Learning is Changing Part I:
MOOCs, E-Learning, The Open World, and Beyond
Curtis J. Bonk, Professor, Indiana University
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http://mypage.iu.edu/~cjbonk/

Audience Poll #1:
Has learning technology has ever transformed your life.

The Problem with Learning Technology
Karen Wilcox, November 7, 2014, Chronicle of Higher Education

Knowledge Navigator (1987)
Apple Computer
http://www.youtube.com/watch?v=hb4AzF6wEoc

Poll #1: Read any good books lately?
The Innovators:
Walter Isaacson (2014)
http://books.simonandschuster.com/The-Innovators/Walter-Isaacson/9781476708690

Poll #2: 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/

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 #3: 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

April 23, 2015
The Catch in Arizona State’s Low-Cost Freshman Year Online: No Aid, Chronicle of Higher Education, Thomas Fisher

Anant Agarwal, the head of edX, which teamed up with Arizona State U. in the new project: “Our mission is to provide education to people who need it the most.”

Poll #4: Read Your Email Lately?
January 15, 2015

Poll #5: Read Any Research Lately?
October 25, 2014
Opening the Curriculum: Open Educational Resources in U.S. Higher Education, 2014
I. Elaine Allen and Jeff Seaman

Looking to the Past...

1728: 1st correspondence course advertised Boston
(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
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 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

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...

Fast Forward 30 Years...
“Anyone can now learn anything from anyone at any time.”
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, Edward Baig, USA Today

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

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

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

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

October 6, 2014
Stanford U Display Wall Takes Visualization to a Higher Level,
Dian Schaffhauser, Campus Technology
VI. Learning is More Game-Based
October 21, 2014
Sexy iPad Air 2 is fabulous but not a must upgrade, Edward Baig, USA Today

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

March 30, 2015
Virtual reality is coming to sex, sports and Facebook, Marco delia Cava, USA Today

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/

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
Aaron Doering, Chasing Seals, TEDx http://chasingseals.com/
IX. Learning is More Social  
October 24, 2014  
Facebook launches Rooms app for anonymous sharing of interests,  
USA Today, Jessica Guynn  

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  
Dubai to Puerto Rico (Edgar Leon)  
https://www.youtube.com/watch?v=Imxw0YwTh2Y&list=UUClhOjnvl1pEXd9Skv_Iw  

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  

XV. Learning is More Informal  
October 13, 2013  
A Dozen Ways To Promote Informal Learning  
Chief Learning Officer, Saul Carliner  
http://www.clomedia.com/articles/a-dozen-ways-to-promote-informal-learning  

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-education/

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  
February 2, 2015  
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
February 5, 2015
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

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
(i.e., magnify moles or injuries, see vital signs, live stream surgeries, access previous PT sessions, access research and drug info, etc.)

XVI. Learning is More Free
August 5, 2014
OpenStax Aims To Bring Free Digital Textbooks to High Schools, David Nagel, THE Journal
http://www.fiercemobilehealthcare.com/story/google-glasses-could-have-strong-potential-healthcare-use/2013-03-18

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

Want something FREE?
Introducing the "TEC-VARIETY" book...(Framework #1)
http://tec-variety.com/

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.youtube.com/user/TravelinEdMan
XXVIII. Learning is More Global
August 1, 2014
Can You Really Teach a MOOC in a Refugee Camp?, Chronicle of Higher Education, Steve Kolowich

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

Last year’s map showing the connections Joe Grabowski’s made with scientists all over the world... (grade 8 students)...This is one of nearly 100 connections with scientists, explorers, and conservationists that his class has made.

Charles Vest (April 4, 2001)

"This is about something bigger than MIT. I hope other universities will see us as educational leaders in this arena, and we very much hope that OpenCourseWare will draw other universities to do the same. We would be delighted if -- over time -- we have a world wide web of knowledge that raises the quality of learning -- and ultimately, the quality of life -- around the globe."

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/

Audience Poll #6:
I. Who remembers what they were doing on 911?
II. Who remembers what they were doing on April 4, 2001?

MIT OpenCourseWare (OCW)
http://ocw.mit.edu/index.htm
Fast Forward to 2015
MIT OCW and the OpenCourseWare Consortium

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#

October 1, 2012: MOOC Students
4 Massive Open Online Courses and How They Work, Ben Gose, Chronicle of HE

Krissa Swain, of Knoxville, Tenn., is taking "Operations Management" online to help develop her management skills.

Rajeev Bajpai, an airline pilot based in Mumbai, took an online computer-science course to gain programming skills.

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
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."

Reasons to explore?
Main Reason Explore the Web Informally to Learn
(MIT OCW Group; Note: Check all that apply)
Factors leading to success or personal change?
Factors Leading to Success or Personal Change When Exploring Online (MIT OCW Group; Note: Check all that apply)

Skills hoping to acquire?
Skills Would Like to Learn Online Informally (MIT OCW Group; Note: Check all that apply)

Experience life change?
Degree to Which Life Changed from Informal Online Learning (Scale of 0 (Not at all) to 10 (Very Significantly); 5 = Moderately) (MIT OCW Group; Note: Check all that apply)

Life Changing Example #1
Yes. I plan to focus my Ph.D. research on alternative forms of learning (informal DIY) and credit (like open badges) and the changes higher ed and employers will have to make to accept these forms of credit.

Life Changing Example #2
It has made my job much easier and it’s been easier for me to execute certain tasks, making me more willing to take on bigger challenges. It was also shown me how enjoyable it is to learn a computer language. It opened my mind to considering possibilities in this area. It also made my husband respect my ability around computers a bit more.
Life Changing Example #3

My life has changed in a big way. I used these new skills to create a small business that supplements my income. I couldn’t use this income solely to support myself, but it does pay some bills.

