

MOOCs: Future Trends and Insights for the Education 4.0 Revolution

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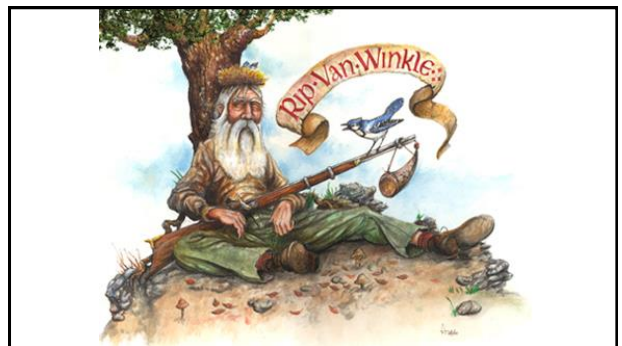


Talk Overview

1. Education 20/20 and Education 4.0
2. New Roles of the Instructor
3. First and Last Principles of Instruction
4. Artificial Intelligence vs. Intelligence Augmentation
5. Megatrends of Learning: Engagement, Access, and Customization (30 ways that learning is changing...)
6. Future Trends and Ideas



(Circa Confucius 551–479 BCE)



What happens to sleeping students?



Merrill's First Principles of Teaching/Instruction

<http://travelindman.blogspot.com/2011/05/bonk-last-principles-of-instruction.html>



Education 20/20



1. Instructor as Credit Manager



2. Instructor as Counselor



3. Instructor as Consultant



4. Instructor as Conductor



5. Instructor as Course Ambassador



6. Instructor as Curator



7. Instructor as Concierge



8. Instructor as Camping Trip Guide



Bank's Last Principles of Teaching/Instruction (Education 4.0?)

<http://travellinedman.blogspot.com/2011/05/banks-last-principles-of-instruction.html>
<http://www.applicadthal.com/articles/education-4-0/>



Education
4.0

1. The Principle of Flexibility

<http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



2. The Principle of Convenience

<http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



3. The Principle of Collegiality

<http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



4. The Principle of Cheerfulness and Optimism

<http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



5. The Principle of High Expectations

<http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



6. The Principle of Choice and Options

<http://travelinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



7. The Principle of Empowerment and Autonomy

<http://traveledman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



8. The Principle of Support and Feedback

<http://traveledman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



9. The Principle of Spontaneity

<http://traveledman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



10. The Principle of Organization

<http://traveledman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



11. The Principle of Sharing

<http://traveledman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



12. The Principle of Nontraditional Learning

<http://traveledman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



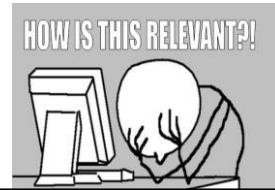
13. The Principle of Passion and Inspiration

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



14. The Principle of Relevance and Meaningfulness

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



15. The Principle of Trial and Error (i.e., it is ok to fail)

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



16. The Principle of Expanded Resources

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



17. The Principle of Human Connectedness

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



18. The Principle of Cognitive Apprenticeship

<http://travellinedman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



19. The Principle of Purpose and Vision

<http://travelinman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



20. ??? (what is missing)

<http://travelinman.blogspot.com/2011/05/bonks-last-principles-of-instruction.html>



The Creation of Effective Learning Environments

<http://study.com/academy/lesson/learning-environment-in-the-classroom-definition-impact-importance.html>



Learning is Changing...



Poll #1: 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



Fast Forward 200 Years...

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 (On Wisconsin, Fall 2014)



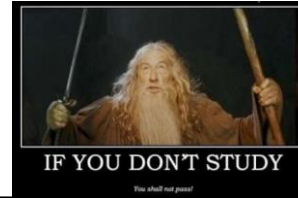
MOOC, Meet MORC

Mimeograph machine.

**Poll #2: Fast Forward 50 more Years...
Do you remember education 2.0?**



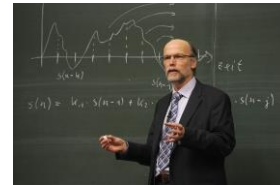
Poll #3: Do you really remember what was to be education 2.0?



**Fast Forward 30+ More Years...
"Anyone can now learn anything from anyone at any time."**



Education 3.0...



"In Education 3.0, classrooms would move away from lectures, such as this one, to having class time be spent on discussions and projects, using digital technology."
(Per Wikipedia: https://en.wikipedia.org/wiki/Education_3.0)

**Education 3.0
The Genesis and Emergence of Education 3.0 in Higher Education and its Potential for Africa**
First Monday, by Derek Keats and J. Philipp Schmidt, March 2007
http://firstmonday.org/issue/13.1/keats_schmidt/13.1_keats_schmidt.html

EDUCATION 3.0

Characteristics	Education 1.0	Education 2.0	Education 3.0
Primary role of professor	Source of knowledge	Guide and source of knowledge	Orchestrator of collaborative knowledge creation
Content arrangements	Traditional copyright materials	Copyright and freer/open educational resources for students within disciplines, sometimes across institutions	Free/open educational resources created and reused by students across multiple institutions, disciplines, nations, supplemented by original materials created for them
Learning activities	Traditional, essays, assignments, tests, some groupwork within classroom	Traditional assignment approaches transferred to more open technologies; increasing collaboration in learning activities; still largely confined to institutional and classroom boundaries	Open, flexible learning activities that focus on creating courses for student creativity; social networking outside traditional boundaries of discipline, institution, nation

Now What is Education 4.0?
<http://www.krukittin.info/?p=744>



Thailand Education 4.0

Now What is Education 4.0?

"Innovation-producing education. Learn more in: Development of Individual Agency within a Collaborative, Creative Learning Community"

<http://www.igi-global.com/dictionary/education-40/41755>
<https://thinc.in.th/engadmission/education4.html> (Chula Engineering)

1.0: Dictation of Knowledge

2.0: E-Learning

Knowledge: a commodity in modern world
 Skills: 21st century skill
 Attitude: Can-Do Attitude

3.0: Knowledge-Producing

4.0: Innovation-Producing

January 14, 2016

The Fourth Industrial Revolution: What it means, how to respond

Klaus Schwab, Founder and Executive Chairman, World Economic Forum
<https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>
<http://www.trainingshare.com/fourth-industrial-revolution-video-clip-shwab>

Navigating the next industrial revolution

Revolution	Year	Information
1	1784	Steam, water, mechanical production equipment
2	1870	Division of labour, electricity, mass production
3	1969	Electronics, IT, automated production
4	?	Cyber-physical systems

April 13, 2016

The Fourth Industrial Revolution: What it means, how to respond

Klaus Schwab, Founder and Executive Chairman, World Economic Forum
<https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>
<http://trainingshare.com/fourth-industrial-revolution-video-clip.php>
<http://www.tubechop.com/watch/8280981>

The world is really open to learning.

August 21, 2016

ST Future Economy Roundtable: Is Asia ready for the Fourth Industrial Revolution?

