Living in Tech City: 50+ Technology Trends and Innovations Transforming Workplace Learning, Education, and Our Lives
Curtis J. Bonk, Professor, Indiana University
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk/

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

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

September 15, 2014
Open, Distance and Online Learning: A Brief History, Sir John Daniel
International Conference on Emerging Technologies in Education and Computer Science, Universidad Da Vinci, Cancun, Mexico
http://vimeo.com/106002761 (password knou)
Notes and Slides: http://sirjohn.ca/wordpress/?page_id=29

Looking to the Past...
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
June 5, 1981
SSU Journal (Sangamon State University)
Side-Band Radio Courses

Folk weaving on display
Freedom is subject of sideband course

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...

Took Correspondence & TV Courses (thanks to Bob Clasen and Charles Wedemeyer, the University of Wisconsin)

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

Fast Forward 25+ Years...
“Anyone can now learn anything from anyone at any time.”
Part I. Learning is Changing
New Technologies =
New Delivery Methods...

September 9, 2014
I. Learning is More Technology-Based

Audience Poll #2:
I. Who remembers what they were doing on 911?
II. Who remembers what they were doing on April 4, 2001?

I. Learning is More Technology-Based

II. Learning is More Mobile
August 5, 2014

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."
III. Learning is More Open
(80-Year-Old WGU Texas Grad Keeps His Promise, November 30, 2012, Reeve Hamilton, Texas Tribune)

III. Learning is More Open
(80-Year-Old WGU Texas Grad Keeps His Promise, November 30, 2012, Reeve Hamilton, Texas Tribune)

Nanodegrees (e.g., Web design, coding, etc.)
(Open Education Alliance)

Aquent Gymnasium
(e.g., Web design, Coding, JavaScript, etc.)
A staffing agency for the marketing and creative industries, a MOOC provider that offers technology courses for creative professionals.
http://gymnasium.aquent.com/

Better Money Habits
(personal finance, money habits, financial literacy)
(Bank of America and the Khan Academy)

openSAP
MOOC platform to educate its ecosystem of developers and partners on SAP technologies
https://open.sap.com/

IV. 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
V. Learning is More Flipped  
August 1, 2014  
Get schools out of the 1890s, Newt Gingrich, CNN  

VI. Learning is More Video-Based  
October 15, 2014  
Videos: Performance Management  
How Disney Develops Culture, Chief Learning Officer  
Doug Lipp, former Disney University leader and author of “Disney U,” discusses how Disney teaches employees to do their jobs and exude the company’s culture.  
http://www.clomedia.com/media/videos/play/195

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

Onboarding New Employees  
(Employee Blended Orientation, Flipping the Classroom—give access to course materials)  
Putting MOOCs to Work Recap  
September 8, 2014, Chris Hilger, Extension Engine  
https://www.udemy.com/organizations/blog/2013/12/23/seven-ways-to-corporate-mooc/

Video Walls of Experts (IQ Wall)  
October 6, 2014  
Stanford U Display Wall Takes Visualization to a Higher Level, Dian Schaffhauser, Campus Technology  
VIII. Learning is More Touch Sensored  
October 16, 2013  
Corporate Classrooms: Adapting to Change  
Chief Learning Officer, Frank Kalman  

IX. Learning is More Gesture-Based  
September 12, 2014  
Intel Says Laptops and Tablets with 3-D Vision Are Coming Soon, Your next laptop or tablet may have 3-D sensors that let it recognize gestures or augment a real scene with virtual characters.  
Tom Simonite, MIT Technology Review  

X. 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  

XI. Learning also is More Collaborative  
May 16, 2014  
Inside Look: Learning Spaces, Meeting classroom teaching and collaboration expectations, University Business, Feb. 22, 2013  

XII. Learning is More Modifiable  
May 16, 2014  
Inside Look: Learning Spaces, Meeting classroom teaching and collaboration expectations, University Business, Feb. 22, 2013  

XIII. Learning is More Comfortable  
May 8, 2012  
Design for Students, with Students, “Hub Central”, the $42 million University of Adelaide learning hub opened in October 2011, 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)  

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

XVII. Learning is More Personal  
August 5, 2014  
OpenStax Aims To Bring Free Digital Textbooks to High Schools, David Nagel, THE Journal  

