

The Future of the Civic in an Online World

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HIGHER EDUCATION IS BEING FUNDAMENTALLY DISRUPTED. Within a decade, teaching and learning will be transformed for a huge number of students across a broad swath of colleges and universities due to a wide range of digital learning technologies. This essay is thus an attempt to rethink and begin to grapple with the future of civic learning and teaching in an increasingly online world. Namely, I want to argue that as teaching and learning move further and further into “the cloud,” civic learning, as a deeply place-based endeavor, may offer the only remaining coherent vision for the future viability of higher education.

So let me begin with a provocation. Let me suggest that teaching and learning as we know them will soon be no more, that political and fiscal pressures will align with technological advancements and an accruing body of substantive research to promulgate the use of hybrid models of education whereby online and computer-mediated instruction become ever more commonplace in post-secondary education.¹

That vision is not the provocation. Those are just the facts on the ground. We are already living through those times.² The provocation is that this stampeding reality is a good thing because it finally puts to rest the tattered and quaint storyline of college as all about and only good for the “life of the mind.” In so doing, it allows us—faculty and administrators committed to the idea of higher education as a public good—to focus on shaping the true value proposition of higher education: that civic learning, in its commitment to pedagogies that link theory and practice within the sphere of the public commons, offers one of the only modes for educating a thoughtful citizenry able to critically engage with the complexities of living in a pluralistic, inequitable, and interconnected world.³

LAYING THE GROUNDWORK FOR CIVIC LEARNING IN AN ONLINE WORLD
Like it or not, the monopoly of place-based institutions and their traditional value proposition has been fundamentally shattered. Demographic changes, market pressures, and technological advancements have eroded and disrupted any singular notion of what constitutes a college education.⁴ While the depth and breadth of this disruption is debatable, the platforms for such disruption (e.g., MOOCs, digital badges, and competency-based education) and their

undergirding digital learning technologies (e.g., “stealth assessments,” adaptive learning, and data analytics) will only become more pervasive.⁵

Don't get me wrong. Colleges and universities as physical places will not disappear. Postsecondary education serves a multiplicity of functions to a wide variety of constituencies. Above and beyond their role in knowledge production and dissemination, postsecondary institutions act as mechanisms of stratification, modes of socialization, drivers of economic activity, and hubs for institutional collaboration.⁶ Many of these functions are intertwined with physical communities, and, as such, a large number of place-based colleges and universities will continue to make substantial impacts in their local communities and attract students from around their regions, if not the nation, to their campuses to be taught by faculty, who are at the heart of the academic enterprise.

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In addition, technologically driven developments are still often at the beta phase of experimentation, where they function more as supplements to rather than replacements of traditional models of teaching and learning. Moreover, due to a variety of vertical and horizontal patterns of stratification and segmentation, technological disruption will undoubtedly be embraced and embedded differentially across diverse segments of the postsecondary landscape (e.g., nonprofit, for-profit, public, and private two- and four-year institutions).⁷ For example, the Massachusetts Institute of Technology and Bunker Hill Community College, although only a few miles apart, will have vastly different implementation strategies and goals for embracing online learning.

Yet despite their differences, all institutions are affected by the two interrelated points that form the foundation of my provocation: first, that most traditional modes of teaching and learning do a pretty poor job of educating a large percentage of postsecondary students; and second, that technological platforms are increasingly demonstrating their capacity to equal or exceed traditional face-to-face instruction in achieving student outcomes.

A litany of statistics and research suggests that a substantial majority of students are being poorly served by our system of higher education. The evidence includes abysmal graduation rates outside of elite institutions; opportunity and outcome gaps among student populations of different races, ethnicities, and socioeconomic statuses; low-level curriculum delivered in the most important introductory classes; and the deep overreliance on contingent instructors with minimal incentive or support to advance students' success.⁸ At the heart of the problem—at least as it concerns civic teaching and learning—is the outdated notion that education is solely or simply the delivery of specific content knowledge, transferred from instructors to students. Such a transmission model of education is flawed, but it was all we had or could hope for beyond the artisanal endeavors of individual faculty.

