

## Education 3.0: My, Our Learning World is Changing!

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## Poll #1: Are you interested in Education 3.0?

A = Yes  
B = No  
C = Not sure



## March 2015 America's Skills Challenge: Millennials and the Future

Madeline Goodman, Anita Sands, and Richard Coley, ETS  
<http://www.ets.org/s/research/30079/index.html>

### AMERICA'S SKILLS CHALLENGE: MILLENNIALS AND THE FUTURE

BY MADELINE J. GOODMAN, ANITA M. SANDS, RICHARD J. COLEY,  
EDUCATIONAL TESTING SERVICE

OVERVIEW

## Why Education 3.0? (Global Education Leaders Program (GELP))

<http://gelponline.org/>

- Globalization and Demographic Shifts
- Technological Revolution
  - Transfer of ownership to students
  - Collaborative learning technologies
  - Holistic change in complex and interdependent system
  - Higher-order thinking focus



## Education 3.0 The Genesis and Emergence of Education 3.0 in Higher Education and its Potential for Africa, First Monday, by Derek Keats and J. Philipp Schmidt, March 2007 <http://firstmonday.org/ojs/index.php/fm/article/view/1625/1540>

### EDUCATION 3.0

Table 1: Educational generations in higher education			
Characteristics	Education 1.0	Education 2.0	Education 3.0
Primary role of professor	Source of knowledge	Guide and source of knowledge	Orchestrator of collaborative knowledge creation
Content arrangements	Traditional copyright materials	Copyright and free/open educational resources for students within discipline, sometimes across institutions	Free/open educational resources created and reused by students across multiple institutions, disciplines, nations, supplemented by original materials created for them
Learning activities	Traditional, essays, assignments, tests, some groupwork within classroom	Traditional assignment approaches transferred to more open technologies; increasing collaboration in learning activities; still largely confined to institutional and classroom boundaries	Open, flexible learning activities that focus on creating room for student creativity; social networking outside traditional boundaries of discipline, institution, nation

## Education 3.0: 'Learning Psychology'—Embracing Better Ways to Teach

Jeff Borden, Pearson, October 28, 2013

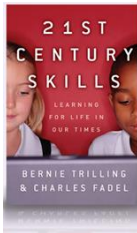
- Calculations (active)
- Compelling questions
- Communication of results
- Critical Thinking
- No single theory, report, or strategy (Vygotsky + McGonigal + Mezirow + Knowles + Pink + Gardner + Wiggins + Etc.)



## What skills do we need in the 21<sup>st</sup> Century?

Bernie Trilling, 21st Century Skills: Learning for Life in Our Times (2006, Toward Learning Societies)

<http://21stcenturyskillsbook.com/>  
<http://toped.avefoundation.org/2011/08/05/the-digital-natives-are-coming/>



### The Seven Cs – 21<sup>st</sup> Century Lifelong Skills

Seven Cs	Component Skills
Critical Thinking-and-Doing	Problem-solving, Research, Analysis, Project Management, etc.
Creativity	New Knowledge Creation, "Good Fit" Design Solutions, Artful Storytelling, etc.
Collaboration	Cooperation, Compromise, Consensus, Community-building, etc.
Cross-cultural Understanding	Across Greater Ethnic, Knowledge and Organizational Cultures
Communication	Crafting Messages and Using Media Effectively
Computing / ICT Literacy	Effective Use of Electronic Information and Knowledge Tools
Career & Learning Self-reliance	Managing Change, Lifelong Learning and Career Reorientation

## Poll#2:

Read any good books lately?  
Ten Books About Education 3.0

EDUCATION 3.0



## 1. Drive: The Surprising Truth About What Motivates Us

Daniel Pink (2009)

### Motivation 3.0



## 2. Invent to Learn:

Making, Tinkering, and Engineering in the Classroom

Sylvia Libow Martinez & Gary Stager (2013)

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

Invent To Learn

Making, Tinkering, and Engineering in the Classroom

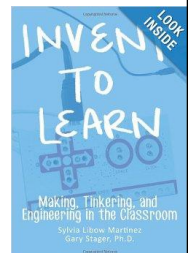
About the book Buy the book Reviews Resources About the authors CME Focus

### Invent To Learn

Making, Tinkering, and Engineering in the Classroom

By Sylvia Libow Martinez & Gary Stager

Using technology to make, repair, or customize the things we need brings engineering, design, and computer science to the masses. Fortunately for educators, this maker movement overlaps with the natural inclinations of children.

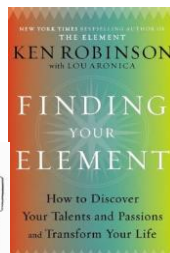
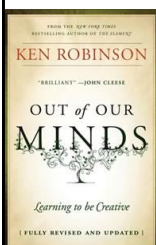


## 3. Finding Your Element:

How to Discover Your Talents and Passions and Transform Your Life

Sir Ken Robinson and Lou Aronica (2013)

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



## Finding Your Element:

How to Discover Your Talents and Passions and Transform Your Life

By Lou Aronica and Ken Robinson (2013)

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

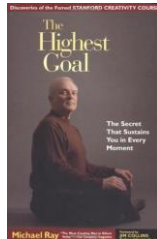
- Find your zone (deep in the throes of exploration and personal passion)
- Think differently (make fresh connections and analogies; avoid groupthink)
- Do something, develop your creative ideas
- Use your imagination, play with ideas
- Free and open exchange of ideas
- Encourage expression of personal ideas/feelings



