

Back to Volume Eleven Contents

Trickle-Down Managerialism: Accountable Faculty in the Financialized University of Managers

J. Paul Narkunas

Abstract

Trickle-down economics offers the promise that wealth will eventually flow to all sectors of society. I argue that rather than wealth, managerial processes and actuarial practices driven by finance and by big data firms have been trickling down and reorganizing higher education—what I call "trickle-down managerialism." Financial firms invest in higher education through student loan programs, educational platforms, and for-profit institutions, and oversee the normalization of conceiving education as a return on investment. Nonprofit institutions increasingly emulate the management strategies of for-profit higher education institutions, such as reliance on adjunct instructors and digital platforms and a profusion of managers. The actuarial emphasis on benchmarking and promoting best practices furthers managerial control over curricula and learning, and I contend that it undermines faculty power, governance, and academic freedom. The unbundling of tasks enabled by digital platforms facilitates the outsourcing of faculty decision-making to machine-learning digital platforms, exemplifying digital Taylorism. To critique these operations in concrete contexts, I analyze the reliance on quantifiable metrics of "student success" for measuring curricula and faculty courses and weigh how journal-impact factors and journal ranking lists outsource faculty decision-making on reappointment, tenure, and promotion to automated machine-learning processes.

The COVID-19 pandemic, like most major social crisis, has revealed the neoliberalist imperative underlying the US res publica: save the market before people. Killing about 200,000 Americans (and counting, as of this article's publication), the pandemic has underscored the structural inequality in the United States by prioritizing the market in the one stimulus measure that has been passed thus far to respond to it: the Coronavirus Aid, Relief, and Economic Security (CARES) Act. CARES invested \$500 billion in large corporations and businesses with almost no conditions of accountability,² while only \$30.75 billion went to K-12 education nationally, with higher education getting \$14 billion.³ Furthermore, the Federal Reserve committed \$2.3 trillion to bail out risky assets, including junk bonds, indebted shopping malls, and distressed loans, injecting liquidity to spur the market, which came roaring back. Such governmental largesse even gave pause to the notoriously conservative editorial board of the Wall Street Journal: "The Fed may feel all of this is essential to protect the financial system's plumbing and reduce systemic risk until the virus crisis passes, but make no mistake that the Fed is protecting Wall Street first. The goal seems to be to lift asset prices, as the Fed did after the financial panic, and hope that the wealth effect trickles down to the rest of the economy."4 The federal government secured Wall Street wealth, offering Keynesianism for large companies, while the rest of the population was succored by free market bromides of our individual freedom and doing more with less, the refrain of neoliberal austerity. Workers and their jobs were no longer affordable costs. More than 40 million workers lost their jobs, and many of them also their health insurance as the pandemic raged. K-12 teachers and college professors, celebrated for transitioning "heroically" to online learning within a week, were rewarded with the prospect of furloughs and mass layoffs before the school year ended.

In protecting the financial sector, large corporations, and the wealthiest sectors of the United States, the CARES Act also highlights the normalization of trickle-down economics, governing by tax cut, with surprising ramifications for higher education. Supply-side or trickle-down economics is a conservative economic theory based on lowering taxes for corporations and high-net-worth individuals (HNWIs) to foster innovation and investment in new technologies, under the assumption that the "wealth effect" will trickle down to the rest of society and lift economic productivity. Under this regime, instead of receiving adequate public funds from state or federal sources, colleges and universities must rely on tuition increases and hope philanthropic donations will trickle in from private corporations or HNWIs, like those safeguarded by CARES. The donations have not been flowing, however, because corporations are hoarding money due to uncertainty. Colleges have instead chosen to lay off or furlough workers or cut their benefits, making them pay for managerial economic short-sightedness, rather than tap endowments.⁵

In this essay, I explore the effects of trickle-down economics in higher education that faculty and lowerlevel administrators experience daily in surprising ways. Rather than wealth trickling down, austerity relentlessly deluges higher education, eroding its historical public function, and replacing it with management strategies. Rather than "a rising tide lifting all boats," managerial procedures trickle down and standardize the work academics perform. These managerial techniques start at the most powerful companies and extend their way into all sectors of society, embodied by financialization and neoliberalist political rationales.

I develop below how academics may unwittingly reproduce what I call "trickle-down managerialism" through such seemingly benevolent ideas as "student success," by tracing how managerial criteria affect curricula, faculty language, and judgment. The focus on student success began through principled explorations into student retention and helping students become lifelong learners. It may now function more as the means to measure accountability to "managerial success." Managers succeed by enticing faculty to use the language of managers, the language of "accountability," quantifying "success" in teaching in terms of raised graduation rates, and measuring faculty research by the number of citations, with catastrophic effects on faculty governance and academic freedom. Trickle-down managerialism also thrives by replacing full-time faculty with adjuncts, who now account for 70 percent of all teaching positions.⁶

Managers have grown exponentially at the expense of faculty, leading Benjamin Ginsberg to speculate on the prospect of "the all-administrative university," an increasing possibility amid budget slashing of employees in the wake of COVID-19. How did this transpire? Bill Readings outlined in 1996 how the Enlightenment project that underwrote the university has given way to an institution "in ruins." Readings identifies how market metrics have replaced Enlightenment concepts of truth, justice, community, and humanity as core legitimations for higher education. The central actors in its mission are no longer the faculty but administrators and managers. Similarly, higher education's chief justification is no longer knowledge or cultural production but corporatist ideas that lack referents in reality, like "excellence." "Student success" works through the same practices of what Readings calls "dereferentialization"—ideas that foster an unquestioning adherence, even though there is no consensus as to their precise meanings. Both the chief technology officer of a Fortune 500 company and a Marxist economist may believe in the ideas of "excellence" and "student success," while having vastly different understandings of them. I document below why faculty must resist the language of accounting, for they can never attain "excellence" in the sense that it is understood by the accountants and managers, one that may be incompatible with educational goals.

Modes of Trickle-Down Managerialism

Private nonprofit and public higher education institutions have replicated the techniques of financial capitalism and neoliberalism and the imperatives of digital technology companies to accumulate data, following what Bernard Harcourt calls an "actuarial logic." Actuarial logic is a managerial technique that

aspires to conquer the uncertainty and indeterminacy of the present and predict the future through systems of classification, grouping, and categorization. Mechanisms of operational organization reconfigure the complexity of reality into an account-able reality that is manageable and marked by quantifiable units. The desire for statistical control was borne from actuarial logic, as a way to measure risk and thus predict and manage the future. Now generalized throughout the social through benchmarking and risk management, it structures a chaotic reality with the epistemological certitude of numbers and data.

In higher education, faculty expertise is disparaged because it does not adhere to a strictly actuarial logic; instead, faculty often depend on narrative modes of analyzing and understanding reality that may not be easily translated into numerical values and data given the many different fields of knowledge specialization. Faculty are increasingly compelled to view knowledge as a data-driven enterprise of productivity and value, through such means as impact factors and number of citations on Google Scholar. In the process, faculty interiorize the managerial goals of education to view it less as a mode of discovery and transformation and more as a purely transactional commodity based on the accumulation of numerical data.

