

Roundtable discussion; State-of-the-Field Discussion

Citation for published version (APA):

Sonwalker, N., Wilson, J., Ng, A., & Sloep, P. (2013). Roundtable discussion; State-of-the-Field Discussion. *MOOCs Forum*, 1(1), 6-9. <https://doi.org/10.1089/mooc.2013.0006>

DOI:

[10.1089/mooc.2013.0006](https://doi.org/10.1089/mooc.2013.0006)

Document status and date:

Published: 21/08/2013

Document Version:

Peer reviewed version

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

<https://www.ou.nl/taverne-agreement>

Take down policy

If you believe that this document breaches copyright please contact us at:

pure-support@ou.nl

providing details and we will investigate your claim.

Downloaded from <https://research.ou.nl/> on date: 02 Apr. 2023

Open Universiteit
www.ou.nl



Roundtable Discussion

State-of-the-Field Discussion

Moderator: Nish Sonwalkar¹

Participants: Jack Wilson,² Andrew Ng,³ and Peter Sloep⁴

AU1 ¹Co-chairman, EdTech Group at MIT Enterprise Forum, and Director of Research at the United States Distance Learning Association, Boston, Massachusetts.

²President Emeritus of the University of Massachusetts and Distinguished Professor of Higher Education, Emerging Technologies, and Innovation, Amherst, Massachusetts.

³Director of the Stanford Artificial Intelligence Lab and Co-founder, Co-CEO of Coursera, Stanford, California.

⁴Director of Learning Networks at the Center for Learning Sciences and Technologies, Heerlen, The Netherlands.

Nish Sonwalkar: *I am Nish Sonwalkar, editor of the new journal MOOCs Forum, published by Mary Ann Liebert, Inc. The goal of the journal is to acknowledge, discuss, and debate, as well as decide, important issues related to the sustainable success of massive open online courses. To this end, I'm pleased to have assembled a very impressive group of experts for a roundtable discussion regarding the hypothesis "MOOCs will democratize education around the globe." I am also pleased to note that the experts in this roundtable represent major players from both for-profit and not-for-profit sides of the MOOCs community. The opinions represented here are coming from long experience and deep understanding of the online education applicable in the context of MOOCs. As we go around the table for your responses, please introduce yourself and your affiliated organization. I would like to begin with you, Jack.*

Jack Wilson: Thank you, Nish. I am Jack Wilson, President Emeritus of the University of Massachusetts and Distinguished Professor of Higher Education, Emerging Technologies, and Innovation. Thank you for the opportunity to discuss this important statement. Unfortunately, it is unlikely that MOOCs will democratize higher education around the globe. They could become part of that process, but it is equally likely that MOOCs could contribute to increased inequality of educational opportunities. MOOCs are an enormously important development in higher education for many reasons, but they are neither the panacea that proponents pronounce or the calamity that the curmudgeons claim. Instead, they are simply another stage in the development of technology-enhanced learning and a sign that even the most reluctant institutions now recognize that online learning and other forms of technology-enhanced education are here to stay. That is a very good and important development.

Over the last two decades, a quiet revolution has occurred in the deployment of online learning. As the Sloan aln-C consortium has carefully recorded over the last dozen years, online education has grown nearly seven-fold to about 6.7 million enrollees in 2011—a phenomenal growth rate that is averaging over 18.5% per year since 2003. One third of all higher education enrollees are taking an online course. This trend is indeed democratizing higher education, but it has not been deployed uniformly across all segments of higher education. Some large public institutions like the University of Maryland University College, PennState World Campus, UMassOnline, SUNY Learning Network, and many others have led the way. Proprietary for-profit universities like The University of Phoenix, Ashford, Walden, or many others have exploited online education in controversial ways. Private non-profit, and particularly prestigious universities, have not generally taken leadership positions—until MOOCs. With the emergence of MOOCs, the powerful and prestigious privates are back in the game.

Computers, communication, and cognitive sciences have influenced educational innovation for the past 30 years since they were first identified as the forces driving change. The first MOOCs were weak on the pedagogy, pedestrian on the technology, but promising on the potential for free widespread distribution. They are now beginning to use the results of cognitive research to create far more powerful learning environments. In this regard, they have not been innovators, but they can still be fast followers. The current model of presentation by famous professors is an adaptation of the centuries-old, but largely ineffective, lecture models and does not differ much from the old videotaped courses with programmed written materials. While adaptive learning techniques are being utilized, there is far more to be done to create the kind of engagement and interaction that has been shown to be critical to learning.