#### 4. The Highest Goal:

The Secret That Sustains You in Every Moment  
Michael Ray (2004)

<http://creatinginnovators.com/>



#### The Highest Goal:

The Secret That Sustains You in Every Moment  
Michael Ray (2004)

<http://creatinginnovators.com/>

- Find real meaning
- Become a generative leader
- What makes you feel connected, motivated, sustained
- Travel your own path
- Go beyond passion and success
- Relate from your heart
- Turn fears into breakthroughs



#### 5. Creating Innovators:

The Making of Young People Who Will Change the World  
Tony Wagner (2012)

<http://creatinginnovators.com/>



#### Creating Innovators

Tony Wagner (2012)

<http://creatinginnovators.com/>

- Play
- Passion
- Purpose and life goals
- Open cultures of innovation and interdisciplinary problem solving
- Collaboration
- Intrinsic motivation



#### 6. Mindset:

The New Psychology of Success  
Carol Dweck (2006)

<http://mindsetonline.com/index.html>

<http://mindsetonline.com/testyourmindset/step1.php>



#### Mindset:

The New Psychology of Success  
Carol Dweck (2006)

- Growth vs. fixed (i.e., entity) theories of intelligence
- Intelligence is not fixed
- Practice, practice, practice
- Do not blame others
- Learning goals over performance goals
- Asks: What can I learn from this?
- Asks: How can I improve?



## 7. Creativity, Inc.

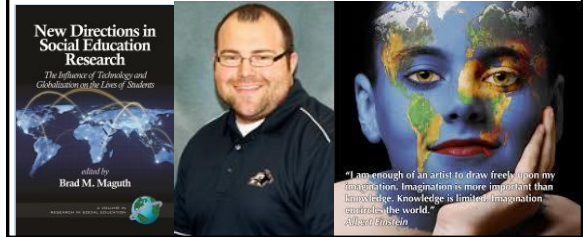
Ed Catmull, President of Pixar Animation and Disney Animation

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



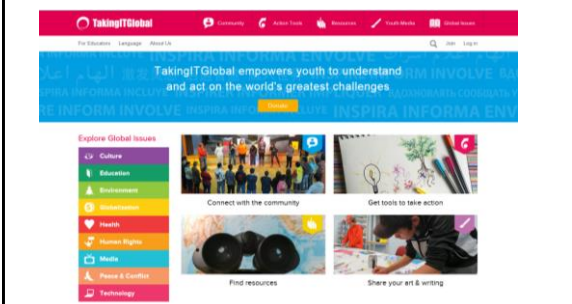
## 8. The Influence of Technology and Globalization on the Lives of Students.

Maguth, Brad M. (Ed.). (2012). *New Directions in Social Education Research: The Influence of Technology and Globalization on the Lives of Students*. Charlotte, NC: Information Age Publishing, Charlotte, NC. (book review, Mimi Lee, Ed Tech Magazine, 2013)



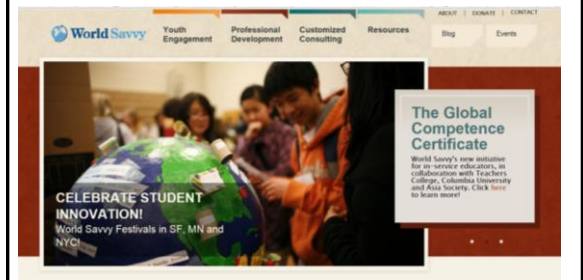
## TakingITGlobal

<https://www.tigweb.org/about/>



## World Savvy (global competency matrices)

<http://worldsavvy.org/>

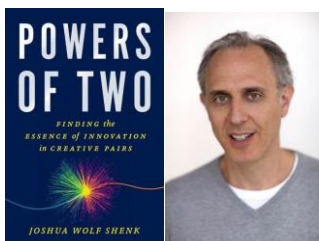


## 9. Powers of Two:

Powers of two: Finding the essence of innovation in creative pairs. Boston: Houghton Mifflin Harcourt.

Joshua Wolf Shenk (2014)

<http://www.shenk.net/powersoftwo/>



## 10. The Innovators:

How a group of hackers, geniuses, and geeks created the digital revolution. New York: Simon & Schuster.

Walter Isaacson (2014)

<http://books.simonandschuster.com/The-Innovators/Walter-Isaacson/9781476708690>





### Poll #3: Listen to the Radio Lately?

**November 14, 2014**

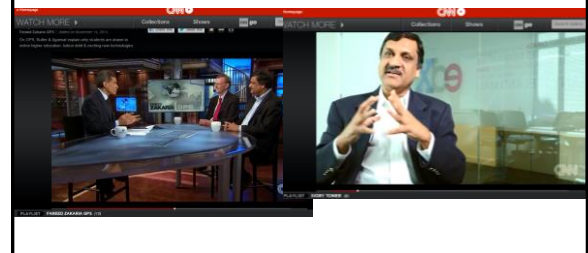
School lessons by radio in Sierra Leone, Liberia, IRIN  
(Humanitarian News and Analysis), MONROVIA/FREETOWN/DAKAR  
<http://www.irinnews.org/report/100838/school-lessons-by-radio-in-sierra-leone-liberia>  
<http://www.pce.uw.edu/about/Leadership/>