The Straits Times
<http://www.straitstimes.com/asia-pacific/ready-for-the-fourth-industrial-revolution>

"It's quite clear that the established models of education have to change and adapt to the new environment."

August 17, 2016

Research: 3D Printing Market to Double by 2020

Joshua Bolkan, Campus Technology
<https://campustechnology.com/articles/2016/08/17/research-3d-printing-market-to-double-by-2020.aspx>

Research: 3D Printing Market to Double by 2020

By Joshua Bolkan | 08/17/16

February 21, 2017

UC students build 3D-printed prosthetic hands for kids, Kate Murphy, Cincinnati.com

<http://www.cincinnati.com/story/news/2017/02/21/uc-students-build-3d-printed-prosthetic-hands/37714214/>

Biomedical students utilize 3D printing

Prosthetic hands usually cost thousands of dollars, making them inaccessible to many patients.

The student organization Student UC can build a custom, 3D-printed hand in its lab on campus for less than \$20 — instead of thousands of dollars — and get it to the patient in about a week. The Cincinnati Enquirer & The Cincinnati.com Content.

June 7, 2016
Teaching refugees how to code
CNN Money
<http://money.cnn.com/video/technology/2016/06/07/recorded-fraction-refugees-code.cnnmoney/index.html>

The image shows two side-by-side screenshots of a CNN Money article. The left screenshot shows a large, open-air classroom with rows of desks and a teacher at the front. The right screenshot shows a man in a suit speaking to a group of people, with a caption that reads 'REFUGEES TRAINED TO BECOME SOFTWARE DEVELOPERS' and 'Adnan Ersoy, President, The Fashion School'.

June 20, 2016
Coursera on a Mission to Help Refugees
Lauren Camera, US News and World Report
<http://www.usnews.com/news/articles/2016-06-20/coursera-on-a-mission-to-help-refugees>

The image shows a screenshot of a US News and World Report article. It features two main images: one of a woman looking at a tablet with the text 'Coursera For Refugees' overlaid, and another of a classroom setting with the text 'Refugees around the world can now take online classes for free'.

September 21, 2016
Udacity Unveils Nanodegree Program for Self-Driving Car Engineers
Sri Raviipati, Campus Technology
<https://campustechblog.com/articles/2016/09/21/udacity-unveils-nanodegree-program-for-self-driving-car-engineers.aspx>

The image shows a screenshot of a Campus Technology article. It includes a photo of a person driving a car while looking at a tablet, and another photo of a self-driving car on a test track with orange cones. The article title is 'Udacity Unveils Nanodegree Program for Self-Driving Car Engineers'.

February 9, 2017
More black and Latino students learn to code as Code.org classes swell
essica Guynn, USA Today
<http://www.usatoday.com/story/technology/2017/02/09/code-org-teacher-back-latino-students/97671518/>

The image shows a screenshot of a USA Today article. It features a photo of two hands using tablets to interact with a coding interface. The article title is 'More black and Latino students learn to code as Code.org classes swell'.

July 28, 2016
Knod
 (Per Dr. Michael Mayrath: work with employers to diagnose skills gaps, then provide a platform to deliver content to build those skills in a learn by doing experiences, real projects with employers)
<https://www.knod.me/>


The image shows a screenshot of the Knod website. The main headline reads 'We eliminate the gap between employment and education'. Below this, there are four circular icons representing different aspects of the platform: 'Learn a digital skill', 'A global pool of', 'Learn on your own', and 'Work a flexible job'.

Poll:
Read any good books lately detailing this shift?

The image contains two side-by-side photos. The left photo shows a man with long white hair reading a large, thick book. The right photo shows a man with long white hair sitting at a desk and using a laptop.

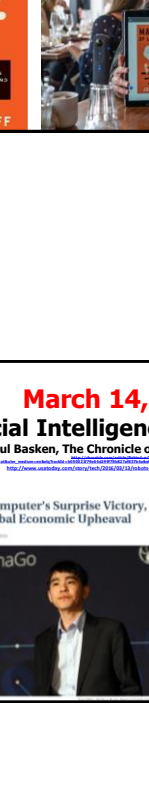
Big Magic: Creative Living Beyond Fear (2015)

Elizabeth Gilbert
<http://www.elizabethgilbert.com/>
<https://www.youtube.com/watch?v=9082266683>



The Innovators: How a group of hackers, geniuses, and geeks created the digital revolution. New York: Simon & Schuster. Walter Isaacson (2014)

<http://books.amazon.in/hacker.com/The-Innovators-Walter-Isaacson/278145728899>



Machines of Loving Grace: The Quest for Common Ground between Humans and Robots. HarperCollins. John Markoff (2015)

<http://www.amazon.com/Machines-Loving-Grace-Common-Between/dp/0062266683>



Artificial Intelligence John McCarthy, Stanford AI Lab

<http://www.amazon.com/Machines-Loving-Grace-Common-Between/dp/0062266683>

John McCarthy

- 1955: Develop the phrase "Artificial Intelligence"
- 1959: Programs with Common Sense
- 1960: First LISP implementation
- 1971: Turing Award Recipient



March 14, 2016 Artificial Intelligence and Robots Paul Basken, The Chronicle of Higher Education

<http://www.usatoday.com/story/tech/2016/03/14/robots-and-ai-generative-art-31232892>

Behind a Computer's Surprise Victory, Hints of Global Economic Upheaval
 By Paul Basken | March 11, 2016

Forget the robots — here come the gnomes!



February 27, 2017 Robots will outnumber humans in 30 years, Softbank says Edward C. Baig, USA Today

<http://www.usatoday.com/story/tech/2017/02/27/the-population-of-robots-will-exceed-the-human-population-in-30-years-108715118/>

The income from human labor gets taxed. Should robots labor face a similar tax? Video provided by Research Horizons

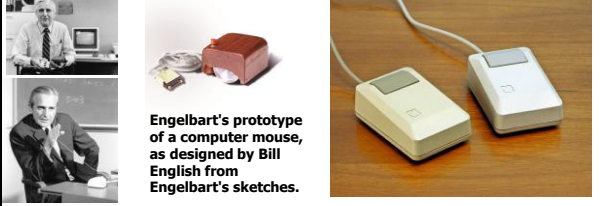
Founder & CEO of Softbank Group, Masayoshi Son, heard at a meeting on the World Economic Forum in Davos on February 27, 2017. © Reuters/Photo: J. J. S. / Getty Images



February 27, 2017
Robots will outnumber humans in 30 years, Softbank says
 Edward C. Baig, USA Today
<http://www.usatoday.com/story/tech/innovation/2017/02/27/the-population-of-super-smart-robots/9847191.1/>

- One of the chips in our shoes in the next 30 years will be smarter than our brain. We will be less than our shoes. And we are stepping on them.
- Softbank's Son notes that today, an average IQ for a person is around 100. If you're an Einstein or Da Vinci your IQ is around 200 mark, and you're considered a genius. In contrast, **Son believes AI-infused computers will eventually have an IQ of 10,000.** "This burst of superintelligence," he says, "is going to become a reality."

