Learning is Changing: MOOCs, The Open World, and Beyond

Curtis J. Bonk, Professor, Indiana University
cjbonk@indiana.edu
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

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. 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 

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

Poll #6: 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 (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
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)

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.”

Twenty-Five 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, 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
http://www.cnn.com/2012/10/03/tech/smartphone-zombie-apocalypse-comment/#ixzz2zZ7ZsL6Y

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
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

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

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

A technician uses virtual reality to test out new military hardware before it's ever put into production. (March 20, 2015)
IX. Learning is More Adventurous
Aaron Doering, Chasing Seals, TEDx
http://chasingseals.com/

X. 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.

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

XII. 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

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

IVX. Learning is More Hands-On
February 2, 2015
Makey Makey and the Kano
http://makeymakey.com/
https://vimeo.com/60307041
XV. 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/

XVI. 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

Online Language Learning
(e.g., 300,000 people per month listening to ChinesePod, co-hosted by Jenny Zhu, John Pasden)
https://chinesepod.com/
https://www.spanishpod101.com/
https://www.italki.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
https://www.coursera.org/about/programs/learningHubs

Online Language Learning
SpanishPod
http://www.spanishpod101.com/

The iTalki
https://www.italki.com/
February 5, 2015
XVII. 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

January 23, 2015
Gates Newsletter

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

IXX. 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

XX. Learning is More Ubiquitous
September 23, 2014
Elliott Masie’s (i-Beacon: Bluetooth low energy proximity sensing)

XXI. 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

XXII. 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

XXIII. 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/

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

Online Language Learning
BBC Learning English
Online Language Learning
DuoLingo
https://www.duolingo.com/

Audience Poll #7:
I. Who remembers what they were doing on 911?
II. Who remembers what they were doing on April 4, 2001?

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."

MIT OpenCourseWare (OCW)
http://ocw.mit.edu/index.htm

Translated Content
Learning from Localized OER and OCW
(e.g., Opensource Opencourseware Prototype System (OOPS), Lucifer Chu, Janitor of OOPS)

XXV. 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/Fa2014/about/
Softcover ($30): http://www.parlorpress.com/invasion_of_the_moocs
October 1, 2012: MOOC Students
4 Massive Open Online Courses and How They Work, Ben Gose, Chronicle of HE

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

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

October 7, 2014
Global Health Initiatives
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

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://campustechnology.com/articles/2015/04/01/for-a-better-flip-try-moocs.aspx

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

Things are heating up!
http://routledge-n.y.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...

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)
Audience Participation!

WE ALL LEARN!!!

Mystery of MOOCs: Part III. 3 Types of MOOCs

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

MOOC Type #2. Remedial Course MOOC

MOOC Type #3. Professional Development (PD) (practical) MOOC

Mystery of MOOCs: Part IV. 3 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 Certificate or Assessment Fee

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?

Mystery of MOOCs: Part V. Three MOOC Instructor (i.e., "Ambassador") Guidelines

MOOC Guide #1.
Use Peer, Machine, Volunteer, and Self-Assessment

MOOC Guide #2.
Personalize Where Possible
Chuck Severance (U Michigan/Coursera) in Barcelona, Seoul, Manila, Melbourne, etc.
http://www.youtube.com/watch?v=JzNHvmSv8TI

MOOC Guide #3.
Form Groups and Social Supports

Introducing the free “TEC-VARIETY” Book and Framework...
http://tec-variety.com/
1. Tone/Climate: A. Threaded Video Discussions, e.g., Flipgrid
   http://flipgrid.com/#429f8ec5

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. Something in the news.
   Ancient jawbones put new species on the human family tree, researchers say,
   Laura Smith-Spark, CNN

   New species from Ethiopia further expands Middle Pliocene hominin diversity, Nature
   http://www.nature.com/nature/journal/v521/n7553/full/nature14448.html

   B. Design Article Database in Pinterest, Jenny Webeck
   https://www.pinterest.com/jennifertwebeck/emerging-learning-technologies/

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.io.edu/p237wpisag9/

7. Interactive, Collaborative:
A. Backchannel Chat (TodaysMeet)
January 27, 2015
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
https://www.youtube.com/watch?v=Bcr3_oZT_xQ&feature=youtu.be

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=BoU_b2T_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

Frame #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/88944

Reflect 2a. Interpreting Infographics
July 24, 2014
Woman in Computer Science
http://graduatedegrees.online.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=ZRGV0Ms5Vnw&feature=youtu.be
Poll #8: Which do you prefer... (A) TEC-VARIETY or (B) R2D2?

Audience Poll #9: Would you like to teach or take a MOOC now?  
A. Yes...  
B. No...

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  

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