Learning is Changing Part 1: Education 3.0: My, Our Learning World is Changing!
Curtis J. Bonk, Professor, Indiana University
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk/

Academos
Plato Circa 428–347 BCE

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
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)

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

The Highest Goal: The Secret That Sustains You in Every Moment
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

Creating Innovators: The Making of Young People Who Will Change the World
Tony Wagner (2012)
http://creatinginnovators.com/

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

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

Elizabeth Gilbert
http://www.elizabethgilbert.com/
http://www.ted.com/talks/elizabeth_gilbert_success_failure_and_the_drive_to_keep_creating?language=en

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.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. Stuart Butler & Anant Agarwal explain why students are drawn to online higher education: tuition debt & exciting new technologies


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

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

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**Poll #7: Remember Education 1.0**

1728: 1st 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

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**May 20, 2015**

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


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**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-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...

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

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-yours-t20786

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

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-yours-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

August 5, 2015
Shubham Jaglan Overwhelmed by "Dream" Return Home After Double World Championship, Disha Chopra, NDTV Sports

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

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.

July 23, 2015
Meet Osterhout and its $2,700 AR glasses
June 10, 2015
Augmented reality promises 'superpowers', and people are listening
The USA Today, Marco della Cava

IX. Learning is More Social
September 1, 2015
IX. Learning is More Social
Facebook says 1 billion people used Facebook on Monday, USA Today
http://www.usatoday.com/tech/

October 7, 2013
6 collaborative writing applications for group projects or papers, Casey Brown, Elon University
MeetingWords, Google Docs, NowComment, MixedInk (http://www.mixedink.com/#/how-it-works)

August 19, 2015
Mini’s Augmented Vision concept puts navigation, safety in your glasses, CNET, Wayne Cunningham and Shara Tibken

VI. 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

April 19, 2015
Mini’s Augmented Vision concept puts navigation, safety in your glasses, CNET, Wayne Cunningham and Shara Tibken
http://www.flatconnections.com/
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

XII. Learning is More Synchronous
January 19, 2015
(International Open Badges Extravaganza)
European Meeting in Zoom, November 2015
Sonja Stahl and Diane Salmon, National Louis University

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 More Blended
March 22, 2015
Madagascar marvel:
Divers find fossils of extinct giant lemurs
Daisy Carrington, for CNN, March 22, 2015

May 28, 2015 (Immediate, Digital, and Resource Rich)
Ancient jawbones put new species on the human family tree, researchers say, Laura Smith-Spark, CNN
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/
College, on Your Own: Competency-based education can help motivated students, but critics say it’s no panacea
http://chronicle.com/article/College-On-Your-Own/147659/?cid=at
Nichele 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/)

XVIII. Learning is More Hands-On
February 2, 2015
Makey Makey and the Kano
http://makeymakey.com/
https://vimeo.com/60307043

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/
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

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

November 18, 2015
Focused Ga. Mom Completes College Exam While in Labor, Fox 5, Atlanta

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

Learning is More Personal
Localization and Translation of Open Content
Coursera, Global Translator Community, Chronicle of Higher Education
http://www.coursera.org/about/translate
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 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)

XV. Learning is More Instantaneous
April 9, 2013
HER Computer fashions face social test: Can wearable computers fit in? Scott Martin, USA Today
http://www.usatoday.com/story/tech/2013/04/06/google-apple-iwatch-glass-jawbone-iphone-nike-microsoft-samsung/1979419/ (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

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

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/

XIX. Learning is More Open
(December 2, 2014)
Nature, Openwords, etc.
http://www.openwords.com/
https://www.facebook.com/Openwords

XXX. Learning is More Modular
August 4, 2015
XXX. Learning is More Massive
How Nanodegrees Are Disrupting Higher Education
John Waters, Campus Technology
http://campustechnology.com/articles/2015/08/05/how-nanodegrees-are-disrupting-higher-education.aspx

XXX. Learning is More Massive
Sample Course: Open Knowledge:
Changing the Global Course of Learning
September 2, 2014 to December 12, 2014, Stanford
https://stanford.edu/group/OpenKnowledge/Fall2014/about/
Softcover ($30): http://www.parlorpress.com/invasion_of_the_moocs

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

http://chronicle.com/article/250-MOOCs-Counting-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.”

May 26, 2015

Edtech and MOOC Times in China


May 12, 2015

Edtech and MOOC Times in China


May 26, 2015

In China, Where Everything is a MOOC

Education Week, Justin Reich, HarvardX Research Fellow

http://blogs.edweek.org/edweek/edtechresearcher/2015/05/in_china_where_everything_is_a_mooc.html?r=284759497

June 26, 2015

Employee to Employee Training

G2g (Googler to Googler) Training

Seven Ways to Corporate MOOC, Udemy blog, December 23, 2013, Shannon Hughes

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

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.”

Things are heating up!

http://routledge-ny.com/books/details/9781138807419/
**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…
(South University of Science and Technology of China, Wednesday June 10, 2015)

Any Comments or Questions?

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