The hype and the promise is that now anyone anywhere in the world can have access to free high-quality lectures, lecture materials, and interactive exercises. That is a wonderful thing, but it is not a wonderful learning environment in the absence of meaningful interaction, engagement, and communication. The danger is that a two-class society is created in which those that can afford it will have access to engaging, hands-on, highly interactive learning environments with live (even if over a network) interactions with peers and mentors in a resource-rich environment. Those who cannot afford to participate, for financial, geographic, or other reasons, will have access to canned materials, machine tutors, and commodity-level credentials.

For MOOCs to truly democratize and globalize education, they will need to do two things. First, MOOCs will need to do a better job of addressing the 3C's of computing, communication, and the cognitive sciences—to create live online communities of learners and mentors

ROUNDTABLE DISCUSSION

who have meaningful interactions with rich resources, engaged peers, and even hands-on experiences. Second, they will need to find a financial model that allows the creation, distribution, and operation of these highly engaging environments. Current financial models do not look promising. I am rooting for many more exciting developments in MOOCs, but on both counts there is much to be done.

Nish Sonwalkar: *Thank you, Jack. You have a very interesting perspective on MOOCs. Another unique view on MOOCs is held by Andrew Ng. Please tell us your thoughts regarding “MOOCs will democratize education around the globe.”*

Andrew Ng: Thank you. I am the director of the Stanford Artificial Intelligence Lab, the main AI research organization at Stanford, and cofounder, co-CEO of Coursera, an education company that partners with the top universities and organizations in the world to offer courses online for anyone to take, for free. Our technology enables our partners to teach millions of students rather than hundreds. I think your subject is at the heart of MOOC sustainability.

Massive open online courses absolutely have the potential to democratize education. When I was prototyping early versions of now-ubiquitous MOOC technology (for example, online video lectures, auto- and peer-grading, and online discussion forums), I focused on one question: *How can we develop an online course that scales to arbitrarily large numbers of students?* The idea of scale was—and still is—fundamental; in reaching the broadest possible audience, online courses are changing the economics of higher education and allowing students around the world to learn without limits.

Let me explain. In MOOCs, there are substantial costs when creating course content, but once the content is online, the marginal cost of signing up one more student is effectively zero. This allows us to offer high-quality university courses—courses that were previously inaccessible to millions of students who can’t afford on-campus tuition costs—essentially for free. In a world where this is possible, education and the success that comes with it are not determined only by wealth or privileged access but by talent and self-motivation.

Further, education is no longer determined by geographic location. Students from every country now have access to course content from institutions around the world. At Coursera, we’ve partnered with institutions from more than a dozen countries, and we now offer courses in seven languages. We’re witnessing the creation of a truly global community, one where a student in the United States can discuss the finer points of web development or modern poetry with students from Africa, Asia, Europe, and the Middle East. MOOCs are not only leveling the economic playing field in education within countries like the United States, they are also leveling the playing field internationally, giving students access to the best content and instructors, in an extensive range of topic areas, whether they are in Silicon Valley or rural Asia.

It’s become clear that MOOCs have a tremendous power to initiate a real paradigm shift, opening up doors to opportunities that were once closed to millions of people around the world. At Coursera, we’re working to harness this power and actualize the idea of “edu-

cation for everyone” by reducing language barriers and making great educational content available online. The democratization of education might not be a reality yet—significant barriers, such as access to Internet technology and the inescapable need for high-quality, in-person instruction to complement online learning, still remain. But with MOOCs, new technology, and student demand for education, democratization of education is certainly within reach.

Nish Sonwalkar: *Very good, thank you. Next let’s hear the edX perspective from Dan O’Connell.*

Dan O’Connell: Thank you, Nish. Yes, I am Dan O’Connell, and I am the associate director of communications at edX.

In his recent speech at Knox College, U.S. president Barack Obama promised to “lay out an aggressive strategy to shake up the tertiary educational system, tackle rising costs, and improve value for middle-class students and their families.” MOOCs will help with this by providing access to quality learning. At edX in particular, we have 1.2 million enrollees from every country in the world. We have heard from many of our students who have told us that without courses from the top schools in our X Consortium, quality education would be beyond their reach.

From its inception, edX has been committed to conducting research into learning and how to improve learning not only online but also on campus. Our research will help traditional education improve. One way this will happen is by using educational research from MOOCs to improve on-campus learning by incorporating what we learn into blended courses. Research from edX data will focus on improving retention, course completion, and learning outcomes. The result will mean that every type of learner will benefit from innovative teaching techniques.

