MOOCs and Executive Education

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On November 2, 2012, using an acronym few would have recognized just months before, The New York Times announced "The Year of the MOOC".[1] A little more than a year after the first major offering, "Massively Open Online Courses" were center stage in the national dialogue on higher education. Distance learning and open education, growing incrementally for more than a decade,[2] reached a tipping point and entered a new phase fueled by significant venture capital and institutional investments,[3] increasing global access to broadband internet, and national concerns over the costs of higher education.

Ongoing rapid adoption of MOOCs by universities has continued in the first half of 2013: While a January 2013 report of a provost survey indicated only 2.6% of higher education institutions, another 9.4% had MOOCs in the planning stages,[4] a more recent survey has indicated as many as 43% of schools plan to offer MOOCs in the next three years,[5] and an April 2013 survey of distance education officials at

[1] All links in this and subsequent notes accessed in May/June 2013. http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html. See Appendix I for a short list of resources on MOOCs generally.
[2] The number of students taking at least one online course grew from 1.6M in fall 2002 (9.6% of total students enrolling in degree-granting institutions) to 6.7M (32% of total students) in fall 2011, an average yearly growth of 20.7%. See Allen and Seamen, "Changing Course: Ten Years of Tracking Online Education in the United States", January 2013, p. 17, http://www.onlinelearningsurvey.com/reports/changingcourse.pdf. An earlier (2007) but very comprehensive report on Open Educational Resources published by OECD may be found here: http://www.oecd.org/edu/ceri/38654317.pdf
[3] In its first year Coursera has attracted $22M in venture capital, and Udacity $21M. EdX was launched with $60M in institutional funding by MIT and Harvard. The Bill and Melinda Gates Foundation is also a significant investor in MOOC research as well as open resources. See: http://chronicle.com/article/Major-Players-in-the-MOOC/138817/
[4] "Changing Course", p. 9.
[5] http://www.huffingtonpost.com/vala-afshar/infographic-adoption-of-m_b_3303789.html

community colleges found that 44% of these institutions are currently exploring options for incorporating MOOCs and MOOC content in their programs.[6]

This report looks at the MOOC phenomenon generally, and then focuses on some implications for units currently engaged in providing executive education. It is based on an extensive review of published sources, supplemented by more than 15 interviews of leaders in senior roles in both universities and beyond engaged in either executive education or MOOC development and strategy. It also reports on a survey completed for this project in March 2013 of more than 600 past participants of executive education programs.

What is a MOOC?

So what is a MOOC? The term Massively Open Online Course was coined in 2008 by David Cormier[7] who is active in the Open Educational Resources movement.[8] Cormier offered a course "Connectivism and Connective Knowledge" to 25 tuition paying students in Extended Education at the University of Manitoba, and 2,300 others who took the course free of charge.[9] Several other institutions, including the University of Illinois Springfield, subsequently experimented with a similar model.[10]

In late 2011, however, MOOCs moved from an experiment in distance education to center stage in a national conversation on the future of higher education. Key players were a few maverick professors from Stanford and MIT: Daphne Koller and Andrew Ng, Sebastian Thrun, and Anant Agarwal, who took their courses out of the ivory tower and offered them to the world at scale. The first major MOOC, Sebastian Thrun's course "Introduction to Artificial Intelligence", co-taught with Peter Norvig of Google, reached an enrollment of 160,000 and caught the attention of the national press. While offered with no Stanford branding or formal university approval, Stanford nevertheless supported this innovation, issuing its own press release in August 2011 as Thrun's class reached an enrollment of 58,000.[11]

MOOCs today are generally considered to be free, online courses offered by colleges and universities at scale. The majority follow a traditional course model, spanning a quarter or semester, although shorter courses are also offered. Enrollees are of all ages and nationalities. Generally, enrollment rates are in the

[6] http://www.insidehighered.com/news/2013/04/23/survey-documents-interest-community-colleges-moocs-and-open-educational-resources

[7] Cormier's video on MOOCs published in 2010, http://www.youtube.com/watch?v=eW3gMGqcZQc.

[8] The Open Educational Resources are generally documents and materials available for teaching and resources, and MIT is generally credited with sparking a movement in this area with its 2001 announcement of MIT OpenCourseWare. While MOOCs utilize OERs, they are different in the sense they are offered as a course with an interactive format.

[9] http://en.wikipedia.org/wiki/Massive_open_online_course

[10] Interview with Ray Schroeder, November 2012. Also see the June 21, 2011 press release, "U. of Illinois at Springfield Offers New 'Massive Open Online Course,' http://chronicle.com/blogs/wiredcampus/u-of-illinois-at-springfield-offers-new-massive-open-online-course/31853

[11] http://news.stanford.edu/news/2011/august/online-computer-science-081611.html

30,000 - 100,000+ range, but completion rates are relatively low (~7%).[12] They are given on all topics and in different languages. In addition to aspiring to provide highest quality education for free, globally, it is hoped that MOOCs will enhance on-campus education in a variety of ways, from helping universities to identify talented students to cost savings to pedagogical innovation.

Are Business Schools Getting Involved?

Coursera currently lists 33 courses in Business and Management, including courses from Yale, University of Pennsylvania, Stanford, University of Michigan, University of Virginia, Northwestern and Vanderbilt.

Executive Education offices at some of these institutions are exploring models for repurposing some or all of the content from their institution's MOOCs for corporate clients as mid-level, scaleable offerings that would broaden educational impact beyond individuals able to attend face-to-face sessions.

One of the reasons for their popularity is that MOOCs have brand. Early and well publicized adoption by top universities including Stanford, Harvard, MIT and others has led to broader adoption, with hundreds of top colleges and universities in the US and internationally now experimenting with MOOC development and delivery.[13] In addition to enhancing institutional brand, faculty also benefit: popular MOOCs have the ability to raise the national and international reputation of the faculty who teach them.

