

SPECIAL ISSUE
Models of Open Education in Higher Education

education policy analysis
archives

A peer-reviewed, independent,
open access, multilingual journal



Arizona State University

Volume 24 Number 38

March 28, 2016

ISSN 1068-2341

**Awarding College Credit for MOOCs:
The Role of the American Council on Education**

Jason Stone
Oklahoma State University
United States

Citation: Stone, J. (2016) Awarding college credit for MOOCs: The role of the American Council on Education. *Education Policy Analysis Archives*, 24(38). <http://dx.doi.org/10.14507/epaa.24.1765>
This article is part of EPAA/AAPE's Special Issue on *Models of Open Education in Higher Education*, Guest Co-Edited by Dr. Lisa Petrides and Dr. Cynthia James.

Abstract: Emerging alongside the open educational resources movement of the past decade, Massive Open Online Courses (MOOCs) have been widely heralded as advancing cause of providing increased access to higher education. The article explores the implications of the recommendation by the American Council on Education (ACE) to offer college credit for a select group of MOOC offerings, with regard to benchmarks of access and affordability, in light of recent developments in credentialing. In particular, the article examines the innovative partnership between Arizona State University's Global Freshman Academy (GFA) and MOOC provider edX, with regard to its potential to both disrupt and transform higher education by contributing to the development of accessible, affordable, alternative credentialing pathways.

Keywords: credentials; credits; college transfer students; distance education; educational innovation; educational technology; electronic learning; equal educational opportunity; influence of technology; instructional design; instructional innovation; Internet; online courses; prior learning; web-based instruction

Otorgando créditos universitarios a través de MOOCs: El papel del Consejo Americano de Educación

Resumen: Con el auge del movimiento de los recursos educativos abiertos en la pasada década, los Cursos Online Masivos Abiertos (MOOCs, por sus siglas en inglés) se han proclamado como la mayor causa del avance en el acceso y la asequibilidad de la educación superior. Este artículo analiza las implicaciones de la recomendación de la American Council on Education (ACE) de ofrecer créditos universitarios para un grupo selecto de ofertas MOOC, en relación con los puntos de referencia de acceso y asequibilidad y a la luz de los recientes progresos en la acreditación. En concreto, este artículo examina la innovadora colaboración entre la Global Freshman Academy (GFA) de la Universidad Estatal de Arizona y el proveedor edX de MOOC, con respecto a su potencial de alterar y transformar la educación superior a través de su contribución al desarrollo de vías de acreditación alternativas, accesibles y asequibles.

Palabras clave: credenciales; créditos; transferencia de estudiantes universitarios; educación a distancia; innovación educativa; tecnología educativa; aprendizaje electrónico; oportunidades educativas; influencia tecnológica; diseño instruccional; innovación en la instrucción; Internet; cursos en línea; aprendizaje previo; instrucción por Internet

Dando créditos universitários através MOOCs: O papel do Conselho Americano de Educação

Resumo: Emergindo do movimento da década previa dos recursos educativos abertos, Cursos Abertos Massivos Em-líneas (ou MOOC, seu acrônimo inglesa), tem sido anunciado como o maior avance em prover acesso à educação superior. O artigo examine as implicações da recomendação do American Council on Education (ACE) em oferecer créditos universitários para um seletto grupo de ofertas de MOOC com respeito aos benchmarks de acessibilidade e custo, e com consideração aos recentes desenvolvimentos. Em particular, o artigo examine o parceria inovadora entre o programa Global Freshman Academy (GFA) da Universidade Estatal do Arizona e edX, provedor de MOOC, com respeito à seu potencial para desmantelar assim como transformar a educação superior por contribuir no desenvolvimento de caminhos que sejam alternativos e acessíveis preços e em acceso.

Palavras chave: credenciais; créditos; Transferência de alunos da faculdade; educação a distância; inovação educacional; tecnologia educacional; aprendizagem eletrônica; igualdade de oportunidades educacionais; influência da tecnologia; inovação no ensino; Internet; cursos em-linha; aprendizagem prévia; instrução baseada no Internet

Awarding College Credit for MOOCs: The Role of the American Council on Education

In the early winter of 2013, the American Council on Education (ACE) recommended that a total of 12 massive open online courses (MOOCs), including algebra, statistics, and computer science, be evaluated by their member institutions for credit (Fain, 2013; Kolowich, 2013). The MOOC providers for these courses included two of the largest names in this nascent sector of the education industry, Coursera and Udacity. During the year prior to the ACE decision, MOOCs garnered considerable attention in education publications and journals, as well as the press at large. For example, *The New York Times* proclaimed 2012, “the year of the MOOC” (Pappano, 2012). MOOCs were characterized as disruptive in a multitude of contradictory ways: a poor substitute for a university education (Bady, 2013), an existential threat to educational institutions of all types (Sumel, 2013), a long-awaited total democratization of knowledge and credentialing (Booker, 2013).

Despite the media hype that surrounded MOOCs in 2012, the potential for MOOCs to disrupt higher education remains to be seen.

This article explores the implications of ACE's recommendation to offer college credit for a select group of MOOC offerings, and examines the potential for MOOCs to both disrupt and transform higher education by creating alternative pathways to college credit and degree completion. In light of significant developments in MOOC credentialing, including a recent credentialing partnership between Arizona State University and edX, this essay poses and seeks answers to the question: Does the ACE decision to award college credit for MOOCs matter?

MOOCs, an Anatomy

MOOCs are enormous, free, online courses that have emerged along with the open educational resources movement over the past decade. The term "MOOC," an acronym for Massive Open Online Course, was coined in 2008 by Dave Cormier and Brian Alexander during a University of Manitoba course titled *Connectivism and Connective Knowledge*, led by George Siemens, formerly of Athabasca University and currently at University of Texas at Arlington, and Stephen Downes of the National Resource Council of Canada (Parr, 2013b). The course enrolled 25 tuition-paying students, and roughly 2000 general public online learners who enrolled for free (Parr, 2013b).

