CONTENTS

Preface: How Higher Education Can Benefit from Shared Solutions and Save Itself ix

1 The Synthetic Service Provider 1
   The National Student Clearinghouse 5
   The Problem with Relying Only on the Market 11
   Artstor: One Shared Solution 18

2 Scanning Mona Lisa 23
   A Conversation with a Professor 23
   Artstor’s Second Product: Shared Shelf 37
   Times Change 50
   Lessons Learned: What Worked (Artstor) 56
   Lessons Learned: What Didn’t Work (Shared Shelf) 59

3 The Hard Reality of Observed Practices:
   Institutional Resistance to Change 64
   A Theory of Change 65
   The Individual-Organization Split 73
   The Department-Organization Split 75
   The Alliance of Individuals and Their National Peers 78
   Interinstitutional Department-to-Department Alliances 84
   Data, Myth, and Mission 88
“What’s in it for us?”

Kenny Morrell, professor of classics at Rhodes College, read this one-line email from the new dean a couple of times. No salutation; no closing. The question at hand was Morrell’s just-approved application to the Andrew W. Mellon Foundation for a second round of funding for Sunoikisis, the interinstitutional virtual classics department that Morrell had created with faculty colleagues at fifteen liberal arts colleges reaching from Texas to Virginia. It was 2001—long before internet bandwidth made Zoom video conferences possible. Thirty-two classics professors at these colleges linked together via the Associated Colleges of the South (ACS) had overcome many barriers and were beginning to function as one large and coordinated interinstitutional department. Bill Troutt, the Rhodes College president, had just called Morrell to congratulate him and his colleagues on receiving the grant and to express his appreciation for their efforts. Then the note from the new dean arrived.

Sunoikisis was a promising effort to strengthen all of the colleges through coordinated faculty collaboration. Plenty of challenges remained, however. On all of the campuses, the time and effort that faculty members were putting into the project did not count
toward their evaluation for promotion and tenure, and the professors who were donating their time to the effort might at any point lose momentum. They had been stretching their days to coordinate synchronized course schedules, plan the logistics for collaborative summer institutes, set up a means of accounting for whether a given department had a net inflow or net outflow of students, and reconcile the requirements and needs of the different departments and colleges. Faculty members at participating campuses with larger departments were reluctant to participate fully in the collaboration because they had a more secure place in their own college. Students were unwilling to take a class offered by a member of the consortium if they couldn’t register for it seamlessly through their school’s course registration software, just one of many technological barriers associated with reconciling local campus needs and the possibilities of an intercampus network of course offerings.

In reading the dean’s note, Morrell remembered the constant tug of war involved in creating and maintaining Sunoikisis. Students wanted more classes available to them, but they also wanted college to cost less. College presidents recognized the devastating long-term problems associated with schools competing endlessly to outdo one another in every aspect of their academic and nonacademic programs, but they often made decisions that were inevitably aligned instead with the reality that they were hired and rewarded on their ability to distinguish their institution from their peers’. Morrell had an enthusiastic partner in Wayne Anderson, who served as executive director of the Associated Colleges of the South, but Anderson and ACS had few resources of their own and were subject to the wishes and priorities of the participating presidents and the Mellon Foundation.

The previous dean, who had been supportive of Morrell’s and Rhodes’ entrepreneurial leadership of the innovative consortium as a way of strengthening the college, had retired, and the pendulum swung in the opposite direction. The new dean, who wanted the faculty to return to more traditional roles, saw Morrell’s request for additional external support as a waste of the college’s limited bites at Mellon’s funding apple.
A few earlier years earlier, as the experimental virtual classics department gained traction, Morrell and his colleagues had wanted to signal the deep collaboration that enabled the faculty to plan and work together. For that reason, they had renamed the project Sunoikisis after a group of fifth-century BCE Greek city-states that had banded together to resist the dominance of Athens. At moments like this, Morrell remembered that Athens had methodically laid siege to the leaders of the rebellion and overwhelmed the coalition. In Thucydides’s telling of the story, the episode is best known not for the success of the coalition, which was ultimately defeated by mighty Athens, but for the debate in the Athenian senate over whether to execute all of the men in the conquered cities or only a thousand from each city to teach the inhabitants a lesson.

“We might be just ever so slightly ahead of the curve,” Morrell thought as he read the dean’s note, “but if we don’t do this, if we don’t succeed, someone else will. It’s just a matter of time.”

Was Kenny Morrell right? Will colleges and universities eventually figure out how to work together to reduce costs while remaining educationally effective? Because the institutional barriers to cost-efficient change are remarkably strong and resilient, it is not clear that they will. Meanwhile, the costs associated with running a college continue to rise. State funding, which once heavily subsidized public higher education, is being systematically withdrawn; the number of private and public colleges with endowments that provide enough financial aid can be numbered in the dozens, not in the hundreds or thousands. The federal government will not come riding in to subsidize colleges beyond the current (and mostly static) levels of scientific research funding and $6,000 Pell grants for the neediest students. As the cost of college increases and public subsidy falls, the financial burden increasingly falls on students and their families.

The results of this steady upward cost escalation include significant student debt and ever-increasing pressure on graduates to reap immediate financial returns when they navigate the job market. On
campuses, the gulf between faculty and administration widens, and so does the divide between faculty who have made it onto the lifeboat of tenure-track jobs and the ever-larger pool of contingent and job-insecure faculty. The water in the pot heats up around frogs who tell themselves that at least it isn’t boiling.

It isn’t as if the ever-increasing challenge of rising institutional costs lurks as an undiscovered issue. But as Harvard president Larry Bacow has noted, “It is difficult to control costs in a university setting precisely because there is no natural constituency for cost control on a university campus.” Bacow recognizes the trap that most institutions face when noneconomic priorities are kept separate from economic priorities: while students and their families fervently desire lower tuition prices, they also are aligned with faculty who prefer costly practices such as smaller classes and more course offerings, and they are lured to individual campuses by expensive, attractive dorm rooms and dazzling flower gardens. Simultaneously, individual colleges and universities continue to shy away from the deep collaborative strategies that could slow their rush toward deeper financial struggles. One ambitious advocate for change, Franklin Patterson, has noted the urgency of the need for practical answers:

No amount of sunny sentiments about cooperation, no viewing with alarm, no cynicism about the slight accomplishments of consortia, and certainly no plethora of preaching at institutional presidents will do the job. What is needed is some substantial, positive action by those outside the consortia movement with enough resources to cause it to turn around. Patterson wrote that in 1966. Little has changed.

So was Sunoikisis simply ahead of the curve, as Morrell optimistically surmised? The slope of the curve doesn’t indicate an arc of progress with respect to the challenge that Patterson, Morrell, Bacow, and many others have identified. The many valuable contributions to scholarship, teaching, and technological innovation that US colleges and universities generate comes with a corresponding challenge: the effective rejection of possible cost efficiencies that could be achieved through deep and effective interinstitutional collaboration. There doesn’t seem to be a curve for Sunoikisis to be ahead of.
It is difficult to deny the many daily and ongoing successes of US higher education. Classes are taught, basketballs are dunked, and students continue to study and figure out who they are by working and playing together. Teachers teach and experiments are conducted in labs. The United States continues to be a net exporter of research and a net importer of students from around the world, and 25 US universities are ranked in the top 50 of all world universities. But the fragmented and uncooperative nonsystem of US higher education also experiences strain due to the cost of running the enterprise. Ever-increasing costs contribute to colleges losing some of society’s good will. As sociologist Robert K. Merton argued, “When net balance of the aggregate of consequences of an existing social structure is clearly dysfunctional, there develops a strong and insistent pressure for change.” Pressure for change in these institutions may be rising, but they seem to resist change very effectively. Government subsidies for higher education could cover over some of the results of this change-resistance, but those subsidies show no signs of materializing.

