Education 3.0: My, Our Learning World is Changing!

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

July 9, 2015

(Circa Confucius 551–479 BCE)

Academos
Plato Circa 428–347 BCE

May 26, 2015
Edtech and MOOC Times in China
Michael Trucano On Tue, 05/12/2015, EduTech

June 26, 2015
In China, Where Everything is a MOOC, Education Week, Justin Reich, HarvardX Research Fellow
https://blogs.edweek.org/edweek/edtechresearcher/2015/05/in_china_where_everything_is_a_mooc.html?r=284759497

The most memorable line from my recent visit to China was this: "We have 12 million K-12 teachers in China who need to receive this particular in-service training, so we started with a group of about 200,000."
Poll #1: Are you interested in Education 3.0?
A = Yes
B = No
C = Not sure

Education 3.0

What skills do we need in the 21st Century?
http://21stcenturyskillsbook.com/
http://toped.svefoundation.org/2011/08/05/the-digital-natives-are-coming/

Poll #2: Read any good books lately?
Ten Books About 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/

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
http://creatinginnovators.com/

The Highest Goal:
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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

- 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. Reinventing Schools:
It’s Time to Break the Mold.
NY: Rowman and Littlefield
http://reigeluth.wix.com/paradigmchange


Walter Isaacson (2014)

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

Poll #4: Turn on the TV Lately?
November 14, 2014 (2:25)

Poll #5: Read Your Email Lately?
January 15, 2015

Poll #6: Read Any Research Lately?
October 25, 2014

Poll #7: Remember Education 1.0
1728: 1st correspondence course advertised Boston
1728-1990s – Generally postal system based
1900s – phonograph and radio
1950s and 1960s – television
1970s and 1980s – VHS tapes
1980s and 1990s – DVD
May 20, 2015
Tech Woes at Small Colleges: If it’s broken, and it probably is, then adapt, Chronicle of Higher Education, Jon Nichols

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

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)

Poll #8: Remember what was to be education 2.0?

Life as an accountant/CPA in a high tech company in the 1980s...
Fast Forward 30+ Years...

“Anyone can now learn anything from anyone at any time.”

Poll #9: Any Visions of Education 3.0?
Knowledge Navigator (1987)
Apple Computer
http://www.youtube.com/watch?v=hb4AzF6wEoc

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

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

April 9, 2015
I’ll Buy the Apple Watch, Ed Baig, USA Today
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-your-nomophobia-t20786

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

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/151031/

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
June 16, 2015
Lynda.com Excel Training, IU Acquired for $1.5 Billion, April 23, 2015

IV. Learning is More Visual
September 22, 2014
110 Foot Engagement, Elliott Masie’s Learning 2014

V. Learning is More Touch Sensored
October 16, 2013
Corporate Classrooms: Adapting to Change Chief Learning Officer, Frank Kalman
http://www.chronicle.com/article/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-air2-fabulous-tablet-is-not-must-upgrade/17658295/

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  

NextVR crewmembers set up their virtual reality cameras at an NBA game, allowing viewers of the live event to see the game from a variety of positions in the arena.

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  

X. Learning is More Adventurous  
May 7, 2015  
Aaron Doering, Chasing Seals, TEDx  
http://chasingseals.com/  
https://twitter.com/chasingseals
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.

XII. Learning is More Synchronous
May 28, 2015
World Bank Institute workshop on e-learning to finance people in Zhengzhou, China

XIII. Learning is More Digital
October 23, 2014
New Amazon Kindle is a Voyage into eReader luxury, USA Today, Edward C. Baig

XIV. Learning is Resource Rich
March 22, 2015
Madagascar marvel: Divers find fossils of extinct giant lemurs
Daisy Carrington, for CNN, March 22, 2015

May 28, 2015
Something in the news.
Ancient jawbones put new species on the human family tree, researchers say, Laura Smith-Spark, CNN
http://www.nature.com/nature/journal/v521/n7553/full/nature14448.html

May 28, 2015
New species from Ethiopia further expands Middle Pliocene hominin diversity, Nature
http://www.nature.com/nature/journal/v521/n7553/full/nature14448.html
XV. Learning is More Informal
June 29, 2015
Is Facebook the next frontier for online learning?
Christine Greenhow; greenhow@msu.edu, Andy Henion
http://msutoday.msu.edu/news/2015/is-facebook-the-next-frontier-for-online-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/

XVII. Learning is More On Demand
May 5, 2014
Mobile MOOCs: New platform challenges conventional MOOCs
eCampus News (https://coursmos.com/)

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
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

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

Learning is More Online
June 15, 2014
Starbucks offers workers 2 years of free college, CNN Money, Gregory Wallace
(from Arizona State online programs)

XII. Learning is More Modifiable
Inside Look: Learning Spaces, Meeting classroom teaching and collaboration expectations, University Business, Feb. 22, 2013
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 6, 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)

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/google-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

January 8, 2015
Obama Plan Would Help Many Go to Community College Free
JULIE HIRSCHFELD DAVIS and TAMAR LEWIN, The New York Times

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

February 11, 2015
Inside the schools that dare to break with traditional teaching
The Guardian
http://www.theguardian.com/teacher-network/2015/feb/11/schools-students-traditional-teaching

Students at the Liger Learning Center in Phnom Penh, Cambodia. Photograph: Liger Learning Center

Ørestad Gymnasium (Copenhagen, Denmark), a school without classrooms, is designed to fit the ethos of 50% teacher-led learning and 50% independent student-centred learning.

