Education 3.0: My, Our Learning World is Changing!

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(Circa Confucius 551–479 BCE)

Academos
Plato Circa 428–347 BCE

Poll #1:
Do you really remember those days of the lecture?

YOU SHALL NOT PASS
This is a new age of learning and instruction...!

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

1. Instructor as Concierge

2. Instructor as Consultant

3. Instructor as Conductor

5. Instructor as Curator
Age of Instructor as Curator, Concierge, Counselor, etc.

Poll #2: 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

Poll #3: Remember education 2.0?

Poll #3: Remember education 2.0?

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/

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 #4: Do you really remember what was to be education 2.0?

Poll #5: Are you interested in Education 3.0?
A = Yes
B = No
C = Not sure

What skills do we need in the 21st Century?
http://21stcenturyskillsbook.com/

What is Education 3.0?

Table 1: Educational generations in higher education

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Education 1.0</th>
<th>Education 2.0</th>
<th>Education 3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary role of professor</td>
<td>Source of knowledge</td>
<td>Guide and source of knowledge</td>
<td>Orchestrator of collaboration knowledge creation</td>
</tr>
<tr>
<td>Content arrangements</td>
<td>Traditional copyright materials</td>
<td>Copyright and free/open educational resources for students within discipline, sometimes across institutions</td>
<td>Free/open educational resources created and sustained by multiple institutions, disciplines, schools, colleges, and universities, supplemented by original materials created for them</td>
</tr>
<tr>
<td>Learning activities</td>
<td>Traditional, course assignments, tests, some groupwork within classroom</td>
<td>Traditional assignments are modified to include open technologies, increasing collaboration in learning activities, still largely confined to institutional and classroom boundaries</td>
<td>Open, flexible learning activities that focus on creating room for student creativity; social networking outside traditional boundaries of discipline, institution, nation</td>
</tr>
</tbody>
</table>
Poll #6: Read any good books lately?

1. Drive: The Surprising Truth About What Motivates Us
   Daniel Pink (2009)
   - Freedom, challenge, purpose
   - Creative, interesting, etc.
   - Self-directed work
   - Intrinsic motivation
   - Life as play and possibility
   - Engagement and mastery
   - Autonomy

2. Grit: The Power of Passion and Perseverance
   Angela Duckworth (2016)
   - 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?

   Carol Dweck (2006)
   - 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?

   Ed Catmull, President of Pixar Animation and Disney Animation
   - http://www.creativityincbook.com/

   Elizabeth Gilbert
   - http://www.elizabethgilbert.com/
   - Successes, failures, and the drive to keep creating...
Scott Barry Kaufman & Carolyn Gregory
http://www.amazon.co.uk/Wired-Create-Unraveling-Mysteries/dp/0399174109

7. 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

Tony Wagner and Ted Dintersmith
http://www.tonywagner.com/1933

Poll #7: What if you read these books?

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

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
(e.g., mobile courses on smartphone)
April 2, 2015
Review: Samsung rises to challenge with Galaxy S6 and S6 Edge

February 17, 2016
World's Cheapest Smartphone at $3.67

May 14, 2015
Smartphone separation anxiety: How bad is your nomophobia?, Today Health, Meghan Holohan

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

January 7, 2015
II. Learning is More Flipped
When a Flipped-Classroom Pioneer Hands Off His Video Lectures, This Is What Happens, Jeffrey R. Young, The Chronicle of Higher Education

June 16, 2015
III. Learning is More Video-Based
Lynda.com Excel Training, IU Acquired for $1.5 Billion, April 23, 2015
August 31, 2015
Short Educational Video Anchors:
CNN, BBC, TED, TED-Ed, FoRaTV
BBC One-Minute World News

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

April 5, 2016
Association for the Advancement of Computing in Education (AACE),
YouTube Channel
https://www.youtube.com/channel/UCTB7tSqnI1VhADciWb_sl9g

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

March 24, 2015
Maps of Languages
Langscape, Language at Maryland
http://langscape.umd.edu/map.php

October 16, 2013
V. Learning is More Touch Sensored
Corporate Classrooms: Adapting to Change
Chief Learning Officer, Frank Kalman
April 2, 2015
VI. Learning is More Immersive
The Quest to Put More Reality in Virtual Reality
Reviewer: 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.