Colleges and universities shouldn’t wait until society has reached the limits of its tolerance for the cost disease of higher education. But is there any reason to believe that these fiercely autonomous institutions can derive collective solutions to address their shared challenges? Will mighty Athens—a metaphor for the apparently insurmountable institutional barriers to change—always win, or is there reason to believe that colleges can prevent the primacy of autonomy from defeating their embrace of some shared solutions? We will turn later to how and when Sunoikisis ran into limits, but for now it is worth noting that some intermediary organizations, including the National Student Clearinghouse, have been able to play synthetically engineered roles that have found acceptance in the loose network of colleges and universities.

The National Student Clearinghouse

In the early 1990s, Sallie Mae, the enormous company created in the 1970s by the federal government to serve as the primary issuer of government-funded student loans, set out to solve an ongoing
logistical headache. Sallie Mae vice president Dan Boehmer was tasked with working with college and university registrars across the country to track whether students with loans were still enrolled at any college or whether they had stopped attending college. If they were no longer enrolled in college, then they had to begin paying off their loans. At the time, no one knew if a student who had left the University of Michigan was now enrolled at the University of Florida. No federated system existed for determining a student’s college enrollment status, and yet schools that didn’t report students’ status correctly faced significant penalties. The paperwork and lack of coordination created a nightmare for all concerned: governments, registrars, financial aid offices, admissions offices, and students.

Coming up with a solution for such a far-reaching and complicated problem wasn’t simple. But by the mid 1990s, Boehmer and his colleagues had made significant progress in building partnerships with almost every US college and university. The new National Student Clearinghouse gradually expanded the data that it compiled, and it was able to provide trend data concerning enrollments by self-identified gender and race. After it solved the original problem (determining whether a student is enrolled somewhere and hence can defer loan repayment), it recognized that its inter-institutional data-sharing network could provide other services to students, to colleges and universities, and to the greater world. Its second service, DegreeVerify, was launched in the late 1990s. It uses the Clearinghouse’s platform to provide degree verification for employers, search firms, and individuals. By some estimates, DegreeVerify provides the Clearinghouse with $50 million a year in revenue.

As the technological infrastructure advanced through improved bandwidth and dramatic increases in processing power, the Clearinghouse is on its way to becoming even more useful. In 2018, the Lumina Foundation and the Bill and Melinda Gates Foundation announced a new data resource, the Postsecondary Data Partnership (PDP). Recognizing the potential in the infrastructure that the Clearinghouse had established, Lumina and Gates provided the working capital
to expand the Clearinghouse’s infrastructure to accommodate the aggregation of students’ full transcript records. Today, as the PDP program is being implemented in stages, the network of registrars with the Clearinghouse in the middle enables the collection and collective analysis of detailed individual student transcripts from an increasing number of public and private institutions—every student, every course, and every grade.

PDP was created in part because the foundations that fund it were eager to find efficient and effective ways to gauge the effectiveness of programs such as Achieving the Dream and Complete College America, which work to help students complete their college degrees. One of the challenges that funders encountered in assessing the effectiveness of such programs is that most students don’t follow “traditional” paths: they alternate between attending and not attending college, and they transfer credits as they move or seek to fit classes around work and family responsibilities. Before the development of PDP, these organizations had to chase students wherever they might go or canvass every institution to see if the student had ended up there. For the programs that it is tracking (and perhaps eventually for all institutions and all students), PDP makes it possible to find every student and trace the particular details of courses that they enrolled in on their path no matter which of the 3,500 US colleges and universities they might attend at different points in time.

The National Student Clearinghouse and PDP are astounding systemic efforts in a higher education landscape that might be defined by its lack of system-wide efforts. By any imaginable measure, the National Student Clearinghouse has succeeded. It is a model of synthesis between outside agencies and the internal practices of colleges; this synthetic approach shows how the independence of individual colleges and universities can be compatible with a degree of standardization and that centrally determined goals can be reconciled with autonomous local needs.

If one simply looks at the Clearinghouse as a business, it might be considered a successful entrepreneurial platform that filled a gap in a two-sided market. A paper by leading venture capital firm Sequoia
describes how a company that bridges a two-sided market by matching suppliers and demanders can become a thriving business:

The two sides of demand and supply need to be incentivized to use the platform to create strong network effects. As an example, a two-sided cleaning service marketplace that connects a cleaner to a home will work the first time. But over a period of time, once the cleaner has made enough connections, they are unlikely to use the platform. The platform needs to create unique and recurring value to both parties to retain them on the system.7

The Clearinghouse created unique and recurring value, and like other successful mega-businesses of our time, such as Amazon or Uber, it then expanded its content and services to efficiently serve both sides of its market. But the marketplace of underlying organizations and the terms of exchange were very different from Amazon’s.

Dan Boehmer had visited campuses in the mid-1990s to convince the assembled staff that the Clearinghouse would make their lives easier because they would no longer have to check hundreds of pages of printouts against their student records system every semester. However, he quickly learned that someone from the corporate world of student loans was not instantly welcomed as a friend. How on earth, the staff asked, will we be able to provide you with information about our students, given the provisions of FERPA (the Federal Educational Rights and Privacy Act)? In some early meetings he was chased out of the room, with words like “sacrosanct” hurled at him as he left.

What accounts for the tension around introducing efficient externally provided services in higher education? Economist Gordon Winston noted that colleges and universities are deeply conflicted institutions. On the one hand, they are commercial enterprises that process inputs and sell services; on the other, they offer a leap-of-faith contract with their customers. That contract essentially says, “It’s hard to measure whether you will get what you are seeking from this transaction, so trust us and become emotionally attached to us so that you will continue to sing our praises and freely choose to give us money for the rest of your life.” In the service of the
noncommercial mode, they engage in economically irrational activities. They subsidize fields and research that people aren’t asking for, and they subsidize students’ education, even those paying full price. In a bid to win currency in reputation markets, they undertake all kinds of strategies in pursuit of prestige (measured in rankings and reputation) that may or may not have financial returns. They do all kinds of things to attract customers who will enhance the reputation of the institution and perhaps make the product better (via positive peer effects and higher rankings). In these noncommercial modes, they function as *donative firms*, meaning that they seek voluntary support rather than earned income. They are, as Winston noted, a mix of two completely different approaches:

The donative-commercial firm is essentially part church and part car dealer—devoted partly to charity and partly to commerce, to “ideology” and “rationality.” The result is a tension between doing good and doing well. It plagues administrators trying to decide which behaviors—those of the charity or those of the firm—are appropriate to a college or university.8

The question is how to reconcile these modes. When should staff and faculty act as if they are working on behalf of a church-like entity? When should they act in a commercial-minded way? There are no clear guidelines, which is one of the reasons that institutional change is so difficult.