Today, universities generally work with one of three providers for these courses: Coursera, edX or Udacity, although other models and platforms exist.[14] Of these three, Coursera currently has the largest footprint with more than 3.5M enrollees, 374 courses and 70 partners. Most courses offer a certificate and no credit, however ACE has approved five Coursera courses for credit, and there are several experiments in for-credit models, notably at San Jose State and also two community colleges in Massachusetts.[15] Building on a for-credit model, recently, Georgia Tech announced it would be

[12] See: http://www.katyjordan.com/MOOCproject.html and http://www.insidehighered.com/news/2013/05/10/new-study-low-mooc-completion-rates

[13] One of the interesting early stories in the history of MOOCs is that of Teresa Sullivan, President of University of Virginia, who clashed with members of her Board, including over distance education, leading to her dismissal (she was subsequently reinstated). See http://www.insidehighered.com/news/2012/06/20/e-mails-show-uva-board-wanted-big-online-push

[14] Specifically, there are a number of initiatives at the university center level that remain unaffiliated with the major providers, for example the Stanford Venture Lab, https://venture-lab.org/, the Knight Center for Journalism at UT Austin, http://open.journalismcourses.org/.

[15] On ACE, see http://www.acenet.edu/the-presidency/columns-and-features/Pages/Giving-MOOCs-Some-Credit.aspx; on San Jose State, see http://blogs.sjsu.edu/today/2013/sjsu-and-udacity-partnership/; a 'hybrid' community college course offered by edX and Bunker Hill Community College is here: http://www.bhcc.mass.edu/edx/

rolling out a $7,000 fully-online, engineering master's degree utilizing a MOOC model and in collaboration with AT&T.[16] And, Coursera just announced partnerships with 10 large public university systems to offer MOOCs for credit.[17]

There are several related companies and initiatives that are discussed in the same vein as MOOCS, most notably Udemy which allows anyone to create an online course either for free and at a fee features courses by faculty, consultants and others, and the Kahn Academy, a foundation-supported non-profit open education venture which pioneered informal short video format that has now been adopted by many MOOCs. FutureLearn a UK supported MOOC venture has been announced and is in development. Blackboard offers MOOC delivery on CourseSites. Instructure has launched a platform called Canvas Network that currently boasts a clientele of over 4 million[18] and Google has made available an open-source MOOC platform, CourseBuilder. The publishing giant Pearson is engaged by many of the major providers for different levels of identity verification services and exam proctoring through PearsonVUE.[19]

What about Industry?

Udacity draws heavily on industry as well as academic talent for teaching its courses and has worked with Google, NVIDIA, Microsoft, Autodesk, Cadence, and Wolfram on industry-sponsored courses.

As mentioned in the April 2013 announcement of collaboration with Stanford, EdX is considering **"SPOCs" or "Small Private Online Courses"**. While initially being piloted at places like Bunker Hill Community College , there is no reason these might not be offered to interested corporate or industrial partners for a fee.

MOOCs are not without their detractors, notably some university faculty.[20] In addition to engaging in the ongoing debate as to the quality and suitability of online education, faculty are also recognizing the threat to their roles in their institutions, as demonstrated in the recent dialogue between faculty at Harvard and San Jose State.[21] It is not clear, for example, that a Harvard or MIT professor wants to be responsible for putting a faculty member at a state college or university out of work as his or her course is replaced by a MOOC: beyond being a colleague, that professor might even be someone he or she trained as a doctoral student. Nevertheless, while the New Yorker, in a detailed

[16] http://www.gatech.edu/newsroom/release.html?nid=212951
[17] http://www.nytimes.com/2013/05/30/education/universities-team-with-online-course-provider.html?_r=0
[18] http://www.insidehighered.com/blogs/technology-and-learning/open-online-education-and-canvas-network and
[19] http://www.washingtonpost.com/blogs/college-inc/post/moocs--here-come-the-credentials/2013/01/09/a1db85a2-5a67-11e2-88d0-c4cf65c3ad15_blog.html
[20] For example, http://www.insidehighered.com/news/2013/04/19/despite-courtship-amherst-decides-shy-away-star-mooc-provider
[21] See, for example, the April, 2013 exchange between the San Jose State philosophy department and Harvard professor Michael Sandel, http://www.mercurynews.com/education/ci_23320596/online-education-debate-san-jose-state-professors-see. In May, 53 Harvard faculty signed a letter raising concerns about edX and HarvardX and calling for greater faculty oversight, http://www.thecrimson.com/article/2013/5/23/professors-edx-oversight-fas/

summary of the MOOC movement to date frames asks "Has the Future of College Moved Online?",[22] it is likely, as the Atlantic Monthly has proclaimed, "College Is Going Online Whether We Like It Or Not."[23]

MOOCs and Executive Education

MOOCs present interesting challenges and opportunities for executive education on several dimensions. We will explore three of these: business models, disruption, and audience. Some of the challenges to existing executive education programs are latent, rather than immediate. It is likely, though, that within the next 1-2 years we will have a clearer picture as to the trajectory MOOCs will take. In the meantime, many institutions are engaging now with these courses to learn, and so as not to be left behind as innovations in this space take root and become part of the way we educate students and others.

In Search of a Business Model

All of the large MOOC initiatives need to, and plan to, generate revenue. Both Udacity and Coursera are for-profit, venture-funded organizations. EdX is non-profit, however it is designed to be at a self-sustaining enterprise. At least at the beginning, the professed business plans adopted by major MOOC organizations is to focus on building the user and course base and to figure out how to monetize it later.[24]

In terms of initial attempts at generating revenues, most MOOC providers have discussed fees related to enrollment and participation in the courses. These could take the form of registration fees, certificate fees, transcript or credit-related fees. Other monetization strategies include fees for hosting courses (edX, Udemity), providing recruiting data to industrial partners (Udacity, Coursera), and shared revenue models supporting for-credit and degree programs (edX, Udacity).