Today, MOOCs typically involve large initial enrollments, often in the many thousands, with no sign-up fees or entry costs (Bates, 2014; Pappano, 2012). Open to all, the instruction takes place mostly online; however some instructors have included face-to-face components in their courses. The literature distinguishes between two types of MOOCs: cMOOCs and xMOOCs. xMOOCs are a more recent phenomenon. Both types of MOOCs are typically led by luminaries in their fields (Cheal, 2013; Pappano, 2012). The difference revolves primarily around pedagogy and instructional style. The online equivalent of large, lecture-based freshman survey courses, xMOOCs focus on the transmission of knowledge, primarily through downloadable video lectures (Caulfield, 2013). Learning in the xMOOC environment is demonstrated in much the same way as it would be in a large lecture course: students successfully complete objective quizzes and tests, contribute to discussions, complete short essays and writings, engage in structured group work, and other types of assignments that constitute major learning assessments (Bates, 2014). Some xMOOC content providers with the largest enrollments are Coursera, edX, and Udacity.

In contrast to the transmission-based learning model of xMOOCs, cMOOCs emphasize knowledge sharing among participants (Bates, 2014). In cMOOCs, learning is demonstrated by interaction with other course participants and by substantive contribution to the collective understanding of the class with regard to the subject matter. cMOOCs are less concerned with awarding credit, than with developing communities that persist and engage actively in the world (Caulfield, 2013; Parr, 2013b).

Credit for MOOCs remains rare, but about half of undergraduate students receive a digital badge or certification for completing a MOOC (Grajek, Bichsel, & Dahlstrom, 2013). MOOC completion rates vary widely, from around 5% to around 20%, depending on student enrollment intentions, such as whether they consider themselves as browsers, auditors, or motivated to earn a certificate (Parr, 2013a; Reich, 2014). It is important to note that student awareness of MOOCs is still limited; according to recent data, only about one-quarter of students are aware of MOOCs (Grajek, Bichsel, & Dahlstrom, 2013).

The ability of MOOCs to transform traditional forms and practices of education and revolutionize for-credit education is likely to revolve around credentialing (Kolowich, 2013), so the question of whether or not students receive credit for their participation in MOOCs is and should

be closely attended to by educational researchers, MOOC providers, and academic administrators (Booker, 2013). Despite the centrality of that consideration, there has been limited research that examines MOOCs within a credentialing framework.

American Council on Education, a Brief History

According to ACE president Molly Corbett Broad, ACE's assessment of non-traditional education reaches back over decades and underscores ACE's commitment to adult education (ACE, 2012). The largest of the so-called "Big 6" higher education umbrella organizations (Cook, 1998), ACE dates back to 1918 and has been instrumental in a number of policy developments over the years, including the passage of the G.I. Bill (Zook, 1950), the construction of the U.S. Department of Education ("American Council," n.d.), the founding of standardized entrance exam testing services (Zook, 1950), and the passage of the post-9/11 G.I. Bill (Hartle, 2010). Comprised of over 1,800 member institutions (ACE, n.d.a), ACE has been recommending that institutions award credit for ACE endorsed courses since 1974 (Book, 2013).

ACE CREDIT service determines recommendations for college credit in prior learning instances that include workplace experience, military training, corporate training, and other forms of non-traditional, extra-institutional learning (ACE, n.d.b; "American Council," n.d.). According to ACE, its reviews are academically sound, involving the judgment of experienced faculty (ACE, n.d.b). ACE's recommendation to offer credit for the 12 MOOCs from Coursera and Udacity was preconditioned on the requirement that students follow protocols established by the MOOC providers for verifying identity and assessment integrity (Fain, 2013; Kolowich, 2013). ACE representatives commented that their recommendation should be welcomed as advancing the causes of access and affordability (Book, 2013).

The MOOC Promise: Accessible, Affordable College Credits

ACE's recommendation to award credit for MOOCs reflects their stated commitment to advancing the causes of access and degree affordability in higher education (Book, 2013). According to Cathy A. Sandeen, vice-president of the Center for Education Attainment and Innovation at ACE, reasons for evaluating Udacity's MOOCs for credit included improving access to college and degree completion by providing multiple entry paths (ACE, 2013; Fain, 2013). Prior to ACE's announcement of its recommendation, Kristen Domonell (2013) writing for *University Business* predicted that the decision could mean "an improvement in college affordability for hundreds of thousands of students" (Domonell, 2013).

Following ACE's lead, Coursera and Udacity also framed the decision to recommend credit as having a positive impact on access to education and student's ability to pay for education toward degree completion (Funnel, 2014). However, the public relations rhetoric employed by MOOC providers has proved less stable, as may be witnessed in an examination of Coursera's website. In the press releases leading up to and immediately following ACE's decision to recommend credit for five courses on the Coursera platform, components of Coursera's mission emphasizing timely, affordable degree completion were heavily emphasized (Coursera, 2012; Kolowich, 2013). Specifically, Coursera's "About" page emphasized degree completion, defraying college costs, and displacing brick and mortar higher education. Coursera's blog post dated February 7, 2013, mentions Coursera's commitment to, "working towards a degree" (Coursera, 2013). This blog page also states, "We want to help more students enter college with credit already accrued and exit college on time, on budget and with a degree in hand" (Coursera, 2013). Two years later, Coursera's website no

longer reflects significant emphasis on access and affordability in higher education. Nevertheless, because these two causes justify ACE's recommendation, they may serve as reasonable benchmarks by which to assess the potential efficacy of ACE's recommendation.

