



# Bringing Business Analytics to the College Campus

Using Fiscal Metrics to Steer Innovation in Postsecondary Educations

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Jane V. Wellman and Louis Soares   September 2011



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# Introduction and summary

Business analytics are the use of quantitative measures of past financial performance to inform future planning and decision making. These are the data tools many private-sector firms use every day to get a return on the investments they make in people, technology, and processes to keep per unit costs down, improve efficiency, enhance quality, and drive competitiveness. It's safe to say that most spending decisions by higher education institutions are not guided by business analytics. Colleges and universities boast neither common language about costs and prices nor well-established metrics for evaluating how resources are used within their institutions or across the higher education landscape.

This leads to confusion about revenues and spending and cost structures inside the institutions, in dialogue with public policymakers, and with the general public. It also contributes to weak use of fiscal data to inform planning, and to poorly informed decision making about how to match spending with priorities, whether for academic programs within a single institution or to advance public goals for higher education. The result is that it is difficult for policymakers and college leaders to even think about how to increase return on investment or target resources to problem areas.

Better business analytics will not, on their own, solve our higher education funding problems, but they would certainly help address some of the most dysfunctional aspects of higher education finance, including:

- The endless search for revenues that causes colleges and universities to drift away from their core mission and competencies
- Rapid increases in tuition driven by subsidy shifts, or losses in general public or institutional resources that pay for core programs
- The chronic underfunding of entry-level courses and developmental education that gets students up to the writing and reading skills to take college courses
- No sense of the best ways to target public funds recognizing that colleges and universities are increasingly funded by tuition dollars

Applying business analytics, with a particular focus on matching spending to public and institutional priorities, and with better attention to subsidy levels, net revenues, marginal costs, and spending against outcomes, would by itself constitute disruptive innovation in most public and nonprofit institutions.

This would be disruptive because it would represent a different way of doing business for most colleges and universities, a new business model. The Center for American Progress recently detailed this model in a paper titled “Disrupting College: How Disruptive Innovation Can Bring Quality and Affordability to Higher Education,” which uses data to focus on spending and results, rather than the current practices, which focus almost entirely on revenues and on inputs such as enrollments.<sup>1</sup>

The purpose of this report is to provide an overview of how business analytics could be used to improve the return on investment in higher education instruction. First, we will place business analytics in the broader context of public higher education goals and the emerging debate regarding learning outcomes as measures of institutional performance. Second, we explore a core set of issues in how we finance higher education that arise because of the lack of business analytics to help make transparent where money is well-invested and ill-spent.

Third, we discuss how business analytics can be incorporated into key policy measures in higher education including institutional governance, state budget reform, funding allocations between two- and four-year schools, and linking school finances to academic program design. Fourth, we provide a short primer on resources where institutions and policymakers can find data to develop appropriate business analytic tools.

Improving access and performance in higher education is a national imperative. The days when colleges and universities could expect to receive generous public subsidies without much questioning about value or effectiveness are over. To maintain public investments in higher education, and to use increasingly scarce resources to improve educational performance, we need better ways to understand the relationship between spending and outcomes, and to use that data to guide how resources are allocated. Business analytics are a key tool in achieving this goal.

# Applying business analytics to educational performance goals

The reason we argue for increased use of business analytics about higher education finance is not simply to improve institutional positions or performance, *per se*, but to improve our collective capacity to meet public goals for postsecondary education. Analytics that are not relevant to decisions about performance become an extension of institutional research in higher education, potentially interesting in and of themselves but not particularly pertinent to improved institutional performance.

From our perspective, the two most pressing areas where performance improvement is needed are in educational attainment and in educational performance. We discuss each of these briefly before returning to the topic of institutional finances, and ways to use business analytics to improve performance.

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## Educational attainment problem

Our country's educational attainment problem is embedded in the leaky educational pipeline, beginning with the poor transition of students across classrooms from kindergarten to 12th grade and then on to and through postsecondary education to credentials, degrees, and jobs. Our education system cannot be fixed exclusively or primarily by improving graduation rates at the B.A. or graduate levels.