	Udacity	Coursera	edX	Udemy	2U
Matching students & employers	✓	✓			
Licensing course content to schools	✓	✓	✓		
Industry-sponsored courses	✓				
Fees for exams and identify verification	✓	✓	✓		
Tuition for degree programs	✓				✓
Fees and revenue-sharing for use of platform		✓	✓	✓	✓

American University recently announced a "moratorium on MOOCs" until some of the faculty-related issues are solved, http://chronicle.com/article/As-MOOC-Debate-Simmers-at-San/139147/

[22] http://www.newyorker.com/reporting/2013/05/20/130520fa_fact_heller

[23] http://www.theatlantic.com/business/archive/2013/05/college-is-going-online-whether-we-like-it-or-not/275976/

[24] http://www.insidehighered.com/news/2012/06/11/experts-speculate-possible-business-models-mooc-providers

EdX is pursuing a platform strategy, charging its university partners $250K for a new course and $50K for each additional time the course is run, and also takes a cut of any revenues generated.[25] Initially there were only a few university partners, however growth has accelerated in recent months, with more than 20 new partners joining edX in the first half of 2013.

Universities working with Coursera are offered 6-15% of the gross revenues and 20% of net revenues.[26] Udacity will keep 40% of the revenue generated by the Georgia Tech online master's program in engineering.[27] (This is similar to a model pioneered by 2U (formerly 2Tor) which has partnered with several universities including USC, UNC, Georgetown, and George Washington to offer professional master's degree programs.)[28] Prior to announcing this initiative, Georgia Tech's president created a four-person office focused on full cost accounting of online education within the university and evaluating the financial side of MOOCs.[29] In the professional development space, Coursera has announced partnerships to offer professional development programs for teachers.[30]

Coursera's approach has been to grow as quickly as it can, both in terms of the number of students (now over 3.5M) and the number of partners (now 70). It generated $220,000 in revenues in the first quarter of 2013 for verified completion certificates priced at $30-100 each.[31] (EdX has also partnered with

Faculty are an Important Driver

Prof. Mike Lenox, UVA Darden, "Foundations of Business Strategy" 6-week MOOC delivered on Coursera, March 2013, 90,000+ enrolled:

"As a teacher, I have been thrilled to see the reach and impact of my MOOC, Foundations of Business Strategy.

- Students from over 50 countries are participating including students from the Philippines, Australia, Rwanda, Croatia, UAE, Mexico, Egypt and Argentina among many others.
- I will have taught more than 5x as many students in a six week period than have graduated from the Darden School over its entire 50-year plus existence.
- Every day, I receive thanks from students for the opportunity to take the course – many who are applying the concepts in their working lives as they take the course and who otherwise would not have access to such material."

http://www.forbes.com/sites/darden/2013/03/29/the-imminent-shakeout-disruptive-innovation-and-higher-education/

[25] http://chronicle.com/article/How-EdX-Plans-to-Earn-and/137433/. EdX has a second 'self-service' model where, edX will collect the first $50,000 generated by the course, or $10,000 for each recurring course. The organization and the university partner will each get 50% of all revenue beyond that threshold.
[26] Ibid.
[27] http://www.businessinsider.com/georgia-techs-7000-masters-degree-2013-5
[28] http://2u.com/partners/
[29] Conversation with Nelson Baker.
[30] http://finance.yahoo.com/news/coursera-announces-professional-development-courses-041650832.html and http://blogs.edweek.org/edweek/DigitalEducation/2013/05/new_mooc_model_for_online_pd_o.html
[31] http://www.insidehighered.com/news/2013/04/08/coursera-begins-make-money and http://articles.washingtonpost.com/2013-04-05/local/38307476_1_massive-open-online-courses-coursera-moocs

PearsonVUE for identity verification purposes.)[32] In addition to student fees, Coursera launched employee matching service, called Coursera Career Services, which charges potential employers for access to student data, provided on an opt-in basis. Early clients for this service included Facebook and Twitter.[33]

Udacity pioneered a licensing model for its courses in collaboration with San Jose State, where students pay $150 for the course and get credit, following the free course but with additional services.[34] With its May 30, 2013 announcement of a partnership with 10 major state university systems, Coursera is moving in a big way into the licensing model.[35]

Udemy, a for-profit MOOC platform that allows anyone to create an online class, keeps 30% of course earnings. It has generated $15M since its launch in 2010, and course faculty can earn anywhere from $10,000 to $500,000.[36]

All of these numbers are relatively small given the level of investment that has been made (and is probably still needed) in MOOCs, and there are no clear paths today to profitability/sustainability. Assuming universities continue to offer free MOOCs for reasons like reputation and impact, as well as enhancing the on-campus experience, platform-type models will probably be successful, though the overall result may be to increase rather than decrease costs of educating students.

Lowering costs and improving quality using 'flipped classrooms' and other blended models is an interesting idea but is not yet proven. Fee-based models require significant scale. For the individual institutions offering MOOCs through major providers, this suggests continuing to expand the paying student base, geographically and demographically, something for both units engaged in executive education and those engaged in professional education/university extension to be aware of as it may encroach on current customers served by these units.

Educational Innovation / Institutional Context

MOOCs have been widely hailed as "disruptive" along the lines of the model formulated by Clay Christensen, and in a February 2013 opinion piece in WIRED magazine, Christensen agreed. These hallmarks of a disruptive innovation are that they serve non-consumers, march upmarket (that is, the quality is good enough for existing customers to want it), and they redefine quality.[37]

Potential impacts on the traditional educational model are many…however it is important to underscore the word "potential" as higher education as a model and a way of life for many has had a remarkably stable history for hundreds of years now.