To date, MOOCs—with their capacity to enroll millions of students anywhere, anytime—have been the most obvious manifestation of the forthcoming

technologically driven disruption. These online, massively networked, data-driven, and automated systems are efficient platforms for delivering content, and they are fundamentally changing how we will think of instruction in the future. A plethora of digital learning technologies offer new means of delivering a wide range of content, from “adaptive” modules that change the level of instructional difficulty according to students’ responses to automated “stealth assessments” that provide instantaneous feedback and helpful prompts to students based on “big data” mined through sophisticated algorithms.⁹

Such practices are grounded in learning theory that presages the value of such pedagogical practices.¹⁰ It is thus not surprising that recent research has made clear that such online and computer-driven instruction is just as effective as instruction in traditional face-to-face settings. From a 2010 US Department of Education meta-analysis to more recent follow-up studies, research suggests that no particular form of instruction—face-to-face, hybrid, or fully online—is any longer the default mode by which any particular student learns best.¹¹

Again, to be clear, I am not suggesting that, broadly speaking, the quintessential seminar—with its intimate small group dynamic driven by a guiding professor and inquisitive students—is somehow in jeopardy of being replaced by a MOOC. But just one in four college students today have followed the traditional path from high school directly into a four-year undergraduate degree program. According to federal data, community colleges educate close to half of the eighteen million students enrolled in postsecondary education.¹² Additionally, a small percent of all college students will ever experience an upper-level seminar like the idyllic one I just described.¹³

In that light, technological solutions become, almost by necessity, an obvious and necessary option for providing adequate instruction to a large number of students at minimal cost. We cannot hide from these realities. That idyllic seminar was never the historical norm and never will be. Instead, we must begin to ask ourselves some important and difficult questions on the future of civic learning that begin in our current reality rather than in some far-away and long-ago seminar dream. Namely, does online education undermine the entire edifice of community-based models of teaching and learning? How does civic learning as a deeply labor-intensive practice continue to resonate in a computer-driven pedagogical environment? What happens to service learning as a critical, justice-oriented, and disruptive pedagogical practice? Put simply, what do we have to offer as civic practitioners?

CIVIC LEARNING IN AN ONLINE WORLD

In fact, I want to suggest that civic learning has much to offer. The distinction—vital to the ultimate value proposition of higher education—is that while MOOCs and other modes of technological disruption may foster better means of instructing and informing, they will never be able to truly educate. They may offer an apprenticeship into Wikipedia, but not an apprenticeship into democracy.

Here, I am referencing the distinction between closed- and open-ended learning, or what learning theorists have alternatively described as shallow and deep learning, first- and second-loop learning, or the difference between the transmission and transformation models of education.¹⁴ This distinction—which, yes, may be too binary

and neat—nevertheless offers a productive way of understanding the limits of technological disruption and its potential for inspiring a renewed vision for civic learning.

The distinction is that computer-based technologies are incredibly efficient at processing well-defined tasks within closed-loop systems. They can transmit specific content in multiple ways, assess students' comprehension in real time, provide immediate feedback, and offer highly calibrated next steps that adapt to an individual's particular background knowledge, level of comprehension, and learning preferences. This is learning analytics at its best, and we will begin to see much more of such technological sophistication in the coming years embedded within online modules and learning platforms.¹⁵

But such an instructional model has prescribed limits. Specifically, the content knowledge it delivers must involve right and wrong answers.¹⁶ When a lesson can be taught by atomizing a body of knowledge and delimiting the parameters of acceptable responses, an automated system will excel. This is coming to be known as the “modularization” of the curriculum, as information is chunked into more precise nuggets of information able to be taught in specific and tightly orchestrated increments.¹⁷

Yet such a mode of instruction never can (nor was meant to) replace the transformational role of education.¹⁸ The educational moment of grappling with the complexities and ambiguities of any difficult and non-binary problem cannot be captured in such modularization of the curriculum. This is because any educational attempt to step outside of a preconfigured and prepared system, to, for example, jump a level of awareness in order to survey the system's context, assumptions, and implications, reveals the system's “brittleness”—its inability to handle ambiguous or unexpected developments.¹⁹