Nish Sonwalkar: *Excellent, thank you. Now for a European viewpoint from Professor Peter Sloep.*

Peter Sloep: Thank you, Nish. Yes, I am Peter Sloep, and I am the director of learning networks at the Center for Learning Sciences and Technologies (celstec.org) in Heerlen, The Netherlands.

Thank you for asking me to contribute to this important discussion. There are many ways to look at MOOCs, but my preferred viewpoint is to regard them as one particular design for a technology-enhanced environment for learning. However, they are not just some random kind but one that has dominated the educational headlines for over a year now. Their notoriety comes, I surmise, from their association with elite or tier-one universities in the United States and the massive financial backing the MOOC-providing companies have received. This success, however, does not exempt us from the obligation to assess the many claims that are made for their value in the learning environment, quite the contrary. So, are they as efficient financially as they are claimed to be? Do they indeed deliver the high-quality learning experiences that the MOOC platform providers want us to believe they do? Do they offer attractive forms of learning? And, also, will they democratize education around the globe, as

AU2

ROUNDTABLE DISCUSSION

for example, Coursera suggests: “We believe in connecting people to a great education so that anyone around the world can learn without limits.”¹ This last claim is the topic of my concern here.

The argument for the democratizing effect of MOOCs is that, since they are freely available at no cost to the student, they increase access to higher education. MOOCs, the argument goes, allows anybody in the world with Internet access to lavish themselves at the fountains of knowledge that top universities have decided to put online. This abstract argument is often embellished by stories about youngsters in developing countries who have performed excellently in some MOOC, thereby gaining access to scholarships that allow them to continue their studies on the very premises of the MOOC-providing elite universities. Although I am willing to accept that it is quite a felicitous turn of events for these individuals, I will argue that these stories do not constitute evidence for the democratization of higher education or its desirability. My argument is two-pronged. I will first argue that MOOCs are not a democratizing force in the sense that we commonly understand democracy; secondly, I will argue that we should have serious doubts about letting MOOCs rule education worldwide.

To flesh out my argument, let us assume that MOOCs will radically change the landscape of higher education in the world. Setting aside for the moment the effects MOOCs may have in the developed world, suppose that universities in the developing world would cease operating or would adopt the status of a MOOC study center. Presumably, such universities would enter a kind of licensing deal with a MOOC provider. The deal could, for example, allow them to act as a hub for students to get together and collaborate, to offer face-to-face tutoring services, to stage the MOOC’s assessment (not for credits), or to set their own exams (for credit). So essentially they act as a conduit for educational content developed and maintained elsewhere. This scenario is not far off; it has been seriously considered by Dheeraj Sanghi, a professor of computer science at a university in India.² Would such an arrangement constitute a case of democratizing higher education?

There can be no doubt that under this scenario many more people now have access to high-quality, university-level content than previously was the case. Also, they can participate in forum discussions with peers across the globe, further honing their skills, and take tests that help them assess their knowledge. This clearly constitutes a widening of their opportunities to learn. But is it a case of democratizing education? I think not. Democracy is about people’s (legal) right to codetermine the decisions that affect them, their lives and futures or, in the words of Tony Bates “their hopes and dreams.”³ With MOOCs, I see very little of that. In MOOCs that are funded by venture capital (i.e., Coursera, Udacity), decisions are made by the investors for whom returns on investments are the key concern, not people’s hopes and dreams. And even in MOOCs such as Harvard and MIT’s edX, funded by donations, influence may be granted as a token of goodwill but not as a right. Please note that I am not arguing here that commercial and not-for-profit MOOC providers should be subject to democratic forces, I am merely concluding that, on a widely shared understanding of democracy, MOOCs cannot be said to democratize education.

One could rebut by saying that I take democratization literally while, obviously, the intention is merely to refer to widening access

to education. And as I already argued, that is a lofty goal. However, should we embrace the kind of widening that MOOCs afford? Again, I don’t think so. My argument here is that the MOOC way of widening access is objectionable on moral grounds. Courses, all courses, even those in computer science, come laden with cultural values. For an illustration of this point, read Dheeraj Sanghi’s blog post already referred to, but also examples given by Ghanashyam Sharma in his blog post.⁴ Cultural values pervade the choice of courses, the elaboration of topics, the pedagogy chosen, but also the examples and assignments given. Such value-ladenness is desirable pedagogically, as it allows teachers to make their teaching fit in with students experiences, but also sociopolitically, as it allows teachers to let a course contribute to the development of local culture. Value-neutral courses thus exemplify bad teaching, assuming it is at all possible to achieve value neutrality (which I don’t believe one can).