Managerial imperatives trickle down into academic practices through "best practices" and "benchmarking," the managerial res publica for the neoliberal era, as so trenchantly argued by political scientist Wendy Brown. For Brown, best practices are dominant techniques of neoliberal governance based on "soft power, antipolitics, buy-ins, consensus, teamwork, [and] market metrics" to reorganize societies: "A key premise of benchmarking is that best practices can be exported from one industry or sector to another and that some of the most valuable reforms will happen by creatively adapting practices in one field to another." Best practices and benchmarking embody the "consolidation of government, business, and knowledge" into a generalizable market-oriented reality that has no use for nonmarket realities, like humanistic inquiry, or narrative modes of evaluation and analyzing.

Managerial best practices enable the reorganization of the professoriate such that a majority of classes are now taught not by full-time faculty but by precarious adjunct labor. Administrators shepherd the few full-time faculty to create and measure the "best practices," standardizing processes such as "learning outcomes," enabling them to hire adjuncts to keep labor costs down, while offering quality control of the educational product. How? They invest resources in faculty development to put forward the best practices, rather than investing in more full-time faculty. Best practices standardize practices of teaching and learning, thus permitting top-down implementation. Formalized learning outcomes supplant faculty expertise as the idea on which basis graduate programs continue to manufacture PhDs. Expertise is no longer necessary, as any sentient faculty member can teach basic knowledge within their field and take ownership of courses. Standardizing learning outcomes, higher education's "deliverable goods," ensure quality control while relying

on contracted faculty. The intensification of new digital technologies in higher education further enables this systemization of thought and learning outcomes, the outsourcing of faculty employment through adjunctification, and it begins the process to replace people with machine learning.

Neoliberalism, big data, and financial capitalism are based on flexible labor, the endless freedom to contract dovetailing into endless competition, and the supplanting of human workers with artificial intelligence technologies to seek new efficiencies and ways to expropriate value from all facets of existence. Indeed, in the middle of the COVID-19 pandemic, as all classes nationally were forced online, calls for rethinking higher education in light of online and distance learning has already begun, led by Silicon Valley and Seattle entrepreneurs who offer solutions for cash-strapped state governments.¹¹ During the worst days of the epidemic, New York governor Andrew Cuomo initiated a task force led by Microsoft founder Bill Gates to "Reimagine Education" through new technologies and standardized best practices, while simultaneously proposing to cut funding of the state's public education system.¹² Naomi Klein sees Cuomo's gesture to fund technology and not people as part of what she calls the "pandemic's emerging shock doctrine," and the emergence of a "Screen New Deal"—public subsidies for digital technologies and increasingly wealthy tech companies, and scarce resources for human beings. 13 Indeed, the commitment to invest in technologies instead of human beings and their labor is part of the dramatic shift to technological solutions over people, exemplified by what Shoshana Zuboff has diagnosed as "surveillance capitalism." Automating digital technologies enable mass surveillance of people's habits on the internet and social media, and turns people's lives into data flows that in turn are converted into "prediction products" sold on "behavioral futures markets." ¹⁴ In other words, people have rents extracted from them whenever they use a "free" platform by giving data and information about themselves, which become the primary forces of production and control in what Paul Mason and McKenzie Wark call a possible new mode of production.¹⁵

Datafication, the rendering of life into immediate streams of monetizable data, explains the diminished status of the humanities and liberal arts as useless explorations of critical thinking and narrativization that do not pass the market stress tests of cost-benefit analysis. Narrative modes of qualitative analysis are slow, complex, and subject to interpretation, unlike the seeming transparency of datafication. The shift in the idea of the university from a producer of knowledge to manufacturer of data facilitates managerial-led higher education institutions to reduce life to numerical transparency, and for machine-learning to replace human instructors. In the process, these data-led initiatives remake academic freedom into an instrument of the market, much to the detriment of core principles of academic freedom and faculty governance.

How Does Trickle-Down Managerialism Happen?

Higher education's transformation by financialization enables the implementation of trickle-down managerialism. By replicating financial strategies from the for-profit education sector, higher education embraces privatization and manages the "cost diseases" of labor through mass adjunctification. William Bowen and William Baumol used the concept of "cost diseases" to describe labor-intensive industries, like the arts and academia, from which it is hard to extract greater productivity. State investment must therefore mitigate these costs. ¹⁶ In our neoliberal moment, without a commitment to governmental investment in labor or jobs, all full-time faculty are "cost diseases."

Finance comprises 25 percent of corporate profits, when one includes insurance and real estate it accounts for 25 percent of gross domestic product, 17 and it has been remaking the social world, state governments, and higher education. From the 1970s onward after deregulation, investment banks and private equity firms lent directly to consumers, whose debts through student loans, mortgages, and car loans become bundled financial assets. Simultaneously, the lack of public investment in higher education leads to larger tuitions and more oppressive student loans, often by financial firms. Financial profits require students to take out loans to create the bundled assets it monetizes. The federal government fully supports these measures as it "directly finances and administers more than 90% of student loans, and it is the largest recipient of interest income from student loan repayments. It is a testimony to the active role of the state in financialization that the US Department of Education has been one of the fastest growing consumer creditors in the US since 2010."18 Rather than trying to subsidize students' development of their human capital by expanding Pell Grants or demanding higher corporate taxes to fund public education, the federal government subsidizes financial firms by guaranteeing the loans they make to students. These very same firms in turn play a role in keeping Pell Grants fixed at low amounts through their lobbying efforts for supply-side economics. Student loans not only subsidize investment house profits but also paradoxically allow for "growth strategies" at higher education institutions that marshal the speculative value of higher education as an asset for students to purchase in the free market.

Sheila Slaughter and Gary Rhoades diagnose these forces through their concept of "academic capitalism." They argue importantly that faculties and administrations do not have market techniques thrust upon them from external forces; instead, they adopt wholeheartedly the methods of for-profit institutions to foster greater market integration, while maintaining the tax and legal protections afforded by their nonprofit status.¹⁹ Through their introduction of new technologies, proliferation of managers, and lowered labor costs, institutions of higher education increasingly imitate corporate and financial structures:

In effect, university managers acted as venture capitalists, picking technologies they thought would be winners in the new economy. By the end of the 1990s, university managers were involved in the market in terms of licensing income, usually received in the form of royalties from sales; milestone payments, which were made when particular research results were reached; equity interest which could include publicly tradable shares, privately held shares, or options to acquire shares; material transfer agreements; tangible property sales (cell lines, software, compositions of matter); and trade secrets.²⁰

University managers operated as speculative capitalists, monetizing existing assets and speculating on the future. This encompassed assessing their various academic disciplines for their value as returns on investment with the understanding that specific types of research, generally STEM-related, could provide lucrative returns through corporate partnerships.

Nonprofit higher educational institutions replicated the market-driven nostrums of for-profit colleges due to the latter's rapid, unfettered expansion throughout the early 2000s. The for-profit educational sector grew exponentially—from 226,818 students in 1993 to over 2 million in 2010—and was drawing students away from traditional nonprofit higher educational institutions. The for-profit college sector and higher education products and platforms like Turnitin.com²¹ became investment strategies for private equity firms and investment banks. Eighty-five private equity firms bought stakes in for-profit colleges, and a prominent investment house, Goldman Sachs, bought Education Management Corporation for \$3.4 billion in a leveraged buyout.²² In the aftermath of the 2008 economic crises, equity firms and investment banks found higher education a sound investment strategy given the large supply of newly unemployed workers returning to college due to the economic collapse caused by the management failures of these very same equity firms and investments banks.