Such moments of uncertainty, which force us to rethink and reorient our notions of what is normal, are crucial. John Dewey, in *How We Think*, poetically described such “moments of doubt” as presenting a “forked-road situation” that fosters true thinking, “a situation which is ambiguous, which presents a dilemma, which proposes alternatives” that force us to pause and “metaphorically climb a tree; we try to find some standpoint from which we may survey additional facts and, getting a more commanding view of the situation, may decide how the facts stand related to one another.”²⁰ These moments ultimately represent the notion of education as transformation rather than as transmission. They allow us to step outside of ourselves and, in fact, see ourselves.

The possibility of moments like these is the power and promise of civic learning in higher education—not as a supplement to the traditional transmission model of education, but as the fundamental model of education in the disrupted university. For if students can gain college credit through learning modules and online courses, then all that is left, all we have to hold onto, all that makes true education worthwhile, lies within the sphere of civic learning.

What civic learning thus offers is exactly those “moments of doubt” that cannot be fully prescribed or anticipated: moments of stepping outside of the normal, engaging in “boundary crossing,” and fostering and forcing reflection. Whether referred to as service learning, community-based research, or civic engagement, such practices are inherently complex. By their very nature, they require engaging

with the complicated realities of our day-to-day lives and they disrupt our taken-for-granted notions of the world.²¹ The disrupted university may thus actually allow us to begin to put the disruptive potential of civic learning at the center rather than the periphery of our educational practices.

I do not mean this, though, in the rhetorical way employed by some civic learning advocates.²² I think of it in very pragmatic terms. Technological disruption will allow students to engage in learning in their own ways and at their own paces. Students already learn particular content knowledge through a wide variety of online courses, web-based modules (such as Khan Academy videos and TED talks), and MOOC-type learning management platforms. By unbundling instructional practices from seat time spent at place-based institutions, the disrupted university undermines any notion of a center. Students can learn and demonstrate mastery of their learning anywhere, anytime, in any way.

What civic learning thus offers, through place-based institutions and faculty-guided instruction, is the opportunity to integrate and extend such knowledge into the real world. Think of this as the flipped classroom expanded to the entire university. In the “flipped university,” students enact and operationalize their knowledge, which is integrated with meaningful engagement in mutually reinforcing ways. The flipped university offers a visible manifestation of civic learning as it links theory and practice in the public sphere by having students actually engage with the learning that they have already done through other platforms.

This, of course, already occurs in multiple ways across higher education, from project-based learning to labs, from internships to service learning. But in the flipped university, such civic practices, rather than being the purview of a select few students and faculty, could become the norm and the embodiment of an educated person. They could become what college credit signifies.

My provocation is that the forthcoming technological disruption is a good thing because it will force us to confront and enact what engaged learning in the public sphere could actually be. It will force us, for example, to begin granting academic credit not for being instructed, but for putting instruction into practice; to require that students demonstrate that learning matters to who they want to become; to prioritize impact over seat time; and to accept that assessing civic learning is a shared enterprise that transcends any single standardized measure. Put otherwise, if civic learning is indeed about linking theory and practice to foster critical inquiry and democratic engagement, then our educational models must begin to scaffold, support, assess, and reward students’ civic engagement at every level of the system.

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CONCLUDING THOUGHTS

The transition I have described above is profound, and it will be difficult to enact. It will require a rethinking of what it means to teach and learn on a college campus and of the pedagogical and organizational infrastructures that support teaching

and learning. It will mean placing components that used to be considered add-ons, such as service learning, internships, and alternative capstone projects, at the heart and soul of the learning experience.

What such a re-centering would portend, if we could accomplish it, is a “civic learning 2.0” that is revitalized rather than ravaged by the forthcoming technological disruption. In fact, the forthcoming disruption will be an opportunity to align the power of technology with the longstanding vision of higher education.