XXVIII. 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)

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://online.stanford.edu/courses/Education/OpenKnowledge/Fall2014/about#

Global Health Initiatives
October 7, 2014
Online Mooc courses deliver Ebola health advice, BBC News, Sean Coughlan

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-MOOCs-Counting-One/229397/?cid=rss
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/#.cczeiq:nR1s
Things are heating up!
http://routledge-ny.com/books/details/9781138807419/

Employee to Employee Training
G2g (Googler to Googler) Training
Seven Ways to Corporate MOOC, Udemy blog,
December 23, 2013, Shannon Hughes
https://www.udemy.com/organizations/blog/2013/12/23/seven-ways-to-corporate-mooc/
Classes range from management and public speaking, to parenting and mountain climbing.

MOOCs and Open Education Around the World
http://routledge-ny.com/books/details/9781138807419/
We are entering a jumping off point…

We are entering a jumping off point...
(South University of Science and Technology of China, Wednesday June 10, 2015)

We are entering a jumping off point…
(South China Normal University, Friday June 12, 2015)

The World is very open!
(South University of Science and Technology of China, Wednesday June 10, 2015)
**Framework: WE-ALL-LEARN:**

**Ten Forces that Opened the Learning World**

- Web Searching in the World of e-Books (i.e., Darwin)
- E-Learning and Blended Learning
- Availability of Open Source and Free Software (e.g., Moodle)
- Leveraged Resources and OpenCourseWare (e.g., MIT)
- Learning Object Repositories and Portals (i.e., shared content)
- Learner Participation in Open Info Communities (YouTube)
- Electronic Collaboration and Interaction (sync and async)
- Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- Real-Time Mobility and Portability (e.g., iPhone)
- Networks of Personalized Learning (Blogs, RSS)

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**The World is Wide Open!**

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

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**Audience Participation!**

**WE ALL LEARN!!!**

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**Ok, how do you now view the instructor in the Open World of Education 3.0?**

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**From Instructor as Credit Manager...**

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**To Instructor as Orchestra Conductor or Concierge?**
Instructor as Course Ambassador?

Instructor as Curator?

June 4, 2015
AspirEDU
http://aspiredu.com/solutions/

An Education 3.0 Solution?
Introducing the free “TEC-VARIETY” Framework...
http://tec-variety.com/

Framework: TEC-VARIETY for Online Motivation and Retention
1. Tone/Climate: Psych Safety, Comfort, Belonging
2. Encouragement, Feedback: Responsive, Supports
3. Curiosity: Fun, Fantasy, Control
4. Variety: Novelty, Intrigue, Unknowns
5. Autonomy: Choice: Flexibility, Opportunities
6. Relevance: Meaningful, Authentic, Interesting
7. Interactive: Collaborative, Team-Based, Community
8. Engagement: Effort, Involvement, Excitement
9. Tension: Challenge, Dissonance, Controversy
10. Yields Products: Goal Driven, Products, Success, Ownership

1. Tone/Climate: A. Threaded Video Discussions, e.g., Flipgrid
http://flipgrid.com/#429f88c5
2. Encouragement, Feedback, etc.: A. Voice/Audio Feedback
[http://vocaroo.com/s/xkQT7tmE3N4](http://vocaroo.com/s/xkQT7tmE3N4)
(Recorded by Curt Bonk for the Open University of China)

3. Curiosity, Fun:
A. Something in the News
ISIS publicly smashes Syrian artifacts (Recorded by Curt Bonk for the Open University of China)

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.

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/p259wpabg9/

7. Interactive, Collaborative:
A. Backchannel Chat (TodaysMeet)
R678_Emerging_Learning_Technologies
https://todaysmeet.com/R678_Emerging_Learning_Technologies
8. Engagement, Effort:
A. Guest Speaker Quotes
(Rey Junco, February 25, 2013)

9. Tension, Challenge, etc.:
A. Controversial Issue Debates
RS11 Midterm Video How to Create an Authentic Environment in a Content-Driven School?, RS11, Nick and Nik
https://www.youtube.com/watch?v=Bcr3_aZF_xQ&feature=youtu.be

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

Commitments:
Which principle(s) of TEC-VARIETY will you use?
Tone/Climate
Encouragement, Feedback
Curiosity
Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products

Also Education 3.0?
Framework #2: The R2D2 Model

January 28, 2015
Read 1a. Twitter Fed Class Discussions
Live-Tweeting Assignments: To Use or Not to Use?
The Chronicle of Higher Education, Adeline Koh
http://chronicle.com/blogs/profhacker/live-tweeting-assignments-to-use-or-not-to-use/58949
Reflect 2a.
Interpreting Infographics
July 24, 2014

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

Poll #10: Which do you prefer...
(A) TEC-VARIETY or (B) R2D2?

Where are we headed?
Where is Education 3.0?

Education 3.0:
My, Our Learning World is Changing!

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

July 9, 2015
Time for a lunch break...

Slides at: http://www.trainingshare.com/