MOOCs for Credit

A recent pilot study, funded by the Bill and Melinda Gates Foundation and administered by ACE, sought to examine the MOOC promise of accessible, affordable college credits more closely (APUS, 2013). Specifically, the study explored the potential for MOOCs reach low-income, young adult and older adult learners, and the capacity of MOOCs for integrating into traditional degree completion programs (APUS, 2013). Participants in the pilot study included many established purveyors of online, for-profit, often technical, adult degree programs, with robust and mature systems for assessing prior learning and granting credit for non-traditional educational offerings. Pilot participants—including Central Michigan University, Kaplan University, Regis University, SUNY-Empire State, University of Maryland–University College, Colorado University–Global, American Public University, and Western Carolina University—agreed to offer credit for successful completion of MOOCs recommended for credit by ACE. The pilot revealed a lack of student interest in applying for credit; specifically, the project resulted in no registered requests for MOOC credit by students in participating institutions (Negrea, 2014).

Provost John Bellum at Colorado State University–Global (CSU-G), one of the largest providers of high-quality accredited, online, public education (Mangan, 2012), conjectured that the reasons why no one had sought credit for CSU-G's MOOCs included the self-pacing, the demonstration of learning, the extra testing, and the “rigorous” process that students must undergo to receive credit for these MOOCs (Negrea, 2014). Provost Marie Cini at University of Maryland–University College, a peer institution to CSU-G and an acknowledged leader in both prior learning assessment and in adult education degree completion (Mangan, 2012), observed, “It's just a lot easier to take a class somewhere and pay for it than to go through all this” (Negrea, 2014). Cini's remarks suggest that the rigorous processes entailed in obtaining credit for MOOCs may have effectively eliminated accessibility for many students.

To obtain credit for CSU-G's UPCEA pilot Udacity MOOC, “Introduction to Computer Science,” interested students would have needed to pay \$350 per credit, plus \$89 to sit for a final exam proctored by Udacity (Negrea, 2014). The price of MOOC credits among the UPCEA consortium members varies widely. In contrast to CSU-G, American Public University's standard tuition rate for general education is \$270 per credit. To improve college credit affordability, some institutions have offered a discounted tuition rate for credits earned in MOOCs; for instance, in 2014, the first MOOC Pennsylvania State made available for credit, an undergraduate criminology MOOC, was offered at a discounted tuition rate of \$333 per credit, reduced from \$691 per credit.

The University of Oklahoma (OU) recently announced plans to open a wide range of its accredited online learning courses to the general public from all over the world at no cost or credit, while continuing to offer those courses for credit to enrolled students (Schaffhauser, 2014). OU's online model, while reminiscent of the original 2008 “MOOC” offered by Siemens and Downes through the University of Manitoba (Parr, 2013b), may best be described as “flipping the MOOC” (Schaffhauser, 2014). In effect, OU's “flip” offers credit for MOOCs to OU students, while considerably widening the scope of their potential real-time course interactions. In one popular OU organic chemistry course, *The Chemistry of Beer*, 9,000 students enrolled globally, along with several hundred OU students (Schaffhauser, 2014). However, with a nonresident tuition rate of over \$500

per credit hour, affordable enrollment for credit in OU MOOCs may be limited to Oklahoma residents for whom tuition is significantly discounted.

Thomas Pack, writing for *Information Today* (2013), notes that Coursera's partners include some of the most prestigious institutions in America: Stanford, Brown, Columbia, Duke, Emory, Johns Hopkins, Princeton, Rice, among others. Significantly, none of those institutions has announced plans to offer college credits for MOOC learning. In fact, one of edX's founding partner institutions, Cornell University, recently released a faculty committee report that questions Cornell's involvement in future MOOC ventures and explicitly rules against Cornell awarding credit for MOOC courses taught by Cornell faculty (Cornell University, 2014). Clearly, if students are to receive college credit for participation in MOOCs, that credit will be awarded at institutions more receptive to this emerging alternative credentialing system.

Arizona State University, a New Partnership with edX

Arizona State University (ASU) recently announced a campaign to award college credit to MOOC enrollees in their Global Freshman Academy (Straumsheim, 2015). In this endeavor, ASU will partner with the Harvard/MIT MOOC provider, edX (Chung, 2015). Unlike Coursera and Udacity, which are private, for-profit corporations (Shumski, 2013), edX is managed as a non-profit academic entity, with the stated goal of "expanding access to education for everyone" (edX, n.d.).

ASU's promotion of MOOCs through its Global Freshman Academy (GFA) pilot program is a major development in MOOC credentialing because ASU has an excellent reputation, nationally and internationally. An acknowledged leader in online degree programs (Best online, 2015), ASU is also respected for the high quality graduates they produce, having ranked fifth nationally for adequate graduate preparation for the workforce in a 2010 report by *The Wall Street Journal* (Evans, 2010). With the largest enrollment of any public university in the United States (Snider, 2014), ASU proposes to award college credit for at least a dozen (Chung, 2015).

In a departure from standard administrative protocol, ASU's GFA students will not need to petition for the credit until after they have completed the MOOC (Anderson, 2015). Prior to ASU's GFA pilot, students who wanted to earn credit for one of the ACE endorsed MOOCs would need to sign-up for the course, declare their intention to seek credit, make an initial payment to the MOOC provider, and successfully complete all of the course requirements on time, with a passing grade. Students would then go to a nationally certified testing center and pay around \$100 to take a comprehensive final exam. The teaching team would grade that exam and decide if the student should get a signature track, endorsed for credit, certificate of completion. The student would then take that MOOC certificate to a Registrar or Department Head and apply for credit. ASU's GFA turns that model on its head (Straumsheim, 2015).