[32] http://chronicle.com/article/How-EdX-Plans-to-Earn-and/137433/
[33] http://chronicle.com/article/Providers-of-Free-MOOCs-Now/136117/. Coursera partners are given the opportunity to opt-out of this service.
[34] https://www.udacity.com/collegecredit and http://blog.udacity.com/2013/01/sebastian-thrun-udacity-announces-for.html
[35] http://mfeldstein.com/mooc-as-courseware-courseras-big-announcement-in-context/
[36] http://techcrunch.com/2013/04/02/with-over-6000-courses-now-live-udemy-brings-its-learning-marketplace-to-ios-to-let-you-study-on-the-go/
[37] http://www.wired.com/opinion/2013/02/beyond-the-mooc-buzz-where-are-they-going-really/

Potential University Impacts of MOOCs

Organizational

- Resources
- Faculty duties
- Faculty governance
- Compliance
- Optimization and cost savings
- Scale
- Conflict of commitment

Educational Methods

- Data-driven innovation and improvements
- Mass personalization
- Peer learning and support
- 'Flipped classrooms'
- New partnerships
- Short modules
- Automated grading

Financial

- True cost calculations
- Reliance on 'free' software
- Scaling allows for different models ($0.99 app)
- Increased competition
- Downward pressure on tuition, fees

Credit/Credentialing

- Assessing learning
- Prior learning activities
- Enhanced student mobility
- Agency involvement (ACE, regional accreditation)

Audience

- 14 to 77
- Lifelong learners
- Suppport for existing on campus education
- Traditionally served by professional / continuing education
- Looking for both admissions and employment-related skills

A recent survey of US Provosts indicates there is some broad concern regarding MOOCs. Specifically 47% strongly or very strongly agreed that MOOCs could threaten the business models of their institutions. The highest level of concern was among provosts at for-profit institutions, where this number was 65%. More than 40% of provosts at public institutions shared a concern that courses would be outsourced to outside providers.[38]

The disruptive innovation model has been specifically applied to Executive Education in an HBR Blog published in January 2013 by Berkeley faculty member Morten T. Hansen, where he made a number of predictions including:

- maybe just 10% of the executive education market is "safe" from disruption;
- online education will up-end the rest of the market…a few star professors who deliver the content online;

[38] http://www.insidehighered.com/news/survey/skepticism-about-tenure-moocs-and-presidency-survey-provosts#ixzz2PohePbEs

- a hoard of "lower-level" local instructors will help with the breakouts; and
- the traditional executive education professor will be squeezed out.

Morton's reasoning is that companies have online learning platforms and will be looking for content thereby creating demand, that hybrid and online programs are attractive from a cost/time perspective, that new technologies make the online experience more appealing, and, potentially most importantly, that networking is increasingly going online which would lessen one of the key benefits of meeting face-to-face. [39]

Balancing these predictions, it has been pointed out by Dennis Yang of Udemy, and others, that MOOCs are probably in the midst of what The Gartner Group calls a "hype cycle" where a new technology initially creates inflated expectations that then give way to disillusionment, eventually leveling out, though, with enhanced productivity.[40] In this same vein, in thinking about MOOCs and their impact it is useful to remember that they are just one development among many that have taken place over more than a century of distance learning (See Appendix II: A Brief Timeline of Distance Education Innovations)

Leaders of executive education units interviewed as part of this research project are exploring several types of innovations. Few were worried about the erosion of value in high-touch, high-end programs such as leadership development or strategy offered to senior executives, however there was some concern about online programs replacing face-to-face at the managerial level, particularly for more skills-based, open enrollment programs such as finance for non-financial managers. Several are also considering how online content from MOOCs may be provided to existing customers with some customization to deepen learning within organizations.

Audience (Dare we say, 'Customer'?)

One of the precepts of the MOOC movement is to make high quality university education available to the world. Institutions can enhance their brands and faculty can benefit from broad exposure.

MOOC organizations and participating faculty alike stress the diversity of their audiences: from teenagers to the elderly, and everyone in between. There are power users, job seekers, stay-at-home moms, and whiz kids. People sign up for MOOCs for many reasons, including professional development, general interest, and curiosity. [41]

Universities including Harvard and MIT have stated strongly that their investment in MOOCs needs to enhance the on-campus education experience. This, in addition to the need to create self-supporting and revenue-generating operations will no doubt influence the way MOOCs develop. Today, it is

[39] http://blogs.hbr.org/cs/2013/01/executive_education_is_ripe_fo.html
[40] http://www.huffingtonpost.com/dennis-yang/post_4496_b_2877799.html ; the idea that MOOCs are a 'lightening rod' for issues in higher education generally is explored in: http://www.insidehighered.com/blogs/law-policy-and-it/moocs-lightning-rod
[41] http://mfeldstein.com/insight-on-mooc-student-types-from-eli-focus-session/ and http://www.insidehighered.com/news/2013/03/08/researchers-explore-who-taking-moocs-and-why-so-many-drop-out

probably safe to say we don't really understand the core audience in an ongoing way. That said, as that audience is better identified, and its needs understood, this may influence how the "MOOC movement" evolves.

Surveying the Executive Education Audience

As part of this research project, we asked the question: how aware are current executive education participants of MOOCs and what do they think about them? A nine-question survey was sent to approximately 13,000 past participants of open enrollment executive education to learn more about their awareness of MOOCs and interest in online education.[42] 691 responses were received, a response rate of 5.27%. Of these, 444 were to an English-language survey and 247 responses were to a Spanish-language survey. The results of these two surveys will be discussed and compared.