In addition to that, policymakers also need to focus on the root causes of declining rates of educational attainment among younger adults, including: equity gaps, or the chronically lower performance at all levels of education for the rapidly growing portions of the population who are low income or Latino; the decline in the proportion of students who complete high school; low college-going rates among many recent high school graduates; and the low success rates in technical-vocational education and in community colleges.<sup>2</sup>

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## The educational performance problem

Our educational performance problem has two basic pieces to it. One has to do with learning outcome—measures of student learning in college that can range from improved writing skills to demonstrated mastery of discipline-specific knowledge. And the other has to do with how learning is packaged and credentialed. Let's look briefly at each in turn.

### Learning outcomes

We know less than we should about learning outcomes, but the evidence that does exist suggests that far too many students who obtain B.A. degrees have not materially improved their knowledge or skill sets since graduating from high school.<sup>3</sup> It isn't clear whether learning outcomes have been getting worse over time or if this has always been the case.

If the value of the degree is measured in economic terms, the earnings premium for B.A. attainment remains high.<sup>4</sup> Nonetheless, questioning about the content of the degree is rising even as the price of the degree has never been higher.<sup>5</sup> This in turn gives rise to a growing questioning about the value of investments in higher education, and to the institutional values that seemingly put price increases and institutional aspirations ahead of service to students.

### Packaging and credentialing

Another part of our educational performance problem relates to the organization, delivery, and credentialing of the growing part of postsecondary education that does not lead to an academic degree or a recognized credential. This is a particular problem in the sub-baccalaureate world, where credentials requiring less than two years of education constitute around 20 percent of total postsecondary awards—quite a bit more than all post-baccalaureate, professional, and graduate education combined.<sup>6</sup>

Studies of the educational value of these certificates, as measured by placements and lifetime earnings, suggest that the one-year-and-below certificates may have little market value.<sup>7</sup> The labeling of the credentials is part of the issue. For example, a general certificate in digital design may have little labor market value while a certificate linked to Adobe web publishing software can be quite lucrative.

The other problem has to do with how learning is packaged and delivered. In the world of developmental education in particular, the course- and credit-based system for organizing and delivering instruction probably gets in the way of the timely provision of high-quality teaching and learning in ways that work well for diverse groups of students, both returning adults and recent high school graduates. In short, the educational delivery system does not match the needs of the students most likely to need support if they are to succeed in completing a credential.

Our “failure” rates in developmental education are well-documented.<sup>8</sup> This has to change since demand for developmental education will surely grow in the future as student demographics move toward those adult learners who have rusty skills and are less prepared for college-level coursework and the Common Core State Standards are implemented in K-12 education nationwide. The Common Core State Standards in English language arts and mathematics will tighten the educational alignment of K-12 and postsecondary schools while also raising the bar for getting into credit-bearing courses for those not already at college competency in these areas. Both of these factors will create a demand for developmental education for those students not ready to take college courses.

Getting the financing and the packaging part of this hugely important piece of the educational pipeline will be critical to future success in improving attainment. As we’ll demonstrate, business analytics can help this process tremendously—once the funding problem is also tackled, the subject of the next section of this report.

# The funding problems

Our higher educational funding problems have many dimensions and affect different groups of students and different university functions quite differently. Looking at the interaction between funding problems against educational performance goals, a fairly short list emerges, with roots both in public policy and institutional practice. Among them are:

- Lack of goals for postsecondary education at both the state and federal levels
- Instability in state appropriations to public educational institutions
- Over-regulation and under-accountability
- Upside-down spending in which education bottlenecks like gateway, general education courses subsidize more expensive upper division and graduate courses that serve fewer students
- Competition that increases spending unrelated to student educational outcomes
- Poor use of data about spending and performance

Let's examine each of these problems in turn.

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## Lack of goals for postsecondary education at both the state and federal levels

Increasing higher educational access and degree attainment to the levels called for by the Obama administration will require an estimated doubling of the nation's degree production rate.<sup>9</sup> This attainment agenda has a good deal of rhetorical support but we have yet to see explicit goals either in federal policy or in most states.

In the absence of goals, funding priorities become dominated by short-term demands for institutional maintenance and by political pressure for sector equity (such as treating the research universities more or less the same as community colleges, whether or not research universities are an equal priority to community colleges).

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## Instability in state appropriations to public institutions

In the absence of performance goals, the fiscal agenda for higher education is de facto written by tax and budget policies, with the dominant motif being to reduce the size of the public sector even in light of increased public demand and need for services, leading to higher tuition and fees. The shift away from public funding to growing tuitions has been going on for more than 20 years; the declining subsidies and rising tuitions are documented by the Delta Cost Project in their annual report on “Trends in College Spending.” One result of the subsidy shift is the increase in tuition and fees, up more than 400 percent since 1982.<sup>10</sup>

Another obvious public policy problem relates to the system of state funding for public higher education. Studies of patterns of state funding for higher education show that it has historically been the “balance wheel” for state budgets, declining more sharply than funding for other public areas during recessions, and recovering more rapidly in good times.