Strategies and tactics of scalability that originated in for-profit education have trickled down into the nonprofit sector.²³ The rise of online education at virtually every higher education institution speaks to how for-profits were serving a niche, attracting adult learners who often worked full-time jobs and needed flexible schedules and previously would have sought out traditional nonprofit colleges. Online courses offer a cheap and scalable way to deliver education, or at least certification, with no infrastructure requirements like classrooms, or actual professors delivering content.²⁴

Investment houses also entered the higher education consulting business²⁵ and supported the development of learning management systems like Blackboard, owned by Providence Equity Partners, and Canvas. Canvas is part of Instructure, an educational technology company that also develops massive open online courses, which is a subsidiary of Thoma Bravo, a private equity firm that specializes in software

development companies. Financial profits require colleges to use learning management systems and develop online courses, which has resulted in lucrative returns in light of the COVID-19 pandemic.

Distance learning has been embraced by higher education managers for its scalability as a revenue stream that requires less investment in people and infrastructure. Private equity firms and hedge funds pursue these same goals when they purchase a distressed business and sell off its existing assets. Finance operates antidemocratically by concentrating wealth, and outsourcing government responsibilities to private companies as a sign of fiscal discipline, a practice we see at work in the governmental response to COVID-19, as well as in the response of higher education managers. 26 Governments become more focused on assuaging bondholders, who pressure local, state, and federal government to forego taxation on higher earners. Timely debt repayment and fiscal responsibility became the hallmarks of governing, even within higher education, which prefers to shed workers rather than dip into endowments, as we see at institutions like Johns Hopkins.²⁷ Such privileged examples offer a larger context for the structural withdrawal of public support of higher education, which while certainly neoliberal is also driven by privatization and the outsourcing of higher education functions to private companies owned by financial firms, epitomized by paying Blackboard and Canvas rather than investing in faculty to develop education technology tools. Christopher Newfield has shown exhaustively how privatization actually increases the costs of education, while weakening its ability to serve as an engine of social mobility: "The view that cuts to public funding don't hurt students or educational quality is wrong. During the past thirty years of shifting costs from public funds to student tuition, the United States has destroyed a global lead in educational attainment that it had held since the nineteenth century."28 Rather than invest in struggling members of the public to improve their likelihood of success through education, governments pay the bondholders (by lowering tax rates on the wealthy and corporations) who fund the government debt . . . and wait for the trickle-down.²⁹ In the meanwhile, governments focus on improving graduation rates lowered by privatization, touting student success initiatives as a way to fill lost state investment in higher education.

As state funding for colleges declines due to willful disinvestment in public education, and generalized austerity becomes the norm for most public institutions, the ability to replace full-time workers with contingent, precarious, and contract workers or automated systems has become a driving force in higher education. As colleges are configured as businesses in competition with other colleges, human workers—whether at Google or at my home institution, the City University of New York—are increasingly viewed not as essential investments but as "cost diseases." As they age, faculty increasingly use costly benefits and become less able to maintain perpetual, machine-like optimization. As a result, the one growth area for faculty in the last thirty years is in the contracting of adjunct workers, who provide the "deliverables" (courses),

without committing their institutions to these long-term cost diseases. While drawing on the reserve army of faculty seeking employment to make instruction flexible and casual, colleges and universities have hired more administrators and managers to seek out comparative advantages within the institutions' existing assets. The culmination of this effort was diagnosed and verified by the 2008 Delta Cost Project study: "Direct instruction expenses have consistently declined as a proportion of education and related spending, relative to spending increases in student services, academic support, administration and maintenance." 30

The trickle-down of for-profit strategies into nonprofit higher education sectors exemplifies the intensification of finance in the social sector and gives a social context for the trickle-down managerialism in faculty's daily practices. All facets of the college experience are reconfigured through the dyad of assets or debts, with the understanding that some debts can be monetized into assets, like student loans. The different elements of the educational experience can be disaggregated to capture revenue streams, reducing education to a transactional process. The next section looks at the practice of adjunctification as the most concrete example of a larger process of removing faculty power through management strategies. According to Tressie Cottom, "In marketing and financial-advisement documents, the lack of unionization is frequently touted as evidence that the sector is a viable investment." Indeed, the financial sector looks for industries to buy that are not unionized or takes great efforts to render unions ineffectual and thereby disempower average workers. In higher education, adjunctification is the outgrowth of a financial strategy to redistribute costs by putting the managers in charge and removing faculty control from the university.

We're All Managers Now

Through adjunctification and investment in digital technologies, nonprofit higher education institutions follow for-profit higher education by supplanting faculty with managers and managerial strategies. They also normalize financial techniques, actuarial logics, and technological solutions that trickle down into all aspects of higher education. To show how this works concretely to remake higher education as we know it, I analyze in this section how adjunctification affects faculty governance and permits machine learning to replace faculty with technical processes. The conception of higher education as return on investment is deepened by the use of managerial logic to focus on results, which are rendered as numeric data.

Adrianna Kezar, Tom DePaola, and Daniel Scott, in their indispensable *The Gig Academy: Mapping Labor in the Neoliberal University*, describe the transformation of labor by neoliberalism's ascendance and its dramatic effects on universities. They write about "the value shifts that have become embedded into and support new forms of work, including a fissured and misclassified workforce; unbundled, deprofessionalized, and atomized

roles; forced micro-entrepreneurship; managerial influence over labor supply and demand; offloading costs onto workers; technological means of reducing labor costs; and increasing structural discrimination."³²

Universities have seen a two-pronged shift: a growth of managers, many at the highest levels, and the replacement of full-time tenure track faculty with temporary workers brought in to teach courses from semester-to-semester. This "just-in-time" employment, Kezar, DePaola, and Scott argue, allows managers to bypass faculty governance and decision making and in fact has become a fundamental aim of restructuring the university.³³ Adjunctification fosters managerial control, as adjuncts' jobs and schedules are too unstable for them to be considered part of the governance community. Furthermore, the rapidly decreasing number of full-time tenure track positions unravels the foundation of faculty or shared governance operations and shifts decision making from faculty to the growing administrative class: "By unbundling traditional faculty roles, administrators can assume a greater degree of control over institutional resource flows and reconfigure them to optimize return on investment." The generalized employment precarity of most adjuncts makes adjunctification one of the greatest threats to academic freedom in our time. Adjunct job insecurity generates fear and quietism among tenure-track or tenured faculty, given the ample supply of qualified people ready to take their positions. Many thus choose silence rather than challenge administrative directives.

By unbundling the various aspects of teaching, learning, and advising, managers make faculty and student advisers not only more fungible but also expendable, as new technologies supplant human workers. Virtually assisted, algorithmically driven student advising platforms are becoming commonplace; they use predictive analytics and algorithmically driven artificial intelligences, now rebranded as machine learning. Indeed, such platforms as Civitas Learning's Student Success Intelligence Platform, TM the Education Advisory Board's Student Success Management System, 35 Purdue's Course Signals, and Pearson's Analytics Services are the machine learning equivalents of Amazon's Alexa or Apple's Siri for the higher education set. Perversely, in the very spaces where the next generation of human workers are being prepared to integrate into the market by developing the employable skills that will make them enticing forms of human capital, automated interactive technological systems are replacing human professors or advisers in order to cut costs and show fiscal discipline.