From an age perspective, the highest percentage of respondents to the English-language survey were in the 40-49 age range, with the majority of others coming from the decade before or decade after, and only a few under 29 or older than 59. Overall, the Spanish-language survey respondents were similarly distributed, but a decade younger:

Age: Survey Respondents	English (n=427)	Spanish (n=235)
20 or younger	0.0%	0.4%
21-29	2.8%	29.8%
30-39	25.5%	40.4%
40-49	41.9%	22.1%
50-59	26.0%	6.4%
60 or older	3.7%	0.9%

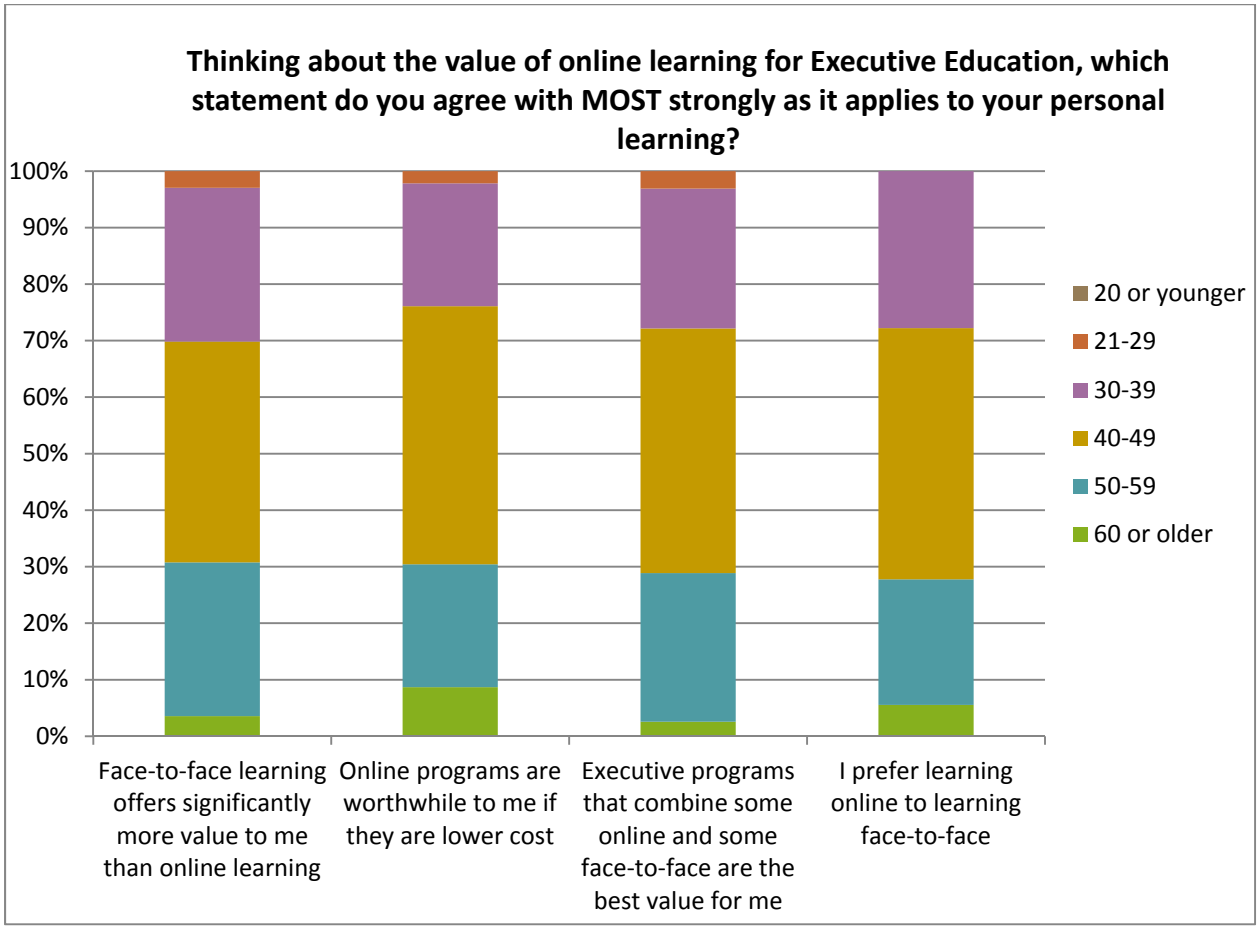
Geographically, English-language respondents came from 61 different countries (n=414) with 39% of respondents reside in the US, 7% in Mexico, and 3% each in France, Brazil, Switzerland, Canada, Germany, followed by 2% each Australia, Japan. All but two of the Spanish-language respondents were from Mexico (n=230).

Survey respondents were first asked which types of training had the most overall value to them in terms of their personal learning. Reponses to this question indicated a split (40/45% English-language, 28/53% Spanish-language) favoring blended learning programs as compared to face-to-face programs. A much smaller percentage of respondents to both surveys favored online-only (15% English-language and 20% Spanish-language).

[42] Institutions participating in this survey were MIT Sloan, INSEAD, ITAM, Columbia University, and the University of Alberta.