For Boehmer, promoting the idea of the Clearinghouse into this conflicted environment required trust-building that went far beyond the normal sales cycle that he knew from his career in underwriting commercial loans. C. Anthony (Tony) Broh was the registrar at Princeton at the time. Looking back, he recalls his mixed feelings about the creation of the Clearinghouse:

Sure, I remember when Sallie Mae came up with the idea of the “Clearinghouse.” I didn’t particularly like it. We had one staff person who was dedicated to the certification process—every month or so, we would get a seven-page printout from Citibank or whomever and that person would check it. I didn’t want to lose
that person and frankly I didn’t want to lose control. We had just
gotten to the point in the establishment of the registrar’s office
where the analysis that we were doing of students—where they
came from, where they went, what they did—was being valued
by the university. So, when we were approached by the Clearing-
house, I started raising issues of confidentiality. These were valid;
we did care about these things. But the idea of sending our data
off to someone else—and I can see this now, 25 years later—also
felt like a threat to my internal position. The FERPA issues and
the tangible effects on our staff and our place in the Princeton uni-
verse blurred. Eventually, the Clearinghouse became inescapable
and incredibly valuable when enough places joined; but when it
started, I wasn’t a fan.9

To garner the support he needed, Boehmer assembled a team of
“insider” relationship builders led by the former registrar of Brigham
Young University, Jeff Tanner, who also had served as president of
the American Association of College Registrars and Admissions Offi-
cers (AACRAO). People like Tanner were known and respected
by people like Broh, and they were needed to convince conflicted
participants—users who had a big stake in the topic who couldn’t be
counted on to make efficient decisions. The Clearinghouse had the
resources of Sallie Mae behind it, so it could pay out of pocket for
the customized programming needed to connect campus databases
to the Clearinghouse’s. Because it had sufficient working capital,
it could make the investments that could ease the hard-to-move
wheels of change.

None of what the Clearinghouse did in 2018 in launching the
new service (PDP) that gathers individual student transcripts would
have been possible if an organization had not been created in 1993,
de novo, to elbow—and charm—its way into the crowded and frag-
mented institutional landscape of colleges and universities. All of
the institutions that the Clearinghouse needed to buy into its effort
were populated with serious, dedicated individuals (such as Tony
Broh), eager to do their work in ways that both upheld longstanding
institutional values and reinforced their own job security and
advancement. Serving as a stable and trusted connective node in the midst of isolated and individualistic institutional data managers enabled the Clearinghouse to grow beyond its original mission and eventually create DegreeVerify, which might otherwise have been perceived by campus constituencies as too much car dealership and too little church. In gaining the trust of registrars around the country, the Clearinghouse overcame the social part of a massive socio-technical problem in which issues of trust and responsibility for a symbolic mission are tangled up in the mixed-up market of colleges and universities.

The Problem with Relying Only on the Market

How does the half-church and half-car-dealer nature of the higher education market support or not support the most widely used market-driven mechanism for cost-reduction—outsourcing? Isn’t the most obvious solution to rising costs simply to rent services or solutions from customer-focused for-profit firms? Most firms in any sector reduce costs by delegating parts of their production to external firms, which may or may not include offshoring work to other labor markets. Outsourcing allows the organization to focus on core areas of expertise or on coordinating activities, and it may spare the organization from making capital investments that require support and eventually replacement. (Think of the widespread practice of leasing copy machines rather than owning them.)

In many ways, entering the difficult selling environment that Dan Boehmer faced was just another entrepreneurial decision to build a service and offer it to a market of institutional buyers. To be sure, selling a solution in an environment where decision-makers can rely on church-like dogma to justify inefficiency might be harder than selling to a car dealer (or a firm with more of a car-dealer ethos). But the possible rewards of doing so are significant because the higher education market is very large. Aramark, which provides dining hall and other services to colleges, is thriving, and on many campuses Barnes and Noble has replaced what used to be independent college bookstores. Oracle and Workday have created enterprise
software systems to serve higher education because even the most do-it-yourself inclined university rarely believes that it can create its own human resources or payroll systems. Public universities, which educate the vast majority of students, are experiencing dramatic decreases in state funding and believe that partnerships with private firms are their best hope for doing all that they need to do. Ashish Vaidya, president of North Kentucky University, has argued that the COVID-19 pandemic made the need for partnerships even more apparent: “For regional public colleges, partnerships may even be the key to survival. As grim as so much of this crisis has been, it has also provided clarity on the need to embrace new solutions to the goals that we all share—including educational, economic, and social prosperity for learners of every kind, at every stage of their lives.”

Firms that seek such partnerships have used insider knowledge of higher education to build new products and have hired notable academic and community leaders to establish bona fides, much as the Clearinghouse hired the Brigham Young registrar to serve as its chief proselytizer. Academic Analytics, a for-profit firm that provides data analytics concerning faculty research productivity and allows institutions to compare their own departments’ results to those of their peers, hired Peter Lange, the well-respected former provost at Duke, and Robert Berdahl, former president of the University of Texas at Austin, to serve as academic advisors. Coursera, which along with edX spurred the enthusiasm around massive open online courses (MOOCs) in 2011, hired former Yale president Richard Levin as its president (and later senior advisor). And although both of these enterprises have encountered their share of faculty criticism, they are successful companies that provide services to colleges and universities at a scale that individual institutions cannot take on. When COVID-19 made it impossible for many high school seniors to sit for the SAT and ACT, selective colleges faced the prospect of making admissions decisions with fewer data than they had before, and plenty of firms stepped in to offer new products to admissions offices. In an Inside Higher Ed article about the suspension of standardized testing as an admissions criterion, Catherine
McDonald Davenport, Dickinson College’s vice president for enrollment and dean of admissions, noted that there was no shortage of firms offering products to the higher education market: “Everybody seems to have an idea and a solution for my unnamed problem. It’s somewhat comical.”

Purveyors of public/private ventures gather at the annual P3.edu meeting, where both cautious and convinced academic administrators come together with real estate developers and other sophisticated market-driven firms that are used to navigating the policy and lender requirements associated with capital-intensive functions like building dormitories. There is no doubt, as Goldie Blumenstyk wrote in the *Chronicle of Higher Education*, that these partnerships are moving from more ancillary areas into areas closer to the educational mission of institutions, offering “a range of other services that colleges increasingly eye as ripe for partnership with outside parties. Among them: managing online programs, predictive-analytics systems, skills training and boot camps, and even career counseling.” The idea of a partnership seems fairly uncontroversial, as colleges coinvest with sophisticated real estate developers to negotiate with local municipalities and carry out multimillion-dollar construction projects. But the contours of partnership arouse more frustration—and resistance—as outside providers move closer to the mission-driven core of the enterprise. Bridget Burns, executive director of the University Innovation Alliance (a coalition of very large universities collaborating to increase graduation rates), noted that a partnership with higher education needs to truly be a two-way street:

We appreciate all of the great apps and software solutions that you’re creating for Higher Education, but please know that when we talk about “partnering,” we don’t really mean that you let us test your app for you and help you make it better. For us, partnering is about your spending time listening to how our users need to work, helping our already-busy faculty figure out how your solution supports their work in the real world, and then providing the project management and onboarding to help make this happen. For some of you this really doesn’t work with your business
model because it is too labor-intensive. But from the university’s point of view, that is what separates a partner from a vendor.¹⁴

Burns was speaking at ASU-GSV, the annual major conference of educational technology hosted by a public-private partnership between Arizona State University and Global Silicon Valley. The conference features presentations and pitches from hundreds of firms working on everything from career services to remote grading to online learning platforms across K-12, corporate, and higher education. These firms are backed by over a billion dollars of annual investment in the K-12 and higher education markets.¹⁵ But are these well-funded, entrepreneurial for-profit firms the right solution for the problem of escalating costs for colleges as they come to recognize that they can’t and shouldn’t build everything themselves?