### Poll #4: Turn on the TV Lately?

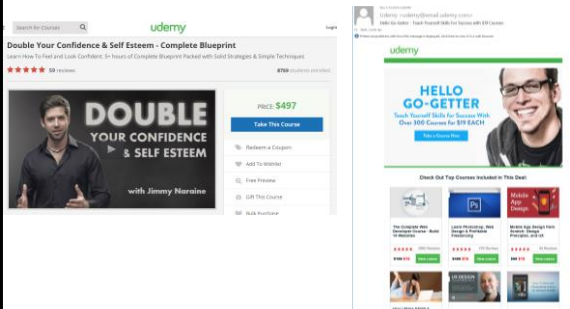
**November 14, 2014 (2:25)**

Why online ed disrupts the traditional model,  
Fareed Zakaria GPS, CNN, On GPS, Stuart Butler & Anant Agarwal explain why students are drawn to  
online higher education: tuition debt & exciting new technologies  
<http://www.cnn.com/video/data/2.0/video/bestof/2014/11/13/exp-gps-moocs-sot-cnn.html>



### Poll #5: Read Your Email Lately?

**January 15, 2015**



### Poll #6: Read Any Research Lately?

**October 25, 2014**



### Education 1.0

**1728: 1<sup>st</sup> correspondence course advertised Boston**  
(learn shorthand from Caleb Phillips thru weekly mailed lessons)

**The First University Correspondence Course**  
(University of London, External Program, 1858)

**1728-1990s – Generally postal system based**

**1930s – phonograph and radio**

**1950s and 1960s – television**

**1970s and 1980s – VHS tapes**

**1980s and 1990s – DVD**



### More Education 1.0

**September 15, 2014**

**Open, Distance and Online Learning:  
A Brief History, Sir John Daniel**

<http://vimeo.com/106002761> (password know)  
Notes and Slides: [http://sirjohn.ca/wordpress/?page\\_id=29](http://sirjohn.ca/wordpress/?page_id=29)



**May 20, 2015**

**Tech Woes at Small Colleges: If it's broken, and it probably is, then adapt, Chronicle of Higher Education, Jon Nichols**

[http://chronicle.com/article/Tech-Woes-at-Small-Colleges/238245/2cid=at&utm\\_source=at&utm\\_medium=en](http://chronicle.com/article/Tech-Woes-at-Small-Colleges/238245/2cid=at&utm_source=at&utm_medium=en)



Mimeograph machine, Wikimedia Commons

**Fall 2014, On Wisconsin**

**MOOC, Meet MORC (Massive Open Radio Course)**

WHA, UW Madison, College of the Air, 1933, Vocational Training dedicated to Agriculture, and later Home Economics and Typing



MOOC, Meet MORC

**May 10, 2013**

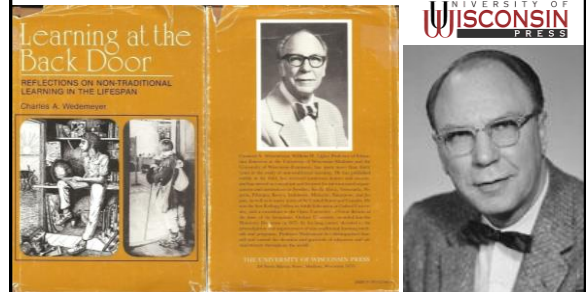
**10 ed-tech tools of the 70s, 80s, and 90s**  
eSchool News, Meris Stansbury

<http://www.eschoolnews.com/2013/05/10/10-ed-tech-tools-of-the-70s-80s-and-90s/print/>

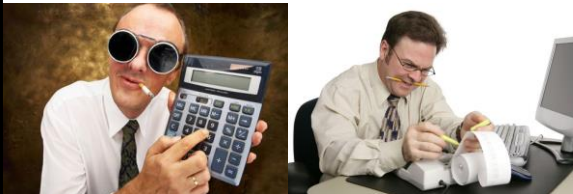


**Took Correspondence & TV Courses**

(thanks to Bob Clasen and Charles Wedemeyer, the University of Wisconsin)



**Life as an accountant/CPA in a high tech company in the 1980s...**



**Education 2.0?**



## Visions of Education 3.0? Knowledge Navigator (1987)

Apple Computer

<http://www.youtube.com/watch?v=hb4Af6wEoc>



## Fast Forward 25+ Years...

"Anyone can now learn  
anything from anyone at any  
time."

SKILLSHARE LEARN TEACH

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.)

Two Cheers for Web 2.0!



## Learning is Technology Based New Technologies = New Delivery Methods...



## I. Learning is More Mobile (e.g., mobile courses on smartphone)

April 2, 2015

Review: Samsung rises to challenge with Galaxy S6 and S6 Edge

Review: Samsung rises to challenge with Galaxy S6 and S6 Edge



April 9, 2015

## I'll Buy the Apple Watch, Ed Baig, USA Today

<http://www.usatoday.com/story/tech/columnist/baig/2015/04/08/baig-buying-the-apple-watch/25436885/>

Baig: I'll buy the Apple Watch

April 27, 2015 by Jeffrey R. Young

Wearable Teaching? College to  
Experiment With Apple Watch as  
Learning Tool





**May 14, 2015**

**Smartphone separation anxiety: How bad is your nomophobia?, Today Health, Meghan Holohan**

<http://www.today.com/health/smartphone-separation-anxiety-how-bad-are-you-120788>