In addition to the machine-learning platforms that replace faculty and advisers and enable the growth of adjunct workforces, strategies from management texts increasingly guide academics' daily practices. Objectives and key results (OKRs) are basic management strategies that began in Silicon Valley's communalist ethos, repurposed for the large-scale corporation or nonprofit. Indeed, two of the major evangelists of OKRs, Andy Grove, formerly of Intel, and John Doerr, a venture capitalist with Kleiner Perkins, borrowed from management guru Peter Drucker, the theorist of management objectives and

outsourcing, and codified these techniques. Such Silicon Valley stalwarts as Google, YouTube, and Lumeris, a technology company with a focus on health care, as well as foundations like the Bill and Melinda Gates Foundation and the One Campaign founded by U2 lead vocalist Bono and funded by the Gates Foundation, use OKRs.³⁶ To enact objectives, the central goals that guide the company, Doerr argues for "key results" that "benchmark and monitor HOW we get to the objective. Most of all they are measurable and verifiable. (As prize pupil Marissa Mayer [Google employee from 1999 to 2012 and former CEO of Yahoo] would say, 'It's not a key result unless it has a number.')" Doerr's analysis centers on how OKRs made Google one of the most powerful companies in the world by creating aspirational goals and fostering a corporate culture committed to these goals, one that measured success through key results. The quantitative approach to achieving the goal is as important as the goal—if the goal cannot be measured, it has no business existing.

Doerr charts how OKRs and what he calls continuous performance reviews (CPRs) can work together to create a corporate culture, a "community" that inspires employees. CPRs make performance reviews perpetual and incessant, ensuring that employees follow the "objectives" and strive toward the "key results." OKRs and CPRs employ the discourse of a horizontal working environment while also creating the means to entrench a hierarchy of leaders, now rebranded simply as the corporate culture, pushing people to accept the culture from above and edify it with measurable results, or seek employment elsewhere.³⁷

Accountability and the actuarial logic dominate both OKRs and CPRs because they provide the means to measure the seemingly immeasurable through data and enable the quantification of all forms of life relative to their returns on investment. This drive for measuring even affective values can reach astounding proportions as management theorist Dov Goldman measures trust, and Bono's One World uses OKRs to measure passion.³⁸ The drive to implement data and quantitative results over qualitative analysis for such human qualities as trust and passion is a technique of financial and speculative capitalists in no small part because venture capital funds so many Silicon Valley start-ups and new digital technologies generally. The desire for measurement not only shows a business's investors its tangible results but also allows for its monetization so that certain sectors can be forced to improve their efficiency or profitability or be abandoned before too many debts accrue. These actuarial techniques become best practices to normalize the conception of education as a return on investment.

As students increasingly bear the cost of their education, the discourse from finance of "return on investment," education understood as an asset, has gained traction among business leaders (many of whom may be trustees for universities and colleges); college presidents; administrators in development, finance, and enrollment management departments; and even the students themselves. As students take on more debt due to rising tuition costs, they see diminishing returns on their educational investment. How then can the

complex and multifaceted higher education experience be quantified to ensure that students are getting their money's worth? One dominant rubric has been *US News and World Report*'s annual list of the best colleges, which in 1988 established fifteen criteria and measurable metrics, including SAT scores, acceptance rates, college fundraising, and student-teacher ratios. The list did not ensure the quality of the education except as represented by the fifteen areas; instead, it offered a set of measurable key results to identify the "best colleges," the objective or high-level goal to use OKR language, based on established reputation and data provided by the colleges themselves.³⁹ Cheating scandals ensued as administrators "cooked" the numbers to show improvement according to the criteria and move up the rankings.. The *US News and World Report* list of colleges was supplemented by the College Scorecard, a database put out by the data-obsessed and often Gates Foundation–subsidized US Department of Education during the Obama administration. The College Scorecard reduced the rankings to five criteria: cost, graduation rates, employment rates, average amount borrowed, and loan default rate. These rankings follow more finance-based criteria than those of the *US News and World Report* rankings; education as return on investment subtends each of these data points.

Most higher education institutions did not have the resources to compete for status on the *Report*'s list because they taught nontraditional or impoverished students. They found themselves further marginalized by the College Scorecard's decontextualized data. These lists, flawed and incomplete, have trickled into the mission of colleges, reorganizing them around the ideas of student retention, student engagement, the student experience (a positive student experience could lead to future donations), and, most important, graduation rates, rebranded through "student success" to demonstrate a college's market value through return-on-investment metrics.

"Put a Glock to Their Heads": The Dangers of Predictive Analytics

The idea of *student success*, a generic term that smacks of trickle-down managerialism, is often misread because it can mean so many things to different constituencies. As Readings noted about universities of "excellence," "student success" for professors is the basic fact of teaching. However, for administrators it is often the metric by which their performance is evaluated against data on student engagement, high-quality learning environments, and student completion. *Student success* is a managerial term that serves a double actuarial function, delineating both return on investment for students and success by administrations in delivering that return on investment, while instrumentalizing the college experience to a series of achieved objectives (outcomes) and key results (graduation rates), as envisioned by Doerr.

As with many things now coopted by managerial logic, student success was a seemingly "faculty-led" initiative to analyze why students, particularly poor students and students of color, do not complete their

undergraduate education, and to redress vast discrepancies in equity. Student success emerged from studies on low student retention rates because of vast racial, economic, ethnic, cultural, and social differences, represented by Vincent Tinto's integration model and Therese Baxter's attrition model. George Kuh's and Jillian Kinzie's 2005 study formalized student success as an overarching objective of higher education by studying twenty institutions to come up with the best practices for student success. For Kuh, Kinzie, and associates, this entails important "good practices" (aka "best practices") such as the first-year experience, improving student advising, and fostering learning communities. Institutions committed to student success have a "collaborative spirit" and a "shared responsibility for educational quality and student success" between faculty and administrators—in short, faculty need to think like managers. The primary objectives of Kuh, Kinzie, and colleagues were to formalize and standardize effective management strategies that could be transported to other campuses.

Importantly, this framework for student success received funding from the Lumina Foundation, one of the major think tanks involved in reorganizing higher education.

Lumina is a major player in educational management theory, having pledged over \$235 million by 2013 to college completion. Indeed, according to a Lumina-backed 2017 study by Kuh and Kinzie, "In 2009, Lumina Foundation pledged to increase the proportion of Americans with high-quality degrees, certificates and other credentials to 60 percent by 2025. This target, known as 'Goal 2025,' is an outcomes-based approach to establish an equitable, accessible, responsive and accountable higher education system while fostering a national sense of urgency for action to achieve the goal." Lumina is thereby not only funding knowledge but also directing and changing governmental policy, with its donations focused on quantifiable results and the following stated mission: "Lumina's priority is to fundamentally rethink how higher education is delivered, and what outcomes can be expected from postsecondary completion. Lumina Foundation is leading a national conversation about the disruptive innovations helping to design and build a 21st century system that meets the needs of all students."

Law professor Frank Pasquale contends that Lumina has a track record of supporting digital technologies and market solutions to higher education problems, through its funding of think tanks, education advocacy nonprofits, and scholars to produce knowledge, as well as journalists to cover this knowledge. In fact, Pasquale and others document Lumina's record of funding knowledge and practices that do not alter the reality that students must take out loans for their education. This makes business sense as Lumina is a think-tank philanthropy spinoff that only came into existence when the USA Group sold off its student loan business to Sallie Mae Student Loans. Moreover, between 2008 and 2012, Lumina donated over \$590,0000 to the American Legislation Exchange Council (ALEC), a free-market nonprofit known for providing ready-

made legislation for state and federal legislators that removes worker's protections, environmental protections, and gun-control protections. Lumina's grants to ALEC demonstrate both groups' higher education priorities: "to help state legislators explore policy options intended to increase student success and productivity within American higher education."

