>

July 31, 2017

I'm in 'Kahoots' with Technology in the Classroom  
Cassandra OSullivan Sachar, Faculty Focus

The screenshot shows a Kahoot! game in progress on a classroom screen. The screen displays a question with four multiple-choice options. A student is visible in the foreground, looking at the screen.

#### January 24, 2019

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

##### D. Design or Play Games

Mash Up and Republish Like It's 1923

Greg Toppo, Inside Higher Ed

<https://www.insidehighered.com/news/2019/01/24/new-release-1923-title-boon-artists-scholars>

The screenshot shows the 'Gaming Like It's 1923' game interface. It features a grid of questions with values ranging from \$100 to \$500. To the right, there is a Jeopardy! board with a blue background and white text, displaying a question about Bandura's (1961) study on social behaviors.

#### October 10, 2018

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

##### E. FutureMe.org

Write a letter to the future

<https://www.futureme.org/>

The screenshot shows the FutureMe.org website. It features a 'Write a letter to the future' interface with a blue background and white text. The interface includes a text input area and a 'Send' button.

#### January 14, 2019

##### 5. Autonomy, Choice:

##### A. Enroll in a MOOC and Reflect

(e.g., see Class Central)

Beer Matters: Free Online Class With Meetups

Karl Brown, Assistant Professor of History

<https://www.classcentral.com/course/beer-matters-free-online-class-with-meetups>

<https://vimeo.com/286408659>

Video: <http://curtboon.com/beer.html> (1:11)

The screenshot shows the Beer Matters MOOC interface. It features a video player with a blue background and white text. The interface includes a title bar, a video player, and a sidebar with course details.

## 5. Autonomy, Choice: B. Design Multimedia Glossaries

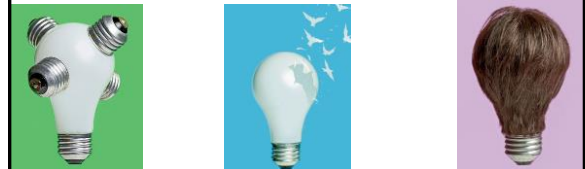
P540 Final Assignment: Nate Wynne, Supersized Personal Course Glossary  
<http://natewynne1982.wikix.com/p540courseglossary>  
 Ozgur Ozdemir, December 2012  
<http://r685glossary.shutterfly.com/>  
 Umida Khikmatillaeva, Dec. 2011, P540  
<http://learningplanet.shutterfly.com/>



## Poll #2:

**Any light bulbs going off in your head so far...?**

- A. Yes definitely\*\*\*
- B. Yes maybe!
- C. Not yet (but hopefully soon...)



## Poll #3: Which of these ideas might you use?

- A. Threaded video discussions (e.g., Flipgrid)
- B. Enroll in a MOOC
- C. Demonstrations and tutorials (Jing, Screenr, etc.)
- D. Voice/Audio feedback (Vocaroo)
- E. Designing multimedia glossaries
- F. Something in the News
- G. Summary and Comparison Maps
- H. Immediate Science



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

## 6. Relevance, Meaningfulness:

### A. Weekly Guest Expert Chats

R511 Chat with Mike Molenda, IU



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

Slide 105, acute cholecystitis, acute.

Slide 137, colon with pseudo-membranous colitis.

Slide 139, colon with pseudo-membranous colitis.

Slide 160, bone marrow with cryptococcal infection.

Slide 166, bone marrow with cryptococcal infection.

**I'd like to take the quiz now.**

Stomach, endoscopic examination and biopsy:  
Poorly differentiated tubular adenocarcinoma

**Final conclusion:**  
Advanced gastric carcinoma with multiple lung metastasis with lymphatic growth.

## March 20, 2018 6. Relevance, Meaningfulness: C. Editing Wikipedia Pages

### Women's-Studies Students Across the Nation Are Editing Wikipedia

Emma Kerr, The Chronicle of Higher Education  
<https://www.chronicle.com/article/Women-s-Studies-Students/242866>

College students take to Wikipedia to rewrite the wrongs of Internet science



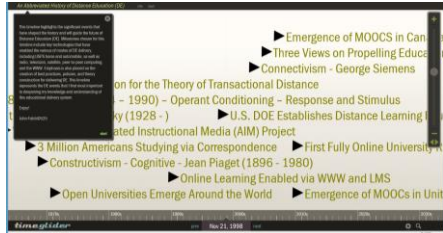
Samantha Erickson, left, of the Wiki Education Foundation; Tina Brock, a dean of the School of Pharmacy at UC San Francisco; and professor Amin Azam discuss implementing the integration of Wikipedia pages on medical topics with students' work