This is a function of the structure of state budgets and the fact that higher education is the single-largest discretionary spending area in most state budgets, making it particularly vulnerable to cuts in bad times. The 20-year pattern of volatility in state funding produces a classic boom-bust phenomenon of uneven state appropriations, which has been corrosive to public institutional capacity to manage resources, plan academic programming, and modulate growth in dependency on tuition and fee revenue.<sup>11</sup>

While most of the focus is on the absolute decline in public funds—a troubling problem in and of itself, to be sure—the lack of predictability in funding from year to year is actually more debilitating to any effort to move away from budget balancing and incrementalism to a strategic investment approach to educational finance. Unpredictability makes it impossible for college and university administrators to plan investments in capital, technology, and even human resources to be able to invest in the educational programs that will accommodate enrollments and produce high-quality learning and results. For a vivid illustration of this challenge, see the narrative on University of Maryland in the recent book *DIY U: Edupunks, Edupreneurs, and the Coming Transformation of Higher Education* by Fast Company reporter Anya Kamanetz.

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## Over-regulation and under-accountability

In many states, the revenue volatility problems are exacerbated by outmoded state budget and fund management practices, which further undermine institutional ability to manage resources and to improve efficiencies.<sup>12</sup> The problem isn't just the funding formulas that disburse a certain subsidy to schools based on the overall state budget and competing programs for that year or the excessive focus on inputs such as student "seat time" rather than outputs such as measured changes in learning. Rather, it's that many states still try to regulate colleges and universities using fund management controls that are wholly inappropriate to their mission or the realities of their current revenue structures.

In a number of major state systems, for example, funds are still allocated to and managed in silos, separating funds for instruction, student services, and academic support.<sup>13</sup> These divisions get in the way of seamless management of resources in a way that best supports students and teaching. As an example, if an institution were to generate savings in instructional budgets, such as by eliminating low-demand programs, those savings could not be reallocated to student support services, since that is a different budget category.

The for-profit sector in higher education basically ignores these categories. These institutions look at spending for educational programs more holistically, in a bundled set of services integrating teaching, learning assessments, student support services, and IT support. This results in a lower cost for delivering education services (although policy and practice have not yet yielded a transfer of these savings to students through lower prices).<sup>14</sup>

Then there are the restrictions that states put on what can be spent from fund reserves, essentially defeating the purpose of creating reserves in the first place, which is to create investment pools for new allocations of resources, and to cushion against budget contingencies. This is a particularly bad practice when the biggest source of "new" revenue in higher education is going to come from internally generated reallocations such as targeting the revenue generated from large general education courses to under-resourced remedial education programs rather than using it to subsidize under-enrolled courses in unpopular majors.

This regulatory problem extends to the federal government, beginning with the student aid programs authorized under Title IV of the Higher Education Opportunity Act, which provides resources for institutional aid, subsidizes student loans, and

funds the Pell Grant program. The regulations surrounding Title IV, however, go far beyond the purposes of the aid programs to academic quality and accreditation.

The recent effort by the federal government to require auditable time-based measures of the student credit hour is but one example of a solution that will hurt rather than help institutional efforts to improve learning productivity.<sup>15</sup> This is the case because quality online education programs such as those being developed by the Open Learning Initiative at Carnegie Mellon University are moving toward competency and not time-based measures of learning, increasing efficiency and reducing costs.<sup>16</sup>

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### Upside-down spending

Higher education is funded through a complicated number of cross-subsidies within institutions, where lower spending requirements in one area (say, offering Geology 101, a standard course taught at most schools to 400 students using teaching assistants) are used to generate resources that are spent on higher-cost programs such as low-enrollment courses such as Advanced Egyptian Hieroglyphics. Historically, the pattern in most four-year colleges and universities has been to suppress costs in lower-division education—the first two years of learning—through large classes, use of adjunct faculty, and teaching assistants to create revenues to pay for higher-cost upper-division classes and graduate programs.

