EDUCATIONSECTOR REPORTS

September 2006

COLLEGE RANKINGS REFORMED:

The Case for a New Order in Higher Education

by Kevin Carey

EDUCATIONSECTOR

Independent Analysis, Innovative Ideas

EDUCATION**SECTOR** REPORTS

September 2006

COLLEGE RANKINGS REFORMED:

The Case for a New Order in Higher Education

by Kevin Carey

Table of Contents

Cover photo courtesy of iStockphoto.

1201 Connecticut Ave., N.W., Suite 850, Washington, D.C. 20036
202.552.2840 • www.educationsector.org

ACKNOWLEDGEMENTS

Education Sector thanks Lumina Foundation for its support of this project. Lumina Foundation for Education is an Indianapolis-based, private foundation dedicated to expanding access and success in education beyond high school. The views expressed in this report are those of the author(s) and do not necessarily represent those of Lumina Foundation for Education, its officers or employees.

ABOUT THE AUTHOR

KEVIN CAREY is the Research and Policy Manager at Education Sector.

ABOUT EDUCATION SECTOR

Education Sector is an independent education policy think tank devoted to developing innovative solutions to the nation's most pressing educational problems. We are nonprofit and nonpartisan, both a dependable source of sound thinking on policy and an honest broker of evidence in key education debates throughout the United States.

In August 2006, the newsmagazine *U.S. News and World Report* published new lists of "America's Best Colleges," as it has every summer since it launched its college and university rankings in 1983. If past editions are a measure, the magazine will sell millions of copies of the latest report to students and parents eager to find the best possible place to pursue a higher education in a world where economic opportunity is increasingly defined by the learning that students obtain beyond high school. Today, more than two-thirds of new high-school graduates go directly to college, compared to fewer than half in the early 1970s.

Many other ranking reports and often-bulky guides to college admissions, including those from *Barron's*, *Peterson's*, and the *Princeton Review*, crowd book shelves and magazine racks. But *U.S. News* dominates the market for higher-education information. Applications and alumni donations rise and fall with the magazine's ratings, and many colleges and universities work assiduously to move up the *U.S. News* ranking ladders.

The *U.S. News* rankings have become the nation's *de facto* higher education accountability system—evaluating colleges and universities on a common scale and creating strong incentives for institutions to do things that raise their ratings.

But the *U.S. News* ranking system is deeply flawed. Instead of focusing on the fundamental issues of how well colleges and universities educate their students and how well they prepare them to be successful after college, the magazine's rankings are almost entirely a function of three factors: fame, wealth, and exclusivity. They directly or indirectly account for 95 percent of a school's ranking, as Table 1 on page 3 reveals.

As a result, the influential rankings have led colleges and universities to focus their energies on becoming wealthier, more famous, and more exclusive, often at the expense of what matters most—educating their students well. College rankings have increasingly defined the terms of the marketplace in higher education and the message from the market is clear: wealth, fame, and exclusivity are what gets colleges and universities ahead today.

Gary Randsell, the president of Western Kentucky University (WKU), is well aware of that fact. While the lion's share of public attention to higher education is focused on elite colleges and major research universities, institutions like WKU—public, regional, masters-granting institutions—are actually far more representative of higher education today. Along with community colleges, the WKUs of the world are where most college students actually go to college.

By today's standards, Randsell has been an unusually successful president, rapidly growing WKU's applicant pool, enrollment and endowment, recruiting new faculty and building new university facilities. "I want nationally competitive faculty," he says. "I want nationally competitive students. I want facilities that are national or world-class in terms of technology. I want a campus that is second-to-none in beautification. You've got to compete, you've got to work hard, you've got to be doing things that continue to improve your quality, or you're going to get passed in a hurry in this business….We're going to compete in that arms race and we're going to win."[1]

President Randsell's comments illustrate just how fiercely successful leaders will compete on whatever terms the marketplace demands—and they suggest how little the terms of today's marketplace have to do with how well students are taught, how much they learn, whether they graduate, and whether they succeed in their future lives.

Because today's rankings reward institutions for wealth, many college presidents are no longer national intellectual leaders but narrowly focused fundraisers-

in-chief. Because rankings reward institutions for their "scholarly" reputations, colleges recruit faculty who are distinguished in research even if their teaching skills are sub-par. Because the current rankings reward colleges for selective admissions and high freshman SAT scores, more scholarships are going to wealthy, high-achieving applicants, instead of the lower-income students who need financial aid the most.