Intelligence Augmentation and Amplification
 Douglas Engelbart's "The Mother of All Inventions" (1968)
 Augmentation Research Center (ARC)
(The live demonstration featured the introduction of the computer mouse, video conferencing, teleconferencing, hypertext, word processing, hypermedia, object addressing and dynamic file linking, bootstrapping, and a collaborative real-time editor.)
<http://www.amazon.com/978-0309-54063-0/book/0309540630/>



Engelbart's prototype of a computer mouse, as designed by Bill English from Engelbart's sketches.

June 10, 2015
Augmented reality promises 'superpowers', and people are listening
 The USA Today, Marco della Cava
<http://www.usatoday.com/story/tech/2015/06/10/letsee-lets-see-what-its-like-to-be-74/3482284/>
<http://www.youtube.com/watch?v=3TCC0P7yab8>



Letsee is an AR app from a South Korea consumers to scan a product and see reviews instantly overlaid ontop.

June 3, 2016
Virtual Reality Lets Med Students Experience What It's Like To Be 74
 Elyse Wanshel, Huffington Post
<http://ht.ly/bSpe300XEPJ>

Virtual Reality Lets Med Students Experience What It's Like To Be 74




I don't remember what I'm supposed to do

April 10, 2016
Virtual reality tested by NFL as tool to confront racism, sexism
 Marco della Cava, USA Today
<http://www.usatoday.com/story/tech/news/2016/04/09/vr-real-reality-stand-both-coast/826274001/>



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 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.)


Knowledge Navigator (1987)
 Apple Computer
<http://www.youtube.com/watch?v=hB4zE6wGc>



October 14, 2011
Siri (co-founder Tom Gruber)
<http://www.imore.com/siri>




May 9, 2016
Personal Digital Assistants (PDA)
Personal digital assistants are on the rise (and they want to talk) USA Today, Edward Baig
 (i.e., Google codename of "Chirp"), Elizabeth Weise, USA Today
<http://www.usatoday.com/story/tech/columnists/baig/2016/05/09/ai-personal-digital-assistants-are-on-the-rise/8413324/>
<http://www.usatoday.com/story/tech/columnists/weise/2016/05/09/ai-personal-digital-assistants-are-on-the-rise/8413324/>



The World is Open:
How Web Technology Is Revolutionizing Education




TEN OPENERS: (WE-ALL-LEARN)

1. Web Searching in the World of E-Books
2. E-Learning and Blended Learning
3. Availability of Open Source and Free Software
4. Leveraged Resources and OpenCourseWare
5. Learning Object Repositories and Portals
6. Learner Participation in Open Information Communities
7. Electronic Collaboration
8. Alternate Reality Learning
9. Real-Time Mobility and Portability
10. Networks of Personalized Learning



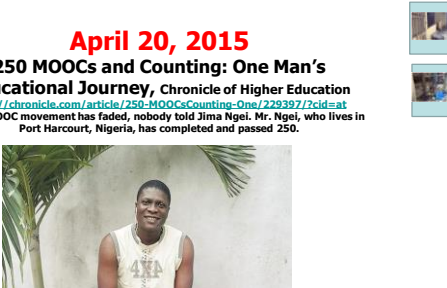
February 22, 2017
Digital citizenship lessons from a 9-year-old with 18,000 Twitter followers, Alan November, eSchool News
<http://www.eschoolnews.com/2017/02/22/aw-digital-citizenship-twitter/>
<http://www.eschoolnews.com/2017/02/22/aw-digital-citizenship-twitter/?all>
<http://www.eschoolnews.com/2017/02/22/aw-digital-citizenship-twitter/?all>
<https://www.youtube.com/watch?v=3M7wK4Tebuc>



August 5, 2015
Shubham Jaglan (10 years old) Overwhelmed by "Dream" Return Home After Double World Championship
Disha Chopra, NDTV Sports
<http://search.yahoo.com/func/news?cid=1384848&search=shubham+jaglan+return+home+after+double+world+championship>
<http://www.ndtv.com/video/story/2015/india-9-golf-prodigy-shubham-jaglan-returns-home-to-hero-s-welcome-277454>




April 20, 2015
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.



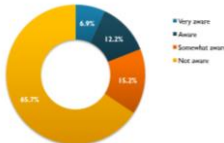
Jima Ngei: "I had this unrelenting fear that this miracle of free access might evaporate soon."

July 2016

The Awareness Problem: Opening the Textbook: Educational Resources in U.S. Higher Education, 2015-2016

I. Elaine Allen and Jeff Seaman, Babson Survey Research Group
<http://www.onlinelearningnews.com/reports/openingthetextbook2016.pdf>

AWARENESS OF OPEN TEXTBOOKS: 2015-16




- Very aware: 4.4%
- Aware: 12.2%
- Somewhat aware: 15.2%
- Next aware: 66.7%

OER Use to Triple Over Next 5 Years

Open educational resources (OER) are making primary increases in higher education, with the potential to triple use over the next five years – from 1 percent to 12 percent of the primary classroom market. The use of OER for credentialing learning is expected to triple over the next five years, jumping from 1 percent to 19 percent.


These findings are drawn from a new report from *College Learning About Open Educational Resources and the Changing Higher Education Landscape*. To watch the education company landscape over the last 10 years, faculty, industry experts and OER primary creators, supplemental designers and non-adjacent. Complete the report here: [http://www.onlinelearningnews.com/reports/openingthetextbook2016.pdf](#)




January 3, 2017

College is Over


Roger Schank, LinkedIn
<http://www.sandiegouniontribune.com/news/science/sd-mc-robots-jobs-20161213-story.html>




The Evolution of E-Learning (All 7 year cycles)




Phase I, 1994:
THE AGE OF PORTALS AND PAGES (NETSCAPE GOES PUBLIC).



Phase II, 2001:
THE AGE OF OPENNESS (MIT OCW & WIKIPEDIA BORN).



Phase III, 2008:
THE AGE OF MOOCs (FIRST MOOC OFFERED).




Phase IV, 2015:
THE AGE OF PERSONALIZATION.

Other prior significant e-learning dates: 1985: FIRST ONLINE COURSE, LINDA HARASIM, UNIV. OF TORONTO
 1987: HYPERCARD FIRST SHIPPED.

January 15, 2016

Wikipedia is 15!

Scott McLemee, Inside Higher Ed
<http://www.insidehighered.com/digital-learning/article/2016/01/15/wikipedia-15>




Wikipedia at 15

Celebrate or hate it as you will, writes Scott McLemee, Wikipedia has metamorphosed from its beginnings as a gangly cultural interloper into the de facto reference work of first resort.

January 15, 2016
by Scott McLemee

Wikipedia came into the world 15 years ago today -- and, man, what an ugly baby. The first snapshot of it in the Internet Archive is from late March of 2001, when Wikipedia was already 10 weeks old. At that point, it claimed to have more than 3,000 pages, with an expressed hope of reaching



April 4, 2016

MIT OpenCourseWare is 15!

<http://ocw.mit.edu/about/15-years/>




August 6, 2016

The Web is 25!