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

June 16, 2014
Metra Mehran is a college student in Political Science and Public Administration in Afghanistan.
Afghanistan Student Keynote, by Elliott Masie Learning 2014, October 26-29, 2014
http://www.learning2014.com/blog/item/afghanistan-student

XX. Learning is More Synchronous
Dubai to Puerto Rico (Edgar Leon)
https://www.youtube.com/watch?v=Imxw0YwTh2Y&list=UUClhOjnvl1pEXd9Skv

XXI. Learning is More Online
January 10, 2014
The New-School Virtual Leader
Chief Learning Officer, Sharat Sharan
Hotel chain Marriott created a leadership program with a goal to provide training to 733 hotels in 23 countries.
Certified 5,000 managers trained; and 10,000 more given big picture training
http://www.clomedia.com/articles/the-new-school-virtual-leader

January 2014
Learning is More Online
Direct download: http://www.sloanconsortium.org/reports/grade-change.pdf
June 15, 2014
Starbucks offers workers 2 years of free college, CNN Money, Gregory Wallace (from Arizona State online programs)

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 Social
October 24, 2014
Facebook launches Rooms app for anonymous sharing of interests, USA Today, Jessica Guynn
http://www.coursera.org/about/programs/learningHubs

XXIV. 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

XXV. Learning is More Game-Based
October 21, 2014
Sexy iPad Air 2 is fabulous but not a must upgrade, Edward Baig, USA Today

Simulation Games
Gamification: Separating Fact From Fiction, Chief Learning Officer, Karl Kapp, March 2014

October 22, 2014
Brain-Training Companies Get Advice From Some Academics, Criticism From Others.
Chronicle of Higher Education, Rebecca Koenig
http://chronicle.com/article/Brain-Training-Companies/149555/?cid=at&utm_source=at&utm_medium=en (Lumosity)

XXVI. Learning is More Immersive
October 22, 2014
The Quest to Put More Reality in Virtual Reality,
Tom Simonite, MIT Technology Review

XXVII. Learning is More Adventurous
Aaron Doering, Chasing Seals, TEDx
http://chasingseals.com/

XXVIII. Learning is More Free
August 5, 2014
OpenStax Aims To Bring Free Digital Textbooks to High Schools, David Nagel, THE Journal

Introducing the FREE “TEC-VARIETY book...”
http://tec-variety.com/
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

XXIX. Learning is More Massive
Sample Course: Open Knowledge:
Changing the Global Course of Learning
September 2, 2014 to December 12, 2014, Stanford
http://openstanfordされた.com/OpenKnowledge/Fall2014/about/

August 13, 2013
How MOOCs Will Revolutionize Corporate Learning And Development, Forbes, Jeanne Meister

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.

Channel/Customer Education
The MOOC Marketplace Takes Off, Forbes, November 30, 2013, Josh Bersin

Online retailer 1-800-Flowers and Udemy offer their florists hand-picked courses on everything from operations efficiency, optimizing sales, social media and entrepreneurship, to floral design, finance, and customer service.

Career Development
August 13, 2013
How MOOCs Will Revolutionize Corporate Learning And Development, Forbes, Jeanne Miester

Yahoo sponsors employees to earn Verified Certificates on Coursera
We’re excited to announce that Yahoo is enabling its employees to earn Verified Certificates by sponsoring participation in Signatures’ Track on Coursera.
**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.

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**Building Talent Pipeline**

**Master’s Degree Is New Frontier of Study Online,**


By Tamar Lewin

http://chronicle.com/article/MOOCs-May-Not-Be-So-Disruptive/140965/

http://extensionengine.com/putting-moocs-to-work-recap-infographic/

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**Entrepreneurship Curriculum**

NovoEd, Amin Saberi

https://novoed.com/courses/entrepreneurship

Things are heating up!

http://routledge-ny.com/books/details/978138807419/

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**MOOCs and Open Education Around the World**

http://routledge-ny.com/books/details/978138807419/

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**XXX. Learning is More Web-Based**

April 15, 2013

World will soon be “Webified”

Google boss: Entire world will be online by 2020, Doug Gross, CNN

September 2013
Google Wi-Fi from the Sky,
Steven Levy, pp. 126-131, Wired
http://www.wired.com/gadgetlab/2013/08/google-project-loon/

Google X chief Astro Teller (left) and Project Loon’s first leader, Rich DeVaul, holding the system’s ground-based antennas.