**Readers: Are we headed for a smartphone zombie apocalypse?, CNN, Nicole Saidi, October 4, 2012**

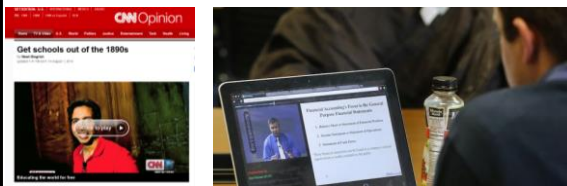
[http://www.cnn.com/2012/10/03/tech/smartphone-zombie-apocalypse-comments/index.html?cid=article\\_slideshow](http://www.cnn.com/2012/10/03/tech/smartphone-zombie-apocalypse-comments/index.html?cid=article_slideshow)



**II. Learning is More Flipped**  
**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-Pioneer-Hands-Off-His-Video-Lectures/151834/>



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.

**III. Learning is More Video-Based**  
**February 15, 2015**

**Lynda.com Excel Training, IU**

<http://www.lynda.com/Excel-tutorials/Excel-2010-Essential-Training/61219-2.html>



**IV. Learning is More Visual**  
**September 22, 2014**

**110 Foot Engagement, Elliott Masie's Learning 2014**

<http://www.learning2014.com/index.php/Item/110-foot-screen-engagement.html>



**V. Learning is More Touch Sensored**  
**October 16, 2013**

**Corporate Classrooms: Adapting to Change**  
**Chief Learning Officer, Frank Kalman**

<http://www.chmedia.com/articles/corporate-classrooms-adapting-to-change>



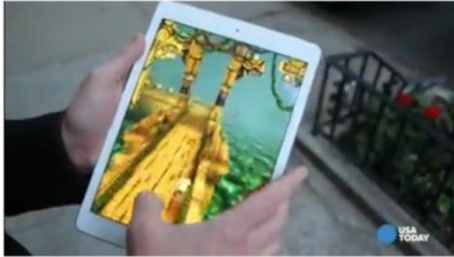


## VI. Learning is More Game-Based

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-fabulous-but-not-must-upgrade/12558295/>



## VII. Learning is More Immersive

April 2, 2015

*The Quest to Put More Reality in Virtual Reality,*  
Review: Samsung rises to challenge with Galaxy S6 and S6 Edge, Edward Baig, USA Today

<http://www.usatoday.com/story/tech/columnist/baig/2015/03/31/samsung-rises-to-challenge-with-galaxy-s6-s6edge/78727252/>



Review: Samsung rises to challenge with Galaxy S6 and S6 Edge



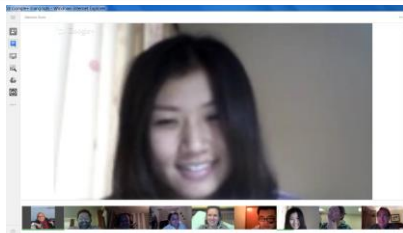
A technician uses virtual reality to test out new military hardware before it's ever put into production.

## VIII. 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



## IX. Learning is More Social

October 24, 2014

Facebook launches Rooms app for anonymous sharing of interests, USA Today, Jessica Guynn

<http://www.usatoday.com/story/tech/2014/10/23/facebook-rooms-josh-miller-brand-mobile-app-creative-labs/11768167/>



## X. Learning is More Adventurous

Aaron Doering, Chasing Seals, TEDx

<http://chasingseals.com/>



Speaking for Change and Humanity

From the Arctic to Africa, Aaron Doering is taking the story of how he protects knowledge, experience, and adventure can change how we think, imagine, experience the world.

## XI. Learning is More Direct from Experts

February 2, 2015

Here Comes Professor Everybody: The 'sharing economy' meets higher education,

Chronicle of Higher Education, Jeffrey R. Young

<http://chronicle.com/article/Here-Comes-Professor-Everybody/151445?cid=at>

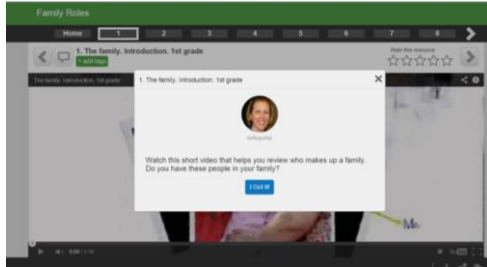


Kevin deLaplante, an associate professor at Iowa State U., makes an average of \$2,500 per month teaching from his home studio (above) on sites like Udemy.

**January 22, 2015**

**Noodle, Google Helpouts, Gooru**  
**When Can I Skip Taking the GRE or GMAT?**

<https://www.noodle.com/articles/when-can-i-skip-taking-the-gre-or-gmat>  
<https://www.noodle.com/>



**XII. Learning is More Synchronous**  
**Dubai to Puerto Rico (Edgar Leon)**

<https://www.youtube.com/watch?v=Imxw0YwTh2Y&list=UUCbG-jw1pE699Kv-Jw>



**XIII. 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/columnists/edward-baig/2014/10/23/amazon-kindle-voyage-to-e-reader-luxury/1774212>



**XIV. Learning is 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>



**XV. Learning is More Informal**

**October 13, 2013**

**A Dozen Ways To Promote Informal Learning**  
**Chief Learning Officer, Saul Carliner**

<http://www.domeia.com/articles/a-dozen-ways-to-promote-informal-learning>



**XVI. Learning is More Competency-Based**

**July 31, 2014**

**Hire Education: Mastery, Modularization, and the Workforce Revolution, Michelle R. Weise and Clayton M. Christensen, The Christensen Institute**