Happy (sort of) birthday, World Wide Web!,
 Erica Fink and Jonathan Tortora, CNN Money (Tech)
<http://info.cern.ch/> (First website)
<http://info.cern.ch/hypertext/WWW/TheProject.html>
<http://money.cnn.com/2016/08/06/technology/world-wide-web-25-years-98/index.html?hpid=hp-stack-dom>



World Wide Web

By Jonathan A. Fink and Erica Fink
 The World Wide Web is 25 years old today. It's a little bit of a birthday party, but it's also a day of reckoning. The World Wide Web is a little bit of a birthday party, but it's also a day of reckoning. The World Wide Web is a little bit of a birthday party, but it's also a day of reckoning.



THE WORLD WIDE WEB BEGINS ON MARCH 12, 1989

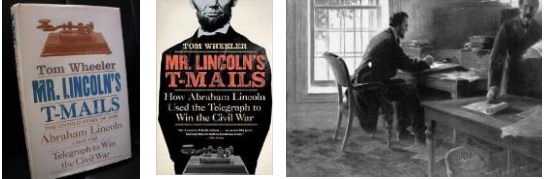
Twenty-five years ago, the first public website went live.

1971
Email is 35 years old!
Raymond Tomlinson, inventor of modern email, dies, USA Today (March 7, 2016)
<http://www.usatoday.com/story/tech/2016/03/07/raymond-tomlinson-dies-inventor-of-email/81432414>


Raymond Tomlinson, inventor of modern email, dies



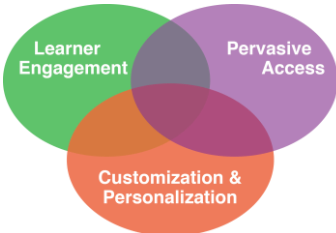
Invented: May 24, 1844
150 Years since Lincoln needed the Telegraph (T-Mail)
Mr. Lincoln's T-Mails: How Abraham Lincoln Used the Telegraph to Win the Civil War, Tom Wheeler (2008).
<http://www.amazon.com/Mr-Lincolns-T-Mails-How-Abraham-Lincoln-Used-Telegraph-to-Win-the-Civil-War/dp/0261122027>




Thirty Ways Learning is Changing...
 (i.e., it's more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)



30+ Ways Learning is Changing: The Mega Trends



How Learning is Changing: Mega Trend #1. Learner Engagement



Learning is More Social

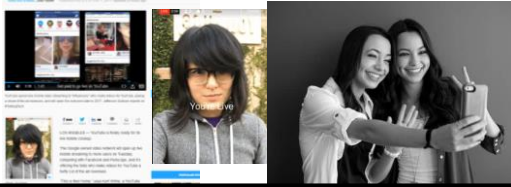


February 7, 2017 (Engagement)
Learning is More Social

YouTube takes on Facebook with mobile live
 Jefferson Graham, USA Today

<http://www.usatoday.com/story/tech/2017/02/07/youtube-takes-facebook-mobile-live/37566932>

YouTube takes on Facebook with mobile live



August 23, 2016 (Engagement)
Learning is More Visual

e.g., reef videoconferencing
 (Great Barrier Reef, Australia)

<http://www.reefqa.com.au/education-at-reef-hq-aquarium/reef-videoconferencing>



Learning is More Adventurous



May 7, 2015 (Engagement)
Learning is More Adventurous

Aaron Doering, Chasing Seals, TEDx

<http://chasingseals.com/>

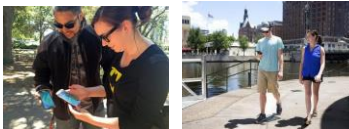
<https://twitter.com/chasingseals>



July 22, 2016 (Engagement)
Learning is More Game-like

When Pokémon Goes to Campus:
 The Good, the Bad, and the Ugly

Gabriel Sandoval, Chronicle of Higher Education



Pokémon Go players converged last week on the U. of Nebraska at Lincoln's Memorial Stadium, which officials had opened to the animated-monster hunters. The hit augmented-reality game has prompted many colleges to jump on the bandwagon.

February 27, 2017 (Engagement)
Learning is More Immersive

Augmented and Virtual Reality Spending to Double in 2017

Sri Ravipati, THE Journal

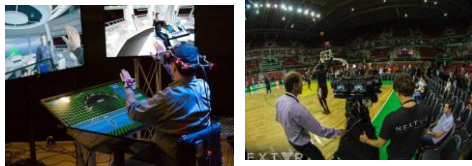
<https://thejournal.com/articles/2017/02/27/augmented-and-virtual-reality-spending-to-double-in-2017.aspx>
 Worldwide: "forecasts the AR/VR market to reach \$13.9 billion in 2017 — up 130.5 percent from the \$6.1 billion spent in 2016. Furthermore, AR/VR spending is expected to accelerate over the next several years, achieving a compound annual growth rate (CAGR) of 198 percent over the 2015-2020 forecast period and reaching \$143.3 billion in 2020."



April 2, 2015 (Engagement)
Learning is More Immersive

The Quest to Put More Reality in Virtual Reality
 Review: Samsung rises to challenge with Galaxy S6 and S6 Edge,
 Edward Balg, USA Today

<http://www.usatoday.com/story/tech/columnists/balg/2015/03/31/samsung-rises-to-challenge-with-galaxy-s6-s6edge/7072733/>



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.

February 15, 2017 (Engagement)
Learning is More Synchronous

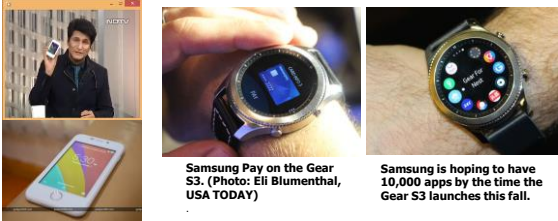
Shindig, Future Trends Forum, Bryan Alexander
<https://bryanalexander.org/the-future-trends-forum/>
<http://www.shindig.com/>
<http://events.shindig.com/event/rtf-anniversary>



February 17, 2016 (Engagement)
Learning is More Mobile

World's Cheapest Smartphone at \$3.67

https://m.facebook.com/hanhsang/launched769d-52k_in_4%26
https://m.facebook.com/story.php?story_fbid=10153396901211279884&_ftid=102527938797
<http://gadgets.ndtv.com/videos/?feed=251-launched-as-world-s-cheapest-smartphone-at-rs-251-4040s>



Samsung Pay on the Gear S3. (Photo: Eli Blumenthal, USA TODAY)

Samsung is hoping to have 10,000 apps by the time the Gear S3 launches this fall.

September 7, 2016 (Engagement)
Learning Apps - Personalized Interfaces for Performance

Elliott Masie's Learning TRENDS; trends@masie.com
 Personalized for an employee based on their development goals, competency gaps and changing skill/information matrix in the workplace. A Learning App could provide a just in time set of content, context, collaboration connections, coaching sets and real time feedback.
 Learningpool: <https://www.learningpool.com/services/apps-for-learning>



Want "FREE" engagement?
How about
"Adding Some TEC-VARIETY"?
<http://tec-variety.com/>



What motivates?

