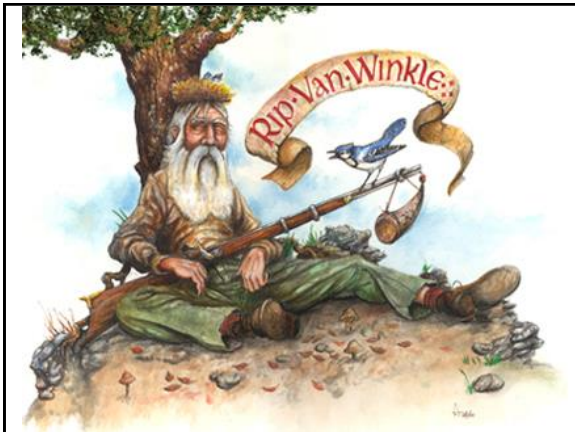


Education 3.0: My, Our Learning World is Changing!

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



(Circa Confucius 551–479 BCE)



From Instructor as Credit Manager...to...



1. Instructor as Conductor



2. Instructor as Curator



3. Instructor as Concierge

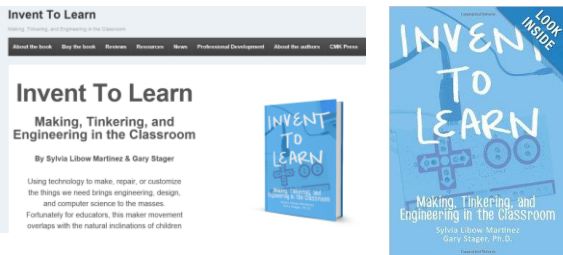


Poll:
Read any books on creativity or innovation lately?



1. Invent to Learn: Making, Tinkering, and Engineering in the Classroom

Sylvia Libow Martinez & Gary Stager (2013)
<http://www.inventtolearn.com/>



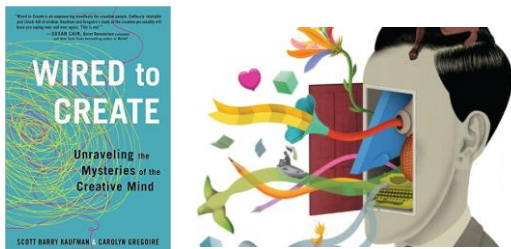
2. Mindset: The New Psychology of Success

Carol Dweck (2006)
<http://mindsetonline.com/index.html>
<http://mindsetonline.com/testyourmindset/step1.php>



3. Wired to Create: Unraveling the Mysteries of the Creative Mind (2015)

Scott Barry Kaufman & Carolyn Gregory
<http://www.amazon.co.uk/Wired-Create-Unraveling-Mysteries-Creative/dp/0393174109>
<http://www.scientificamerican.com/article/how-to-cultivate-your-creativity-book-excerpt/>



Poll:
Remember what technology you used to own?




Fast Forward 30+ Years...
"Anyone can now learn anything from anyone at any time."



Learn anything from anyone, anywhere.

Join us! Start learning and discover unique classes in your city.

Thirty Ways Learning is Changing...
 (i.e., it's more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)



I. Learning is More Mobile
February 17, 2016
World's Cheapest Smartphone at \$3.67

[https://m.facebook.com/hashtag/launched?refid=528..._tn_=%2A&](https://m.facebook.com/hashtag/launched?refid=528...)
https://m.facebook.com/story.php?story_fbid=10153960012315798&id=10252703079
<http://gadgets.ndtv.com/videos/freedom-251/launched-as-world-s-cheapest-smartphone-at-rs-251-40492>



March 2, 2015
Beware the smartphone zombies blindly wandering around Hong Kong, Mark Sharp, South China Morning Post

<http://www.scmp.com/lifestyle/technology/article/1725001/smartphone-zombies-are-putting-your-life-and-theirs-danger>

Beware the smartphone zombies blindly wandering around Hong Kong

Disoriented walking, in the experts' view, it is a growing annoyance in the MTR and on the streets of Hong Kong. Experience elsewhere shows it can be deadly.