Foundations and think tanks like Lumina and the Gates Foundation play outsized roles in centralizing student success along quantifiable data, particularly in light of continued austerity and lack of government investment. The Gates Foundation has invested \$472 million in higher education research and journalists to cover this research between 2007 and 2013. Gates has also been involved in fostering "competency-based education" and such online megauniversity franchises as Southern New Hampshire University and Western Governors University, as well as the ideas behind "proficiencies" or "competencies" and "student success." As the authors of a 2013 article in the Chronicle of Higher Education describe it, "Some experts have complained that the Gates foundation approaches higher education as an engineering problem to be solved. Most important, some leaders and analysts are uneasy about the future that Gates is buying: a system of education designed for maximum measurability, delivered increasingly through technology, and—these critics say narrowly focused on equipping students for short-term employability."⁴⁷ Indeed, the Gates Foundation is committed to "Postsecondary Success, whose goal is to dramatically increase the number of young people who obtain a postsecondary degree or certificate with labor-market value." Their solutions? New digital technologies as scalable, cheap educational delivery systems, reformulating government policy to promote student graduation rates, and transforming higher education through infinite accountability: "Our work with colleges and universities and the organizations supporting them focuses on transformation—building capacity to dramatically improve student outcomes and eliminate racial and income gaps. This includes having a student-centered mission, using data to make decisions, creating a collaborative environment, setting goals and being accountable for them, and making a commitment to continuous improvement."48

These statements show the Doerr's OKRs and CPRs guide the foundation's objective. While helping the poor and underserved is certainly a noble goal, the obsession with accountable key results like graduation rates and "degrees or certificates with labor-market value" removes any qualitative assessment of education, as well as neglects Gates's own lobbying against raised tax rates for high earners.

As the Gates and Lumina Foundations fill the void left by governmental austerity for public education, they play an often-unrecognized role in setting the language and practices that currently guide so many trends in higher education, including student success. As college tuitions increase, retaining students becomes more challenging, especially when more nontraditional students go to college while working full-time and, at least at public educational institutions, find limited opportunities for grants. Low graduation rates at institutions often

correlate with the number of students living in poverty or receiving Pell Grants. The discourse of student success unites a desire to maintain the public mission of education to help disadvantaged groups without actually demanding massive public investments, such as extending Pell Grant limits. Instead, it places faith in managerial solutions to locate the reasons why disadvantaged students might leave college, so as to restructure these institutions through better management, and the deployment of digital technologies, perfectly in line with the Gates Foundation's overarching goals, as well as Microsoft's business model (Microsoft earns most of its money now from its cloud server infrastructure, which is essential for all learning management systems). These foundations use discourses of equity, access, and affordability but circumvent public accountability with respect to their own approaches because they actually approach education through the financial lens of return on investment.

Furthermore, these foundations neglect to weigh how many of their tools, like predictive analytics and retention rates, can be manipulated to make the numbers work while normalizing discrimination. For example, Simon Newman, now former president of Mount St. Mary's, a small, private Catholic university in Maryland, wanted to kick out freshman students preemptively so that they would not lower the college's graduation rates and hurt the college's national ranking. He devised a predictive analytics survey that students would complete, and from their answers the college could identify students who would not succeed and would be encouraged to leave before they could affect the ranking. According to the *New York Times*, Newman, a former private equity executive, told a professor skeptical of the program, "This is hard for you because you think of the students as cuddly bunnies, but you can't. You just have to drown the bunnies. Put a Glock to their heads." Newman's strategy demonstrates a mixture of faith in predictive analytics (another of Gates's and Lumina's innovation strategies) to identify student success, and anxiety about graduation rates as measures to attain by any means necessary. In the process, he was willing to discriminate, profile, and sacrifice actual students early in their education to ensure student success, a cover for what has in effect become a marketing strategy.

Student success is a means for administrations to exercise greater managerial control over faculty, since faculty's teaching, research, or speech could affect the college brand as return on investment and thereby get in the way of student success, which invariably requires standardization of processes. More importantly for faculty, managerial techniques may allow for the circumvention of academic freedom. The focus on objectives and goals that can be put on a spreadsheet and quantified by key results may boost graduation rates, a seemingly transparent metric because a student either completes the degree or does not. Yet the qualitative elements of education—what the student actually learns beyond skills for particular preprofessional programs—are often not. Also, the mitigating social factors that may affect why a student

does not graduate on time, like economic hardship, housing insecurity, inadequate health care, or the generalized precarity of existence due to neoliberal austerity measures, are erased by the data.

Academic fields of study that struggle to become actuarial can become jettisoned in the name of student success. For example, developing critical thinking, the hallmark of liberal arts education, used to be fairly dominant in discourses for accreditation, college missions, and strategic plans in higher education, to the point where critical thinking functioned like an empty sign, having so many possible meanings that it became derided as nonsensical. Critical thinking at least challenges normalization and the status quo, including systems of actuarial accountability that are opaque, for the numerical values are abstractions that stand in for the complexity of human experience in all its messiness and indeterminacy.⁵⁰ Moreover, critical thinking defies simple reconfigurations into data, into measurable units of accountability, because it requires narrative not datafication, which is perhaps why its centrality to the mission of higher education has dissipated. Finally, critical thinking remains grounded in the idea of faculty expertise and judgment to produce new knowledge, and it encourages students and faculty to challenge naturalized truths that dispossess and marginalize vast sectors of the population, and to analyze and critique the systems of power that construct our collective realities. Student success, in contrast, is as much a measurement tool of administrative success and can be standardized by any agents, from academics to administrators to outside consultants like Deloitte and Touche, an accounting firm that has gotten into the business of higher education consulting, to gather and manage the metrics of accountability. Despite its noble intentions and perhaps its results,⁵¹ "student success" marks a moment when administrators try to mobilize faculty around an idea designed to make them flexible, interchangeable, and replaceable, because teaching and learning have been unbundled by student success.

Algorithmic Judgments, Governance, and Academic Freedom

With managerial and financial techniques trickling down into all facets of higher education, new technologies can program and circulate benchmarks of success, making human laborers dispensable in this age of big data.⁵² Unbundling traditional faculty tasks of teaching, learning, advising, and using complex machines provides deliverables, much like the breakdown of the Fordist assembly line that we associate with Frederick Taylor's *The Principles of Scientific Management*, and use of "trained gorillas" to complete discrete tasks.⁵³ For Taylor, every worker could be made fungible by standardized and optimized engineering processes, allowing any semisentient being to perform the task. In our present fetishization of data, adaptive algorithms systematize machine learning. Machines are programmed to "learn" the managerial processes, act more like humans so they can eventually replace human workers, a practice we see systematized with Amazon's Mechanical Turk.⁵⁴ While companies that promote machine learning claim they want to learn from humans in

order to serve them, their goal of market dominance is made easier by rendering humans more transparent, more measurable, more accountable, and more predictable, in short more like the algorithms and systems the companies are coding for machine learning.

I have documented how managerial techniques trickle down into academics' everyday life through the normalization of actuarial logics, codified as best practices, and formalized by measurable results such as completion rates and student success. Moreover, finance is the primary force reconfiguring the entire social landscape of higher education as a field of assets and debts: students, star faculty, academic fields of study, campus amenities, and first-year experiences are different metrics to determine the value of education and a return on investment. Powerful foundations like Lumina and Gates, aided by the US Department of Education, guide this financial discourse as they design educational models based on measurable results—not education as endless critical exploration—to fulfill the needs of the market.