1. Tone/Climate: Psychological Safety, Comfort, Sense of Belonging
2. Encouragement: Feedback, Responsiveness, Praise, Supports
3. Curiosity: Surprise, Intrigue, Unknowns
4. Variety: Novelty, Fun, Fantasy
5. Autonomy: Choice, Control, Flexibility, Opportunities
6. Relevance: Meaningful, Authentic, Interesting
7. Interactivity: Collaborative, Team-Based, Community
8. Engagement: Effort, Involvement, Investment
9. Tension: Challenge, Dissonance, Controversy
10. Yielding Products: Goal Driven, Purposeful Vision, Ownership



How Learning is Changing:
Mega Trend #2. Pervasive Access



July 21, 2016
Facebook's Aquila drone completes first test flight
 Jessica Gynn, USA Today
<http://www.usatoday.com/story/tech/news/2016/07/21/facebook-aquila-completes-first-test-flight/8736891/>





An aerial view of Aquila, an autonomous aircraft Facebook is designing to deliver mobile broadband networks to isolated people (mission to fly 60,000 above Earth for up to 3 months at a time; current record for solar-powered unmanned flight is 2 weeks). (Photo: Facebook)

August 1, 2016 (Access)
Learning is More Ubiquitous
 363 by Idea Group; Study Café Meeting Place; Idea Space (Seoul, Korea)
http://363.co.kr/eng/363_wellness/study-cafe_11





September 28, 2016 (Access)
Learning is More Free
 Bookshare, An accessibility online library for people with disabilities
<https://www.bookshare.org/>




Accessibility
Nonprofit Delivers 10 Million Accessible E-Books
 By Siri Rappaport | 09/22/16
 A California-based nonprofit has reached a significant milestone: delivering more than 10 million accessible e-books worldwide.

June 15, 2014 (Access)
Learning is More Online
 Starbucks offers workers 2 years of free college, CNN Money, Gregory Wallace (from Arizona State online programs)
<http://money.com/2014/06/15/news/economy/starbucks-scholarship-education/index.html#p=12>
<http://www.nytimes.com/2014/06/16/us/starbucks-to-provide-free-college-education-to-thousands-of-workers.html>

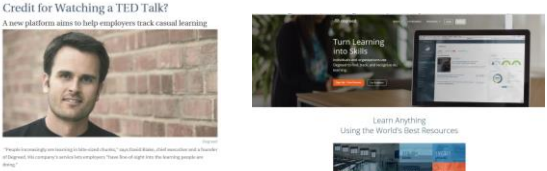


May 4, 2016 (Access)
Learning is More Video-Based
 What I Learned at the ASU GSV Summit
 Kenneth Green, Inside Higher Ed
<http://www.insidehighered.com/digital-learning/article/2016/05/04/asu-gsv-summit>
July 18, 2016 (Access)
 Survey: Video Usage in Ed Continues Ramp-up, Dian Schaffhauser, THE Journal



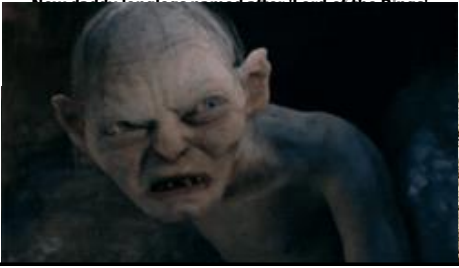
ASU GSV Summit
 33 Interactive Thought Leader Interviews from the ASU GSV Knowledge Summit
 Produced Interviews
 ASU GSV Summit Dr. Michael Young, President, Arizona State University
 ASU GSV Summit Dr. Michael Young, President, Arizona State University
 ASU GSV Summit Dr. Michael Young, President, Arizona State University
 Video will be a major part of education in the future

September 14, 2015 (Access)
Learning is More Video-Based
 Credit for Watching a TED Talk? A new platform aims to help employers track casual learning
 Chronicle of Higher Education, Jeffrey R. Young
<http://chronicle.com/article/Credit-for-Watching-a-TED-Talk/2302131006>
 Degreed: <https://www.degreed.com/>



September 14, 2015
Credit for Watching a TED Talk?
 A new platform aims to help employers track casual learning
 Turn Learning into @-alls
 Learn Anything. Using the World's Best Resources


November 19, 2015 (Access)
Learning is More Immediate...



May 14, 2016 (Access)
Learning is More Immediate...
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_S04.pdf

Mastodon bones offer clues of earliest humans in North America



Learning is More Direct from Experts



June 20, 2016 (Access)
Learning is More Direct from Experts
 (e.g., The Expert Café)
<http://expertscafe.com/>



June 13, 2016 (Access)
Nine-Year-Old Anvitha Vijay is the Youngest Developer at WWDC (age 9)
 (Apple Worldwide Developers Conference), Gadgets
<http://pau.edu.au/~com/updates/development/youngest-developer-at-wwdc-2016-64841570>



May 4, 2016 (Access)
This Mongolian Teenager Aced a MOOC
 Now He Wants to Widen Their Impact
 (140,000 people take the MIT MOOC on Circuits and Electronics, 1 of 300 to get a perfect score)
 The Chronicle of Higher Education, Jeffrey R. Young
<http://chronicle.com/article/This-Mongolian-Teenager-Aced-a-MOOC/236362>

THE CHRONICLE OF HIGHER EDUCATION

This Mongolian Teenager Aced a MOOC. Now He Wants to Widen Their Impact.




May 19, 2016 (Access)
From MOOC to bootcamp to MIT
MIT News, Office of Digital Learning
 (Jin Wu—from MITx to MIT Global Entrepreneurship Bootcamp to master's student)
<http://news.mit.edu/2016/mooc-bootcamp-mit-0519>



From MOOC to bootcamp to MIT
 Two students with entrepreneurial spirit found their way into the Class of 2020 through MOOCs.

How Learning is Changing:
Mega Trend #3. Customization




massive
 self-directed blended
 communal flipped personal
 competency-based
 on-demand modifiable
 modular

September 7, 2016 (Customization)
Learning is More Comfortable
 The Future of Collaboration Spaces Encompasses Video Interactive, Mobil, Julie Johnston, IU, Campus Technology
<http://www.iu.edu/campus-technology/article/2016/09/07/the-future-of-collaboration-spaces-encompasses-video-interactive-mobil>




In the Indiana University Media School lobby, a large display will showcase student work and provide interactive sessions. (photo by Allen Major/The Media School @ Indiana University)

January 20, 2016 (Customization)
Learning is More Blended
Universities tap growth of craft beer, offer classes, Chicago Tribune
<http://www.chicagotribune.com/business/ct-college-craft-beer-offer-classes-20160120-story.html>



Universities tap growth of craft beer, offer classes

February 16, 2017 (Customization)
Learning is More Communal
Building Global Community, Marc Zuckerberg, Facebook
<https://www.facebook.com/notes/mark-zuckerberg/building-a-global-community/1015250821158471/>



Mark Zuckerberg publishes manifesto to save the world

Building Global Community

To save ourselves.
 To save the planet to sustain the world, we often discuss grand ideas like building and upgrading our own business. But the most important question of all, our wellbeing, the world we all want?