Mark Sharp
 09/03/2015, Monday, 10:42 AM
 09/03/2015, Tuesday, 10:42 AM



II. Learning is More Video-Based
August 5, 2015
Shubham Jaglan Overwhelmed by "Dream" Return Home After Double World Championship
Disha Chopra, NDTV Sports

<http://sports.ndtv.com/golf/news/246551-shubham-jaglan-overwhelmed-by-dream-return-home-after-double-world-championship>
<http://www.ndtv.com/video/player/news/india-s-golf-prodigy-shubham-jaglan-returns-home-to-hero-s-welcome/377454>



III. Learning is More Game-Based
October 21, 2014
Sexy iPad Air 2 is fabulous but not a must upgrade, Edward Baig, USA Today

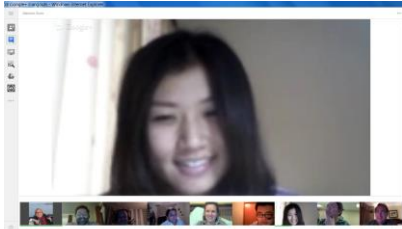
<http://www.usatoday.com/story/tech/columnist/baig/2014/10/21/ipad-air-2-subtly-sabotage-not-must-upgrade/1725825/>



IV. Learning also is More Collaborative March 26, 2014

Flat Connections: Welcome to Flat Connections - Learning about the world, with the world
<http://www.flatconnections.com/>

Global Collaboration Projects that Go Way Beyond Skype



V. Learning is More Digital October 23, 2014

New Amazon Kindle is a Voyage into eReader luxury, USA Today, Edward C. Baig

<http://www.usatoday.com/story/tech/innovation/2014/10/23/amazon-kindle-voyage-into-e-reader-luxury/178125/>



VI. Learning is More Adventurous May 7, 2015

Aaron Doering, Chasing Seals, TEDx

<http://chasingseals.com/>

<https://twitter.com/chasingseals>



Speaking for Change and Humanity

Watch the video to learn more about the story of how he follows technology, innovation and adventure on change. You can follow Aaron on Twitter for more.

VII. Learning is More Immediate and Resource Rich March 22, 2015

Madagascar marvel:

Divers find fossils of extinct giant lemurs

Daisy Carrington, for CNN, March 22, 2015

<http://www.cnn.com/2015/03/19/africa/underwater-fossil-lemur-graveyard-madagascar/index.html>

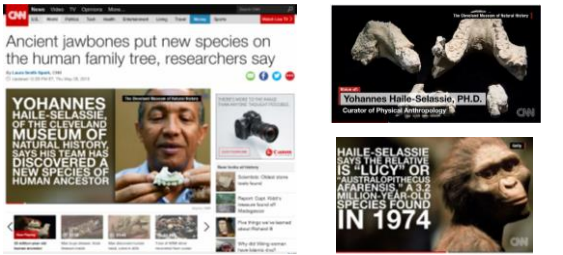


May 28, 2015

Immediate and Resource Rich

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>



VIII. Learning is More Hands-On February 2, 2015

Makey Makey and the Kano

<http://makeymakey.com/>

<https://vimeo.com/60307041>




March 2, 2016


IX. Learning is More Personal

Florida lawmakers push personalized learning

Leslie Postal, Orlando Sentinel (eSchool News)
<http://www.orlando Sentinel.com/news/education/fla-compulsory-law-schools-20160222-story.html>



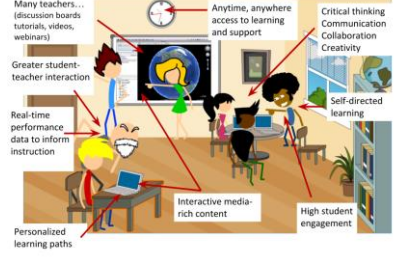
A growing number of schools are backing an effort that helps align learning to an individual student's



Competency-Based Education
in all about
Personalization

X. Learning is More Blended

Anatomy of a Blended Learning Classroom



Many teachers... (discussion boards, tutorials, videos, webinars)
 Greater student-teacher interaction
 Real-time performance data to inform instruction
 Personalized learning paths
 Anytime, anywhere access to learning and support
 Critical thinking
 Communication
 Collaboration
 Creativity
 Self-directed learning
 Interactive media-rich content
 High student engagement

XI. Learning is More Self-Directed

February 2013

TED Talks

(Build a School in the Cloud; Self-Organized Learning Environments (SOLEs), TED Talk from Sugata Mitra
http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud.html