**R678 John Falchi, Timeglider, An Abbreviated History of Distance Education**  
[http://timeglider.com/t/50843d8903a48008?min\\_zoom=1&max\\_zoom=100](http://timeglider.com/t/50843d8903a48008?min_zoom=1&max_zoom=100)



**September 3, 2017**  
**Yields Products, Goals:**  
**D. Mindmap Recaps of Online Discussions**  
**Mindmap of Week 2 of R511**

## Mindmap of Week 2 of R511

<https://bu.bbl.us/Mjg2MzMxODQ4MjYxNjcxL2UyODQzMjQ0NTQyYzQwZDlmNDk3ZWJ3OWYwMmMlMjY1L3I>



## 10. Yields Products, Goals:

### E. Goal Setting Tools

(e.g., I Done This, Milestone Planner, and 43 Things)

(e.g., I Done This, Milestone Planner, and 43 Things)



**10. Yields Products, Goals:**  
**F. Student Website Development**  
 R511 Final Projects, **December 12, 2017**

## R511 Final Projects, December 12, 2017

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

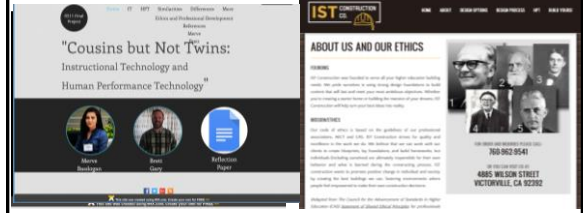
**"IST Construction, Co."**  
Rob Elliot Patrick Walsh Erin Milanese R511 December 2016

lliott, Patrick Walsh, Erin Milanese, R511, Decem  
<http://relliott.net/istconstruction/index.php>


**"Cousins but Not Twins: Instructional Technology and Human Performance Technology,"**  
Merve Baedogan and Brett Gary, PE11 December 2016

**Merve Basdogan and Brett Gary, R511, December 2016**  
<http://educbasdogan.wixsite.com/511final>

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**Poll #4:**  
**Which of these ideas might you use?**

- A. Mindmaps of online discussions
  - B. Edit Wikipedia pages
  - C. Guest chats with experts and former students
  - D. Negotiate meanings online (e.g., PiratePad)
  - E. Online case analyses
  - F. Facebook course page
  - G. Guest speaker quotes
  - H. Student website development
- 



## Commitments: Stop and Share:

**Which principle(s) of TEC-VARIETY will you use?**

**Tone/Climate**  
**Encouragement, Feedback**  
**Curiosity**

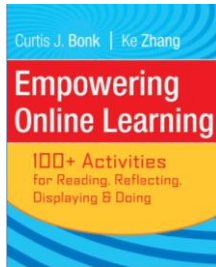
**Variety**  
**Autonomy**  
**Relevance**  
**Interactive**  
**Engagement**  
**Tension**  
**Yields Products**

### 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



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

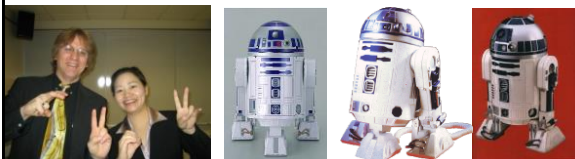


## Question: How can technology address diverse learner needs?



## The R2D2 Model

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.



## February 11, 2018 Read 1a. Online Referenceware The Magical Power of Dictionaries Alberto Manguel, The Chronicle of Higher Education <https://www.chronicle.com/article/The-Magical-Power-of-Dictionaries/242813>



## January 20, 2016 Read 1b. Podcasts

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

[https://inside.iuindiana.edu/headlines/2016-01-20-new-campus-podcast.html?utm\\_source=2016-01-20&utm\\_medium=sponsor&utm\\_content=something-in-the-air&utm\\_campaign=2016-inside-sub-distribution](https://inside.iuindiana.edu/headlines/2016-01-20-new-campus-podcast.html?utm_source=2016-01-20&utm_medium=sponsor&utm_content=something-in-the-air&utm_campaign=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 1c. Twitter Fed Class Discussions

Live-Tweeting Assignments: To Use or Not to Use?  
he Chronicle of Higher Education, Adeline Koh

<http://chronicle.com/blogs/profhector/live-tweeting-assignments-to-use-or-not-to-use/58949>

Live-Tweeting Assignments: To Use or Not to Use?