April 10, 2016
Virtual reality tested by NFL as tool to confront racism, sexism
Marco della Cava, USA Today

One VR diversity demo places the user in the body of an African-American woman as a white male avatar gets aggressive mere feet away. (In one Stanford VR demo, subjects are made to feel what it is like to be homeless, as in this scene where the user is transported into the body of a woman riding the bus with a few possessions.)

April 28, 2016
Shindig, Video Chat Tool
Future Trends Forum
(with Bryan Alexander)
https://bryanalexander.org/

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

L fiss is an AR app from a South Korean consumer to scan a product and see reviews instantly overlaid on top.

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)
April 12, 2016
VIII. Learning is More Social
Zuckerberg criticizes Trump's call for border wall at F8 conference,
Natalie DiBlasio, USA Today

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

January 19, 2015
XI. Learning is More Synchronous
(International Open Badges Extravaganza)
European Meeting in Zoom, November 2015)

June 10, 2015
VIII. Learning is More Social
Tencent, Shenzhen, China

February 2, 2015
X. Learning is More Direct from Experts
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

October 23, 2014
XII. Learning is More Digital
New Amazon Kindle is a Voyage into eReader luxury, USA Today, Edward C. Baig
XIII. Learning is More Blended
Universities tap growth of craft beer, offer classes, Chicago Tribune

XIV. Learning is More Immediate
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

January 14, 2016
Move over T. rex, new dinosaur unveiled, Amanda Jackson, CNN
http://www.cnn.com/2016/01/14/living/titanosaur-new-dinosaur-on-display-new-york-city/

May 14, 2016
Mastodon bones offer clues of earliest humans in North America, Faith Karimi, CNN
Abstract: http://advances.sciencemag.org/content/2/5/e1600375
Full Article: http://advances.sciencemag.org/content/2/5/e1600375.full
Supplemental materials (PDF): http://advances.sciencemag.org/content/suppl/2016/05/10/2.5.e1600375.DC1/PDF/
http://advances.sciencemag.org/content/advances/suppl/2016/05/10/2.5.e1600375.DC1/1600375_SM.pdf

May 13, 2016
Abstract: http://advances.sciencemag.org/content/2/5/e1600375
Full Article: http://advances.sciencemag.org/content/2/5/e1600375.full
Supplemental materials (PDF): http://advances.sciencemag.org/content/suppl/2016/05/10/2.5.e1600375.DC1/PDF/
http://advances.sciencemag.org/content/advances/suppl/2016/05/10/2.5.e1600375.DC1/1600375_SM.pdf
June 29, 2015
XV. Learning is More Informal
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/

May 10, 2016
XVI. Learning is More Competency-Based
Developing a Flexible Degree
Cathy Sandeen, Inside Higher Ed
http://chronicle.com/article/College-On-Your-Own/147659/?cid=at

February 2, 2015
XVIII. Learning is More Hands-On
Makey Makey and the Kano
http://makeymakey.com/
https://vimeo.com/60307042

March 7, 2016
XIX. Learning is More Personal
Personalized Learning: What It Really Is and Why It Really Matters
Michael Feldstein and Phil Hill, EDUCAUSE Review
http://er.educause.edu/articles/2016/3/personalized-learning-what-it-really-is-and-why-it-really-matters

January 15, 2016
Wikipedia at 15
Scott McLemee, Inside Higher Ed

May 5, 2014
XVII. Learning is More On Demand
Mobile MOOCs: New platform challenges conventional MOOCs
eCampus News (https://coursmos.com/)
Learning is More Personal
Localization and Translation of Open Content
Coursera, Global Translator Community, Chronicle of Higher Education
https://www.coursera.org/about/translate

April 30, 2014
XX. Learning is More Communal
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

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

November 18, 2015
Focused Ga. Mom Completes College Exam While in Labor, Fox 5, Atlanta
October 30, 2015
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.