To answer the question of whether relying on motivated market players will help with the escalating costs of college, we first have to think about how institutional buyers of solutions act and are treated in the open market. As mission-driven nonprofit organizations, colleges and universities might have every reason to have different rules than normal market buyers and sellers. But a telling episode in how these institutions conduct themselves commercially arose with the notorious 1992 Department of Justice (DOJ) case that charged MIT, the Ivy League universities, and other schools that worked together to jointly set financial aid offers for students who applied to overlapping institutions with illegal price fixing. The case was legally complicated. It was originally brought by the DOJ against Brown University, which decided (along with the other Ivy League institutions) that it would be too costly to fight the case. MIT chose to appeal the case and eventually won, but by then the die had been cast. The institutions acknowledged that their practices were collusive and stopped sharing information about aid offers. Their decision has been interpreted to cover a wide range of practices that might be considered collusive. This is the crux of the matter: what the DOJ and the courts saw as illegal market behavior—collusion—was, as a subsequent New York Times editorial noted, “surely a charitable
activity.” Institutions agreeing how to allocate aid so as to serve their collective missions seemed to be substantially different from “price fixing by commercial enterprises that exploit customers.”16

Today we see the far-reaching implications of the decision and the model that it sanctioned. Competition among colleges is now considered an unadulterated good, accompanied by a societal and governmental faith that the market will work things out to the benefit of consumers. Competing without limits for students who are in any way desirable is sanctioned because that competition is supposedly good for the consumer. With unbridled competition blessed in this way, merit aid—the enrollment strategy of discounting tuition for the sake of achieving an institutional objective, such as attracting students who can boost a school’s rankings because they carry high test scores—thrived in the 1990s and into the 2000s. This method of using financial aid (which, before the DOJ case, had been allocated largely on the basis of a shared conclusion about a student’s financial need) leads schools to compete for students in entirely self-serving ways that end up serving particular students well at the expense of the amount of financial aid available in the system. For example, it is now widespread practice for schools to use tuition discounts as a strategy for attracting students who are entirely capable of paying a school’s full tuition but who can be lured to the school by the offer of a $10,000 or $15,000 discount in the form of a merit scholarship.17 Individual interests (of those particular students and that particular college) are served while the collective mission of the sector is not. As Winston lamented, “Without coordination, parental haggling and individual schools’ positional bidding for student quality [will] divert . . . resources from low-income students who [are] willing but unable to pay the full price to high-income students who [are] able but unwilling to pay.”18 The ruling in the DOJ case was one step in uncorking colleges’ inclination to compete endlessly. As a result, the presidents whose faculty members were interested in collaborating to build a shared classics department lived in a world where they were charged with avoiding collaboration. In short, colleges’ impulses to compete have been thoroughly blessed, even legislated. And compete they do.
These thousands of institutional buyers of all sorts of services from athletic equipment to library databases to magnetic resonance spectrometers make decisions that constitute a market estimated at $300 billion, and they can look like fish in a barrel to businesses seeking growth opportunities. And where there’s competition among buyers, the market is very good at incentivizing profit-minded firms to provide profit-maximizing solutions.

Consider EAB, a higher education data analytics company that provides data services consulting to a thousand colleges. While it also consults on enrollment recruiting strategies, its main line of business is providing integrated planning and advising services that help colleges and universities help their students to graduate.\textsuperscript{19} With over $300 million in annual revenue, EAB is thriving, and a private equity firm purchased the firm for $1.55 billion in 2018. It’s fair to note that the work of EAB and similar firms is not simple. That work requires the mapping, integration, analysis, and utilization of various campus data sources that are idiosyncratically stored on each campus. But the firms’ skills and tools are reapplied in each engagement. They can apply the lessons learned to their core business offering, using their experiences with other colleges when they begin working with the next one. The colleges themselves don’t financially benefit from working with firms that have the economies of scale of having worked with many different but similar institutions. For example, in 2018 Laramie County (WY) Community College (LCCC), with an enrollment of 3,174 full-time students, published the results of its student success vendor search. It chose EAB, at an annual estimated cost that began at $138,000 per year. LCCC felt that it had to pursue the arrangement for both church and car-dealership reasons: “While student success technology is expensive and is not easy to implement, we have an obligation to our students and community to provide excellence in education and service.”\textsuperscript{20}

The for-profit firms that provide complex services to colleges and universities can essentially name their price. In his investigation for the \textit{Huffington Post}, titled “The Creeping Capitalist Takeover of Higher Education,” Kevin Carey describes how graduate programs expanded online via locked-in revenue-sharing deals with companies
such as 2U. When USC dean of social work Marilyn Flynn signed up with 2U to produce online master’s degrees that cost students the same amount as in-person degrees ($107,000), it didn’t matter that 2U locked in 60 percent of all revenue from such courses on an ongoing basis, because the revenue that remained after USC paid 2U was all additive to USC’s existing tuition revenue. Carey writes:

The company [2U] assumed all of the financial risk. College deans could use their cut to lure star research professors by promising them large salaries and small or nonexistent teaching loads, pushing programs up the rankings. The online courses would be staffed by adjuncts, most working far from the campus and much cheaper to employ. “This is a cash cow,” Flynn says bluntly. “Universities are struggling to find a business plan that works. And I was very aware that we would have a dramatic increase in revenue from this.”21

Interestingly, by the end of his time at 2U, founder John Katzman criticized the model in which online program managers such as 2U lock in deals with universities to fill and profit from scalable online master’s degree programs: “There are CEOs who believe they have a fiduciary duty to their stockholders to just market the most expensive programs and encourage schools to jack up tuition,” Katzman said. “I am horrified. That was not the goal.”22

When colleges recognize that they can’t keep up with the technology involved in ambitious new programs and directions, they become captive to vendors. There’s no shortage of experts who can scale their own profits by replicating their work as they pass from college town to college town. As colleges and universities buy these wares, their costs rise and the consumers—students and their families—end up paying more.

What are the alternatives?

The expansion of National Student Clearinghouse into the Post-secondary Data Partnership could put the Clearinghouse in a position to provide analytics services similar to EAB’s to its member institutions. As the PDP project gathers more and more institution-wide troves of student transcripts, the Clearinghouse will have—in
one structured and standardized format—more and more capacity to mine student data. Instead of watching colleges and universities pay market rates for predictive analytics about student success to firms such as EAB, ReUp Education, or Civitas, the Clearinghouse could add these services to the analytics that it already provides, including (as promoted on its website), “Powerful multivariable filtering tools to analyze deep, disaggregated data, characteristics, such as age, race, gender, cohort term, and first-generation-student status.”23 In short, the Clearinghouse could expand its role as a trusted intermediary—an enterprise that synthetically supports institutions’ missions while connecting isolated colleges and universities. Doing so would generate scalable value and services, under the watchful eyes of a Board of Trustees that represents the community rather than financial investors and shareholders.