Thinking about the value of online learning for Executive Education, which statement do you agree with MOST strongly as it applies to your personal learning?	English (n=444)	Spanish (n=244)
Face-to-face learning offers significantly more value to me than online learning	39.9%	27.5%
Online programs are worthwhile to me if they are lower cost	10.4%	13.9%
Executive programs that combine some online and some face-to-face are the best value for me	45.5%	52.5%
I prefer learning online to learning face-to-face	4.3%	6.1%

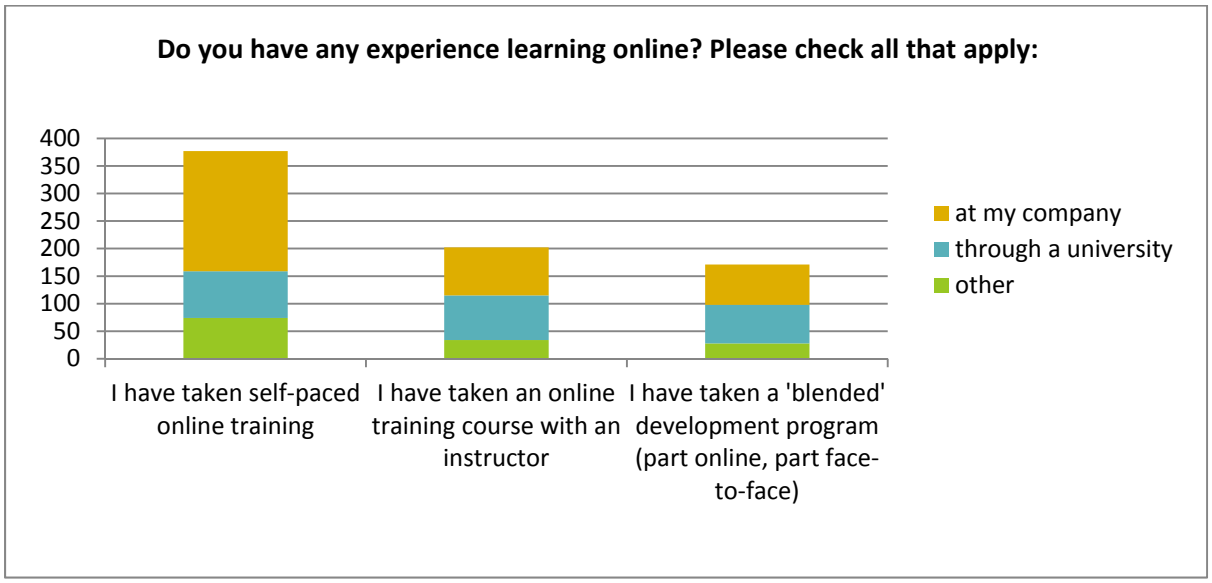
While one might assume that younger professionals have a stronger affinity for online programs, in fact responses were evenly distributed over age ranges (Spanish-language responses showed a similarly even distribution):

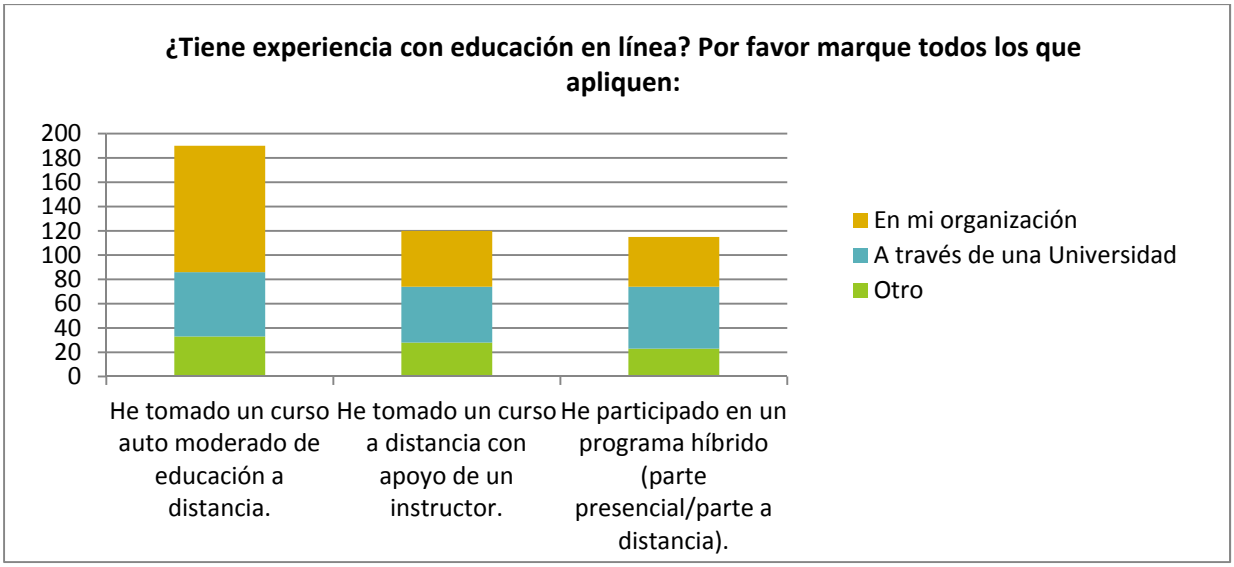


Respondents were then asked what would make them more likely to enroll in an online executive education program. Lower cost was definitely an important factor for both English- and Spanish-language respondents. Spanish-language respondents felt more strongly about graduate credit. However neither group responded strongly to “free” as an important condition:

Which of the following conditions would make you MORE likely to enroll in an online Executive Education program? (check all that apply)	English (n=431)	Spanish (n=244)
It offers a general certificate of completion	29.9%	49.6%
It offers certification in a field	44.3%	39.8%
I receive academic, graduate-level, or course credit	40.8%	65.2%
It could help me with a promotion	24.1%	27.0%
My company sponsors my participation	34.8%	31.1%
It is lower cost than a similar face-to-face program	45.5%	47.1%
It is free	23.9%	17.6%

In terms of experience with online learning, 80% of both English-language and Spanish-language responders had taken either online or blended professional development programs, and of these almost 100% indicated they had taken self-paced online training.