<http://www.christenseninstitute.org/publications/hire/>



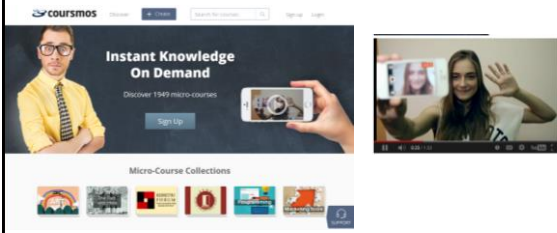
College, on Your Own: Competency-based education can help motivated students. But critics say it's no panacea  
 Dan Berrett, The Chronicle of Higher Ed, July 14, 2014  
<http://chronicle.com/article/College-On-Your-Own/147659/>

Nichole Pollock, a student in Northern Arizona U.'s competency-based bachelor's-degree program, takes a Spanish exam online.



## XVII. Learning is More On Demand May 5, 2014

Mobile MOOCs: New platform challenges conventional MOOCs  
eCampus News (<https://coursmos.com/>)  
<http://www.elearningnews.com/top-stories/new-platform-challenges-conventional-moocs/print>



## XVIII. Learning is More Hands-On February 2, 2015

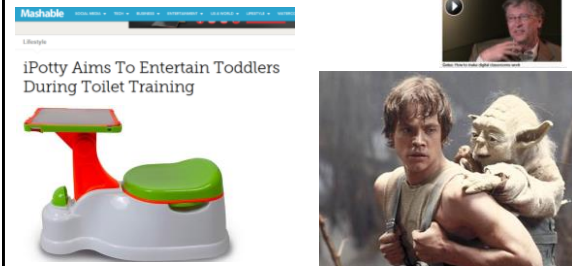
Makey Makey and the Kano

<http://makeymakey.com/>  
<https://vimeo.com/60307041>



## XIX. Learning is More Personal iPotty Aims To Entertain Toddlers During Toilet Training, Mashable, Kate Freeman (January 10, 2013)

<http://mashable.com/2013/01/10/ipotty/>



## Learning is More Personal Localization and Translation of Open Content

Coursera, Global Translator Community, Chronicle of Higher Education  
<https://www.coursera.org/about/translate>

### Coursera Seeks to Create a 'Global Translator Community'

Bring a great education to the world.  
Join the **Global Translator Community**.

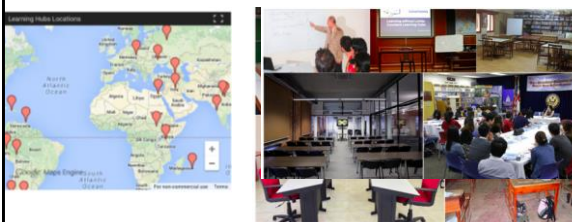
The Global Translator Community (GTC) is a community of volunteers and partner organizations working to make great educational content accessible across geographic and linguistic boundaries. GTC participants work together to translate top courses on Coursera into their native languages.

[Join the GTC >](#)  
[Meet our translators >](#)



## XX. Learning is More Communal April 30, 2014

New Learning Hubs Locations Hosted by The New York Public Library and Seven Other Int'l Partners,  
Coursera Learning Hubs  
<https://www.coursera.org/about/programs/learningHubs>  
<http://blog.coursera.org/post/84322385012/new-learning-hubs-locations-hosted-by-the-new-york>



## February 5, 2015 XXI. Learning is More Online

2014 Survey of Online Learning  
Grade Level: Tracking Online Education in the United States, 2014, Online Learning Consortium (formerly Sloan-C), by I. Elaine Allen and Jeff Seaman  
<http://www.onlinelearningconsortium.com/reports/gradelevel.pdf>  
<http://edition.cnn.com/videos/business/2015/03/11/yale-offers-online-degree-2u-ceo.cnn>





## January 23, 2015 Gates Newsletter

[http://www.gatesnotes.com/2015-annual-letter?page=0&lang=en&WT.mc\\_id=01\\_21\\_2015\\_AL2015-BG\\_PPPL\\_Img1\\_Top\\_20](http://www.gatesnotes.com/2015-annual-letter?page=0&lang=en&WT.mc_id=01_21_2015_AL2015-BG_PPPL_Img1_Top_20)



A quick overview of the bet we're making about the next 15 years.

## Learning is More Online June 15, 2014

Starbucks offers workers 2 years of free college, CNN Money, Gregory Wallace (from Arizona State online programs)

[http://money.cnn.com/2014/06/15/news/economy/starbucks-scholar-education/index.html?hpt=hp\\_12](http://money.cnn.com/2014/06/15/news/economy/starbucks-scholar-education/index.html?hpt=hp_12)  
<http://www.nytimes.com/2014/06/16/us/starbucks-to-provide-free-college-education-to-thousands-of-workers.html>



Getting a College Degree, With Help From Starbucks



## XII. Learning is More Modifiable

Inside Look: Learning Spaces, Meeting classroom teaching and collaboration expectations, University Business, Feb. 22, 2013  
<http://www.universitybusiness.com/article/inside-look-learning-spaces>



## XIII. Learning is More Comfortable

Design for Students, with Students, "Hub Central", the \$42 million University of Adelaide learning hub opened in October 2011, May 8, 2012, Mike Roberts  
<http://designbuildsource.com.au/design-for-students-with-students>



## XIV. Learning is More Ubiquitous September 23, 2014

Elliott Masie's (i-Beacon; Bluetooth low energy proximity sensing)  
<http://www.learning2014.com/index.php/learning-trends-and-challenges-webinar.html>

On September 23, 2014 Elliott Masie hosted a webinar discussing Learning Trends and Challenges in 2014. Below is the video from this dialogue.