Artstor: One Shared Solution

The passionate people who work at colleges and universities are inclined to solve their own problems.24 Sometimes they should, and sometimes they shouldn’t. When they do engage an external provider, they would be better off if that the provider will care about the school’s mission as if that mission were truly its own. At the same time, external mission-driven providers need to recognize college and universities’ deep commitment to autonomy, they need to endure long enough to develop trust, and they need to develop a business model that supports their capacity to be responsive enough to the needs of individual campuses to sustain that trust and sense of value.

The Mellon Foundation’s creation of Artstor provides an illustrative example of a mission-aligned synthetic service provider. Before 1.4 trillion digital photos were taken each year and before lecture notes were routinely posted to learning management systems, students studied art and architectural history by sitting in darkened classrooms wherein professors supported their lectures by use of images that they projected onto a wall by shining very bright light bulbs through 35-millimeter film slides. To study for exams, students
gathered in a room or a hallway in the art history department that was designated as the “photo study” area. There they would study (and sometimes sketch) the photographs that were thumbtacked to a wall; these photos roughly corresponded to the slides that they had seen in class. By 1999, innovative art history departments, librarians, and academic technologists had begun to believe that digitizing those teaching slides and sharing them with their students on campus via the internet would be a vast improvement over existing practices.

In fact, dozens of colleges came up with the same idea: asking the Andrew W. Mellon Foundation for funds to digitize the art history slide collection. Don Waters, who led Mellon’s program in libraries and scholarly communication, started receiving inquiry after inquiry, grant application after grant application. Provosts wrote to ask for $800,000 or $1 million to digitize their teaching slides. Each proposed to scan their 35mm slide of the Mona Lisa and tens of thousands of other artworks that had mostly been photographed from printed pictures in published books. The goal of their grant applications was to create a database that allowed the institution to attach searchable words and phrases, such as “Leonardo da Vinci, “da Vinci,” “Italian painting,” or “Portraits,” to the digital image files. To support the use of these digital files, they also sought funds to build or buy software to manage the images and data and to ensure that access to the image was restricted to use on the campus, so that the museum, the textbook publisher from which they got the image, or the photographer who had taken the photograph wouldn’t sue them. The final result on each campus would be a digital library of tens of thousands of images that students could consult as they prepared for exams and faculty could use in their research.

Don, along with Mellon president Bill Bowen and a few others, began to look at the individual institutional proposals. I had been working with Bill on research projects about issues that affected the whole college sector, such as the role of race in college admissions and the appropriate balance between college sports and educational values. Bill knew that I had gotten my PhD in the humanities, and we shared very similar ideas about working on system-wide challenges
in scalable ways. From Mellon’s transinstitutional perspective, all of these pleas for funds looked fairly similar. It didn’t take us long to figure out that we would run through a billion dollars if we gave a million dollars to a thousand different campuses. Even worse, that billion dollars would have created a thousand digital image databases that were largely redundant and isolated in institutional silos that were reinforced by software incompatibility and protective rights-management policies. The need for digital images that allowed students to study for exams via the web was a real one, but the solution—using a billion dollars to digitize the country’s thousand un-networked and locally isolated pools of analog content—was clearly not the right one.

So in the townhouses that house the Mellon Foundation on a quiet side street in Manhattan, a complicated puzzle was starting to take shape. On the one hand, campuses were ready, willing, and able to solve their own problem—but each needed a million dollars to do so. On the other hand, the Mellon Foundation was proposing a very different solution: the creation of a new organization, called Artstor, to build and provide a large and growing digital image library to colleges and universities for use in teaching and research. If we could figure out how to share digital images over the web while respecting intellectual property rights, the cost savings across the US college and university system would be enormous.

But Artstor would have to be developed within a complicated reality. The do-it-yourself approach on each separate campus was representative of the kind of complicated interdepartmental undertaking that staff at nonprofit institutions instinctively feel only they can and should do. Staff and faculty deeply believe that one size does not fit all, and that anyone who offers a shortcut around the local relationships, reporting lines, and sources of institutional anxiety and territoriality must either be naïve or nefarious.

The fit between individual art history departmental image collections and the Mellon Foundation was apparent to staff on campuses and to administrators looking for external funding. Mellon had been the country’s most significant supporter of humanistic scholarship since its founding in 1970. It also had a deep interest in the visual
arts, dating back to Andrew Mellon’s gift of the National Gallery of Art to the nation and to his son Paul’s passion for art. (Paul Mellon was the foundation’s founder.) Beyond bringing together art and scholarship, the foundation had under the leadership of Bill Bowen shown an active interest in using technology to serve teachers and scholars. Based on research that he had been conducting about the future of libraries, Bowen had started to be convinced that technology might offer a solution to the dilemmas associated with an ever more costly enterprise. In the 1990s, Bowen and Kevin Guthrie had created JSTOR, the digitized archive of scholarly journals that stands out as an extraordinary success in bringing technology into the service of scholarship across the arts and sciences. To Bowen, the idea of providing digital images of art to campuses made very good sense. But the approach that we came up with was different from the one that that the individual schools had sought in their grant requests.

The next chapter tells Artstor’s stories—its ups, its downs, and the lessons that we learned from building a collective solution rather than funding endless and isolated local solutions. Before moving on to that chapter, we can reflect on a key but perhaps subtle point that I will make throughout this book: that while relying only on redundant local solutions to shared needs isn’t the right answer, neither is relying solely on external profit-maximizing vendors. As the Mellon Foundation worked with colleges and universities, we noticed that wherever we went to build out Artstor as a shared solution, for-profit vendors followed in our wake. Software providers wanted to sell tools to each campus for building up local efforts in ways that aligned with the Artstor tools; proprietary image vendors wanted to sell their content on a campus-by-campus basis through our platform. We didn’t want to interfere with their businesses, but we also didn’t want to facilitate what we saw as extractive rather than compatible solutions. We worked to convince some of the world’s most important holders of photographs (including one-of-a-kind collections held by for-profit image distributors such as Italy’s Scala and highly desirable nonprofit collections such as the Museum of Modern Art’s) that Artstor’s shared approach—which sought primarily to
cover its costs rather than to maximize profits—was a good and fair way to reach the educational audience. If Artstor hadn’t been invented with the mission-aligned ethos that we created, these owners of valued and valuable content would surely have found ways to license images to each place, one by one, thus increasing their own surpluses. That’s their job. But doing so would have been to the detriment of the institutions that constitute the system and the collective support of teaching cultural history.