Under ASU's new model, students need only an email address and a name to sign-up for the class. Students will simply declare that they are likely to pursue credit at the end of the course, complete all assignments in an identity-verified manner, complete the course and decide if they would like credit, then petition ASU to receive the credit. ASU then awards credit at a significantly discounted rate: less than \$200/credit hour, even to international and/or out-of-state students (Chung, 2015). Because all of the faculty, curriculum, teaching assistants, content, and identity verification are all produced and/or controlled by ASU, these new MOOCs will be available for credit without the approval of the American Council of Education. Additionally, because ASU has been offering all of these courses online in fully regionally accredited online programs, ASU is able to provide fully transportable college credit for these courses, which likely will be recognized by other institutions, nationally and internationally.

While ASU's GFA affiliation with edX has been hailed by *The Washington Post* as "groundbreaking" (Anderson, 2015), many questions persist. Which students will petition ASU for credit? Will other institutions accept those credits? How will the partnership between edX and ASU impact credentialing of learning in MOOCs? At this point, it is too early to know, but if ASU's Global Freshman Academy is successful at awarding discounted college courses to large populations of learners, the disruptive and potentially transformative effects of this development will likely be subtle at first and possibly pronounced in years and decades to come.

Furthermore, while ASU appears to be on a solid footing, leading with courses titled Astronomy, Western Civilization, and Human Origins, that footing may be tested this academic year when the GFA rolls out an English Composition MOOC as a component of the pilot program. Writing intensive courses like composition and philosophy are more difficult to teach successfully online; English Composition has proven to be an especially tough subject to teach in the MOOC format (Head, 2013). ASU has committed to ensure that all work submitted through the MOOCs is evaluated by ASU faculty or teaching assistants (Straumsheim, 2015).

Predictably, ASU's GFA pilot announcement provoked accreditation concerns from critics. Researcher and cMOOC pioneer at the University of Texas at Arlington, George Siemens, dismissed the controversy in terms that normalized the pilot program: "This is what has in the past been called 'distance education' or 'online learning'. . . Nothing new here, folks, move along" (Straumsheim, 2015). While Siemens correctly describes the ASU pilot, there is nevertheless some nuance that his description seems to miss: ASU's credentialing procedure effectively adopts the online courses offered on the MOOC platform for ASU credit. The credit on the ASU transcript will not have any indicators describing it as MOOC credit or even as online credit. Department Heads and Registrars alike will have no way of distinguishing the credit on the transcript as MOOC credit; it will appear identical to that obtained on the ASU campus. Furthermore, when those credits come from ASU, Department Heads and Registrars will be evaluating a transcript from a prestigious, recognized leader in education, rather than assessing credits from a MOOC provider endorsed by ACE. Such credit equivalency and prestige renders ASU's program a potential watershed with regard to students' ability to earn credit for learning happening in a MOOC.

Perhaps the most significant aspect of the ASU GFA pilot is that it effectively sets a ceiling for what first-year courses should cost. The fact that ASU has declared a market-based tuition ceiling for freshman education could be a significant factor in changing financial outlooks across higher education, particularly at community and technical colleges, and also at four-year comprehensives that depend upon freshmen enrollment fees to pay for their technical and/or graduate programs. Guaranteeing the tuition at under \$200 per credit is a potentially effective marketing strategy, as price-conscious students will likely turn away from options like the University of Phoenix, which would cost them thousands of dollars for a single online course, in favor of ASU's GFA, where they can earn more transportable credits from a respected brick and mortar institution. The sector of for-profit, Internet-based, online education providers will be most disrupted by ASU's announcement, as will institutions competing for the demographic of students that typically embraces online classes—including adult, non-traditional students who are returning to school and trying to balance work, family, and career. This educational demographic is sizable. According to the most recent "Online Report Card", an annual report that tracks online education in the United States, at least 28%, or more than one out of every four students took at least one online course in 2015 (Allen & Seaman, 2016).

Does the ACE Decision to Award College Credit for MOOCs Matter?

Using ASU as a case in point, one is left questioning: Does the ACE decision to award college credit for MOOCs matter? The ASU GFA pilot announcement indicates that the questions regarding the credentialing of MOOCs will be decided on college campuses, rather than within educational content providers like Coursera and Udacity—a shift that reduces the significance of ACE’s recommendation. ASU’s important test case for MOOC credentialing could signal the beginning of a much-anticipated transformation of the traditional forms and practices of higher education. Only time will tell.

Meanwhile, in the wake of ACE’s decision, unrealistic expectations regarding MOOCs have been assuaged. ACE’s decision may have mainstreamed MOOCs sufficiently, and with such little observable impact that, by this time, it is evident that MOOCs will not result in an immediate or massive dislocation of the entire higher education industry. ACE’s decision invites researchers and practitioners to conceptualize and discuss MOOCs in realistic terms, and attempt to use them instrumentally to improve accessibility and affordability in higher education, toward increasing student success and thereby accomplishing long-standing institutional goals.

While it could be argued that the ACE recommendation to award credit was not significant in terms of the actual number of credit hours it produced (at least to date), the credit recommendation was indeed significant insofar as it sent a message to the ACE affiliate institutions, to private industry, and to society at large that the type of online learning being offered for free by MOOCs is similar to the type of online learning that colleges and universities, both private and public, for profit and not-for-profit alike, are currently providing for a premium.

Prominent results of the ACE recommendation to date include several partial degree programs, a fully online master’s program at Georgia Tech, and now ASU’s innovative Global Freshman Academy. In addition, each of the three major MOOC providers, although non-accredited, recently introduced its own independent credentials for paid courses: the Udacity Nanodegree, the Coursera Specialization, and the edX Xseries (Shah, 2014).