Nationwide, on average, within public four-year institutions, lower division courses generate 36 percent of all credits taken and receive 23 percent of spending for instruction, and are responsible for 60 percent of student attrition—meaning students fail the course or drop out before receiving a degree or certificate.<sup>17</sup> This is what we call upside-down spending—the least resources are spent on the students most at risk of failure, reserving funds for students who already have demonstrated capacity to succeed and advance.

In the first two years of college, greater investments in student coaching, intensive advising, and improving the effectiveness of developmental education could yield better student retention and learning outcomes.<sup>18</sup> But it would require the educational institutions to make some choices to reduce spending on upper-division and graduate education—a choice most would rather not make.

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## Competition that increases spending unrelated to outcomes

The growing role of parent- and student-paid tuition in public higher education is tipping the scales more toward market-oriented decision making by students and their parents and away from public policy decision making, which means that incentives and rewards in the marketplace will have growing importance to higher educational public policy. One of the dirty little secrets of higher education finance is that competition leads to increased spending and mission creep rather than to greater differentiation of products, in part because of the absence of measures of quality leading institutions to treat money and prestige as surrogates for excellence.

Williams College economist Gordon Winston's research on institutional hierarchies and competition shows that competition for the best-prepared students increases spending, in what he describes as a positional "arms race" in higher education.<sup>19</sup> Zemsky and Massy similarly document the devaluation of teaching alongside the incremental shift of institutional attention toward research as a driver of costs for both higher faculty salaries and lower teaching loads.<sup>20</sup>

The problem of mission drift away from teaching and toward research is being exacerbated in the current environment, as governing boards' ability to discipline the academic arms race is being weakened as flagship universities seek to exempt themselves from state system status and to weaken coordinating boards' authority over institutional programs. Two cases in point are the recent effort by the University of Wisconsin Madison (ultimately unsuccessful) to separate itself from the UW System, and a similar effort (successful) by the University of Washington to persuade the governor to end "regulation" of their institution by killing off the state coordinating board.

Flagship public-sector institutions such as these feel they need this special status to keep up with the private institutions, which enjoy a huge and growing funding advantage. They argue that since state funds now constitute a minority share of funding for their institutions, they shouldn't have to obey the myriad regulatory requirements imposed on public agencies.<sup>21</sup>

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## Poor use of data about spending and performance

The culture of higher education has long equated quality with resources, measured by revenues rather than results. As an industry, higher education does a remarkably bad job of looking for evidence about areas where spending pays off in positive outcomes. Almost all higher education funding metrics are measures of revenues, or total assets, which tell nothing about how resources are used within the institutions. But the focus on revenues perpetuates the endless search for resources, whether those funds go to pay for teaching or research or auxiliary enterprises. So the drift in mission—and the hunt for revenues—continues.

# Focusing priorities for better business analytics

Business analytics—measures of unit costs related to performance—need to be developed with an eye to how they will be used to:

- Deliver improved governance and public policy capacity
- Improve state budget reform efforts
- Change in-state funding allocations to improve lower-division education
- Focus college and university finance administrators on revenues and costs

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## Improve governance and policy capacity

We need better metrics but metrics are not self-executing; they need to support decision making as part of a coherent and effective governance structure. Rebuilding our public governance models to work better in the era of technology-delivered instruction and tuition-driven revenues is key to maintaining public capacity in higher education.

In public institutions of higher learning, this requires changes in most states in policy capacity, both at the state and the institutional levels, to provide leadership to this agenda. Specifically, at the state level, states need to have some organization capable of guiding the public agenda for attainment, funding, and accountability. Institutions need governing boards to balance the interests of the state with institutional interests. Both levels need to have the data capacity, people, and public credibility to do the job.<sup>22</sup>

Neutral business analytics that translate spending into readily accessible and transparent measures are an essential tool for building language and shared understandings of facts and circumstances between state government and institutional leaders. States should be particularly focused on the question of public subsidies as a percentage of institutional costs, and how subsidies translate into meeting public goals. States need to be thinking of higher education funding as an investment strategy rather than as a way to fund institutions.

To move in this direction, they need to be able to evaluate the ROI from an investment of funds in (for instance) a public community college, as contrasted to a for-profit institution, or even buying space in a neighboring state. That means they need metrics on average subsidies per student, and subsidy costs on average for each degree or credential.