## XV. Learning is More Instantaneous April 9, 2013

HER Computer fashions face social test: Can wearable computers fit in? Scott Martin, USA Today  
(i.e., magnify moles or injuries, see vital signs, live stream surgeries, access previous PT sessions, access research and drug info, etc.)  
<http://www.fiercemobilehealthcare.com/story/people-glasses-could-have-strong-potential-healthcare-use/2013-03-18>





## XVI. Learning is More Free August 5, 2014

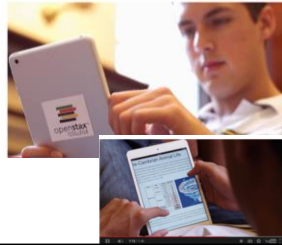
OpenStax Aims To Bring Free Digital Textbooks to High Schools, David Nagel, THE Journal

<http://thejournal.com/articles/2014/08/05/openstax-aims-to-bring-free-digital-textbooks-to-high-schools.aspx>

New mobile app helps a Cambridge press offer free digital monographs even to those without computers



Screen savours: books can now be read on almost any mobile phone



January 8, 2015

## Obama Plan Would Help Many Go to Community College Free

JULIE HIRSCHFELD DAVIS and TAMAR LEWIN, The New York Times

[http://www.nytimes.com/2015/01/09/us/politics/obama-proposes-free-community-college-education-for-some-students.html?\\_r=0](http://www.nytimes.com/2015/01/09/us/politics/obama-proposes-free-community-college-education-for-some-students.html?_r=0)



President Obama running onto the stage before delivering remarks at Central High School in Phoenix on Thursday. Credit Doug Mills/The New York Times

## The V-PORTAL (Bonk, IU) "Video Primers in an Online Repository for e-Teaching and Learning" V-PORTAL, TravelinEdMan (27 free/open YouTube videos) <http://www.youtube.com/user/TravelinEdMan>



## XXVII. 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](http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud.html)



## XXVIII. Learning is More Global August 1, 2014

Can You Really Teach a MOOC in a Refugee Camp?, Chronicle of Higher Education, Steve Kolowich

<http://chronicle.com/blogs/teaching/can-you-really-teach-a-mooc-in-a-refugee-camp/5443136#sthash=AmrLmKtMm>



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)

May/June 2014

Hopper, Susan (2014). *Tech Trends*, 58 (3). 78-88.

## Bringing the World to the Classroom through Videoconferencing and Project-based Learning

By Susan B. Hopper, University of North Texas

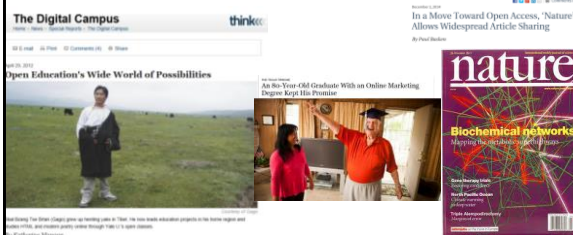


## XIX. Learning is More Open (December 2, 2014)

**Nature, Openwords, etc.**

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

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



## XXX. Learning is More Massive

**Sample Course: Open Knowledge:  
Changing the Global Course of Learning  
September 2, 2014 to December 12, 2014, Stanford**

<https://class.stanford.edu/courses/Education/OpenKnowledge/Fall2014/about#>  
Softcover (\$30): [http://www.paripress.com/invasion\\_of\\_the\\_moocs](http://www.paripress.com/invasion_of_the_moocs)  
Free (PDF): [http://www.paripress.com/pdf/invasion\\_of\\_the\\_moocs.pdf](http://www.paripress.com/pdf/invasion_of_the_moocs.pdf)



## Global Health Initiatives October 7, 2014

**Online Mooc courses deliver Ebola health  
advice, BBC News, Sean Coughlan**

<http://www.bbc.com/news/education-29521360>

<http://www.advancelearning.com/why-wait-for-others-to-fight-ebola>



Disinfecting a room in Monrovia, Liberia: Online courses are providing health advice to fight Ebola.

**April 20, 2015**

**250 MOOCs and Counting: One Man's  
Educational Journey, Chronicle of Higher Education**

<http://chronicle.com/article/250-MOOCsCounting-One/229397/?cid=at>  
If the MOOC movement has faded, nobody told Jima Ngei. Mr. Ngei, who lives in Port Harcourt, Nigeria, has completed and passed 250.



**Jima Ngei: "I had this unrelenting fear that this  
miracle of free access might evaporate soon."**

## 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."

**May 17, 2015**

**Why Is The University Still Here?  
TechCrunch, Danny Crichton**

<http://techcrunch.com/2015/05/17/why-is-the-university-still-here/#.czziqnr1s>



Universities are supposed to be dead. These bastions of higher learning have been on Silicon Valley's hit list for much of the past decade, and disruption players targeting the industry have certainly been seen to kill in the years since.