February 16, 2017
Zuckerberg: Bonds between strangers can help in divisive times
 Jessica Guynn, USA Today
<http://www.usatoday.com/story/tech/2017/02/16/mark-zuckerberg-facebook-group-community/101321238/>



Zuckerberg: Bonds between strangers can help in divisive times

May 20, 2016 (Customization) Learning is More Massive agMOOCs (India)

<http://www.agmoocs.in/>

MOOCs are Like Library Books...

September 15, 2015 (Customization) GROOCs are 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?v=38kv-WNg-5LzAR6st>

December 25, 2016 By The Numbers: MOOCs in 2016

Dhawa Shah, Class Central
<https://www.class-central.com/report/mooc-stats-2016/>

Source: CLASS CENTRAL

December 25, 2016 Class Central

<https://www.class-central.com/report/mooc-stats-2016/>

58M
Students

700+
Universities

6850
Courses

MOOCs in 2016: Analysis by Class Central

December 23, 2016 HarvardX and MITx: Four Years of Open Online Courses -- Fall 2012 - Summer 2016

Isaac Chung, MIT, and Andrew Dean Ho, Harvard
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2889438

Exhibit 3: Course participation and demographics

Course	Participants
HarvardX: Introduction to Computer Science	1,449,034
MITx: Introduction to Computer Science	788,209
HarvardX: Introduction to Business	244,705
MITx: Introduction to Business	289

Note: Per course and demographic statistics are medians of course-level statistics.

- The typical HarvardX/MITx course or module certifies 500 participants.
- Around 1,500 will explore half or more of course content.
- Around 7,000 will access the course content.

August 12, 2016 (Customization)
Class Central's Top 50 MOOCs of All Time,
Dhawal Shah, Class Central Blog
 "Now there are close to 6,000 MOOCs from 600+ universities around the world."
<https://www.class-central.com/report/top-moocs/>

August 12, 2016 (Customization)
A Life of Happiness and Fulfillment
Indian School of Business, Rajagopal Raghunathan
<https://www.class-central.com/mooc/2860/courses-a-life-of-happiness-and-fulfillment>

August 30, 2016
Thousands sign up for free online wine course, John Elmes, Wine News
<http://www.class-central.com/wine-elmes/free-wine-course-afda16e32564/>

August 5, 2015 (Customization)
How Nanodegrees Are Disrupting Higher Education
John Waters, Campus Technology
<http://campustechnology.com/articles/2015/08/05/how-nanodegrees-are-disrupting-higher-education.aspx>

January 13, 2016 (Customization)
Degree gets you a tech job — or your money back
Marco della Cava, USA Today
<http://www.usatoday.com/story/tech/news/2016/01/13/degree-gets-you-tech-job-or-your-money-back/78703230/>

July 28, 2016 (Customization)
Coursera Specializations email
Starting Monday August 1st: 9 Top Specializations

MOOCs and Open Education Around the World

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

**MOOCs and
Open Education**
AROUND THE WORLD

EDITED BY
CHARLES A. BAKER, THOMAS C. REEVES,
THOMAS K. REEVES
& THOMAS R. REYNOLDS

July 1, 2015 (Customization)

Chapter 14: Creating a Temporary Spontaneous Mini-Ecosystem through a MOOC

Paul Kim and Charlie Chung, Stanford University
Figure 2. Twitter thread announcing the MOOC

June 14, 2016 (Customization)

Chapter 15: Learning About MOOCs by Talking to Students

Charles Severance, Univ. of Michigan
Anuar Lequerica, Class Central

<https://www.class-central.com/report/dr-chuck-graduate-ceremony-python-specialization/>

Type of MOOC	cMOOC	sMOOC	pMOOC
Learner Role	Active	Passive	Active
Instructor Role	Co-learner	Sage on video stage	Guide on the side
Learning Theory	Connectivism	Behaviorism	Constructivism
Primary Pedagogy	Knowledge integration	Knowledge duplication	Knowledge production
Metaphor	"We link movies"	"We watch movies"	"We make movies"
Development Approach	Learning design	Instructional design	Educational design research
Primary Type of Assessment	Self Assessment	External and/or Peer Assessment	Self and/or Client Assessment
Funding Source	Seat of the pants funding	Large external funding	Moderate client provided funding

Figure 1. Differences among three types of MOOCs (Reeves & Hedberg, 2014).

Bonk, C. J., Lee, M. M., Reeves, T. C., & Reynolds, T. H. (in press). The emergence and design of massive open online courses (MOOCs). In R. A. Reiser, & J. V. Demsey (Eds.), *Trends and issues in instructional design and technology* (4th Ed.), (pp.7). Boston, MA: Pearson Education. Available: <http://www.publicationshrs.com/3>

August 24, 2016

K-MOOCs (and ocMOOCs and hMOOCs)

Revolutionizing online education
Professor creates courses tailored to cultural differences
Korea JoongAng Daily, Bong-Moon Kim

<http://www.kmooc.kr/>

The new "Four Horsemen" of the Apocalypse:

Quality, Copyright, Plagiarism, and Assessment...

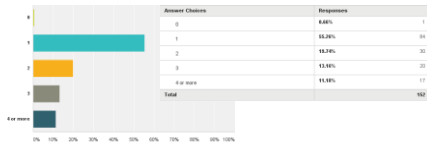
30+ Ways Learning is Changing: Recapping the Three Mega Trends: Engagement, Access, and Customization



MOOC Personalization Survey Results

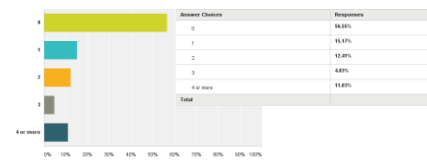


1. How many MOOCs have you taught? (N = 152)



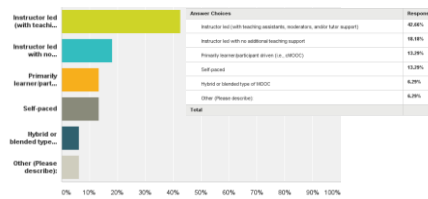
Q4: 3. How many MOOCs have you completed as a learner (including any that you are currently enrolled in)?

Answered 145 Skipped 10

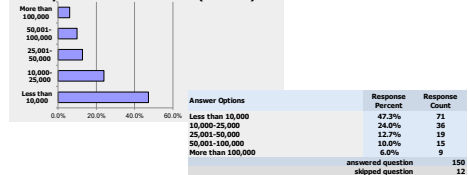


Q7. What is the delivery format of your most recent MOOC?