Only a small number of respondents reported taking MOOC-model courses. Awareness of these courses was surprisingly limited, particularly among Spanish-language respondents:

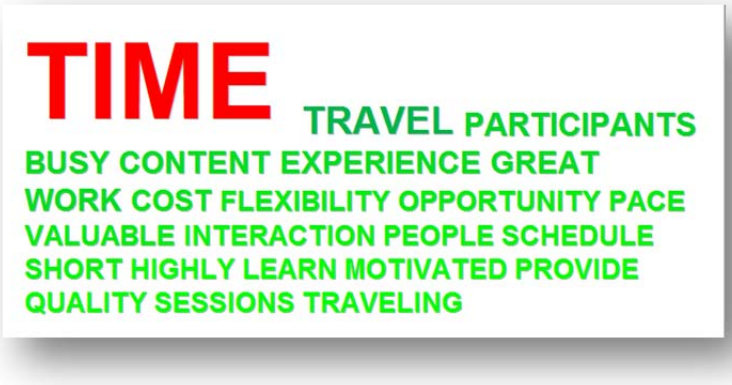
In the past year, have you enrolled in a free semester-long course offered by a university? (check all that apply)	English (n=361)	Spanish (n=204)
Coursera	6.9%	2.5%
Udacity	1.7%	0.0%
edX	3.6%	1.0%
Kahn Academy	2.2%	0.5%
Udemity	0.0%	0.5%
I don't have time to do these courses	16.6%	2.0%
I am not interested in these courses	8.6%	2.0%
I have never heard of these courses	69.0%	93.6%

For those who did enroll in free online courses, however, they self-reported a much higher than typical completion rate of 54% for English-language respondents and 78% for Spanish-language respondents.

Participants were then asked how suitable they thought online education was for executive education. 52% of respondents to the English-language survey, and 68% of the respondents to the Spanish-language survey, felt that online learning was well or highly suited for executive education:

How well suited do you think online learning is for Executive Education?	English (n=428)	Spanish (n=198)
Highly suited	12.4%	21.7%
Well suited	40.0%	46.5%
Neither well nor poorly suited	29.2%	28.3%
Not well suited	14.5%	2.0%
Poorly suited	4.0%	1.5%

Extensive comments were provided in response to this question as well. For those who felt that online was highly or well suited for executive education, participant comments indicated that time and travel were key challenges they hoped online education would help solve:



Online Highly or Well Suited –Open Response Word Frequency Cloud (n=113)

Open response data by Spanish-language respondents showed similar patterns:

Online Highly or Well Suited –Open Response Word Frequency Cloud – Spanish survey (n=77)

For those who indicated online was not well or poorly suited for executive education, the loss of opportunities for face-to-face interaction (both with participants and faculy) as well as networking were key concerns:

Online Not Well or Poorly Suited – Open Response Word Frequency Cloud (n=53)

Only four Spanish-language respondents provided comments on why it was not well suited, which is insufficient data for a word frequency cloud, but personalization and interaction with faculty were both mentioned twice.

In summary, the survey suggested a strong interest in online executive programs, particularly blended models. At the same time, there is still a strong interest in face-to-face programs. The interest in blended and online programs was reinforced by concerns about the time and resources invested in executive education. The survey also suggested a relatively low awareness of MOOCs – as this changes it could influence participant opinions and choices.

Conclusion

The economist Rudi Dornbusch described a crisis as something that "takes a much longer time coming than you think, and then it happens much faster than you would have thought" and this seems to be an apt description of what we are seeing in the higher education space today,[43] with MOOCs being a disruptive technology that is now at the center of a very broad debate.

That said, we might also remember the French epigram, "plus ça change, plus c'est la même chose" ("the more it changes, the more it is the same thing"), which may well continue to apply to the history of higher education. Unanswered questions about the long-term sustainability of MOOCs, and also about how their adoption may impact faculty, could influence the strategic direction institutions ultimately choose.

Clearly there are important unmet needs related to higher education on a national and a global scale. Additionally, distance education, in development for more than a century and delivered over the

[43] http://www.pbs.org/wgbh/pages/frontline/shows/mexico/interviews/dornbusch.html. Credit to Mike Malefakis at the UNICON Directors' Conference in April 2013 for linking this quote to MOOCs.

internet for close to two decades, appears to have entered a new phase in terms of scale and accessibility. For executive education, these developments may provide opportunities for extending reach within organizations, for engaging faculty in new and exciting ways, and for providing educational opportunities that are more flexible in meeting participants' needs.

For the moment, at least, we are in a time of experimentation with, and investment in, new technologies and educational methods that show promise in extending the reach and impact of higher education. Executive education leaders would be well advised to stay connected with strategic conversations on campus, both for the purpose of continuing to differentiate their offerings and also to provide leadership in serving their clients.

Or, to quote Alan Kay, "the best way to predict the future is to invent it."

Appendix I: Select Bibiliography – Some Recent and Popular Articles

Press coverage of MOOCs has been very broad. Here are a few select sources of up-to-date information as of the publication of this report:

"Difference of Opinion on Online Courses," Harvard Magazine, May 1, 2013, http://harvardmagazine.com/2013/05/harvardx-and-edx-online-learning-update

"Major Players in the MOOC Universe," Chronicle of Higher Education, June 3, 2013, http://chronicle.com/article/Major-Players-in-the-MOOC/138817/

"What You Need to Know about MOOCs," Chronicle of Higher Education, June 3, 2013, http://chronicle.com/article/What-You-Need-to-Know-About/133475/

"Online Education (MOOCs) Chronology", The New York Times, http://topics.nytimes.com/top/reference/timestopics/subjects/e/elearning/index.html

"Welcome to the Brave New World of MOOCS", video published by the New York Times, http://www.youtube.com/watch?v=KqQNvmQH_YM