The failure of the *U.S. News* rankings to provide colleges with incentives to improve the quality of their teaching is one reason why studies have found that many American collegians aren't learning what they need to know. In a recent report on college-student literacy, for example, the Washington, D.C.-based American Institutes for Research revealed that only 38 percent of graduating seniors could successfully perform tasks like comparing viewpoints in two newspaper editorials.[2]

What the *U.S. News* rankings do, in effect, is confirm the status of colleges and universities that by virtue of their prestige are valuable to students irrespective of the quality of the education they provide. Students could get a rotten education at Harvard and Yale and they would still be ahead of the game because Ivy League degrees have so much cachet.

But the vast majority of college students—almost 90 percent—don't attend selective colleges and universities. They attend institutions that don't have the status to open doors for their graduates on the basis of name alone. Instead, what matters to these students is the quality of the education that they receive.

Reinforcing the status of the nation's wealthiest, most famous, and most exclusive institutions has been lucrative for *U.S. News* and other organizations that rank colleges and universities. But they have not deliberately excluded measures that shed light on the quality of college teaching and learning. Rather, they exclude such measures because information that answers questions that would be most helpful to the most students—Where are students taught the best? Where do students learn the most? Where do students have the best chance of earning a degree? Where are students best prepared to succeed in their lives and careers?—simply hasn't been available.

Until now. New research and advances in technology in the last several years have led to a host of new metrics and data sources that together offer an unprecedented opportunity to measure how well colleges and universities are preparing their undergraduate students. The new measures provide information about a range of important factors like teaching quality, student learning, graduation rates, and success after college. Many of them are eye-opening, suggesting that existing rankings badly mislead students and parents about the "best" colleges and universities. Some institutions currently mired in the lower reaches of the *U.S. News* rankings show outstanding results, while some of the exclusive institutions so prized by striving students don't live up to their reputations for excellence.

The wealth of valuable new information provides the possibility of replacing existing college rankings with a vastly improved ranking system. This report explains what the new measures can show, how those measures can be combined into new college rankings, and why the new rankings would benefit both students and colleges.

The new rankings would give students and their parents far more useful information for choosing colleges. They would create strong incentives for colleges and universities to take steps to improve their undergraduate instruction and reward institutions that have excelled at that task. They would bring two-year institutions more fully into the mainstream conversation about higher education quality. And they would even help address the problem of rising college costs.

In the long run, higher education would greatly benefit from the new rankings. They would give colleges and universities fair terms under which to compete and excel. They would help justify new public investments in higher education. And they would create a more dynamic, efficient market by giving students the ability to pick and choose the institutions that will actually serve them best.

Attention to Teaching

In 1998, Russ Edgerton saw an opportunity. Then the director of education programs for the Pew Charitable Trusts and a former president of the American Association for Higher Education, he called a meeting of some of the best minds in higher education to discuss the absence of information about the quality of undergraduate teaching in U.S. colleges. The gathering included people like

Table 1. Components of the U.S. News and World Report College Rankings

Measure	Percentage of ranking	Measured characteristic	Total
Peer assessment	25%	Fame	25%
Percentage of classes with fewer than 20 students	6%	Wealth	30%
Percentage of classes with more than 50 students	2%	Wealth	
Average faculty salary	7%	Wealth	
Percentage of professors with highest degree in field	3%	Wealth	
Student/faculty ratio	1%	Wealth	
Percentage of faculty who are full time	1%	Wealth	
Spending per student	10%	Wealth	
Percentage of students in top 10 percent of high school class	6%	Exclusivity	40%
Student SAT scores	7.5%	Exclusivity	
Acceptance rate	1.5%	Exclusivity	
Graduation rate	16%	Exclusivity	
Retention rate	4%	Exclusivity	
Alumni giving rate	5%	Exclusivity	
Graduation rate performance (predicted versus actual)	5%	Quality	5%

Source: America's Best Colleges: 2007 Edition, U.S. News and World Report LP, 2006.

An analysis of the latest *U.S. News and World Report* college rankings shows that university scores are, directly or indirectly, almost entirely a function of three factors: fame, wealth, and exclusivity.