Now, developing countries lack the financial and human resources to develop an educational system with extensive, high quality, “localized” content. So when confronted with MOOCs, developing countries cannot afford the luxury of refusing them. After all, any course is better than none, and a course laden with Western values is better than one that teaches severely outdated topics. So developing countries end up surreptitiously importing Western value systems with MOOCs. To me, this amounts to a form of cultural imperialism (others will even go so far as to use the term neo-colonialism, which I find less apt). The MOOC providers profit from the developing countries dire financial situation. This is morally objectionable and, according to Michael Sandel, exemplifies the argument from coercion: developing countries really have no choice other than to import MOOCs.^{5,6}

Importantly, this need not be. The morally right thing to do would be to provide financial support to developing countries to develop their own courses or to help them get access to the needed human resources. This could be done via open educational resources (OERs). OERs are not open to the objection of cultural imperialism as they may be jointly created and their courses, unlike MOOCs, may be adapted (assuming they are made available under a share-alike Creative Commons license). As MOOCs divert funds from the development of OERs—the money that the Gates Foundation donates to MOOCs is not available for OER development anymore—they are a threat to the maturation of this alternative route. This may be seen as a third objection to the claim that MOOCs democratize education on a global scale.

So I don’t subscribe to the statement that MOOCs will democratize education around the globe. But the health of MOOCs as an educational innovation does not hinge on this. MOOCs have a lot more to offer than is claimed in such “absurd views” (in the words of Ghanashyam Sharma). I welcome studies in their ability to be effective and efficient learning environments, but let’s evaluate claims to that effect in culturally homogeneous contexts only.

Nish Sonwalkar: Thank you, Peter, and thanks again Jack, Andrew, and Dan. Clearly, the mission of the MOOCs Forum to share a variety of perspectives and opinions regarding the mission and sustainability of massive open online courses has been served by gathering your inputs. A vigorous debate and dialogue can only

ROUNDTABLE DISCUSSION

lead to improvement of MOOCs in the future to reach the necessary maturity. Thank you for providing your thought-provoking opinions and ideas on the broader impact of MOOCs on education. Best wishes in your important work.

AU3 REFERENCES

1. About Coursera. Coursera, 2013 (www.coursera.org/about).
2. Sanghi D. MOOC: Massively Open Online Courses. Musings of Dheera Sanghi, July 20, 2012 (<http://dsanghi.blogspot.fr/2012/07/mooc-massively-open-online-courses.html>).
3. Bates T. When MOOCs crash and burn. Online learning and distance education resources, February 5, 2013 (www.tonybates.ca/2013/02/05/when-moocs-crash-and-burn/).
4. Sharma G. A MOOC delusion: Why visions to educate the world are absurd. WorldWide, The Chronicle of Higher Education, July 15, 2012 (<http://chronicle.com/blogs/worldwide/a-mooc-delusion-why-visions-to-educate-the-world-are-absurd/32599>).
5. Sandel MJ. What Money Can't Buy: The Moral Limits of Markets (p. 256). New York: Farrar, Straus and Giroux, 2012.
6. Sloep PB. MOOCs, what about them? Some moral considerations. Stories to TEL, January 3, 2013 (<http://pbsloep.blogspot.nl/2013/01/moocs-what-about-them-continued.html>).



Jack M. Wilson, Ph.D., is President Emeritus The University of Massachusetts and Distinguished Professor of Higher Education, Emerging Technologies, and Innovation. Widely considered a thought leader and sometime critic for MOOCs, Wilson was recently the keynote speaker at The University of Pennsylvania Higher Education Leadership Conference: Innovation in an Era of Disruptive Change as well as

delivering two keynotes on MOOCs at the recent annual meeting of the Association of American Colleges and Universities.



Andrew Ng is the co-founder of Coursera and a Computer Science faculty member at Stanford. In 2011, he led the development of Stanford University's main MOOC (Massive Open Online Courses) platform, and also taught an online Machine Learning class that was offered to over 100,000 students, leading to the founding of Coursera in January 2012.



Peter Sloep, PhD, is a Full Professor of Technology Enhanced Learning in the School for Teacher Education at the Open University of The Netherlands. He is particularly interested in formal and informal learning in networked learning settings, using existing and custom-made online social networks and their affordances as a supporting learning technologies. Dr. Sloep received his PhD in theoretical biology from the Universiteit Groningen, Groningen, the Netherlands.

retical biology from the Universiteit Groningen, Groningen, the Netherlands.

*Nish Sonwalkar
Editor-in-Chief
MOOCs Forum*

E-mail: nish@alum.mit.edu

- AU1 Please confirm accuracy of author affiliations.
 AU2 Please add a reference entry for direct quotes.
 AU3 Please add date of access for all online references.