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## State budget reform

The state budget process for higher education needs to be rethought in almost all states in order to move from the current boom-bust pattern of higher educational funding toward a path that supports a multiyear investment strategy to accomplish public purposes. This means a shift from the front-end regulatory controls discussed earlier in this paper to a better focus on performance and resource use. In addition to models for performance- and outcomes-based budgeting, and attention to use of subsidies, states should be putting more pressure on institutional governing boards to demonstrate that they are looking at spending within the institutions, in ways that promote public transparency about where money comes from and how it is being spent.

Business analytics can make a big difference in informing these types of decisions by bringing transparency to what is now a black box to both state and institutional leaders. In addition to looking at subsidies and outcomes, institutional decision makers should be looking at more granular measures of performance, including total credit hour production against degrees (which helps show what percentage of credits are lost either to attrition or to excess credits), marginal costs per student by level of student and program, and indirect costs as a proportion of spending.

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## Changes in state funding allocations to improve lower-division education

States and their institutions of higher learning both need to address their responsibility for perpetuating the “upside-down” allocation of resources through funding formulas that consistently underfund lower division education. State decision makers can advance this by changing how instructional funds are allocated, to more nearly equalize subsidies between lower-division, upper-division, and graduate education.

If necessary, higher-cost programs can be funded through student tuition dollars and with private resources. This will force greater price transparency to the subsidies now going to pay for departmental research and will help end mission drift toward research and away from instruction that is likely to occur in this funding environment. And institutional leaders should be aware of basic cost and subsidy structures, and know which programs are “paying for themselves” in either student tuition or state funding, or require additional subsidies from redirected revenues.

Cross-subsidization is not necessarily a bad way for institutions to fund high-cost programs, but such subsidies should be defensible against both institutional and public priorities. For instance, upper-division and graduate STEM fields likely cost more on average than other programs, thus requiring a cross-subsidy to be sustainable. That is probably defensible in terms of institutional as well as public priorities. But the majority of intercollegiate athletics programs also require generous subsidies, as they do not generate enough revenues to pay for themselves. In this environment, subsidizing athletic programs may not be as high a priority as paying for other things.

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## Focus college and university finance administrators on revenues and costs

The days when balancing the budget of a college or university was the responsibility of its president and his or her finance officer are long gone. Today, all academic decision makers need to be much savvier about spending, subsidies, net revenues, and marginal costs. Business analytics can accomplish this through readily accessible measures of unit costs that are generally available to anyone with responsibility for finance decisions. This information needs to be available in pertinent cost centers, to allow (as one example) an academic provost thinking about whether to eliminate a program or to consolidate it with other campuses to know what the curriculum costs, which programs are actually yielding revenues to the university, and which programs are in turn most costly.

Academic decision makers need to be able to think about curriculum design not just in terms of learning goals and outcomes but also in terms of spending. A cost-effective curriculum might be actually very congruent with an educationally effective curriculum—with the right combination of mandatory and elective classes, lectures, seminars, distance learning, undergraduate research, and service learning.

Getting these metrics right will require different general ledger accounting systems in many institutions to attach both revenues and spending to courses and programs. In most institutions, unit cost data, which connects information about students, courses, and credits to faculty and staff salaries, is simply not available. Institutions also need to develop protocols for assigning indirect costs across spending categories—the spending for general administration, student support services, academic support, and operations and maintenance. In most institutions, these areas account for more than half of all spending. Yet we do not have good protocols for assigning their costs to either inputs or outputs.

# Places to go for business analytics

Each institution should approach business analytics with an eye to the types of measures that are best suited to their mission and market. Additionally, we believe there are a number of common metrics whose use would improve decision making in all types of institutions. They are:

- Measures of average spending per student
- Average spending per degree conferred
- Estimates of costs associated with excess credits and with student attrition
- Cost, price and subsidy structures, and the proportion of average costs that are subsidized by student tuitions
- Marginal cost per student by program and level of instruction
- Average costs of shared services including overhead.

While not perfect measures of effectiveness or efficiency in and of themselves—those measures require qualitative assessments as well—these metrics put higher education finance into a performance context, with a focus on spending and not just revenues, and the subsidy structures required to support them.