Twenty-five percent of the *U.S. News* rankings are based on a survey of college presidents, provosts, and deans of admissions, who are asked to rate other institutions' academic programs on a scale from 1 to 5. How college leaders are supposed to accurately make such judgments about scores of competitors is unclear; most are challenged to get good information about their *own* institutions. Inevitably, they rely on past reputations, heavily influenced by previous *U.S. News* surveys. To the extent that judgments are based on firsthand knowledge, they tend to focus on scholarly or research reputations, not success in educating students. This is basically a self-reinforcing measure of fame and renown. As one college president said about the college he ranked first, "I don't know anything about [the college]. I've never been there. But they are at the top. So they must be good, right?"[3]

Thirty percent of the rankings are based directly or indirectly on wealth. Direct measures include spending per student; indirect measures include faculty salaries, class size, faculty credentials, and other things that cost money to buy.

Forty percent of the rankings are based in various ways on exclusivity. While conventional wisdom is that colleges can drive up their *U.S. News* rankings by inducing many students to apply and then rejecting them, acceptance rates only make up 1.5 percent of the rankings. But items like average freshman SAT scores and the percentage of freshmen from the top 10 percent of their high school class serve a similar function, since those are the students the most exclusive institutions recruit and enroll. Graduation and retention rates seem at first like real measures of quality, but statistical analyses show that they're strongly correlated with other measures of exclusivity like SAT scores.[4] Five percent of the rankings are based on the percentage of alumni who give money, working mostly to the advantage of small, private, exclusive institutions with fewer, wealthier alumni to solicit for donations.*

That leaves **five percent** for the one real quality measure in the mix—the difference between an institution's statistically *predicted* graduation rate, based on SAT scores and other factors, and it's *actual* graduation rate. Five percent for the only measure that speaks to how well institutions work to help their students succeed. And that measure is used only for national universities and liberal arts colleges—for master's granting universities and comprehensive colleges, *U.S. News* uses no quality measure at all.

*For example, nine institutions were ranked by *U.S. News* among the top 50 national universities despite not ranking in the top 100 in terms of their alumni giving rates. Eight of nine were large, public universities.

Alexander (Sandy) Astin, director of the Higher Education Research Institute at UCLA, and Arthur Chickering, co-author of the seminal publication "Seven Principles for Good Practice in Undergraduate Education." They focused on one source of information—students themselves.

From that meeting came a survey, one that would ask students a wide range of questions designed to uncover the quality of undergraduate education at individual campuses. Indiana University, which was already working with a well-respected survey instrument called the "College Student Experiences Questionnaire," and which also housed a professional survey research unit, was chosen over a number of other competitors to administer what became known as the "National Survey of Student Engagement," or NSSE.

NSSE (pronounced "Nessie") was launched in 2000 to provide institutions with confidential data about how well they teach and engage their students. Students are given an 80-question survey about their college experiences focusing on the teaching practices and university environments that, research shows, usually lead to learning. Years of study have found that the more time and effort students spend researching papers, interacting with faculty, and studying with classmates, the more they learn.

To measure how much students are challenged academically, a sample of freshmen and seniors are asked about things like the number of books assigned, lengthy papers written, and time spent preparing for class. Students are also asked about how much of their coursework is focused on synthesizing complex ideas and applying theories to practical problems. Other questions focus on "active and collaborative learning," i.e., how often students ask questions in class, work with other students, and participate in community-based projects.

Because student-faculty interaction is a key element of effective teaching, students are asked how often their professors provide prompt feedback on performance and how many times they discuss ideas with faculty outside of class. NSSE also documents "enriching educational experiences," such as interaction with students of different economic, social and racial backgrounds, study abroad, and the availability of culminating senior experiences.

Institutions receive detailed reports comparing them to the average results at groups of peer institutions and regional competitors. Some groups of institutions have formed consortia to share results for research purposes. It is not an expensive enterprise: Web-based surveys are used to gather information from thousands of students per institution for as little as $1.50 a head.