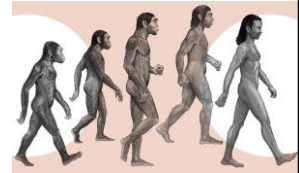
We're welcome a great deal in using Twitter in the classroom. It's a free, easy-to-use platform that allows students to share their thoughts and ideas in real-time. It's also a great way to connect with other students and faculty members.



## February 14, 2018 Read 1d. Reading Online News Tracing the tangled tracks of humankind's evolutionary journey

Hannah Devlin, The Guardian

<https://www.theguardian.com/news/2018/feb/12/tracing-the-tangled-tracks-of-humankind-evolutionary-journey>



## 2. Reflective and Observational Learners

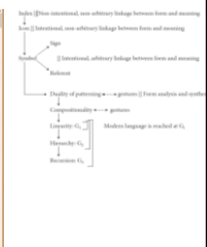
- Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives



## February 28, 2018 Reflect 2a. Reflect on and Debate News Did Homo erectus speak?

Daniel Everett, Bentley University, Aeon

<https://aeon.co/essays/tools-and-voyages-suggest-that-homo-erectus-invented-language>



## October 6, 2016 Reflect 2b. What-if Reflections What if Aaron Burr had missed Alexander Hamilton?, Thomas Fleming, CNN

<http://www.cnn.com/2016/10/06/politics/alexander-hamilton-aaron-burr-duel-missed/index.html>

What if Aaron Burr had missed Alexander Hamilton?



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





### April 13, 2016 Reflect 2d. Interpreting Interactive Graphs and Infographics

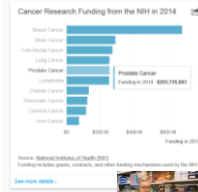
How much rainforest in that chocolate bar?  
Tech billionaire announces \$250 million in cancer immunotherapy funding,  
Jayne O'Donnell, USA Today  
<http://www.usatoday.com/story/news/2016/04/13/billionaire-announces-250-million-cancer-immunotherapy-funding/9282119/>

Land-Use Change Emissions in Miles Driven



<http://bit.ly/rainforest-chocolate>

WORLD RESOURCES INSTITUTE



Source: National Institutes of Health (NIH). Funding in billion grants, contracts, and other funding program support, except for the NIH. See more details.

### July 5, 2018 Reflect 2e. Vialogues

EdLab Seminar--Engaging Educators with Digital Collections

Vialogue, Sara Hartman, New Learning Times

<https://newlearningtimes.com/cms/article/5426/how-academic-publishing-is-changing-in-the>



### Reflect 2f. Workplace Internship, Practicum, and Field Experiences



### October 24, 2018 Reflect 2g. Session Recap Mindmaps Emerging Online Learning Tools Research Session Mindmap

Learnlets, Clark Quinn

[https://blog.learnlets.com/2018/10/emerging-online-learning-tools-research-session-mindmap/?fbclid=IwAR11\\_0o6CxiPe1JvR-niq7ZfGbyktiveM\\_Q8U9WMDUq4LwUJDd0\\_D9gU](https://blog.learnlets.com/2018/10/emerging-online-learning-tools-research-session-mindmap/?fbclid=IwAR11_0o6CxiPe1JvR-niq7ZfGbyktiveM_Q8U9WMDUq4LwUJDd0_D9gU)



## 3. Visual Learners

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.



### Display 3a. Virtualize Words Used (e.g., Wordle, Taggedo, Tagul, WordSift, Word It Out)



## January 8, 2017

### Display 3b. Summary and Comparison Maps

#### #GeoawesomeMapOfTheDay

<https://twitter.com/geoawesomeness>  
<https://www.instagram.com/p/BNwgyJfDaq3/>  
<https://twitter.com/hashtag/GeoawesomeMapOfTheDay?src=hash>

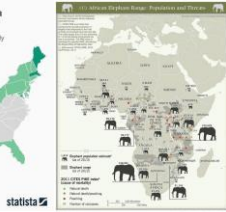
#### The States Where It's Legal To Smoke Marijuana

Laws on recreational and medical marijuana use in the US

■ Legalized for recreational & medical use ■ Medical use only



As of May 10, 2016, laws on marijuana use have not been updated. Some states may have laws on the books but not yet implemented. Source: Statista