Researchers and practitioners alike must begin to attend to the kinds of online learning happening in MOOCs. Students, parents, advisors, high school counselors and employers should become more aware of the transportability of credits and the availability of more flexible, less rigid pathways to degree completion. Those realities are part of the world of higher education today. ACE’s recommendations, MOOC credentialing, and ASU’s bold experiment will likely shape how those realities unfold in the future and should be closely attended to by policy makers, faculty, and administration.

Conclusion

This essay has sought answers to the question: Does the ACE decision to award college credit for MOOCs matter? Clearly, the ACE recommendation moved MOOCs closer to academic acceptance. However, the absence of student enrollment for credits billed as both accessible and affordable, and the reluctance of some institutions to award credit for MOOCs, signal that MOOCs have not yet become an effective or often used mechanism for providing college credit.

In light of the innovative, streamlined credentialing processes and price ceilings involved in the recent ASU GFA pilot partnership with edX, the impact of the ACE decision may be seen retrospectively as having opened the way for a gradual yet radically transformative disruption of higher education policy and practice. Ultimately, greater access and affordability may result from these and other innovative credentialing models.

While relatively little is known to date about the learning happening in MOOCs, additional study is necessary to determine whether and in what ways MOOCs may be a viable learning platform for different student groups (Siemens, Irvine, & Code, 2013). Furthermore, an examination of policies and processes that determine the cost, accessibility, and transportability of earned credits is needed in order to understand the potential for MOOCs to serve as alternative credentialing pathways, and the implications of those pathways for student learning.

References

- Allen, I. E., & Seaman, J. (2016, February). *Online Report Card: Tracking online education in the United States*. Retrieved March 23, 2016, from <http://onlinelearning survey.com/reports/onlinereportcard.pdf>
- American Council on Education (ACE) (n.d.a) About. Retrieved April 12, 2014 from <http://www.acenet.edu/aboutace/Pages/default.aspx>
- American Council on Education (ACE) (n.d.b) ACE CREDIT course review. Retrieved April 12, 2014 from <http://www.acenet.edu/news-room/Pages/ACE-CREDIT-Course-Review.aspx>
- American Council on Education (ACE) (2012, November 13). ACE to assess potential of MOOCs, evaluate courses for credit-worthiness. Retrieved from <http://www.acenet.edu/news-room/Pages/ACE-to-Assess-Potential-of-MOOCs-Evaluate-Courses-for-Credit-Worthiness.aspx>
- American Council on Education (ACE) (2013, January 15). ACE to forge new ground in MOOC evaluation and research effort. Retrieved from <http://www.acenet.edu/news-room/Pages/ACE-to-Forge-New-Ground-in-MOOC-Evaluation-and-Research-Effort.aspx>
- “American Council on Education.” (n.d). In *Wikipedia*. Retrieved January 1, 2014 from http://en.wikipedia.org/wiki/American_Council_on_Education
- American Public University (APUS) (2013). APUS partners with University Professional & Continuing Education Association to evaluate MOOC impact on higher education. Retrieved from <http://www.apus.edu/news-events/news/2013/04-08-2013-apus-partners-with-upcea.html>
- Anderson, N. (2015, April 22). Arizona State University to offer freshman year online, for credit. *The Washington Post*. Retrieved from http://www.washingtonpost.com/local/education/arizona-state-university-to-offer-freshman-year-online-for-credit/2015/04/22/17df61e8-e921-11e4-9767-6276fc9b0ada_story.html
- Bady, A. (2013, February 12). Tree sitting. *The New Inquiry*. Retrieved from <http://thenewinquiry.com/blogs/zunguzungu/tree-sitting/>
- Bates, T. (2014, October 13). Comparing xMOOCs and cMOOCs: Philosophy and practice. Retrieved from <http://www.tonybates.ca/2014/10/13/comparing-xmoocs-and-cmoocs-philosophy-and-practice/>
- Best online bachelor's programs. (2015). *US News and World Report*. Retrieved June 24, 2015 from <http://www.usnews.com/education/online-education/bachelors/rankings?int=a2bb09&int=a56509>
- Book, P. (2013, July 25). ACE as academic credit reviewer—adjustment, accommodation, and acceptance [Web log post]. Retrieved from <http://wcetblog.wordpress.com/2013/07/25/ace-review-moocs-for-credit/>