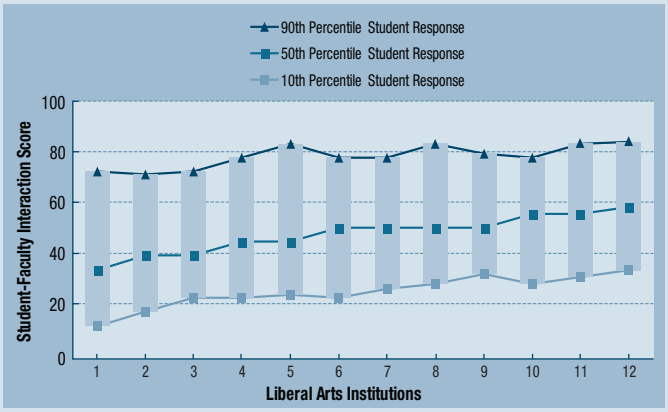
Edgerton had originally wanted NSSE results to be public, to serve as an alternative to *U.S. News's* rankings. But he also wanted NSSE to be broadly used and financially self-sustaining. That meant getting a lot of institutions to both agree to participate and pay for the privilege. Many were willing on one condition: the results would be kept confidential and not released to the public. Institutions didn't know how they would fare on the survey and were afraid of bad publicity. Said Peter Ewell, Vice President of the nonprofit National Center for Higher Education Management Systems and one of the main architects of NSSE: "People won't pay for the gun that shoots them in the head."[5]

NSSE quickly exceeded its creators' most optimistic projections. As NSSE staff worked to continuously refine and improve the survey, the number of institutions participating grew rapidly to more than 560 per year by 2006. Pew invested nearly $4 million in research and development and operational support in the initial years, but by 2003 NSSE was completely financially self-sufficient.

As Figure 1 shows, NSSE results vary significantly between institutions, and even more among different students within institutions. NSSE also confirmed the suspicions of Edgerton and others that many institutions simply don't ask as much of their students as they could. Thirty percent of students nationwide reported being assigned four or fewer books to read in their entire senior year, while half were assigned *zero* written papers of 20 pages or more. Half of all freshmen spend 10 or fewer hours per week doing homework and preparing for class.

NSSE data also show little or no relationship between having a respected brand name and teaching students well. The 2005 NSSE annual report found no statistically significant relationship between any of NSSE's benchmarks of effective educational practices and institutional selectivity, as measured by the popular *Barron's Guide to Colleges*. Teaching at big-name schools

Figure 1. Level of Student-Faculty Interaction: First-Year Students at 12 Liberal Arts Institutions



Source: National Survey of Student Engagement.

Figure 1 shows a group of liberal arts colleges. Each light blue vertical bar shows the range of combined student responses to NSSE questions about student faculty-interaction at a single institution, converted to a 100-point scale. A score of 100 would represent the highest level of student-faculty interaction. The top of each bar shows the 90th percentile response, while the bottom shows the 10th percentile response. The middle mark shows the median response. The highest median score among these colleges is half again as large as the lowest, with an even larger spread *within* each college. Clearly, not all colleges are equally successful in engaging students.

wasn't any better than at lesser-known colleges and universities. A similar comparison to the components of the *U.S. News* rankings found correlations for some elements but not others. The *U.S. News* peer evaluation of "academic reputation"—the single largest component of the rankings—had no correlation with whether an institution was successful or unsuccessful in promoting active learning, student-faculty interaction, or a supportive campus environment, the NSSE study found.

That suggests that some low-ranked institutions are being unfairly maligned, and some high-ranked schools don't deserve their peers' esteem. Consider Miles College in Alabama and Jackson State University in Mississippi, both historically black institutions. Both serve predominantly lower-income students who don't score high on the SAT and ACT and spend relatively low amounts of money per student. As a result, both languish in the *U.S. News* rankings: Jackson State is in the bottom tier among national research universities, while Miles College is the third tier (out of four) among Southern "Comprehensive" colleges, which are less prestigious than those in the "Liberal Arts" college category.

Most schools don't make their NSSE results public, but Miles and Jackson State do and, as Table 2 shows, both institutions score above—sometimes *far* above—the national average on a range of NSSE measures. Their students are more likely than their peers nationwide to be engaged with their peers, to receive prompt feedback from professors, to be assigned lengthy papers to write and to work on projects in the community. Conventional measures rank Miles and Jackson State below par; NSSE tells exactly the opposite story. But because NSSE results aren't public for most institutions, the data aren't part of existing rankings, and institutions like Miles and Jackson State don't get the credit they seemingly deserve.