There are a number of places where institutions and policymakers can go for approaches to higher education business analytics. The Delta Project on Postsecondary Costs has developed a series of metrics about funding that can be aggregated to the national, state, or institutional level. These measures include:

- Total revenues by source per student
- Average spending for educational and related expenses per student (an average “full cost” figure including both instructional spending as well as spending on student services, academic and institutional support, and physical plant)
- The subsidy share of average costs, and the share that is supported with student tuition dollars
- Average education and related expenses per credit hour, and per degree and certificate conferred

The Delta data are available publicly for more than 2,000 public and nonprofit colleges and universities. A longitudinal database with comparable revenue and spending data has been assembled going back to 1988; it can be downloaded from the Delta Cost Project website at <http://www.deltacostproject.org>. An online system additionally presents institution-level data in the Delta metrics from 2002 forward; that is available at <http://www.tcs-online.org>.

Another source with detailed data for direct instructional costs (excluding support and administration) is the National Study of Instructional Costs and Productivity hosted by the University of Delaware, also known as the Delaware Cost Project. The Delaware Project is a voluntary consortium of institutions who collaborate for the purpose of sharing data about spending. Participating institutions submit data to the project using the Delaware standard categories and receive in return benchmarks showing how their institutions compare in spending to others in the national dataset. Institutions wanting to learn more about the Delaware Cost Project may find it at <http://www.udel.edu/IR/cost/>.

And lastly, the National Governors Association has recently promoted the adoption of similar metrics in their monograph “From Information to Action: Revamping Higher Education Accountability Systems,” part of their “Complete to Compete” initiative. In addition to recommendations on metrics for measuring degree progression and degree completion, the NGA monograph recommends ways to look at resource use in relation to degree production and outcomes, including employment and future earnings. The monograph also recommends ways for policymakers to design systems that promote common language between state decision makers and institutional leaders, beginning with highly aggregated measures against broad public goals at the state level, but connecting to much more detailed academic and performance information within institutions.<sup>23</sup>

## Conclusion: Cost and outcomes

Improving access and performance in higher education is a national imperative—essential in our opinion to the quality of our democracy and to sustaining economic development and growth in the future. The days when colleges and universities could expect to receive generous public subsidies without much questioning about value or effectiveness are over. To maintain public investments in higher education and to use increasingly scarce resources to improve educational performance, we need better ways to understand the relationship between spending and outcomes, and to use that data to guide how resources are allocated.

The quality of evidence about spending and performance in higher education is terrible. Between public policy and higher education, we have made much more progress in advancing the science of assessing learning outcomes than we have in looking at the role that resources do or don't play in producing those different outcomes. We have avoided transparency about spending and performance, partly because of bad data, partly because we couldn't agree about ways to measure spending, and partly because we don't like quantitative measures of quality.

We can't expect to get away with that in the future. But we need not remain victims of broken cost models in the future. Higher education finance can be stabilized, and we can find a better way to match revenues with spending priorities through more systematic application of business analytics both at a public policy level and within institutions. If we fail to meet this challenge, then our funding problems will become the excuse, if not the reason, for why the next generation of Americans will be less educated than the one that has come before. It is not a future we should accept, and we don't need to.