Forging synthetic solutions isn’t easy. This book argues for a particular approach to the cost problem, an approach that is not based on deus ex machina revenue sources or magical thinking about institutions choosing to collaborate when all of their impulses pull them to compete. In the following chapters, I propose that colleges and universities need a set of mission-driven and market-supported organizations that live and thrive in the middle of the institutional forest of thousands of individual distinctive institutions. Passionate and brilliant faculty and staff on campuses remain devoted to the craft of teaching, scholarship, and service. Collective solutions should not be forged without their deep involvement and their discerning eye. We need to understand the forces that shape their options and decisions, understand the skills and the ecosystem that can create and foster new interinstitutional organizations, and reconcile mission and market in ways that can save higher education.
INDEX

Abrahams, Rosa, 189
absolute return funds, 104–5
Academic Analytics, 12, 212n11
academic credential, influence of, 85
academic departments, norms of, 75–76
academic freedom, 34, 138, 173–74, 180, 212n11
academic society, 80, 194–95
Acadeum (College Consortium), 191–93
Achieving the Dream, 7
Agarwal, Anant, 170
aid, allocation of, 14–15
Alford, Robert R., 68, 71
Allen, Nancy, I14
alliance, types of, 78–88
alternative assets, hedge funds as, 105
alumni, role of, 207
Amari, Riadh, 41
Amazon, 38
American Association of Universities (AAU), 87
American Association of University Professors’ 1966 Statement on Government of Colleges and Universities, 76
American Historical Association (AHA), 80, 194
Anderson, Wayne, 2
Andrew W. Mellon Foundation: Artstor and, 18–22, 25–26, 28, 143; contributions of, 44–45; focus of, 20–21; in-house research capacity of, 26; institution building by, 26; leadership within, 127; liberal arts and, 190; return measurement of, 128–29; Shared Shelf and, 50–51, 126; strategic philanthropy and, 26
Aramark, 11, 171
Arizona State University, 135
Arizona State University-Global Silicon Valley (ASU-GSV) conference, 135–36
Art Libraries Society (ARLIS), 121–22
Artstor: access within, 34; benefits of, 109–10; champions of, 35–36; conference attendance regarding, 78–79; costs of, 36, 45; criticism regarding, 28–29, 40–41, 106–7; fee structure of, 121–22; focus of, 157–58; funding for, 62–63; goal of, 24, 25; growth of, 36; image quality concerns regarding, 32–34; as institutional model of change, 176; introduction of, 24; lessons learned regarding, 56–59; network alignment and, 58; objectives of, 110, 114; overserving by, 58–59; overview of, 18–22; return on investment of, 129; revenue of, 37; sales proposition regarding, 29–32, 110–11; support for, 119–20; support from, 42; team of, 114–15; value proposition regarding, 25–26; Visual Resources Association (VRA) and, 30.
See also Shared Shelf
Arum, Richard, 200
Aspire, 151
Associated Colleges of the South (ACS), 1, 141, 182, 202
Avis, Greg, 63
Bacow, Lawrence (Larry), 4, 47–48, 87, 132
Bannick, Matt, 129–30, 156, 162, 167
Barnes and Noble, 11
Baxter, Andrew, 150–51, 164
Beall, Robert, 146
Beck, James, 23–24, 32, 34, 35–36, 173
Becker, Gary, 139
Beinen, Henry, 44
Berdahl, Robert, 12
Bernard, Lewis, 28, 112
Bildner, Jim, 159
Bill and Melinda Gates Foundation, 6–7, 135–36, 151, 219n37
Blair, Sheila, 28
blended capital, 150

243

For general queries, contact webmaster@press.princeton.edu
Bloom, Jonathan, 28, 40–41
Blue Meridian Fund, 145
Blumenstyk, Goldie, 13
Boehmer, Dan, 6, 8, 9, 10
Bourdieu, Pierre, 109
Breton, Paul, 67, 153
bricolage, 110–11
Broh, C. Anthony (Tony), 9–10
Brooks, Peter, 92
Brown University, 14
Buddhist art, 25
Bugg-Levine, Antony, 149, 150
Burns, Bridget, 13–14
Byju, 198

Callanan, Laura, 166–67
Cambridge Associates, 105
cancer research, 130–32, 154–56, 161
capital: access to, 131–32; alignment of players to, 162–68; blending, 150; goodwill and mission alignment regarding, 62–63; motivations regarding, 132; relationship risks regarding, 61; restriction of, 132
career services, 158–62
Carey, Kevin, 16–17
Carnegie Foundation for the Advancement of Teaching (CFAT), xii–xiii
Cash, Connor, 150–51
Cassirer, Ernst, 66, 88
Central Park Conservancy, 112
change: battle metaphor regarding, 124–25; choosing, 202–10; contextual, 105–6; faculty benefits regarding, 181–82; faculty resistance to, 180; goal sharing and, 130–41; insider role of, 180–86; non-isomorphic, 176; resistance to, 108–9, 199; resisting theory of, 98; risks within, 200; selling, 65; theory of, 65–73, 207
Chan Zuckerberg Initiative, 135–36
Christensen, Clayton, 101, 134–35, 216n10
City University of New York (CUNY), 42
Civitas Learning, 218n15
Clark, Burton, 66–67, 90
classroom, symbolism of, 172–73
Cline, Nancy, 53
collaboration: avoidance of, 15; benefits of, 181; in cancer research, 131, 154–56; within Hydra, 46; interinstitutional, 46; with Metropolitan Museum, 112; of nonprofit organizations, 138; of public universities, 138
colleges. See institutions of higher education
collusion, cases regarding, 14–15
Columbia University, 55–56, 205
community college, 139–40. See also institutions of higher education
community development, 141–42
competition, 2, 15, 16, 87–88, 157, 163, 202–3, 209
Complete College America, 7
The Conservation Fund (TCF), 165–66
cooperatives, outputs by, 221n63
Cornell University, 71–72
Cornfield, David, 146
council, 190–96
Courant, Paul, 198
Coursera, 12, 196–97
course sharing, student record gaps and, 190–91
COVID-19 pandemic, 12, 177
Cramer, Tom, 46
Credly, 136–37, 218n15
Cummings, Anthony, 27
Cystic Fibrosis (CF) Foundation, 145–46
Daniels, Ronald, 210
Day, James R., 21ln5
decision-making, 70–71, 76, 77, 98–99, 120
degree attainment, 139, 203
DegreeVerify, 6, 11
Dempsey, Lorcan, 62
Denny, Walter, 28
Department of Justice (DOJ), 14–15
department-organization split, 75–78
department-to-department alliances, inter-institutional, 84–88
Dickinson College, 97, 102, 103, 105, 124
DiMaggio, Paul, 72–73, 83, 84–85, 93, 100–101
discontinuity, disruption of, 60
Disrupting College (Christensen), 134–35
disruptive innovation, 101, 135
disruptive technologies, 216n10
do-it-yourself inclination, 12, 20, 59–60, 117, 128, 168
Dropbox, 52, 62–63
Dunhuang, 44–45, 46–47
Duong, John, 136–37
EAB, 16
educational innovation, funding of, 133–34
edX, 169–70, 174, 196–97, 222n3
Ekman, Richard, 27
Emerson, Jed, 149, 150
endowment, 97, 104–5, 106, 209
entrepreneur, institutional, 99–109, 166
entrepreneur, systems, 159, 166
entrepreneurship, 102–3, 218n39
environmental, social, and governance (ESG), investment considerations regarding, 148
Ewell, Phil, 184–86, 189, 193–94, 206
Exley, Charles, 27
extractive partnerships, threat of, 196–201