Managerialism has set the stage to automate faculty judgment with machine learning tools. Academic judgment is outsourced to ready-made lists of journal rankings, and impact factors exemplify machine learning that erodes academic freedom and judgment. These issues have become even more pressing in the wake of COVID-19 and the call to reconfigure all facets of the university to virtual contexts.

As critical algorithm studies scholars have argued, algorithms are modeling systems with built-in biases, but they also produce worlds through predictive systems and analytics. 55 They use available inputs to render judgments based on predicting patterns from reams of data, and in fact model human behavior because of these predictions. According to Tania Buchner, "In the era of big data and data mining, algorithms have the ability performatively to change the ways events unfold or, at the very least, change their interpretation."56 Safiya Noble has shown the built-in algorithmic racism of Google Search. These seemingly neutral technological algorithms privilege whiteness and exhibit structural racism against people of color, particularly women of color, and engage in digital racial profiling guided by algorithms.⁵⁷ Impact factors and journal rankings like H-Net, SCImago, ERIH, and Google Scholar have biases in their programming that are erased by the seeming transparency of the actuarial logic and numerical truth claims. Yet they are the culmination of designed modeling processes whose built-in prejudices are based on scalability that privileges for-profit academic presses. Books and journals sponsored by major for-profit presses like Taylor and Francis or Springer are more likely to have their citations captured than small university presses because metrics are part of the for-profit academic publication's business model. Their rankings and reputations are based on actuarial logics of accounting, namely the number of citations, which denotes the "impact factors" of journals, rather than editorial boards and actually existing academics who read and evaluate academic work through the peer review process.

Vast disciplinary discrepancies on methods of citation are lost in the OKRs of counting academic excellence by citations and downloads as the signs of "impact," that is, the number of citations for a journal within a two-year period. The sovereignty of numbers stands in for the value of the editorial board and peer-review process, the quality of the argument, or academic judgment writ large. Critiques of impact factors demonstrate how little they actually measure and how they reward articles that reflect the status quo within specific disciplines. Furthermore, editors of journals often engage in "coercive citation," requiring scholars to add citations to raise the numbers and impact factor of the journal, or risk the article's rejection. Disciplines such as literature, social theory, gender studies, or critical race studies, which do not require citations for every statement like law journal articles do, are at a comparative disadvantage within this actuarial culture. Finally, impact factors and journal rankings are seemingly transparent, but they may have biases built in that cannot be explored because their mechanisms of algorithmic judgment are proprietary as they are owned by private entities.

Faculty may outsource their own judgments on tenure and promotion cases within personnel processes every time they consult impact factors and journal rankings as the markers of quality, instead of reading the articles or weighing the judgments of external evaluators within a candidate's field. If citations and shares are the measure of academic quality, then there really is no need for the academic judgment on which academic freedom is based, and thus no real need for academics. As Louis Menand reminds us, "At the heart of the political and economic battles over the future of the university is the concept of academic freedom. Academic freedom is not simply a bonus enjoyed by workers within the system, a philosophical luxury universities could function just as effectively, and much more efficiently, without. It is the key legitimating concept of the entire enterprise. Virtually every practice of academic life that we take for granted. . . derives from it."61 Machine learning destroys academic freedom by replacing faculty speech with algorithmic judgment.⁶² Faculty judgment on the quality of fellow academics for tenure and promotion is one place where faculty would seem indispensable. Nonetheless, if the numbers game is all that is necessary for tenure and promotion, then eventually proprietary algorithms and predictive analytics, likely developed by third parties or consultants, will become the norm to render judgment on tenure and promotion. Faculty failing to make sufficient progress according to the algorithm's predictive judgments would be let go. There would be no need to argue for faculty academic freedom, because there would be no need for faculty judgment, only data inputs that the "transparent" algorithm would administer.63

J. Paul Narkunas is associate professor of English at the John Jay College of Criminal Justice at the City University of New York and a grievance counselor for the CUNY Professional Staff Congress (PSC-CUNY).

Notes

- ¹ The federal government has demanded the reopening of the economy, in effect rendering some populations expendable, and reinforcing the structural racism and ageism of the United States as people of color and the elderly die disproportionately. Blacks/African Americans and Latinx are suffering disproportionately because of social inequalities and entrenched racism, and have even been outrageously blamed for their own demise. Ibram x. Kendi, "Stop Blaming Black People for Dying of the Coronavirus," *Atlantic*, April 14, 2020.
- ² \$350 billion went for the payment protection program for small "businesses" (up to \$10 million) who faced prohibitive requirements that deincentivized people from using the funds or punished those who did. This does not include how such "small" businesses as the Los Angeles Lakers and food chains like Shake Shack and Longhorn Steaks took advantage of the program. Furthermore, the bill contained a tax cut (the one remaining tax from the 2017 Tax Cut and Jobs Act where the bulk of the saving went to corporations), where 80 percent of the benefits will go to 43,000 people who make over \$1 million annually, and will cost the United States \$90 billion in 2020 and potentially \$195 billion over the next ten years. Jeff Stein, "Tax Change In Coronavirus Package Overwhelmingly Benefits Millionaires, Congressional Body Finds," *Washington Post*, April 14, 2020.
- ³ Kelsey Snell, "What's Inside the Senate's \$2 Trillion Coronavirus Aid Package," *National Public Radio*, March 26, 2020, https://www.npr.org/2020/03/26/821457551/whats-inside-the-senate-s-2-trillion-coronavirus-aid-package. Also, one of President Trump's main economic advisers, Art Laffer, the "economist" who formalized governing by tax cut and trickle-down economics during the Reagan administration, has proposed taxing arts and educational nonprofits. This will result in cuts in salaries for public officials and professors to generate revenue, while suspending the payroll tax, which would again benefit corporations and the employed. See Ross Barkan, "Art Laffer's Trickle-Down Economics Would Be Disastrous for a Recovery," *GQ*, April 13, 2020, https://www.gq.com/story/art-laffer-trickle-down-economics.
- ⁴ Editorial Board, "The Fed's 'Main Street' Mistake," *Wall Street Journal*, April 9, 2020, https://www.wsj.com/articles/the-feds-main-street-mistake-11586474912.
- ⁵ François Furstenberg, "University Leaders Are Failing," *Chronicle of Higher Education*, May 19, 2020. Furstenberg diagnoses brilliantly the centralization of power in managers, who at the first major crises in twelve years failed to secure their institutions' futures, trampled on the premise of shared or faculty governance, and saved their endowments first before saving faculty or staff.
- ⁶ See AAUP, "Background Facts about Contingent Faculty," https://www.aaup.org/issues/contingency/background-facts .
- ⁷ A libertarian political science professor, Ginsberg also documents these changes and the shift away from teaching and research to the "student experience," which often redirects the focus of colleges to catering to students as customers and professionalizes a class of managers who may have no academic experience. Benjamin Ginsberg, *The Fall of the Faculty: The Rise of the All-Administrative University and Why It Matters* (Oxford: Oxford University Press, 2011), 39.
- ⁸ Bill Readings, *The University in Ruins* (Cambridge, MA: Harvard University Press, 1996), 5. I want to thank here Rachel Ida Buff and an anonymous reviewer for their invaluable comments on this article.
- ⁹ Bernard E. Harcourt, *Exposed: Desire and Disobedience in the Digital Age* (Chicago: University of Chicago Press, 2015).
- ¹⁰ Wendy Brown, *Undoing the Demos: Neoliberalism's Stealth Revolution* (Brooklyn, NY: Zone, 2015), 136–37.
- ¹¹ Michael Roth, "Beware the Doyens of Disruption," *Chronicle of Higher Education*, March 27, 2020, https://www-chronicle-com.ez.lib.jjay.cuny.edu/article/Beware-the-Doyens-of/248868?cid=wcontentgrid_hp_1b.
- ¹² Although it included plenty of administrators, the task force had no educators from higher education and only one representative from New York City, despite the city's having the largest number of students in the state public education system. The managers would know best and implement the strategies from the top down; the technologies would provide the means and ends. Reema Amin, "No Current NYC Educators Named to Cuomo's

'Reimagine Education' Council," *Chalkbeat: New York*, May 8, 2020, https://ny.chalkbeat.org/2020/5/8/21252576/no-current-nyc-educators-named-to-cuomos-reimagine-education-council.