In conclusion, I want to note that there is really nothing radical in this idea that a college education should help students learn how to engage with real-world problems and issues, develop competence in areas ranging from quantitative reasoning to critical inquiry to communication, and gain the habits of mind and repertoires of action necessary to demonstrate such capacities thoughtfully and meaningfully. We have wanted this for generations.

What is radical is the idea that such an education might actually be possible now. But enacting it will require an articulation of next steps that is dramatically different from how we have thought of teaching and learning until now. We cannot conduct business as usual. It is thus incumbent on those of us who work and teach in higher education to make clear to ourselves and to the larger public that education is about deep learning—and that such civic learning cannot be found solely in the online cloud. It requires us and our students to have our feet on the ground.

NOTES

1. The “disruption” of higher education is a highly contested notion. See Dan Butin, “From MOOCs to Dragons,” *Inside Higher Ed*, April 14, 2014, <http://www.insidehighered.com/blogs/higher-ed-beta/moocs-dragons>, for my analysis of how such technologically-driven change is impacting higher education. I take “civic learning” as a broad indicator of the interconnected pedagogical practices and philosophical stances (e.g., service learning, participatory action research, community-based research) that experientially engage students through academic coursework in their local and global communities. Civic learning may be broadly defined as the knowledge, skills, values, and collective actions that “emphasize the civic significance of preparing students with knowledge and for action.... [in] a highly diverse and globally engaged democracy.” The National Task Force on Civic Learning and Democratic Engagement, *A Crucible Moment: College Learning and Democracy’s Future* (Washington, DC: Association of American Colleges and Universities, 2012), 3. However, it is important to note, as Finley and many others have suggested, that “civic engagement is a term that lacks a cohesive definition.” Ashley Finley, “Civic Learning and Democratic Engagements: A Review of the Literature on Civic Engagement in Post-Secondary Education” (paper prepared for the United States Department of Education, Association of American Colleges and Universities, Washington, DC, May 24, 2011), 20. See also Dan W. Butin, *Service-Learning in Theory and Practice: The Future of Community Engagement in Higher Education* (New York: Palgrave Macmillan, 2010).
2. See, for example, William G. Bowen, *Higher Education in the Digital Age* (Princeton, NJ: Princeton University Press, 2013), regarding how such a “digital” future may look and Candace Thille, *Changing the Production Function in Higher Education* (Washington DC: American Council on Education, 2012) for the undergirding relevance—pedagogical and budgetary—of digital technologies.
3. For an expansion on these ideas, see Dan W. Butin, “There’s No App for Ending Racism: Theorizing the Civic in an Age of Disruption,” *Diversity & Democracy* 17, no. 1 (2014): 11–13.
4. See James G. Mazoué, “The Deconstructed Campus,” *Journal of Computing in Higher Education* 24, no. 2 (2012): 74–95.
5. See Thomas Carey and David Trick, *How Online Learning Affects Productivity, Cost and Quality in*