Fabian, Carole Ann, 55–56, 114
faculty: academic credential of, 85; academic freedom code of, 173; within campus decision-making, 76, 77, 83; change benefits to, 182–83; change resistance by, 180; diversity of, 175; employment positions for, 175; governance of, 83; as guild, 208; horizontal networks of, 83; norms of, 76, 77–78; online education viewpoint of, 177; rewarding, 82, 183; Sunoikisis role of, 1–2, 181–86; tenure statistics regarding, 138–39, 195, 205, 224n5
Faster Cures, 132
Faut, Drew, 222n3
Feldstein, Michael, 197
Flecker, Dale, 53–54
Fleishman, Joel, 142–43
Floyd, George, 185
Flynn, Marilyn, 17
Ford Foundation, 141–42
forestry, sustainable, 164–65, 166
Frazier, Sarah, 44
Friedland, Roger, 68, 71
Friedman, Thomas, 172
funders, influence of, 81–82. See also specific funders
Garber, Alan, 196
Garfield, James, 177
Garud, Raghu, 102, 103–4, 110–11, 113
General Motors, 101–2
Gernsheim, Jutta, 35
Giusti, Kathy, 154–56, 203
Global Canopy Programme, 164
Global Impact Investing Network (GIIN), 147, 149–50
Global Silicon Valley (GSV), 135
Goldrick-Rab, Sara, 139–40
grading, 178, 179
Grameen Bank, 148–49, 220n39
Grant, Aaron, 189
Grantham, Jeremy, 165
Great Recession (2008–2009), 49–50, 97
green bond, 165–66
Greenwood, Royston, 105–6, 176
Grossman, Allen, 143
Grossman, Jim, 80, 194
Guidelines for Evaluating Work in Digital Humanities and Digital Media (Modern Language Association), 81
guild, 195, 208
Guthrie, Kevin, 21, 117–18
Hagia Sophia, 40
Hamilton, Andrew, 54–55
Handy, Alice, 96, 99–104, 109, 112, 113, 122–23, 124
Hardy, Cynthia, 102, 108
Harvard Magazine, 53
Harvard University, 50, 61; edX and, 169–70, 174, 187, 222n3; endowments of, 97; HarvardX of, 167–68, 171; mission statement of, 91; Shared Shelf and, 49, 53
HarvardX, 167–68, 171
Haskell, Hal, 182
Hayes, Nicky, 186–87
hedge funds, endowments and, 104–5
Heron Foundation, 145
higher education: benefits of, 139; as commercial enterprises, 8; costs regarding, 3, 4; as donative firms, 9; focus of, 204; funding decrease within, 12; goals within, 156; public opinion regarding, 140, 180, 204. See also institutions of higher education
Hijorth, Daniel, 102
Hinings, C. R., 105–6
Hopkins, Mark, 177
Horatio Alger myth, 90
horizontal institutions, 58, 80, 81, 83–84, 170, 173–74, 176, 194, 195, 207, 208
human capital, 131, 139, 166, 204
Hunter College, 41, 42
Huntington, John and Susan, 25
Hydra (Samvera), 46, 47–48, 84
Ibrahim, Ramy, 161
impact investing: assessing, 167; in creative economy, 167; defined, 136, 147; focus of, 150; growth of, 149–50; in higher education, 157; infrastructure for, 220–21n32; in K-12 education, 151; of Lumina Foundation, 136; motivation for, 206; overview of, 147–51, 157; promise within, 219n37; venture philanthropy versus, 154–55
Impact Investing (Bugg-Levine and Emerson), 149

individual-organization split, 73–75
innovation, educational, funding of, 133–34
Institute of Museum and Library Services (IMLS), 52
institutional entrepreneur, 99–109, 166
Institutional Review Board (IRB), 161
institutional saga, 90
institutions of higher education: antianti-intellectualism, 138–39; building process of, 100–101; car-dealer nature of, 11, 16, 146, 183; change resistance by, 83, 93–94, 199; change role of, 80–81; characteristics of, 68; church aspect within, 156; collaboration of, 138; costs of, 15, 93, 133, 139–41, 163, 204–5, 222n6; decision-making process within, 72–73; defined, 68; department-organization split and, 75–78; disruptive innovation theory and, 101, 135; efficiency within, 69; government support decline for, 206; importance of, 68; isomorphism and, 85; leadership considerations regarding, 208; measures within, 86–87; mission statements of, 91; morale of, 224n1; motivations for decision-making within, 70–71; multiple goals of, 86; new institutionalism theory and, 72–73; as nonprofit structure, 69–70; organizational structure of, 69; public opinion regarding, 140, 180; purpose of, 132–33; ranking of, 87, 88; student-centricity within, 134; students as buyers of, 133; unifying saga for, 92
interinstitutional alliances, department-to-department, 84–88
Investment Fund for Foundations, The (TIFF), 96

Investure: baseline of, 123–24; market test of, 120–21; Middlebury College and, 123, 124, 171; overview of, 96, 176–77; promise of, 113; strategy regarding, 100–101; team within, 113–14
isomorphism, 85, 108, 215n33
ITHAKA/JSTOR, 127

James, William, 119, 186
Jaschik, Scott, 80–81
Jensen, Michael, 70, 72
John S. and James L. Knight Foundation, 162
Johns Hopkins University, 206
Jones, Maitland, 140

JSTOR (Journal Storage), 21, 27, 28, 30, 44, 117, 118, 126–27
junk bond, 131–32
“Justice” course, 169, 176, 197–98
K-12 education, 151, 154
Kahneman, Daniel, 42–43
Kalaris, Thomas, 102
Kaplan, Ann, 121
Karnøe, Peter, 103–4, 110–11
Katzman, John, 17
Kelly, Louise, 116
Kenney, Anne, 49
Kerr, Clark, 90
Kirs, David, 180–81
Kovari, Jason, 61
Kowalcik, Steve, 41