- Booker, E. (2013). Will MOOCs matter? *Information Week Reports*, 2-7. Retrieved from <http://reports.informationweek.com/abstract/306/11438/Education/Will-MOOCs-Matter?.html> (Downloadable PDF)
- Caulfield, M. (2013, July 20). xMOOC communities should learn from cMOOCs. [Web log post]. Retrieved from <http://www.educause.edu/blogs/mcaulfield/xmooc-communities-should-learn-cmoocs>
- Cheal, C. (2013, August 14). Creating MOOCs for college credit: SJSU's partnership with edX and Udacity [Research bulletin]. Retrieved from <https://net.educause.edu/ir/library/pdf/ERB1307.pdf>
- Chung, C. (2015, May 12). A Big Step in MOOCs for Credit? The ASU & edX Global Freshman Academy. *Class Central*. Retrieved from <https://www.class-central.com/report/moocs-credit-asu-edx-global-freshman-academy/>
- Cook, C. (1998). *Lobbying for higher education: How colleges and universities influence federal policy*. Nashville, TN: Vanderbilt University Press.
- Cornell University, Distance Learning Committee. (2014). Report of the Cornell distance learning committee. Retrieved from <http://philosophy.cornell.edu/epl/upload/CornellDistancelearning.pdf>
- Coursera (2012, November 14). American Council on Education to evaluate credit equivalency for Coursera's online courses. [Web log post]. Retrieved from <http://blog.coursera.org/post/35647313909/american-council-on-education-to-evaluate-credit>
- Coursera (2013, February 7). Five courses receive college credit recommendations [Web log post]. Retrieved from <http://blog.coursera.org/post/42486198362/five-courses-receive-college-credit-recommendations>
- Domonell, K. (2013, January). Managing MOOC credits. *University Business*, 16(1), 17. Retrieved from <http://www.universitybusiness.com/article/managing-mooc-credits>
- edX. (2015, June 24). About. Retrieved from <https://www.edx.org/about-us>
- Evans, T. (2010, September 13). Penn State tops recruiter rankings: Companies favor big state schools with one-stop shopping for graduates with necessary skills. *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/SB10001424052748704358904575477643369663352>
- Fain, P. (2013, January 16). ACE to assess Udacity courses for credit. *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com/news/2013/01/16/ace-assess-udacity-courses-credit#sthash.YPuiO9ly.dpbs>
- Funnell, A. (2014, July 16). Massive online courses: does the rhetoric match the reality? *Future Tense*. Retrieved from <http://www.abc.net.au/radionational/programs/futuretense/a-moocs-education-rhetoric-and-reality/5598962>
- Grajek, S., Bichsel, J., & Dahlstrom, E. (2013, October). What MOOCs mean to today's students and institutions. *Educause Review*. Retrieved from http://net.educause.edu/ir/library/pdf/ECAR_SO/ERB/ERB1309.pdf
- Hartle, T. W. (2012). Statement to the United States Senate, The Senate Appropriations Defense Subcommittee, on Voluntary Military Education Programs. Retrieved from <http://www.acenet.edu/news-room/Documents/Testimony-Appropriations-Defense-Subcommittee-FINAL-061213.pdf>
- Head, K. (2013, September 6). Lessons learned from a freshman composition MOOC. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/blogs/wiredcampus/lessons-learned-from-a-freshman-composition-mooc/46337>

- Kolowich, S. (2013, February 7). American council on education recommends 5 MOOCs for credit. *The Chronicle of Higher Education*, 59(23). Retrieved from <http://argo.library.okstate.edu/login?url=http://search.proquest.com.argo.library.okstate.edu/docview/1287085055?accountid=4117>
- Mangan, K. (2012, September 6). A first for Udacity: A U.S. university will accept transfer credit for one of its courses. *The Chronicle of Higher Education*. Retrieved from <https://chronicle.com/article/A-First-for-Udacity-Transfer/134162/>
- Masterson, K. (2013, May 1). Giving MOOCs some credit. *The Presidency*. Retrieved from <http://www.acenet.edu/the-presidency/columns-and-features/Pages/Giving-MOOCs-Some-Credit.aspx>
- Moe, R. (2014, May 15). The MOOC problem. *Hybrid Pedagogy*. Retrieved from <http://www.hybridpedagogy.com/journal/mooc-problem/>
- Negrea, S. (2014, March 1). Massive, open, online, for credit: Three models for allowing students to earn credit for completed MOOCs. *University Business*, 17(3), 45.
- Pack, T. (2013, February). The abcs of free classes from elite schools. *Information Today*, 30(2), 38. Retrieved from <http://argo.library.okstate.edu/login?url=http://search.proquest.com.argo.library.okstate.edu/docview/1285507760?accountid=4117>
- Pappano, L. (2012, November 2). The year of the MOOC. *The New York Times*. Retrieved from http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html?_r=0
- Parr, C. (2013a, May 9). MOOC completion rates below 7%. *Times Higher Education*. Retrieved from <https://www.timeshighereducation.co.uk/news/mooc-completion-rates-below-7/2003710.article>
- Parr, C. (2013b, October 17). MOOC creators criticize courses lack of creativity. *Times Higher Education*. Retrieved from <https://www.timeshighereducation.co.uk/news/mooc-creators-criticise-courses-lack-of-creativity/2008180.article>
- Reich, J. (2014, December 8). MOOC completion and retention in the context of student intent. *Educause Review*. Retrieved from <http://er.educause.edu/articles/2014/12/mooc-completion-and-retention-in-the-context-of-student-intent>
- Schaffhauser, D. (2014, November 17). U Oklahoma's Janux flips the MOOC. *Campus Technology*. Retrieved from <http://campustechnology.com/articles/2014/11/17/u-oklahomas-janux-flips-the-mooc.aspx>
- Shah, D. (2014). MOOCs in 2014: Breaking down the numbers. *EdSurge News*. Retrieved from <https://www.edsurge.com/news/2014-12-26-moocs-in-2014-breaking-down-the-numbers>
- Shumski, D. (2013, August 15). MOOCs by the numbers: How do EdX, Coursera and Udacity stack up? *Education Dive*. Retrieved from <http://www.educationdive.com/news/moocs-by-the-numbers-how-do-edx-coursera-and-udacity-stack-up/161100/>
- Siemens, G., Irvine, V., & Code, J. (2013). An academic perspective on an emerging technological and social trend. *Journal of Online Learning and Teaching*, 9(2). Retrieved from http://jolt.merlot.org/vol9no2/siemens_editorial_0613.htm
- Snider, S. (2014, September 25). 10 universities with the largest undergraduate student populations. *U.S. News & World Report*. Retrieved from <http://www.usnews.com/education/best-colleges/the-short-list-college/articles/2014/09/25/10-universities-with-the-largest-undergraduate-student-populations>

- Straumheim, C. (2015, April 24). Arizona State U 'MOOCs for credit' program faces unanswered accreditation questions. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2015/04/24/arizona-state-u-moocs-credit-program-faces-unanswered-accreditation-questions>
- Sumell, A. J. (2013). I don't want to be MOOC'd. *The Chronicle of Higher Education*, 59(29). Retrieved from <http://chronicle.com/article/I-Dont-Want-to-Be-Moocd/138013/>
- Zook, G. F. (1950). The American Council on Education. *The Phi Delta Kappan*, 31(7), 312-318.