"Massive Open Online Course," Wikipedia, http://en.wikipedia.org/wiki/Massive_open_online_course

EDUCAUSE Executive Briefing, "What Campus Leaders Need to Know About MOOCs", updated Dec. 20, 2012, http://net.educause.edu/ir/library/pdf/PUB4005.pdf

"Mission, MOOCs and Money", Association of Governing Boards of Colleges and Universities, Jan/Feb 2013, http://agb.org/trusteeship/2013/1/mission-moocs-money

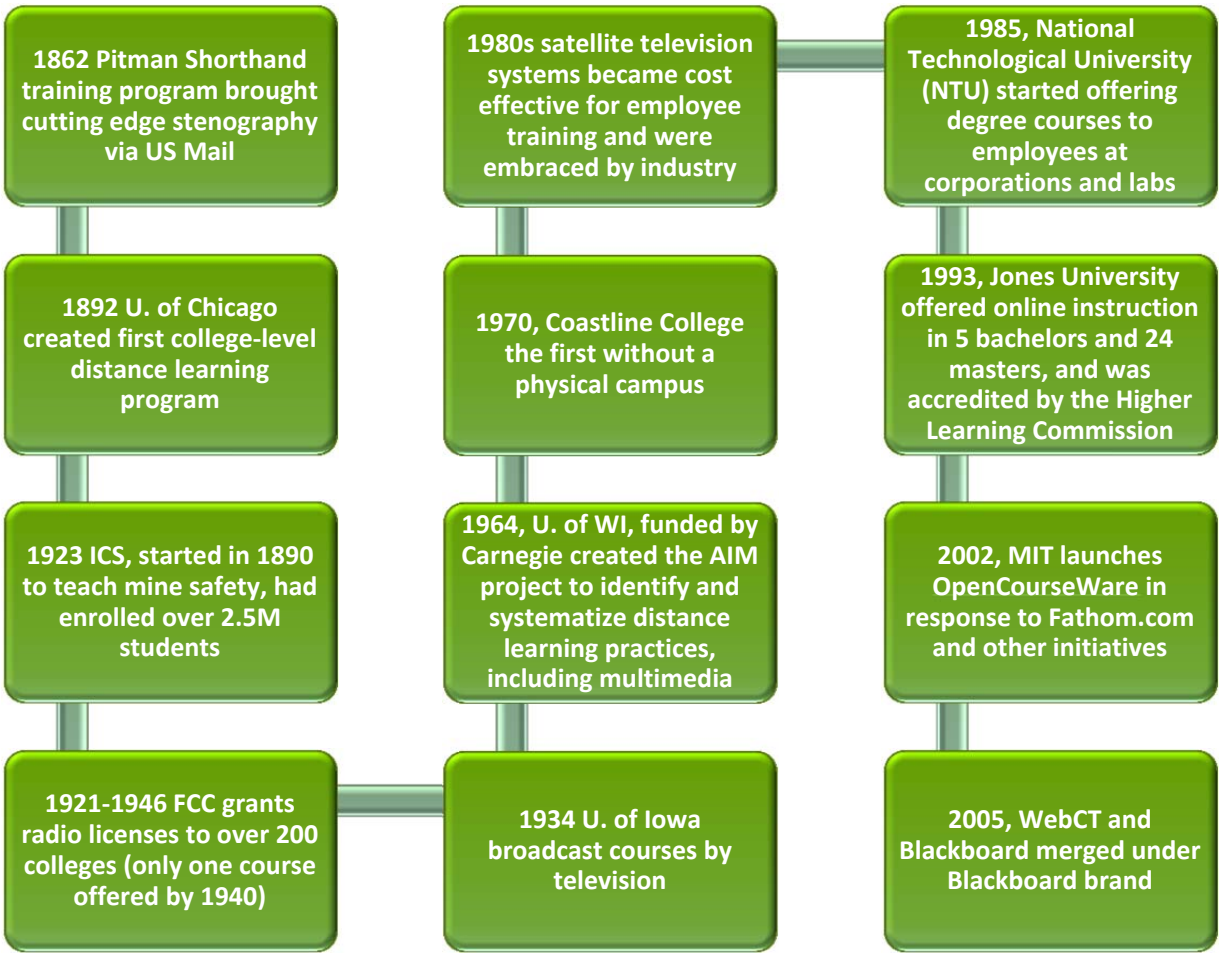
"Napster, Udacity and the Academy", Clay Shirky blog, 11/12/2012, http://www.shirky.com/weblog/2012/11/napster-udacity-and-the-academy/

"Massive Open Online Courses, aka MOOCs, Transform Higher Education and Science", Scientific American, 3/13/2013, http://www.scientificamerican.com/article.cfm?id=massive-open-online-courses-transform-higher-education-and-science

Nathan Heller, "Laptop U: Has The Future of College Moved Online?", The New Yorker, http://www.newyorker.com/reporting/2013/05/20/130520fa_fact_heller

Andrew DelBlanco, "MOOCs of Hazard: Will online education dampen the college experience? Yes. Will it be worth it? Well...", The New Republic, 3/31/2013, http://www.newrepublic.com/article/112731/moocs-will-online-education-ruin-university-experience#

Appendix II: A Brief Timeline of Distance Education Innovations



Sources: http://www.evolution-of-distance-learning.com/ and "A Journey to Legitimacy: The Historical Development of Distance Education through Technology" by D. Casey

About the Author

Jennifer Stine has served in leadership roles in executive and professional education for the past 11 years, first as Executive Director of Professional Education Programs at MIT then as Managing Director of Professional Education at the Harvard Graduate School of Education. Currently she is an independent consultant, focusing on university-industry collaborations. She teaches Organizational Behavior at Harvard Extension School and she has a PhD from Stanford University in history.