- ¹³ Naomi Klein, "Screen New Deal," Intercept, May 8, 2020.
- ¹⁴ Shoshana Zuboff, *The Age of Surveillance Capitalism* (New York: Public Affairs, 2019).
- ¹⁵ Paul Mason, *Postcapitalism: A Guide to Our Future* (Brooklyn, NY: Verso, 2015); McKenzie Wark, *Capital Is Dead: Is This Something Worse?* (Brooklyn, NY: Verso, 2020).
- ¹⁶ Baumol and Bowen's arguments were instrumental in procuring support for the arts in the 1960s through the National Endowments for the Arts and the Humanities. Bowen later seems to have embraced neoliberalist goals. See his argument for online education as the means to fight "cost diseases" in *Higher Education in the Digital Age* (Princeton, NJ: Princeton University Press, 2013).
- ¹⁷ Rana Foroohar, *Makers and Takers: The Rise of Finance and the Fall of American Business* (New York: Crown Business, 2016), x.
- ¹⁸ Charlie Eaton, Jacob Habinek, Adam Goldstein, Cyrus Dioun, Daniela G. S. Godoy, and Robert Osley-Thomas, "The Financialization of Higher Education," *Socio-economic Review* (2016): 25.
- ¹⁹ Sheila Slaughter and Gary Rhoades, *Academic Capitalism and the New Economy* (Baltimore: Johns Hopkins University Press, 2005), 4.
- ²⁰ Slaughter and Rhoades, 25.
- ²¹ Sydney Johnson, "Turnitin to Be Acquired by Advance Publications for \$1.75B," *EdSurge*, March 16, 2019, https://www.edsurge.com/news/2019-03-06-turnitin-to-be-acquired-by-advance-publications-for-1-75b.
- ²² Aaron Ross Sorkin, "Education Management Said to Be Sold for \$3.4 Billion," *New York Times*, March 6, 2006, https://www.nytimes.com/2006/03/06/business/education-management-said-to-be-sold-for-34-billion.html.
- ²³ Consumer Financial Protection Bureau and US Department of Education, *Private Student Loans: Report* (Washington, DC: Consumer Financial Protection Bureau, 2012).
- ²⁴ Western Governors University was asked to return \$730 million in federal aid by the Office of Inspector General of the Department of Education because it was unclear if the college was in fact following the legal instruction requirements of distance education or was merely offering correspondence courses through its Bill and Melinda Gates Foundation–led focus on competency-based education. In short, the question was whether there was enough faculty interaction given that WGU has broken down the educational process with courses designed by faculty members but administered by separate "mentors" and "evaluators," who interact with students: "Accreditors and the department are in charge of determining whether a distance education program meets federal requirements for faculty interaction. The inspector general recently has issued rebukes to both the feds and a regional accreditor for their review of competency-based programs related to this question." Paul Fain, "The Faculty Role Online, Scrutinized," *Inside Higher Education*, January 15, 2016,
- https://www.insidehighered.com/news/2016/01/15/education-departments-inspector-generals-high-stakes-audit-western-governors-u. I explore Western Governors University's educational model further in *Edu-Futures: How Finance and Big Data Transform Higher Education* " (manuscript in preparation).
- ²⁵ See Charlie Eaton, Sabrina T. Howell, and Constantine Yannelis, "When Investor Incentives and Consumer Interests Diverge: Private Equity in Higher Education," NYU Stern School of Business, May 13, 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3371413.
- ²⁶ Wolfgang Streeck, *Buying Time: The Delayed Crisis of Democratic Capitalism* (New York: Verso, 2013). Streeck outlines what he calls the consolidation state that has emerged since the 2008 economic crisis: nation-states are transformed through privatization, so as to make even the pretense of democracy or its exercise impossible.

 ²⁷ Furstenberg, "University Leaders Are Failing."
- ²⁸ The outsourcing of revenue streams to private actors become new costs of doing business. Christopher Newfield, *The Great Mistake: How We Wrecked Public Universities and How We Can Fix Them* (Baltimore: Johns Hopkins University Press, 2016), 19.

- ²⁹ See the timely and infuriating book by Emmanuel Saez and Gabriel Zucman, *The Triumph of Injustice: How the Rich Dodge Taxes and How to Make Them Pay* (New York: W.W. Norton, 2019), which makes a claim comparable to Streeck's.
- ³⁰ Donna Desrochers, Colleen Lenihan, and Jane Wellman, *Trends in College Spending, 1998–2008: Where Does the Money Come From? Where Does It Go? What Does It Buy?* (Washington, DC: Delta Cost Project, 2010), https://deltacostproject.org/product-types/trends-and-data-updates.
- ³¹ Tressie McMillan Cottom, *Lower Ed: The Troubling Rise of For-Profit Colleges in the New Economy* (New York: New Press, 2017), 114.
- ³² Adrianna Kezar, Tom DePaola, and Daniel T. Scott, *The Gig Academy: Mapping Labor in the Neoliberal University* (Baltimore, MD: Johns Hopkins University Press, 2019), 20.
- ³³ Kezar, DePaola, and Scott, 22.
- ³⁴ Kezar, DePaola, and Scott, 22.
- ³⁵ The Education Advisory Board was sold to Vista Equity Partners in 2017 and is now known simply as EAB.
- ³⁶ John Doerr, Measure What Matters: How Google, Bono, and the Gates Foundation Rock the World with OKRs (New York: Penguin, 2018).
- ³⁷ In the one of many vignettes in the book focusing on the adoption of OKRs and CFRs at Lumeris, Andrew Cole, chief HR/organizational development officer, describes how Lumeris had to replace 85 percent of their HR professionals within an eighteen-month period (Doerr, 220). The culture was being implemented from above, and those who failed to embrace it were considered a "bad fit" and let go with little time for people to adapt to the management style.
- ³⁸ Doerr, 241–43.
- ³⁹ As former math professor and quant Cathy O'Neill reveals, the list required models and numbers, so anecdotal or qualitative/narrative analysis was forsaken, since the numbers carried truth claims that could be incorporated into the algorithm. As a result, "Three-quarters of the ranking would be produced by an algorithm—an opinion formalized in code—that incorporated these proxies" (the models or "key results"). O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (New York: Crown, 2016), 53. In short, college administrators reorganized colleges to fulfill the needs of the algorithms as the list could make or break their career ambitions and their college's financial well-being. This race to the top of the *US News and World Report* list, which continues even after the demise of the print magazine in 2010, created many of the campus excesses like wave pools and boutique dorms that I described above. Institutions that could not emulate Harvard, Yale, and Stanford in reputation and academic standing could excel in infrastructure, another criterion of the list.