March 30, 2014
All Things Drones, CNN
Facebook unveils technology to bring the internet to everyone. CNN’s Ralitsa Vassileva reports.)

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.”

The Web of Learning

We are entering a jumping off point...

Framework #1: 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)
Audience Participation!

WE

ALL

LEARN!!!

Audience Poll #3:
Are we going crazy yet?
Any questions?

20 More Technologies of Today...

September 23, 2014
Elliott Masie’s Learning 2014 (Drones?)
(no-charge, one hour briefing addressing: Personalization, Compliance, Video in Learning, LearningTech, Wearable, Social Learning, Gamification, 50 Plus and Big Learning Data.)

Tech #31. Free Content Portals
MERLOT II: Multimedia Educational Resource for Learning and Online Teaching
http://www.merlot.org/merlot/index.htm?action=find

Tech #32. Online Study Groups
(e.g., Open Study: http://openstudy.com/)
Tech #33. Online Language Learning
May 5, 2014
Technology Provides Foreign-Language Immersion at a Distance,
Danya Perez-Hernandez, Chronicle of Higher Education,
http://chronicle.com/article/Technology-Provides/146369/
Portuguese-language students at Virginia Commonwealth U. hold a "teletandem" session with students in Brazil who are learning English. The approach "basically forces you to learn," says one student. "It pushes you to practice the language to make sure you are ready for the next meeting."

October 24, 2014
Raw: Facebook CEO dazzles with Mandarin, USA Today

Tech #34. Mobile Apps for the other training and resources

Tech #35. Social Books (e.g., Subtext; http://subtext.com/)

Tech #36. Web Conferencing (e.g., Jabber, iMeet)
December 2013

Tech #37. Videoconferencing and Telepresence Technology
Tech #38. Goals Setting Tools (e.g., I Done This, Milestone Planner, and 43 Things)

Tech #39. Shared Online Video Tests and Quizzes (e.g., TED-Ed) [http://education.ted.com/]

Tech #40. Concept Animations

Tech #41. Video Editing and Commenting Tools (e.g., TubeChop)

Tech #42. Screencasts and Tutorials (Jing, GoView, Screenr)

Tech #43. Online Testing (Quizlet; [http://quizlet.com/])
Tech #44. Big Data Visualization Tools (Harvardx and MITx)

http://harvardx.harvard.edu/harvardx-insights

4. World map of gender composition

761,287 registrants
36.6% female, 63.4% male
in 203 countries

Tech #45. Wikis: Collaborate and Crowdsourcsource Content

Tech #46. Crowdsourced Website Donations
(e.g., Scholar Match, Zero Bound, Pave, GoFundMe; http://www.gofundme.com/)

Tech #47. Conversational Robots
Cornell U. Researchers Put Robots in Conversation, and the Result Is Surprisingly Human,
Chronicle of Higher Education, April 17, 2014, Steve Kolowich

Tech #48. Virtual or Augmented Reality Training
(Web-based Land Navigation Trainer Tutorial)
http://www.youtube.com/watch?v=8-WY9neuGzU

See article: http://www.defensenews.com/article/20130619/TSJ/306190025/Land-Nav-Masses

Tech #49. Interactive News and Science Globes, January 7, 2013, Digital Globes Offer a Dynamic Vision
NY Times, Mark Vanhoenacker
Tech #50.
Mobile Health (bio sensors)
7 new smartphone features that will help define your future
February 23, 2014, Stewart Wolpin, CNN

Bonus: September 16, 2014
Panipat Teen Develops Device to Convert Breath Into Words, NDTV

May 16, 2014
Defining the Gen Y Leader
Chief Learning Officer, Frank Kalman
http://www.clomedia.com/articles/5595-defining-the-gen-y-leader/

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 Questions?
😊 Slides at: TrainingShare.com
😊 Papers: PublicationShare.com
😊 Book: http://worldisopen.com/
😊 Email: curt@worldisopen.com