May 8, 2012
XII. 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

May 11, 2016
XIII. Learning is More Voice Activated
Google may have its own Echo coming soon (i.e., codename of “Chirp”), Elizabeth Weise, USA Today

April 13, 2016
XIV. Learning is More Ubiquitous
Facebook debuts terrestrial tech to deliver Internet, Jessica Guynn, USA Today

August 5, 2014
XV. Learning is More Free
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)
February 2013
XXVI. Learning is More Self-Directed
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
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 26, 2015
XXVII. Learning is More Global
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/

September 15, 2015
MOOCs for Social Impact
Social Learning for Social Impact, edX
Join the world’s first GROOC – a MOOC for groups – to collaborate with others globally and create social change.
https://www.youtube.com/watch?t=36&v=WNg5LFAMdI

September 15, 2015
MOOCs for Social Impact, edX
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https://www.youtube.com/watch?t=36&v=WNg5LFAMdI

April 20, 2015
XXVIII. Learning is More Open
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.

August 4, 2015
XXIX. Learning is More Modular
How Nanodegrees Are Disrupting Higher Education
John Waters, Campus Technology
https://www.youtube.com/watch?t=36&v=WNg5LFAMdI
Jima Ngei: “I had this unrelenting fear that this miracle of free access might evaporate soon.”
September 2, 2014
XXX. Learning is More Massive
Sample Course: Open Knowledge:
Changing the Global Course of Learning
https://class.stanford.edu/courses/Education/OpenKnowledge/Fall2014/about#
Softcover ($30): http://www.parlorpress.com/invasion_of_the_moocs

State of the MOOC 2016:
A Year of Massive Landscape Change
For Massive Open Online Courses, Online Course Report
http://www.onlinecoursereport.com/state-of-the-mooc-2016-a-year-of-massive-landscape-change-for-massive-open-online-courses/

January 5, 2016
Use Of MOOCs And Online Education Is Exploding: Here’s Why
Josh Bersin, Forbes
http://www.forbes.com/sites/joshbersin/2016/01/05/use-of-moocs-and-online-education-is-exploding-heres-why/

November 19, 2015
Ten Most Popular MOOCs Starting in November 2015,
Class Central Blog
https://www.class-central.com/

September 22, 2015
Who’s Benefiting from MOOCs, and Why
Chen Zhenghao, Brandon Alcorn, Gayle Christensen, Nicholas Eriksson, Daphne Koller, Ezekiel J. Emanuel, Harvard Business Review

May 4, 2016
This Mongolian Teenager Aced a MOOC. Now He Wants to Widen Their Impact
The Chronicle of Higher Education, Jeffrey R. Young
http://chronicle.com/article/This-Mongolian-Teenager-Aced-a/226362

The Career Benefits of MOOCs:
As reported by those who stated career benefits as their primary reason for completing a MOOC.

- Increased marketability
- Enhanced skills for current job
- Improved candidacy for a new job
- Improved pay increase
- Increased confidence
- Started my own business
- Received a pay increase
- Received a promotion
- Found a new job
- Received a promotion
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- Increased confidence

Source: Chronycle of Higher Educatiion, 2015
March 4, 2016
MOOCs: vital tools in education of the future – or over-hyped online fad? (embedded video: 8:01)
Euro News, Sarah Chappell
http://www.euronews.com/2016/03/04/moocs-vital-tools-in-education-of-the-future-or-over-hyped-online-fad

June 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

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."

Things are heating up!
http://routledge-ny.com/books/details/978138807419/

And coming within reach!

MOOCs and Open Education Around the World
http://routledge-ny.com/books/details/978138807419/
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.”

Poll #8: Does all this give you a headache?

Not Me…I am happy! and…
My minions are happy!

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

Remember: “I cannot do this alone.”
“I cannot do this alone.”
“I cannot do this alone.”

Any Comments or Questions?
Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://tec-variety.com/
Email: curt@worldisopen.com