- Higher Education: An Environmental Scan and Review of the Literature* (Toronto: Higher Education Quality Council of Ontario, 2013); and Patricia W. Neely and Jan P. Tucker, "Unbundling Faculty Roles in Online Distance Education Programs," *International Review of Research in Open and Distance Learning* 11, no. 2 (2010): <http://www.irrod.org/index.php/irrod/article/view/798/1543>.
6. See Mitchell L. Stevens, Elizabeth A. Armstrong, and Richard Arum, "Siege, Incubator, Temple, Hub: Empirical and Theoretical Advances in the Sociology of Higher Education," *Annual Review in Sociology* 34 (2008): 127–51.
 7. Scott Davies and David Zarifa, "The Stratification of Universities: Structural Inequality in Canada and the United States," *Research in Social Stratification and Mobility* 30, no. 2 (2012): 143–58.
 8. See, for example, Richard Arum and Josipa Roksa, *Academically Adrift: Limited Learning on College Campuses* (Chicago: University of Chicago Press, 2011) regarding students' academic success and Ann L. Mullen, *Degrees of Inequality: Culture, Class, and Gender in American Higher Education* (Baltimore: Johns Hopkins University Press, 2010) regarding how such success is stratified across different student groups. See Sara E. Brownell and Kimberly D. Tanner, "Barriers to Faculty Pedagogical Change: Lack of Training, Time, Incentives, and Tensions with Professional Identity?" *CBE—Life Sciences Education* 11, no. 4 (2012): 339–46 and Diane Ebert-May, Terry L. Derting, Janet Hodder, Jennifer L. Momsen, Tammy M. Long, and Sarah E. Jardeleza, "What We Say Is Not What We Do: Effective Evaluation of Faculty Professional Development Programs," *BioScience* 61, no. 7 (2011): 550–58 regarding the difficulty of supporting faculty in high-quality instruction.
 9. See Adam Cooper, "What is Analytics? Definition and Essential Characteristics," *CETIS Analytics Series* 1, no. 5 (2012).
 10. David George Glance, Martin Forsey, and Myles Riley, "The Pedagogical Foundations of Massive Open Online Courses," *First Monday* 18, no. 5 (2013), <http://firstmonday.org/ojs/index.php/fm/article/view/4350/3673>.
 11. See William G. Bowen, Matthew M. Chingos, Kelly A. Lack, and Thomas I. Nygren, "Interactive Learning Online at Public Universities: Evidence from a Six Campus Randomized Trial," *Journal of Policy Analysis and Management* 33, no. 1 (2013): 94–111; Kelly A. Lack, *Current Status of Research on Online Learning in Postsecondary Education* (New York: Ithaca S+R, 2013), <http://www.sr.ithaca.org/sites/default/files/reports/ithaca-sr-online-learning-postsecondary-education-may2012.pdf>; and Barbara Means, Yukie Toyama, Robert Murphy, Marianne Bakia, and Karla Jones, *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies* (Washington, DC: US Department of Education, 2010), <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>.
 12. See Susan Aud, Sidney Wilkinson-Flicker, Paul Kristapovich, Amy Rathbun, Xiaolei Wang, and Jijun Zhang, *The Condition of Education 2013* (Washington, DC: US Department of Education, National Center for Education Statistics, 2013).
 13. See George D. Kuh and Ken O'Donnell, *Ensuring Quality and Taking High-Impact Practices to Scale* (Washington, DC: Association of American Colleges and Universities, 2013).
 14. See, for example, Gregory Bateson, *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology* (Chicago: University of Chicago Press, 2000); Jack Mezirow, "Transformative Learning: Theory to Practice," *New Directions for Adult and Continuing Education* 1997, no. 74 (1997): 5–12; and Donald A. Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1983).
 15. See President's Council of Advisors on Science and Technology (PCAST), letter to the President of the United States, December 2013, http://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast_edit_dec-2013.pdf.
 16. See Kurt VanLehn, "The Relative Effectiveness of Human Tutoring, Intelligent Tutoring Systems, and Other Tutoring Systems," *Educational Psychologist* 46, no. 4 (2011): 197–221.
 17. Institute-wide Task Force on the Future of MIT Education, *Preliminary Report* (Cambridge, MA: Massachusetts Institute of Technology, 2013), http://web.mit.edu/future-report/Task-ForceOnFutureOfMITEducation_PrelimReport.pdf.
 18. See Sanjay Sarma and Isaac Chuang, "The Magic Beyond the MOOCs," *MIT Faculty Newsletter* 25, no. 5 (2013), http://web.mit.edu/fnl/volume/255/sarmay_chuang.html.

19. For the basis of this insight, see Bateson, *Steps to an Ecology of Mind*; for an expansion as it relates to civic learning, see chapter 3 of Butin, *Service-Learning in Theory and Practice*.
20. John Dewey, *How We Think* (New York: Heath & Co., 1910), 11.
21. See Tania D. Mitchell, "Traditional vs. Critical Service-Learning: Engaging the Literature to Differentiate Two Models," *Michigan Journal of Community Service Learning* 14, no. 2 (2008): 50–65.
22. See, for example, National Task Force on Civic Learning, *A Crucible Moment*.