About the Author

Jason E. Stone

Oklahoma State University
esto@osuokc.edu

Jason E. Stone is an Assistant Professor at Oklahoma State University - Oklahoma City, where he serves as the Division Head of Liberal Arts. His interests include MOOCs, online education, transformational educational leadership, educational policy rhetoric, higher educational organizational culture, and organizational trust. A finalist for the Oklahoma Medal for Excellence in Teaching and Administration in 2012 & 2013 and winner of the Kamm Fellowship, Mr. Stone is a doctoral student in Educational Leadership and Policy Studies at Oklahoma State University.

About the Co-Guest Editors

Lisa A. Petrides

Institute for the Study of Knowledge Management in Education
lisa@iskme.org

Lisa Petrides, Ph.D. is CEO and founder of the Institute for the Study of Knowledge Management in Education (ISKME). A former professor in the Department of Organization and Leadership at Columbia University, Teachers College, her research and teaching interests include information science, decision-making, and issues of access and equity in education. Petrides also leads OER Commons (www.oercommons.org), a digital public library of open educational resources, and a collaboration platform that supports and facilitates the creation, sharing, and modification of open educational resources. Petrides received her Ph.D. from Stanford University.

Cynthia M. James

Institute for the Study of Knowledge Management in Education
cynthia@iskme.org

Cynthia James, Ph.D., is Director of Research at the Institute for the Study of Knowledge Management in Education (ISKME), where she has led international projects over the past ten years focusing on the use and impact of open educational resources on teaching and learning. While living in Sweden and the Netherlands from 1995 to 2004, she worked in both the private and public sectors, holding positions in research consulting, teaching high school and college, and obtaining her Ph.D. in Information Science from Uppsala University in Sweden.

SPECIAL ISSUE
Models of Open Education in Higher Education

education policy analysis archives

Volume 24 Number 38 March 28, 2016 ISSN 1068-2341



Readers are free to copy, display, and distribute this article, as long as the work is attributed to the author(s) and **Education Policy Analysis Archives**, it is distributed for non-commercial purposes only, and no alteration or transformation is made in the work. More details of this Creative Commons license are available at <http://creativecommons.org/licenses/by-nc-sa/3.0/>. All other uses must be approved by the author(s) or **EPAA**. **EPAA** is published by the Mary Lou Fulton Institute and Graduate School of Education at Arizona State University. Articles are indexed in CIRC (Clasificación Integrada de Revistas Científicas, Spain), DIALNET (Spain), [Directory of Open Access Journals](#), EBSCO Education Research Complete, ERIC, Education Full Text (H.W. Wilson), QUALIS A2 (Brazil), SCImago Journal Rank; SCOPUS, Socolar (China).

Please contribute commentaries at <http://epaa.info/wordpress/> and send errata notes to Gustavo E. Fischman fischman@asu.edu

Join **EPAA's Facebook community** at <https://www.facebook.com/EPAAAPE> and **Twitter feed** @epaa_aape.

education policy analysis archives
editorial board

Lead Editor: **Audrey Amrein-Beardsley** (Arizona State University)

Executive Editor: **Gustavo E. Fischman** (Arizona State University)

Associate Editors: **Sherman Dorn, David R. Garcia, Oscar Jimenez-Castellanos,**

Eugene Judson, Jeanne M. Powers (Arizona State University)

Cristina Alfaro San Diego State University	Ronald Glass University of California, Santa Cruz	R. Anthony Rolle University of Houston
Gary Anderson New York University	Jacob P. K. Gross University of Louisville	A. G. Rud Washington State University
Michael W. Apple University of Wisconsin, Madison	Eric M. Haas WestEd	Patricia Sánchez University of University of Texas, San Antonio
Jeff Bale OISE, University of Toronto, Canada	Julian Vasquez Heilig California State University, Sacramento	Janelle Scott University of California, Berkeley
Aaron Bevanot SUNY Albany	Kimberly Kappler Hewitt University of North Carolina Greensboro	Jack Schneider College of the Holy Cross
David C. Berliner Arizona State University	Aimee Howley Ohio University	Noah Sobe Loyola University
Henry Braun Boston College	Steve Klees University of Maryland	Nelly P. Stromquist University of Maryland
Casey Cobb University of Connecticut	Jaekyung Lee SUNY Buffalo	Benjamin Superfine University of Illinois, Chicago
Arnold Danzig San Jose State University	Jessica Nina Lester Indiana University	Maria Teresa Tatto Michigan State University
Linda Darling-Hammond Stanford University	Amanda E. Lewis University of Illinois, Chicago	Adai Tefera Virginia Commonwealth University
Elizabeth H. DeBray University of Georgia	Chad R. Lochmiller Indiana University	Tina Trujillo University of California, Berkeley
Chad d'Entremont Rennie Center for Education Research & Policy	Christopher Lubienski University of Illinois, Urbana-Champaign	Federico R. Waitoller University of Illinois, Chicago
John Diamond University of Wisconsin, Madison	Sarah Lubienski University of Illinois, Urbana-Champaign	Larisa Warhol University of Connecticut
Matthew Di Carlo Albert Shanker Institute	William J. Mathis University of Colorado, Boulder	John Weathers University of Colorado, Colorado Springs
Michael J. Dumas University of California, Berkeley	Michele S. Moses University of Colorado, Boulder	Kevin Welner University of Colorado, Boulder
Kathy Escamilla University of Colorado, Boulder	Julianne Moss Deakin University, Australia	Terrence G. Wiley Center for Applied Linguistics
Melissa Lynn Freeman Adams State College	Sharon Nichols University of Texas, San Antonio	John Willinsky Stanford University
Rachael Gabriel University of Connecticut	Eric Parsons University of Missouri-Columbia	Jennifer R. Wolgemuth University of South Florida
Amy Garrett Dikkers University of North Carolina, Wilmington	Susan L. Robertson Bristol University, UK	Kyo Yamashiro Claremont Graduate University
Gene V Glass Arizona State University	Gloria M. Rodriguez University of California, Davis	

archivos analíticos de políticas educativas
consejo editorial

Editor Ejecutivo: **Gustavo E. Fischman** (Arizona State University)