## Things are heating up!

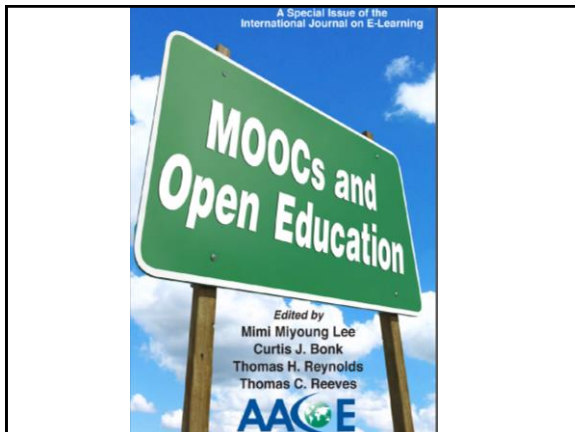
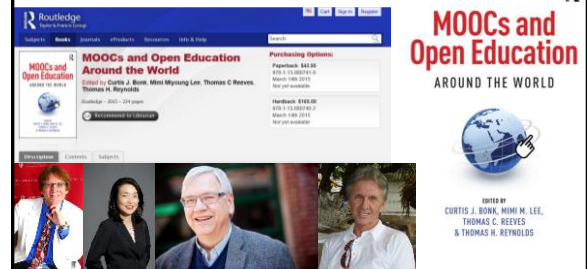
<http://routledge-ny.com/books/details/9781138807419/>



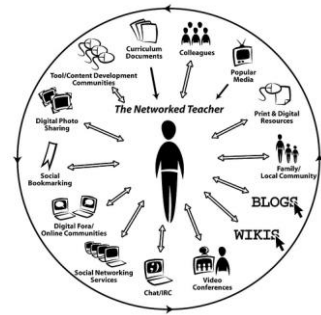
MOOCs and Open Education Around the World  
By Bonk, Lee, Reeves, & Reynolds

## MOOCs and Open Education Around the World

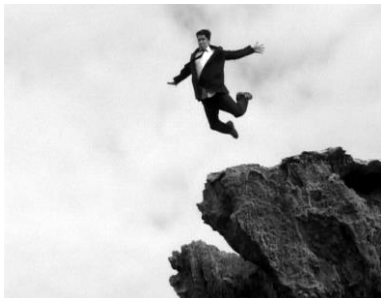
<http://routledge-ny.com/books/details/9781138807419/>



## The Web of Learning



## We are entering a jumping off point...



## The World is Open for Learning!

Dr. Jiao Jianli, Professor of Educational Technology,  
Director of Future Education Research Centre  
Deputy Dean of School of Information Technology in Education,  
South China Normal University  
<http://jiao.blogbus.com/>



## The World is very open!

(in Ho Chi Minh City, Vietnam, Wednesday  
March 12th)



### Framework: WE-ALL-LEARN: Ten Forces that Opened the Learning World



- **W**eb Searching in the World of e-Books (i.e., Darwin)
- **E**-Learning and Blended Learning
- **A**vailability of Open Source and Free Software (e.g., Moodle)
- **L**everaged Resources and OpenCourseWare (e.g., MIT)
- **L**earning Object Repositories and Portals (i.e., shared content)
- **L**earner Participation in Open Info Communities (YouTube)
- **E**lectronic Collaboration and Interaction (sync and async)
- **A**lternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- **R**ead-Time Mobility and Portability (e.g., iPhone)
- **N**etworks of Personalized Learning (Blogs, RSS)

## Audience Participation!

**WE**

**ALL**

**LEARN!!!**



## Poll #7: How do you now view the instructor in the Open World of Education 3.0?



## From Instructor as Credit Manager...



## Poll #8:

## To Instructor as Orchestra Conductor or Concierge?





**Poll #9:**  
**Instructor as Counselor?**



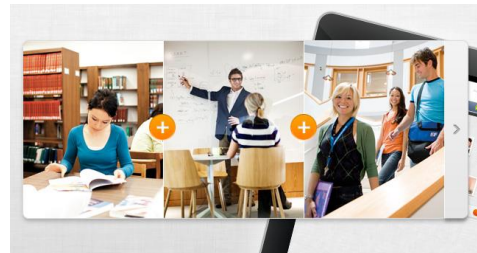
**Poll #10:**  
**Instructor as Course Ambassador?**



**Poll #11:**  
**Instructor as Curator?**



**How About Instruction as a Cognitive Apprenticeship?**



**Education 3.0?**  
**Introducing the free "TEC-VARIETY" Framework...**  
<http://tec-variety.com/>  
<http://tec-variety.com/TEC-VARIETY-Chinese.pdf>

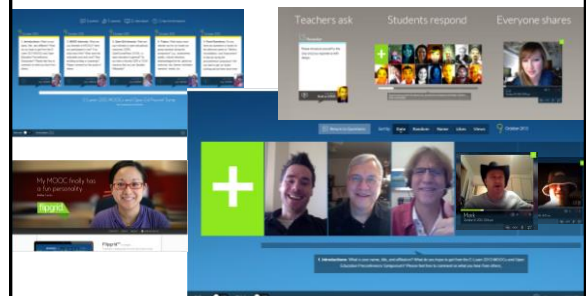


**在线学习动机与激励:**  
**TEC-VARIETY 模型**

——激励和留住在线学习者的 100 个活动

作者: Curtis J Bonk & Elaine Khoo IU

**1. Tone/Climate: A. Threaded Video Discussions, e.g., Flipgrid**  
<http://flipgrid.com/#429f88c5>



## October 4, 2014

### 2. Encouragement, Feedback, etc.:

#### A. Class Facebook Group

Dr. Bonk's creative fun time group (R546)