La MaMa, 167
Lange, Peter, 12
Laramie County Community College (LCCC), 16
legitimacy, 111–12, 113, 119
Lerner, Josh, 150–51, 164
Letts, Christine, 143
Levin, Richard, 12
Levy, David, 218n39
Lewis, Earl, 127
LexisNexis, 39, 62
libraries, 30–31, 46, 49, 118. See also specific schools
Liebowitz, Ron, 96
Lower Cost Models for Independent College Consortium (LCMC), 193
Low Income Support Corporation (LISC), 141–42
Lucas, George, 111
Lumina Foundation, 6–7, 136–37, 164, 192, 218n15
MacArthur Foundation, 142
Macmillan Learning, 188
Maguire, Steve, 108
Malan, David, 223n28
Malinowski, Bronislaw, 89–90
Mandel, Carol, 49
Manley, Lawrence, 66
Manzer, Robb, 192
marginal unity, 71, 77
market test, xiv, 117–25, 195, 205, 209
Marler, Megan, 115
Marmor, Max, 24–25, 114
massive open online course (MOOC): characteristics of, 175–76; choices within, 172; edX, 169–70, 174, 196–97, 222n3; focus of, 175–76; HarvardX, 167–68, 171; vision regarding, 172
Master Class, 188–89
Masters, Blake, 204
mastery learning, 179
McCulloch, George, 126–28, 143
McDonald Davenport, Catherine, 12–13
McGuire, Steve, 102
McKay, Tim, 178
McPherson, Pat, 121
medical research, 130–32, 154–56, 161, 207–8
Mellon, Paul, 21
Menand, Louis, 174
Merton, Robert K., 5
Metropolitan Museum of Art, 112
Meyer, John, 86
microlending, 148–49, 220n40
Middlebury College, 95–99, 103, 106, 123, 124, 171
Milken, Michael, 130–31, 203
Miller, Bill, 206
Miller, Bruce, 113–14, 121
Miller, Clara, 144–45
Mintz, Steve, 137, 196–97
mission-driven environment, 85, 91, 129, 151–58
mission statements, 91–93
MIT, 14, 169–70, 174, 196, 197, 222n3
Mitchell, John, 178, 179
Morrell, Kenny, 1, 2, 3, 180–81, 182, 198–99, 202
Multiple Myeloma Research Foundation (MMRF), 154–56, 164
music theory, 184–86, 189, 193–94
Myers, David G., 187–88
myth, 88–94, 111–12, 117
mythopoesis, 103–4, 111, 117, 166
National Association of College and University Business Officers (NACUBO), 123, 171
National Cancer Institute, 130
National Institute for Technology in Liberal Education (NITLE), 190
National Student Clearinghouse, 5–11, 12, 17–18, 134, 157–58, 171, 206
Nee, Victor, 68
new institutionalism, 72–73
New Profit, 143–44, 161
non-distribution constraint, 73–74, 214n16, 221n63
nonprofit organizations: challenges of, 144–45; characteristics of, 69–70; collaboration of, 138; decision-making process within, 71; defined, 214n15; discontinuity among decision makers at, 60; features of, 214n16; governing principle of, 75; individual-organization split and, 73–75; institutions as, 69–70; mission of, 75, 91–92; motivations of, 74–75; non-distribution constraint and, 73–74
North, Douglas, 68
Northwestern University, 37–38, 43–46, 47, 55, 91
Office of Digital Assets and Infrastructure (ODAI) (Yale University), 54–55
online education, 16–17, 135, 177–78, 200.
See also edX; HarvardX; massive open online course (MOOC)
Opatrny, Donald, 51
Open Syllabus project, 187
Opportunity Insights project, 87
outsourcing, 11, 98, 99–100, 171
Palfy, Cora, 189
paradox of embedded agency, 108, 208
Parker, Sean, 161
Parod, Bill, 44, 45
partnerships, 12, 13–14, 60–61, 211–12n10
Patterson, Franklin, 4
Paying the Price (Goldrick-Rab), 139–40
Perrow, Charles, 79
PhD programs, 107–8, 205
philanthropy, 27, 143, 144, 146, 163. See also venture philanthropy; and specific organizations
Pierce, Josh, 193
Pioneering Portfolio Management (Swenson), 96, 105
Post, Robert, 174
Postsecondary Data Partnership (PDP), 6–7, 17–18
Powell, Woody, 72–73, 83, 84–85
The Practicing Music Theorist, 189
pragmatism, 119
Prasad, Ratnika, 150–51
Princeton University, 97
principal-agent problem, 96–98, 124
professional associations, 79–80, 215n23
program-related investments (PRIs), 142
prostate cancer, 130–32
providential plots, 92
psychology textbooks, 187–88
public benefit corporation (PBC), 151–52
public universities. See institutions of higher education

Qayoumi, Mohammad, 169
Quandt, Richard, 27
Quazzo, Deborah, 189
Quercia, Jacopo della, 23

Randel, Don, 50–51, 127
rational myths, 93, 216n51
Reid, Daniel, 82
Reveley, W. Taylor, III, 64
Reynolds, Jennifer, 102
Rhodes College, 182
Ricciardi, Lawrence (Larry), 28–29, 32
risk-adjusted return, 129–30
Rize, 193
Rowan, Brian, 86
Rudenstine, Neil, 28
Ryan, William, 143

Salem, David, 96
Sallie Mae, 5–6
Samvera (Hydra), 46, 47–48, 84
Sandel, Michael, 169, 170–71
San Jose State University (SJSU), 169–70, 174
Scala, 36
Schenker, Heinrich, 185
Scherago, Nina, 121
Schoolzilla, 151–58, 220n48
Scott, Joan, 173

Shakespeare, Einstein, and the Bottom Line (Kirp), 180–81

shared curriculum, mechanisms of, 177–80
Shared Shelf: Andrew W. Mellon Foundation and, 50–51, 126; APIs and, 55; challenges of, 42–43, 48, 52–53, 121; changes to, 127; at Cornell University, 71–72; costs of, 56; function of, 38–40; funding for, 51–52; Great Recession (2008–2009) and, 49–50; at Harvard, 49, 53–54; Institute of Museum and Library Services (IMLS) and, 52; lessons learned regarding, 59–63; library viewpoints regarding, 49; open-source software and, 84; optimism regarding, 43; overview of, 37–50;

partnerships with, 50; reputational risks and, 61; Society of Architectural Historians (SAH) and, 51–52; subscribers of, 52; at Yale, 49, 54–55
Shelbourne, Brian, 120
Shenton, Helen, 54
Simon, Herb, 69
Sinclair, Upton, 32
Small, Nealie, 102, 105, 121
Smelser, Neil, 65
Smith College, 97, 102, 103, 120–21, 122–23, 124
Society for Music Theory, 186
Society of Architectural Historians (SAH), 51–52
software as a service (SaaS), Shared Shelf as, 40
sports, college, 86, 88–89, 209
stakeholder value, 70
standardized testing, 12–13
Stanford University, 97
stasis, within organizational practice, 80–81
state funding, changes regarding, 3, 206
Stayaert, Chris, 102
Sternberg, Robert, 186–87
Stewart, Claire, 44
storytelling, within entrepreneurship, 102–3.

See also mythopoesis
student loans, 139, 204
student records, gaps within, 190–91
Sturm, Susan, 81–82
Suchman, Mark, III–12
Suddaby, Roy, 105–6
Sun Microsystems, 111, 112
Sunoikisis, 1–2, 3, 180–86, 189–90, 195, 198–99, 202
SUNY Albany, 106–7
sustainable forestry, 164–65, 166
Swenson, David, 96, 97–98, 99–100, 105, 165
Switchboard, 158–62
Synthesis, viii–x
systems entrepreneur, 159, 166

Tanner, Jeff, 10
Tatlock, Anne, 27
tenure, 138–39, 195, 205, 224n5
textbooks, 186–89, 223n28
theorization, 79–80

Theory of Social and Economic Organization (Weber), 71
Thiel, Peter, 204
TIAA, xii, 134
venture philanthropy, 36, 141–47, 154–55, 206. See also philanthropy
Visual Images Application (VIA) (Harvard University), 53–54
Visual Resources Association (VRA), 30, 121–22
von Hippel, Eric, 100
Wagner, Gretchen, 114, 116
Walker, Jeffrey, 159
Wallach, Harlan, 44, 45, 46
Walton Family Foundation, 135–36
Waters, Don, 19, 51, 52
Weber, Max, 71, 84
Wees, Dustin, 114–15
Weisbrod, Burt, 74
Whitehead, John, 27
Whiting Foundation, 82
William & Mary, 64–65, 67–68
Winston, Gordon, 8, 9, 15, 147–48
Working Forest Fund (The Conservation Fund (TCF)), 165–66
Worth, Robert (Bob), 188
Wygant (Bill), 1
Yale University, 49, 50, 54–55, 97
Ying, Bill, 114
Yunus, Muhammad, 148–49, 220n39
Zebras Unite, 160–61
Zecher, Carla, 80
Ziegenhagen, Lynzi, 151–58
Zoom, 177, 178