Answered 143 Skipped 12



8. How many people signed up for your most recent MOOC? (N = 150)



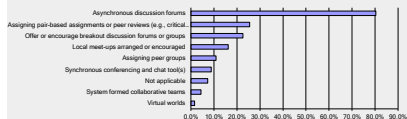
13. How do you address students' varying competencies and needs?[Check all that apply]

Answer Options	Response Percent	Response Count
Establish learner-based discussion forums	81.0%	115
Embed supplementary course materials (e.g., readings, Post timely course announcements and announcements)	78.2%	111
Record video tutorials or walkthroughs (e.g., Screencasts, YouTube)	63.4%	90
Emphasize project-based learning over exams	49.8%	68
Using preexisting online videos (e.g., Lynda.com, TED talks, YouTube)	34.5%	48
Other (Please describe):	32.4%	46
Hold synchronous lectures, meetings, and events (e.g., Skype, Google)	26.1%	37
Establish study groups	23.9%	34
Establish learner reflection journals or blogs	19.0%	27
Schedule virtual office hours and meetings	18.2%	26
Offer face-to-face meet-up opportunities	14.1%	20
	7.0%	10
	answered question	142
	skipped question	20

14. What types of learning resources can participants select from in your most recent MOOC?[Check all that apply]

Answer Options	Response Percent	Response Count
Discussion forums or threads	91.0%	130
Video lectures and tutorials	76.8%	109
Readings (including textbooks, literature, scientific & tech reports)	76.1%	108
Practice quizzes and exams	67.7%	92
Interactive assessments	60.7%	82
Expert interviews	50.0%	71
PowerPoint and other presentation slides	47.9%	68
Instructor lecture notes	44.4%	63
Animations and other types of animated or interactive contents	42.0%	60
Visuals (e.g., concept maps, diagrams, flowcharts, timelines, etc.)	42.0%	60
Video examples (e.g., TED talks, YouTube, etc.)	38.4%	56
Social media (e.g., Facebook, Instagram, Snapchat, Twitter, Pinterest, etc.)	28.9%	41
Popular media (e.g., news stories and videos)	28.2%	40
Podcasts	18.2%	26
Wikis-style documents	15.5%	22
Instructor blogs	14.8%	21
Simulations and games	14.1%	20
Job aids and study guides	12.0%	17
Mobile applications	12.0%	17
Learner blogs	8.9%	14
Other (fill in the blank - optional):	9.8%	14
Virtual conferences and summits	4.9%	7
	answered question	142
	skipped question	20

16. In what ways is peer interaction encouraged in your MOOC?[Check all that apply; N = 137]



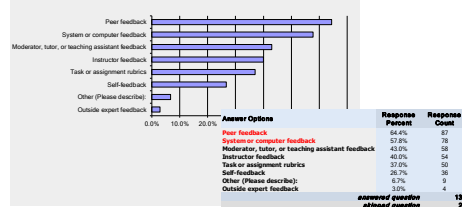
17. How did you design your course to be suitable for students from different cultures and/or linguistic backgrounds?[Check all that apply]

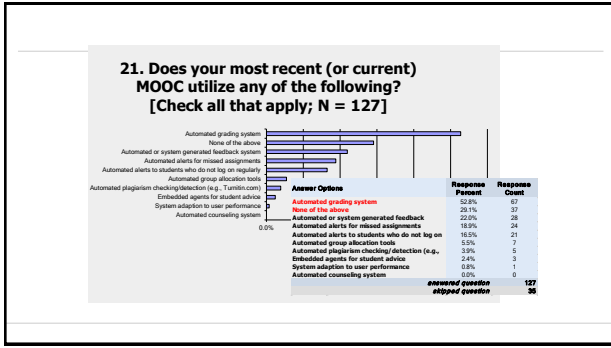
Answer Options	Response Percent	Response Count
Offer transcripts of video or audio content	66.2%	88
Add subtitles to video content	63.9%	85
Be careful with language use and hand gestures	51.9%	69
Simplify the language used	42.1%	56
Slow the pace of speech	36.8%	49
Simplify the course content and navigation	27.1%	36
Link text by relying more on pictures	19.5%	26
Encourage participants to translate and localize content	18.0%	24
Other (Please describe):	15.8%	21
Translate the content to different languages	11.3%	15
	answered question	133
	skipped question	20

18. Does the structure of your most recent or current MOOC provide any of the following?[Check all that apply; N = 126]

Answer Options	Response Percent	Response Count
Optional readings, videos, or other materials	74.6%	94
Learner selected incentives (e.g., certificates, badges, course credit, etc.)	64.3%	81
Options with course tasks and assignments	38.1%	48
Learner discussion and negotiation of content	36.5%	46
Two or more media elements to learn the same content	31.7%	40
Learner determined or contributed content	30.2%	38
Learner selected learning pathways (i.e., different routes to learn the)	19.0%	24
Learner portfolios of course accomplishments	16.7%	21
Choice in team or collaborative partners (i.e., self-formed teams)	12.7%	16
	answered question	126
	skipped question	36

20. In what ways do students get feedback in the course?[Check all that apply; N = 135]





MOOC Research Review, 2014–2017

- Empirical studies between 2014–2017
- 150 studies
- Focus on research methods/paradigms and topics of research

Primary Journals for MOOC Publication (2014–2017)

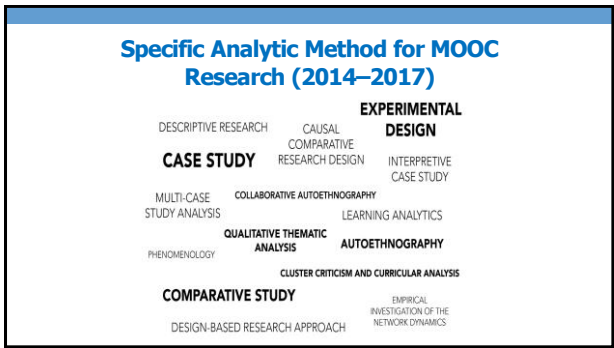
JOURNAL	TOTAL
1. International Review of Research in Open and Distance Learning (IRRODL)	33
2. Computers & Education	11
3. British Journal of Educational Technology	9
4. Online Learning	7
5. Distance Education	5
6. Educational Media International	5
7. Internet and Higher Education	5
8. Journal of Asynchronous Learning Network	5
9. Journal of Computer Assisted Learning	5
10. Computers in Human Behavior	4
11. Open Learning	4
12. Journal of Online Learning and Teaching	3

MOOC Research Publications (2014–2017)

DATE	TOTAL
2014	27
2015	69
2016	52
2017	2
TOTAL	150

General Analytic Method MOOC Research (2014–2017)

GENERAL ANALYTIC METHOD	TOTAL	PERCENT
QUALITATIVE	29	19.3%
QUANTITATIVE	26	43.3%
MIXED METHODS	56	37.3%
TOTAL STUDIES	150	



Number of Data Sources for MOOC Research (2014–2017)

NUMBER OF DATA SOURCES	TOTAL	PERCENT
1	57	38%
2	54	36%
3	24	16%
MORE THAN 3	15	10%
TOTAL STUDIES	150	

Location of MOOC Research Team Members (2014–2017)



Country of Origin of MOOC Delivery (2014–2017)



Focus of MOOC Research (2014–2017)

FOCUS	TOTAL	PERCENT
STUDENT-FOCUSED	75	50.0%
DESIGN-FOCUSED	48	32.0%
CONTEXT AND IMPACT	21	14.0%
OTHER	8	5.4%
INSTRUCTOR-FOCUSED	5	3.4%
TOTAL *	157	

*Seven studies had more than one area of focus.