While the number of institutions reporting NSSE data to the public is slowly increasing, there appears to be little chance that simply asking institutions to provide the data voluntarily will result in students having comprehensive, comparable information for all colleges and universities. Less than 15 percent of colleges ranked by *U.S. News* provided NSSE data to the magazine when asked, and *none* of the top-tier national universities released results. The newsmagazine *Maclean's*, which ranks Canada's 47 universities, recently used freedom of information requests to pry NSSE data out of Canadian public university hands (the results mirrored those reported by U.S. schools: many Canadian universities are doing a poor job of engaging students). But it would be an immense legal challenge to use this approach for the many hundreds of U.S. public universities, and private colleges wouldn't have to comply.

By 2006, NSSE had become an unqualified success, having worked with nearly 1,100 different institutions and more than three million students in the U.S. and Canada, staffed by 35 full- and part-time employees, and spawning related surveys for community colleges (CCSSE), faculty (FSSE), law schools (LSSSE), and high schools (HSSSE). After two years of field testing, a survey for beginning college students (BCSSE) will be launched in 2007. Concluded Edgerton in the introduction to the 2005 NSSE annual report:

> "Colleges that become more selective are rewarded with rising rankings in *U.S. News*. But colleges that become more effective in contributing to student learning are largely ignored…excellence in higher education is still largely defined as having resources others don't have—like students with high SAT scores and

faculty with national reputations as scholars. Institutions that aspire to be "the best" are encouraged to become more exclusive. What America needs instead are colleges that are inclusive, and excellent, too. I do not believe that the traditional order will ever be overthrown. There will always be a race to be like Harvard, or what people perceive it to be. But the pursuit of prestige need not be the only game in town."

What Students Need to Know and Be Able to Do

Making NSSE data available for all institutions would be a major advancement. But evidence of good teaching is still one step removed from evidence of actual student learning. K–12 schools attempt to measure learning with standardized tests in core subjects like reading and math. It might seem impossible to do the same in higher education. Elementary and secondary students are at least expected to complete similar courses, to learn the same rules of punctuation and applications of the Pythagorean Theorem. Undergraduate studies are far more diverse: Some students choose to spend four years immersed in Ovid, others in organic chemistry.

But there turns out be an answer: Instead of testing discrete pieces of knowledge, test the high-order critical thinking, analysis, and communications skills that all college students should learn (and which employers value most). The Collegiate Learning Assessment (CLA), recently developed by a former subsidiary of the RAND Corporation called the Council for Aid to Education (CAE), does exactly that. Instead of filling in bubbles with a No. 2 pencil, students who take the CLA at hundreds of participating colleges and universities are writing lengthy essays, analyzing documents, and critiquing arguments. In making this process standardized and affordable, the CAE has met a goal that higher education has been reaching toward for the better part of a century.

The roots of this important work date back nearly eight decades to 1928. That year, the Carnegie Foundation for the Advancement of Teaching administered a comprehensive test of knowledge to 4,580 Pennsylvania college seniors. Today's seniors who complain about the length and difficulty of modern-day tests like the GRE and LSAT should be thankful they didn't matriculate in that era—the first version of the Pennsylvania test had 3,200 questions and lasted for 12 hours. Later versions were shorter but still covered English, math, foreign literature, fine arts, history, science, and social studies, including questions such as "True or false: The slow movements of Beethoven's symphonies are somewhat inferior to the rest of those compositions," and "[Which] of Corneille's plays, 1 *Polyeucte*, 2 *Horace*, 3 *Cinna*, 4 *Le Cid*, shows least the influence of classical restraint?"[6]

In the late 1930s, the designers of the Pennsylvania study went on to help found a new organization, ETS, where they developed what became the most widely used general test of college graduates: the GRE. ETS struggled to manage one of the main shortcomings of

Table 2. Percentage of Students Who Answered 'Very Often' When Asked by the National Survey of Student Engagement About College Experiences in 2004