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## Endnotes

- 1 Clayton M. Christensen and others, "Disrupting College: How Disruptive Innovation Can Bring Quality and Affordability to Postsecondary Education" (Washington: Center for American Progress, 2011), available at [http://www.americanprogress.org/issues/2011/02/disrupting\\_college.html](http://www.americanprogress.org/issues/2011/02/disrupting_college.html).
- 2 Louis Soares and Christopher Mazzeo, "College-Ready Students, Student-Ready Colleges: An Agenda for Improving Degree Completion in Postsecondary Education" (Washington: Center for American Progress, 2008), available at [http://www.americanprogress.org/issues/2008/08/college\\_ready.html](http://www.americanprogress.org/issues/2008/08/college_ready.html); James Heckman and Paul LaFontaine, "The American High School Graduation Rate Trends and Levels," Working Paper 13670 (National Bureau of Economic Research, 2007); Western Interstate Commission for Higher Education, "Knocking at the College Door, Projections of High School Graduates by State and Race/Ethnicity, 1992-2022" (2008); Organisation of Economic Co-operation and Development, "Education at a Glance 2010" (2010). The United States now ranks 19th among industrialized nations for young adults, in contrast to our B.A. and graduate school rates of attainment, which remain at or near the highest in the world.
- 3 See, for example: Richard Arum and Josipa Roksa, *Academically Adrift: Limited Learning on College Campuses* (Chicago: University of Chicago Press, 2011).
- 4 Anthony P. Carnevale, Steven Rose, and Ban Cheah, "The College Payoff: Education, Occupation and Lifetime Earnings" (Washington: Georgetown University Center for Education and the Workforce, 2011).
- 5 Donna M. Desrochers, Colleen M. Lenihan, and Jane V. Wellman, "Trends in College Spending, 1998-2008" (Washington: Delta Project, 2010).
- 6 Ibid.
- 7 Brian Bosworth, "Certificates Count: An Analysis of Sub-Baccalaureate Certificates" (Washington: Complete College America, 2010).
- 8 Bruce Vandal, "Getting Past Go: Rebuilding the Remedial Education Bridge to College Success" (Denver, CO: Education Commission of the States, 2010).
- 9 Jane Wellman, "The Postsecondary Attainment Challenge Facing Public Systems" (Washington: National Association of System Heads, 2011).
- 10 Desrochers and others, "Trends in College Spending"; National Center for Public Policy and Higher Education, "Measuring Up,"
- 11 Jane Wellman, "Financing, Access and Attainment," February 25, 2010, available at <http://www.howardsamuelscenter.org/conference/jwellman.ppt>; Will Doyle and Jennifer Delaney, "The Balance Wheel," September 23, 2008, available at <http://www.wisconsin.edu/Programs/Program.aspx?ID=07df84fd-c7da-4ca5-9244-54c78e7d6412>.
- 12 See, as examples: Oregon University System, "OUS Governance Change Proposal" (2011), available at <http://ous.edu/sites/default/files/dept/govrel/files/2011BGovernance.pdf>; "Wisconsin Idea Partnership," available at <http://www.wisconsin.edu/wip/>.
- 13 Jane V. Wellman, Donna M. Desrochers, and Colleen M. Lenihan, "The Growing Imbalance: Recent Trends in U.S. Postsecondary Education Finance" (Washington: Delta Project, 2008).
- 14 Christensen and others, "Disrupting College."
- 15 Ibid.
- 16 Candace Thille and Joel Smith, "Cold Rolled Steel and Knowledge: What Can Higher Education Learn About Productivity?," Change, March-April 2011, available at <http://www.changemag.org/Archives/Back%20Issues/2011/March-April%202011/cold-rolled-steel-full.html>.
- 17 Sharmila Basu Conger, Alli Bell, and Jeff Stanley, "Four-State Cost Study" (Boulder, CO: State Higher Education Executive Officers, 2010), available at [http://www.sheeo.org/finance/SHHEO\\_Cost%20Study%20Report\\_2010.pdf](http://www.sheeo.org/finance/SHHEO_Cost%20Study%20Report_2010.pdf).
- 18 Brian Pusser and John Levin, "Re-imagining Community Colleges in the 21st Century: A Student-Centered Approach to Higher Education" (Washington: Center for American Progress, 2009), available at [http://www.americanprogress.org/issues/2009/12/reimagining\\_community\\_colleges.html](http://www.americanprogress.org/issues/2009/12/reimagining_community_colleges.html).
- 19 Gordon Winston, "The Positional Arms Race in Higher Education," Discussion Paper 54 (Williams Project on the Economics of Higher Education, 2000).
- 20 Robert Zemsky and William Massy, "The Lattice and the Ratchet," Policy Perspectives 2 (4) (1990), available at <http://www.thelearningalliance.info/Docs/Jan2004/DOC-2004Jan12-1073931090.pdf>.
- 21 The argument for "privatization" of public institutions is provided by: James Duderstadt and Ferris Womak, *The Future of the Public University in America* (Baltimore, MD: Johns Hopkins University Press, 2003).
- 22 See, for example: Joseph Burke, "Nine Principles: Serving the Public Good in a Time of Changing Governance Models for Colleges and Universities," National Crosstalk 13 (4) (2005); The Delta Project on Postsecondary Education Costs, Productivity, and Accountability, The National Center for Higher Education Management Systems, and The National Center for Public Policy and Higher Education, "Strengthening College Opportunity and Performance: Federal, State and Institutional Leadership," National Crosstalk 18 (2) (2010); "State Capacity for Higher Education Policy," National Crosstalk 13 (3) (2005), available at <http://www.highereducation.org/crosstalk/ct0305/news0305-insert.pdf>.
- 23 National Governors Association, "From Information to Action: Revamping Higher Education Accountability Systems" (2011), available at <http://www.nga.org/files/live/sites/NGA/files/pdf/1107C2CACTIONGUIDE.PDF>.

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