TED Ideas worth spreading

TALKS
Sugata Mitra: Build a School in the Cloud



TED Ideas worth spreading



TALKS
Sugata Mitra: Build a School in the Cloud

XII. Learning is More Global

May 26, 2015

Exploring by the Seat of Our Pants

National Geographic, Jessica Shea
<http://blog.education.nationalgeographic.com/2015/05/26/exploring-by-the-seat-of-our-pants/>





Two men living in Dadaab, a refugee camp in Kenya, would watch lecture videos and take online quizzes at a nearby United Nations compound. (InZone)

January 19, 2015

XIII. Learning is More Synchronous

(International Open Badges Extravaganza)
 European Meeting in Zoom, November 2015)



October 30, 2015

XIV: Learning is More Online

Migrants get help through German online university

Mihret Yohannes and Jabeen Bhatti, Special for USA TODAY, USA Today "Kiron (University) relies on existing "mass open online courses," or MOOCs, and works with eight academics from Harvard and MIT to create a two-year course of study. This will provide many refugees with credits that can transfer to 35 traditional, brick-and-mortar universities across Europe that are partners with Kiron."



Let's Review: Learning is Changing...

(i.e., it's more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)

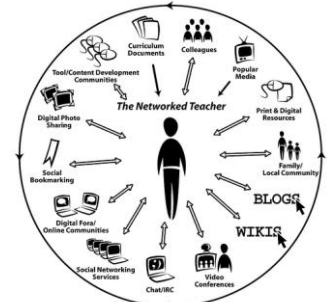


Frank Basile, an aircraft technician, took an MITx course on circuits and electronics to increase his knowledge.



Joe Alfonso, a financial adviser from Oregon, is taking the online finance course as a "refresher."

The Web of Learning



We are entering a jumping off point...

(South University of Science and Technology of China, Wednesday June 10, 2015)



Frameworks and Models



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



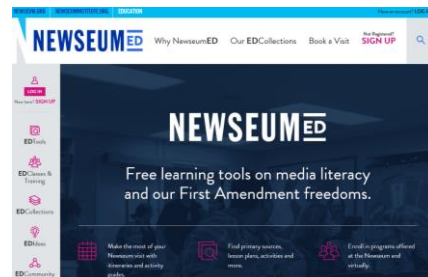
3. Curiosity, Fun: A. Virtual Expeditions July 23, 2015

What Google's virtual field trips look like in the classroom, cSchool News, Stephen Noonoo



October 16, 2015 5. Autonomy, Choice: C. Newseum Ed

<https://newseumed.org/>



6. Relevance, Meaningfulness:

A. Map Animations
Yes, Mr. President, We Remade Our Atlas to Reflect Shrinking Ice

Christine Dell'Amore, National Geographic, August 3, 2015
<http://www.nationalgeographic.com/2015/08/03/yes-mr-president-we-remade-our-atlas/>

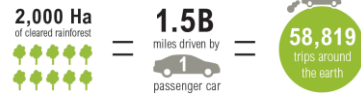


8. Engagement, Effort:

A. Interpreting Infographics
August 5, 2015

How much rainforest in that chocolate bar?
 Global Forest Watch, Nancy Harris, Octavia Payne and Sarah Mann
<http://blog.globalforestwatch.org/2015/08/how-much-rainforest-is-in-that-chocolate-bar/>

Land-Use Change Emissions in Miles Driven

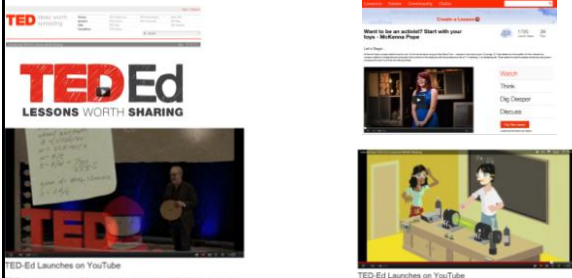


<http://bit.ly/rainforest-chocolate>

WORLD RESOURCES INSTITUTE

10. Yields Products, Goals:

A. Shared Online Video Tests and Quizzes (e.g., TED-Ed)
<http://education.ted.com/>



Any Comments or Questions?

Slides at: TrainingShare.com
 Papers: PublicationShare.com
 Book: <http://tec-variety.com/>
 Email: curt@worldisopen.com