## Display 3c. (April 28, 2015)

### Concept Mapping and Timeline Tools

(Bubbl.us, Cmap, Gliffy, Spicynodes, or Mindomo)

<http://www.spicynodes.org/index.html>



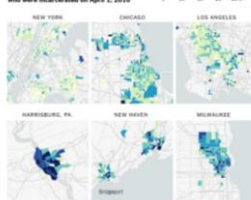
## October 1, 2018

### Display 3d. Detailed New National Maps Show How Neighborhoods Shape Children for Life

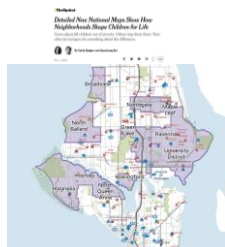
By [Emily Badger](#) and [Quoctrung Bui](#), The New York times

<https://www.nytimes.com/2018/10/01/upshot/mass-neighborhoods-shape-child-poverty.html>

#### Share of black men from poor families who were incarcerated on April 1, 2010



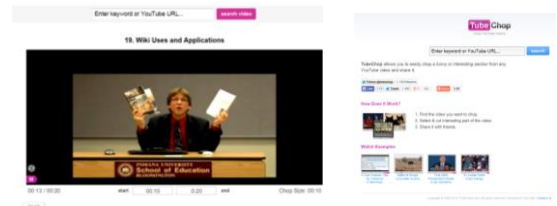
Poor indicates families making about \$12,000 a year (in 2010 dollars), at the 50th percentile of the national income distribution



## Display 3e. 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>



## Display 3f.

### Short Educational Videos:

#### Anchored Instruction/Macrocontext

CNN, BBC, TED, TED-Ed, ForATV  
 BBC One-Minute World News (August 31, 2015)  
<http://www.bbc.com/news/business-34105708>  
 Weekly 1 minute updates: <http://www.danpink.com/pinkcast/>



## 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.



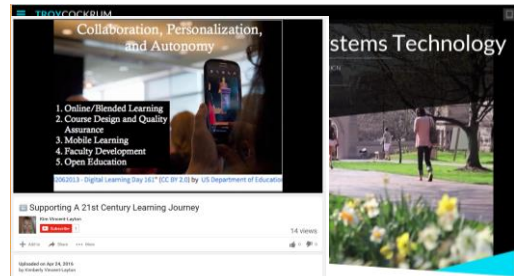
## Do 4a. Student Music Recordings of Course Content

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=ZRGV0M5Vmw&feature=youtu.be>  
 Daniel Halluska, P540: <http://www.youtube.com/watch?v=tOL7rGsqnW>  
 Weigeng (William) Yang: IST History (1:40): <https://drive.google.com/file/d/0B9YDNkNTIa4DnNSVx0eDM1SkU/view>  
 IST Paradise (2:52) (It all started with IST) <https://drive.google.com/file/d/0B9YDNkNTIa4DnNSVx0eDM1SkU/view>



## Do 4b. Student Created Recap Videos

Piercarlo Abate: <http://www.youtube.com/watch?v=-TURzH00aU>  
 Qi Li, Gangnam: <http://www.youtube.com/watch?v=7Q429iqZaU&feature=youtu.be>  
 Miguel Lara (Web 2.0 FREEDOM): <http://www.youtube.com/watch?v=8onC-TW03W8>  
 Kendal Rasnake (Is IT Right For You?): <https://www.youtube.com/watch?v=M33GU01CLGw>  
 Kimberly Vincent Layton: [https://www.youtube.com/watch?v=4iC3J\\_rYU28&feature=youtu.be](https://www.youtube.com/watch?v=4iC3J_rYU28&feature=youtu.be)



## March 11, 2018 Do 4c. PBL in Puerto Rico

<https://sites.google.com/iu.edu/pbl-in-puerto-rico/home>



## Poll #5:

### Which of these ideas might you use?

- A. Interactive map timelines
- B. Visualize words used
- C. Issue challenges, role plays, and debates
- D. Student designed course recap videos
- E. Student infographics
- F. Interactive timeline tools
- G. What-if reflections



## Poll 6: Which do you prefer... (A) TEC-VARIETY or (B) R2D2?



### What motivates?

1. Task/Climate: Psychological Safety, Comfort, Sense of Belonging
2. Encouragement: Feedback, Responsiveness, Praise, Support
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



## Any Questions or Comments?

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

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

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

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