Editores Asociados: **Armando Alcántara Santuario** (Universidad Nacional Autónoma de México), **Jason Beech**,
(Universidad de San Andrés), **Antonio Luzon**, Universidad de Granada

Claudio Almonacid

Universidad Metropolitana de
Ciencias de la Educación, Chile

Miguel Ángel Arias Ortega

Universidad Autónoma de la
Ciudad de México

Xavier Besalú Costa

Universitat de Girona, España

Xavier Bonal Sarro Universidad
Autónoma de Barcelona, España

Antonio Bolívar Boitia

Universidad de Granada, España

José Joaquín Brunner Universidad
Diego Portales, Chile

Damián Canales Sánchez

Instituto Nacional para la
Evaluación de la Educación, México

Gabriela de la Cruz Flores

Universidad Nacional Autónoma de
México

Marco Antonio Delgado Fuentes

Universidad Iberoamericana,
México

Inés Dussel, DIE-CINVESTAV,
México

Pedro Flores Crespo Universidad
Iberoamericana, México

Ana María García de Fanelli

Centro de Estudios de Estado y
Sociedad (CEDES) CONICET,
Argentina

Juan Carlos González Faraco

Universidad de Huelva, España

María Clemente Linuesa

Universidad de Salamanca, España

Jaume Martínez Bonafé

Universitat de València, España

Alejandro Márquez Jiménez

Instituto de Investigaciones sobre la
Universidad y la Educación, UNAM,
México

María Guadalupe Olivier Tellez,

Universidad Pedagógica Nacional,
México

Miguel Pereyra Universidad de
Granada, España

Mónica Pini Universidad Nacional
de San Martín, Argentina

Omar Orlando Pulido Chaves

Instituto para la Investigación
Educativa y el Desarrollo Pedagógico
(IDEP)

José Luis Ramírez Romero

Universidad Autónoma de Sonora,
México

Paula Razquin Universidad de San
Andrés, Argentina

José Ignacio Rivas Flores

Universidad de Málaga, España

Miriam Rodríguez Vargas

Universidad Autónoma de
Tamaulipas, México

José Gregorio Rodríguez

Universidad Nacional de
Colombia, Colombia

Mario Rueda Beltrán Instituto
de Investigaciones sobre la
Universidad y la Educación,
UNAM, México

José Luis San Fabián Maroto

Universidad de Oviedo,
España

Jurjo Torres Santomé,

Universidad de la Coruña, España

Yengny Marisol Silva Laya

Universidad Iberoamericana,
México

Juan Carlos Tedesco

Universidad Nacional de San
Martín, Argentina

Ernesto Treviño Ronzón

Universidad Veracruzana, México

Ernesto Treviño Villarreal

Universidad Diego Portales
Santiago, Chile

Antoni Verger Planells

Universidad Autónoma de
Barcelona, España

Catalina Wainerman

Universidad de San Andrés,
Argentina

Juan Carlos Yáñez Velazco

Universidad de Colima, México

arquivos analíticos de políticas educativas
conselho editorial

Editor Executivo: **Gustavo E. Fischman** (Arizona State University)

Editoras Associadas: **Geovana Mendonça Lunardi Mendes** (Universidade do Estado de Santa Catarina),
Marcia Pletsch, Sandra Regina Sales (Universidade Federal Rural do Rio de Janeiro)

Almerindo Afonso
Universidade do Minho
Portugal

Alexandre Fernandez Vaz
Universidade Federal de Santa
Catarina, Brasil

José Augusto Pacheco
Universidade do Minho, Portugal

Rosanna Maria Barros Sá
Universidade do Algarve
Portugal

Regina Célia Linhares Hostins
Universidade do Vale do Itajaí,
Brasil

Jane Paiva
Universidade do Estado do Rio de
Janeiro, Brasil

Maria Helena Bonilla
Universidade Federal da Bahia
Brasil

Alfredo Macedo Gomes
Universidade Federal de Pernambuco
Brasil

Paulo Alberto Santos Vieira
Universidade do Estado de Mato
Grosso, Brasil

Rosa Maria Bueno Fischer
Universidade Federal do Rio Grande
do Sul, Brasil

Jefferson Mainardes
Universidade Estadual de Ponta
Grossa, Brasil

Fabiany de Cássia Tavares Silva
Universidade Federal do Mato
Grosso do Sul, Brasil

Alice Casimiro Lopes
Universidade do Estado do Rio de
Janeiro, Brasil

Jader Janer Moreira Lopes
Universidade Federal Fluminense e
Universidade Federal de Juiz de Fora,
Brasil

António Teodoro
Universidade Lusófona
Portugal

Suzana Feldens Schwertner
Centro Universitário Univates
Brasil

Debora Nunes
Universidade Federal do Rio Grande
do Norte, Brasil

Lílian do Valle
Universidade do Estado do Rio de
Janeiro, Brasil

Flávia Miller Naethe Motta
Universidade Federal Rural do Rio de
Janeiro, Brasil

Alda Junqueira Marin
Pontifícia Universidade Católica de
São Paulo, Brasil

Alfredo Veiga-Neto
Universidade Federal do Rio Grande
do Sul, Brasil

Dalila Andrade Oliveira
Universidade Federal de Minas
Gerais, Brasil