Specific Topics of MOOC Research (2014–2017)



Data Sources of MOOC Research (2014–2017)



Audience Poll:
Would you like to research MOOCs now?
A. Yes...
B. No...



January 30, 2017
1. Professor Einstein PDA's

<http://www.usatoday.com/story/tech/2017/01/30/robotic-barista-now-serving-really-fast/95888780/>

When the Teaching Assistant is a Robot

Professor Einstein, an educational Wi-Fi connected robot is on display at the Hanson Robot display during the opening day of Consumer Electronics Show 2017. (Photo: Robert Hanashiro, USA TODAY)
<http://www.usatoday.com/story/tech/2017/01/30/robotic-barista-now-serving-really-fast/95888780/>

February 27, 2017
2. World Knowledge Refreshment Stations

http://www.theivivngmoon.com/43ancients/02files/Library_Alexandria.html

February 27, 2017
3. Robot Collaborators/Partners

http://www.theivivngmoon.com/43ancients/02files/Library_Alexandria.html

February 27, 2017
3. Three Part Resumes/CV's

http://www.theivivngmoon.com/43ancients/02files/Library_Alexandria.html

February 27, 2017
3. Global Learning Partner Selection Walls

http://www.thefivingmoon.com/3successes/02the_Library_Alexandria.html



September 2, 2016
5. MOOC Graders and Tutors
Introduction to Philosophy: God, Knowledge and Consciousness
(\$300 USD for an identity-verified certificate)
Carl Straumsheim, Inside Higher Ed

<https://www.insidehighered.com/news/2016/09/02/massachusetts-technology-experiments-robotic-grading-massive-open>
<https://www.ahd.edu/news/introduction-philosophy-and-knowledge-09-02-2016-14-view0116>



Humans, the Latest MOOC Feature

MIT experiments with instructor grading in massive open online courses as a way to expand teaching and learning opportunities for students and instructors.

September 2, 2016
 by Carl Straumsheim
 One of the Massachusetts Insti



Introduction to Philosophy: God, Knowledge and Consciousness
 Learn how to ask and answer big questions. Based on verified evidence to make your own judgment and informed open by professional philosophers.

May 4, 2016
6. MOOC Spirituality
MOOC 4.0: The Next Revolution in Learning & Leadership, Otto Scharmer, Huffington Post

http://www.huffpost.com/otto-scharmer/mooc-40-the-next-revolut_3_7309506.html



7. Rise of Super E-Mentors



8. Café Classroom and Café Connectedness



Poll: Who wants one of these? Starbucks



**Poll: How about one of these?
Starbucks**



Starbucks Coffee Korea employees learn how to use the firm's online learning system "Starbucks Academy," which was introduced, Wednesday. The two-way learning system provides some 5,000 employees in Korea with various reeducation services, including encyclopedias, latest news and information about coffee among others. Starbucks Korea is the first affiliate of the international coffeehouse selling its products in 60 countries to introduce the system.

**July 29, 2016
Reimagine Your Learning Space:
Starbucks Your Classroom!**
Oskar Cymerman, Teaching Channel



Stale, industrial-era rows aren't very attractive or motivating. Even more, I've become convinced that traditional educational settings dull the senses. We know that breaks and interruptions after periods of focused activity actually help in learning, yet we sometimes ask our students to sit still for an hour or more with little freedom of movement. I believe the "Starbucks" environment will promote that freedom and movement. Freedom is the key ingredient to social-emotional well-being and deeper learning. Rows and columns constrict. They hold us stiff. That is the truth. That is the reality in many U.S. classrooms today. But no longer in mine. Never again.

**July 29, 2016
Reimagine Your Learning Space:
Starbucks Your Classroom!**
Oskar Cymerman, Teaching Channel



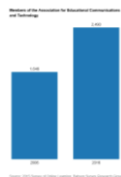
This year, my students will work together every single day and I'll be working with them as part of the team. I will be both facilitator and collaborator as we implement a new, blended learning model. And, we'll be moving around, which is crucial to focus, health, and proper brain function. Humans aren't meant to sit in one place. We are born curious and we learn by exploring our world, which requires all of the senses.

**9. Instructional Designer
Morphs into Learning
Environment Engineer**

**February 29, 2016
Instructional Design: Demand grows
for a new breed of academic
Chronicle of Higher Education, Dann Berrett**

Instructional Design

Demand grows for a new breed of academic



**February 29, 2016
Instructional Design: Demand grows
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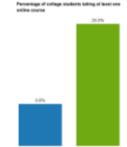
Succeeding by Design

As digital content proliferates, more courses, more students are using books, and the nature of instructional design is changing.

Percentage of colleges that use online courses as part of long-term strategy



Percentage of college students taking at least one online course



April, 2016
Instructional Design in Higher Education
 Gates Foundation

http://instructionaldesign.com/research/instructional_design_in_higher_education%20report%20by%20type%20of%20institution%20report.pdf
http://instructionaldesign.com/research/instructional_design_in_higher_education%20report.pdf

Instructional Design in Higher Education
 A report on the role, workflow, and experience of instructional designers

April, 2016
Instructional Design in Higher Education, Gates Foundation

http://instructionaldesign.com/research/instructional_design_in_higher_education%20report%20by%20type%20of%20institution%20report.pdf
http://instructionaldesign.com/research/instructional_design_in_higher_education%20report.pdf

ARE YOU MALE OR FEMALE?

67%
Female CIs

WHAT IS YOUR AGE?

Age Group	Percentage
18-27	7%
28-37	29%
38-47	31%
48-57	24%
58+	9%

10. The Age of Personalization

February 27, 2017
The LMS Market is Quickly Losing Ground
 Carol Leaman, CLO
<https://www.openlearning.com/>

Ambient Insight...the self-paced e-learning market — defined by LMS, off-the-shelf content and services — is expected to drop from global revenues of \$46.6 billion in 2016 to \$33.4 billion by 2021....**the single most unfavorable place to be is the LMS market, which is essentially imploding, particularly in the U.S. corporate segment that has a negative 33.9 percent growth rate.**

The LMS Market is Quickly Losing Ground

Things are heating up!

Education 4.0 is coming within reach!

Poll #10:
Who is now interested in Education 20/20...?

END OF COURSE EXAMS?
I SHALL PASS!

Remember for Education 20/20 to meet Education 4.0:
"I cannot do this alone."

"I cannot do this alone."
 "I cannot do this alone."
 "I cannot do this alone."

I can't do this alone.

Poll: Who now wants one of these?
Starbucks

Any Questions or Comments?

Slides at: TrainingShare.com
 Papers: PublicationShare.com
 Free book: <http://tec-variety.com/>
 Email: curt@worldisopen.com