September 18, 2013
MIT Will Offer MOOC Curricula, Not Just Single Courses, on edX, Steve Kolowich, Chronicle of HE

October 6, 2014
High School Initiative
https://www.edx.org/high-school-initiative
http://www.eschoolnews.com/2014/10/06/high-school-moocs-839/print/

September 16, 2013
Rwandan Degree Program Aims for a 'University in a Box', Chronicle of Higher Education, Megan O’Neil
http://chronicle.com/article/Rwandan-Degree-Program-Aims/141631/

Students attend an orientation session at Kepler, a new hybrid program in Kigali, Rwanda, which will use MOOCs and classroom time to help students earn competency-based associate degrees.

April 1, 2015
For a Better Flip, Try MOOCs
David Raths, Campus Technology
http://campustechology.com/articles/2015/04/01/for-a-better-flip-try-moocs.aspx

February 24, 2013
Big (MOOC) Data, Inside Higher Education, Dayna Catropa

For a Better Flip, Try MOOCs
Why MOOC CERs are "ultimate necessities" in higher education
Research discusses 3 strategies to open up MOOC content. MOOCs are good for education, but they can also be enhanced. MOOCs are expensive and complex, making it challenging to measure their effectiveness. MOOCs are not inherent. MOOCs need to be "inflated" with content, but they must avoid "puffing" with "moire".

For Better Flip, Try MOOCs

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<td>Registered</td>
<td>12,725</td>
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<td>Watched at least one video</td>
<td>7,761</td>
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<td>Took any quiz during the course</td>
<td>3,658</td>
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<tr>
<td>Scored &gt;0 on both Week 1 quizzes</td>
<td>1,287</td>
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<td>Scored &gt;0 on either quiz in Week 4</td>
<td>581</td>
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<td>Attempted the final exam</td>
<td>346</td>
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<td>Earned a certificate</td>
<td>313</td>
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<tr>
<td>Earned a distinction certificate</td>
<td>281</td>
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Figure 1: MOOC participation statistics
February 5, 2013
Bioelectricity: A Quantitative Approach, Duke University’s First MOOC

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 2013
MOOCs @ Edinburgh 2013– Report #1

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

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

Jumping off or tilting sideways...?

The World is very open!
(In Chulalongkorn University Monday, March 10th)
Audience Participation!

WE ALL LEARN!!!

Mystery of MOOCs:
Part III. 4 Types of MOOCs

MOOC Type #1.
Theory- or Trend-Driven MOOC

MOOC Type #2.
Remedial Course MOOC

MOOC Type #3.
Degree or Program Qualifier or System Bottleneck MOOC

MOOC Type #4.
Professional Development (PD) (practical) MOOC
Mystery of MOOCs: Part IV. Five MOOC Business Plans and Models

MOOC Business Model #1. Advertisers Underwrite Courses and Degrees

MOOC Business Model #2. Small and Flexible Application or Enrollment Fee

MOOC Business Model #3. Course Assessment Fee

MOOC Business Model #4. Certificate Fee (with sticker) 
https://twitter.com/drchuck/status/262423228717355689/photo/1

MOOC Business Model #5. Free Entryway Course
How do you now view the instructor in this more Open World?

From Instructor as Credit Manager...

To Instructor as Orchestra Conductor or Concierge?

And Instructor as Curator?

How about Instructor as Course Ambassador?

Mystery of MOOCs: Part V. Five MOOC Instructor Guidelines
MOOC Instructor Guide #1.
Plan and Prepare
October 12, 2012
Radical rethink: how to design university courses in the online age, Paul, Wappett, The Conversation, Australia
http://theconversation.edu.au/radical-rethink-how-to-design-university-courses-in-the-online-age

MOOC Guide #2.
Use Peer, Machine, Volunteer, and Self-Assessment

Feedback

MOOC Guide #3.
Address Participants by Geographic Region

The World

MOOC Guide #4.
Personalize Where Possible
Chuck Severance (U Michigan/Coursera) in Barcelona, Seoul, Manila, Melbourne, etc.
http://www.youtube.com/watch?v=JzNHvmSv8TI

MOOC Guide #5.
Form Groups and Social Supports

Audience Poll #7:
Would you like to teach or take a MOOC now?
A. Yes...
B. No...

Gordon Lockhart, iBerry, http://iberry.com/
http://gbl55.wordpress.com/2011/03/08/cck11-man-this-mooc-is-something-else/
Charles Wedemeyer Quote:
“It should be immaterial whether one has learned at the front door or the back door of the Palace of Learning. **What one has learned**—not where, or how, in what sequence, at what institution, or in what period of time—is the only criterion of supreme importance.”
(Charles Wedemeyer, 1981, p. 216)

December 13, 2013
Former MIT president Charles M. Vest dies at 72
As the Institute’s leader from 1990 to 2004, he sparked a period of dynamism.

Steve Bradt, MIT News Office

May 17, 2015
So...Why Is The University Still Here?

TechCrunch, Danny Crichton

October 21, 2014
Teaching and the University of Tomorrow.
Chronicle of Higher Education, Kelly J. Baker

Stop and Share:
Three Words from this Session!

Any Comments or Questions?
Try TEC-VARIETY...
Slides at: TrainingShare.com
Papers: PublicationShare.com
Free Book: http://tec-variety.com/
Dr. Curt Bonk – CJBonk@Indiana.edu