 ⁴⁰ Both Baxter and Tinto discuss students' struggle to integrate into the college experience due not only to academic problems but also and more frequently extra-academic ones like feeling alienated because certain assumptions to which they are not privy are built into the college experience. Such students are more likely to leave school.
- ⁴¹ George D. Kuh, Jillian Kinzie, John H. Schuh, Elizabeth J. Whitt, et al., *Student Success in College: Creating Conditions That Matter* (San Francisco: Jossey-Bass), 9.
- ⁴² Kuh et al., 176.
- ⁴³ Indiana University Center for Postsecondary Research, *Review of Student Success Frameworks to Mobilize Higher Education*, report prepared for the Lumina Foundation, November 2016.
- ⁴⁴ See the website: https://www.luminafoundation.org/.
- ⁴⁵ Journalists like Kevin Carey of the New America Foundation, which controversially has close ties to Google's Eric Schmidt and tends to only support technological solutions to education problems. See Kenneth Vogel, "Google Critic Ousted from Think Tank Funded by the Tech Giant," *New York Times*, August 30, 2017, https://www.nytimes.com/2017/08/30/us/politics/eric-schmidt-google-new-america.html.
- ⁴⁶ See Lumina's grants database: https://www.luminafoundation.org/grants-database/5495, https://www.luminafoundation.org/grants-database/6782. ALEC is an organization aligned primarily with the

Republican Party and New Democrats that, among other things, seeks to undermine workers' protections, gun laws, and environmental protections. It lobbies for antistatist, neoliberal legislation on education policy. The Gates Foundation donated to ALEC until 2012, when the latter's toxicity made it a liability for Gates.

- ⁴⁷ Marc Parry, Kelly Field, and Beckie Supiano, "The Gates Effect," *Chronicle of Higher Education,* July 14, 2013, https://www.chronicle.com/article/The-Gates-Effect/140323. See also Linsey McGoey's indispensable *No Such Thing as a Free Gift: The Gates Foundation and the Price of Philanthropy* (New York: Verso, 2015).
- ⁴⁸ See the Gates website: https://postsecondary.gatesfoundation.org/areas-of-focus/transformation/; my emphasis.
- ⁴⁹ Yonette Joseph and Mike McPhate, "Mount St. Mary's President Quits after Firings Seen as Retaliatory," *New York Times*, February 29, 2016.
- ⁵⁰ Joan Scott, *Knowledge, Power, and Academic Freedom (The Wellek Library Lectures*) (New York: Columbia University, 2019) defends the importance of critical thinking as the mission of the university instead of the market metrics I describe above. For Scott, critical thinking relies on faculty expertise and judgment, and is the very essence of academic freedom.
- ⁵¹ I am not contesting that "student success" can work. Indeed, investing vast resources for student services and creating administrative positions should help students continue to graduation because in fact resource allocation is key to success at any institution. Instead, I am noting that student success has become its own means and ends, offering best practices and benchmarks that make faculty expendable due to trickle-down managerialism and diminished investment in faculty at institutions of higher education.
- ⁵² These companies exemplify what Nick Srincek, among others, has called platform capitalism and Shoshanna Zuboff terms surveillance capitalism. Srincek, *Platform Capitalism* (New York: Polity, 2016); Zuboff, *The Age of Surveillance Capitalism*.
- ⁵³ Frederick Winslow Taylor, *The Principles of Scientific Management* (New York: Harper and Brothers, 1911), https://archive.org/details/principlesofscie00tayl/page/n6/mode/2up.
- ⁵⁴ Mturk, as it is more commonly called, contracts piecemeal tasks for the temporary workers it hires to facilitate the learning curve of machinic processes in what its creator, Jeff Bezos, CEO of Amazon, called the production of "artificial artificial intelligences." As Bezos told the *New York Times* in 2007, "Normally, a human makes a request of a computer, and the computer does the computation of the task. But artificial artificial intelligences like Mechanical Turk invert all that. The computer has a task that is easy for a human but extraordinarily hard for the computer. So instead of calling a computer service to perform the function, it calls a human." Quoted in Pew Research Center, "What Is Mechanical Turk?," July 11, 2016,

https://www.pewresearch.org/internet/2016/07/11/what-is-mechanical-turk/.

- ⁵⁵ Tania Buchner, *If . . . Then: Algorithmic Power and Politics* (Oxford: Oxford University Press, 2019); John Cheney-Lippold, *We Are Data: Algorithms and the Making of Our Digital Selves* (New York: NYU Press, 2019); Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: NYU Press); O'Neil, *Weapons of Math Destruction*.
- ⁵⁶ Buchner, *If . . . Then*, 28.
- ⁵⁷ Furthermore, algorithms automate decision-making and have been used to tragic effect on precarious and dispossessed populations, creating what Virginia Eubanks calls a "digital poorhouse" that never considers the human costs of automation because measurement is the goal and key result. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* (New York: St. Martin's, 2017).
- ⁵⁸ See Thed van Leuwen, "Discussing Some Basic Critique on Journal Impact Factors: Revision of Earlier Comments," *Scientometrics* 92, no. 2 (August 2012): 443–55.
- ⁵⁹ Allen W. Wilhite and Eric A. Fong, "Coercive Citation in Academic Publishing," *Science* 335, no. 6068 (2012): 542–43.
- ⁶⁰ We have seen in the United Kingdom how such research measuring systems have played out in the allocation of funds through the Research Excellence Framework (REF). The REF offers a national measuring system that gives

each department a numerical reading, like a grade, to show its research profile. Unfortunately the United States seems poised to replicate this system. The numerical values, the accountable measures, stand in for any type of qualitative assessment. Starting in 2015, the United Kingdom demanded that its universities assess research by its economic value, which put many humanities scholars at a comparative disadvantage because human practices—for example, desire itself—may not always have fungible economic value. Furthermore, according to Derek Sayer, the REF was an abject failure because it was expensive, ironically avoided peer review because of the sheer volume of assessment, undermined collegiality because of the relentless competition, and rewarded noninnovative research. Sayer, "Five Reasons why the REF Is Not Fit for Purpose," *Guardian*, December 15, 2014, https://www.theguardian.com/higher-education-network/2014/dec/15/research-excellence-framework-five-reasons-not-fit-for-purpose. See also Sayer, *Rank Hypocrisies* (London: Sage, 2014).

- ⁶¹ Louis Menand, "The Limits of Academic Freedom," in *The Future of Academic Freedom*, ed. Louis Menand (Chicago: University of Chicago Press, 1996), 4.
- ⁶² As Kezar, DePaola, and Scott warn about the use of new technologies to replace faculty in the classroom, "Increasingly, administrators will begin to see faculty and staff as obsolete and automate as many of their functions as possible, fulfilling the Gig Academy's drive towards a minimally labor-intensive enterprise." Kezar, DePaola, and Scott, *The Gig Academy*, 147.
- ⁶³ This is already in effect at some places. At CUNY, part of the tenure and promotion appeal process is a direct appeal to the college president. As more and more college presidents at CUNY come from nonacademic, private sector, business, or legal backgrounds, they must render decisions on the value of scholarship in fields from cellular biology to continental philosophy to medieval literature. They invariably turn to the rankings and impact factors as measures for the work to help them decide candidates' futures.