<https://www.facebook.com/groups/830496290323899/>



## 3. Curiosity, Fun:

### A. Design Article Database in Pinterest, Jenny Webeck

<https://www.pinterest.com/jennifertwebeck/emeraldina-learning-technologies/>  
EDED 5372 Emerging Trends and Issues in Instructional Technology

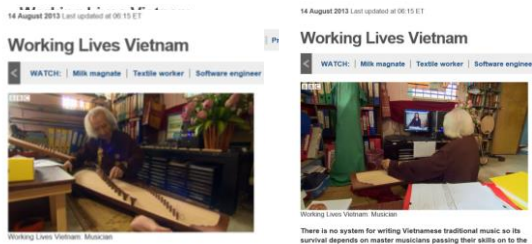


## 4. Variety, Novelty, Fun:

### 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-23497559>



## 5. Autonomy, Choice:

### A. Design Multimedia Glossaries

Ozgur Ozdemir, December 2012

<http://r685glossary.shutterfly.com/>

Umida Khikmatillaeva, Dec. 2011, P540

<http://learningplanet.shutterfly.com/>



## 6. Relevance, Meaningfulness:

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

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



January 27, 2015

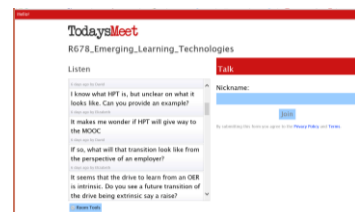
## 7. Interactive, Collaborative:

### A. Backchannel Chat (Today'sMeet)

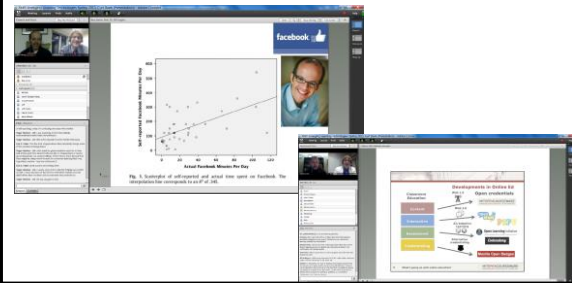
<https://todaysmeet.com/>

R678\_Emerging\_Learning\_Technologies

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



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



**March 13, 2015**

## 9. Tension, Challenge, etc.: A. 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](https://www.youtube.com/watch?v=Bcr3_aZT_xQ&feature=youtu.be)



## 10. Yields Products, Goals: A. Student Created Mobile Apps and Videos



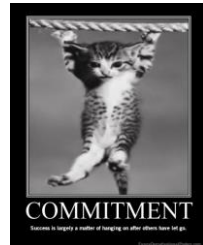
## Commitments:

### Stop and Share:

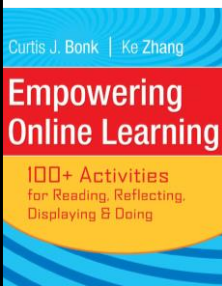
Which principle(s) of TEC-VARIETY will you use?

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

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



## Framework #2: The R2D2 Model



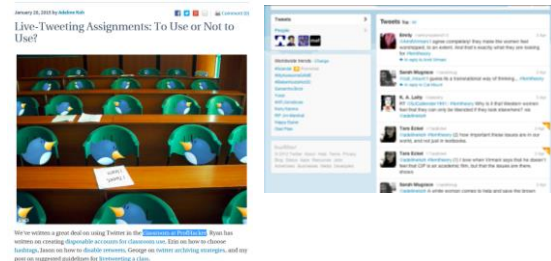
**January 28, 2015**

## Read 1a. Twitter Fed Class Discussions

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

he Chronicle of Higher Education, Adeline Koh

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



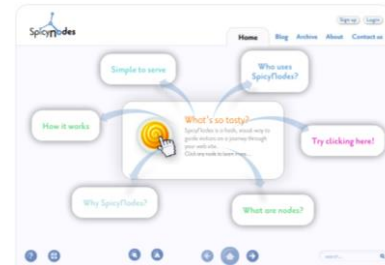
## Reflect 2a. Interpreting Infographics July 24, 2014

Woman in Computer Science

<http://graduatedegreesonline.njit.edu/mscs-resources/mscs-infographics/women-in-computer-science/>



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



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

April 26, 2015

IST Groove Song, Jeffrey Jenkins, R511

<https://soundcloud.com/jeffjenkins25/ist-groove>

The World is Open, Jill Kaufman, R678

<https://www.youtube.com/watch?v=ZRGV0Mg5Vmw&feature=youtu.be>



## Poll #12: Which do you prefer... (A) TEC-VARIETY or (B) R2D2?



### 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, Investment, Investment
9. Tension: Challenge, Dissonance, Controversy
10. Yielding Products: Goal Driven, Purposeful Vision, Ownership



## Where are we headed? Where is Education 3.0?



## Any Comments or Questions?



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

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

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

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

Email: [curt@worldisopen.com](mailto:curt@worldisopen.com)