	National average	Miles College	Jackson State University
Asked questions in class or contributed to discussions	43%	**65%**	43%
Worked with classmates outside of class to prepare assignments	22%	**39%**	**39%**
Participated in a community-based project as part of a regular course	7%	**25%**	**21%**
Discussed ideas from readings or classes with faculty outside of class	8%	**28%**	**18%**
Received prompt feedback from faculty on academic performance	21%	**36%**	**23%**
Wrote 11 or more papers between 5 and 19 pages during the current school year	18%	**26%**	**25%**
Wrote five or more papers of 20 pages or more during the current school year	16%	**41%**	**30%**

Source: www.usnews.com/usnews/edu/college/rankings/ranknsse_brief.php.

the Pennsylvania exam, the high cost of paying people to hand-score such a lengthy test. Their solution was to use new machine-scoring technology developed by a growing company called International Business Machines. By the 1950s, the GRE had evolved away from testing specific knowledge to become a test of general language and math abilities, leaving Beethoven and Corneille far behind.

The GRE thus did little to assess the advanced knowledge and higher-order thinking skills that are the hallmark of a higher education. The University of Chicago worked to develop a better test in the 1950s and gave all undergraduates an exam with open-ended questions designed to assess the ability to apply principles to explain phenomena, interpret works of art, and interpret and synthesize information from texts. In the 1970s, ACT—maker of the college entrance exam of the same name—developed an assessment using a combination of multiple choice, short answer, essay, and oral response questions to assess students' ability to communicate, solve problems, and analyze information. Similar task-based assessments were piloted by the state of New Jersey in the 1970s and 1980s.

But these efforts ultimately foundered for the same reason ETS chose to partner with IBM—complicated tests required real people to administer and score, and thus were simply too expensive to administer widely. They couldn't compete with the massive economies of scale driving tests scored by machines.

CAE has used the latest advances in technology to solve that cost/benefit dilemma. Like NSSE, the CLA is administered to a sample of freshmen and seniors at a given college or university. Students write lengthy analytic essays "making" or "breaking" a certain argument or proposition. They also tackle "performance tasks" that require analyzing a series of documents, synthesizing written and quantitative information, forming conclusions and making recommendations.

The CLA is administered online, cutting administrative costs. And while the performance tasks are scored by trained personnel, the essays are scored by computer programs using holistic scoring rubrics. While some efforts to score essays with computers have been problematic, CAE has validated its system by having a sample of essays scored by both computers and humans and finding the two methods to be equally reliable and consistent.

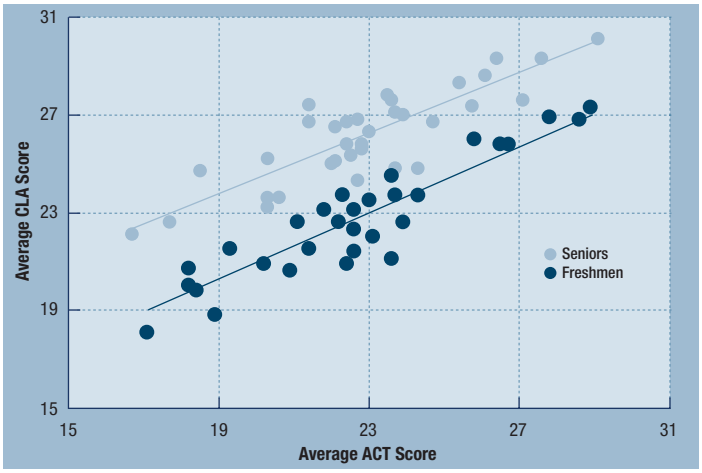
The cost-reducing power of technology—combined with early financial backing from some of the same nonprofit foundations that supported NSSE—has made the CLA an attractive, relatively inexpensive source of new information about student learning. First piloted in the 2002–03 academic year, the test was given at 121 colleges and universities to more than 30,000 students in 2004–05. Double that number will participate in 2006. Like NSSE, the CLA doesn't cost very much: for $6,300 per institution, CAE will test enough students to yield statistically reliable results for the institution as a whole.

Thus, CAE has done for essays and complex performance tasks what ETS and IBM did for multiple choice tests half a century before—use technology to make test scoring cheap enough to make the test economically feasible for large numbers of colleges and universities.

The *U.S. News* rankings are partly based on student SAT and ACT scores, giving colleges and universities credit for how smart their students are when they arrive at college, not when they finish. The CLA, in contrast, compares the scores of seniors to those of freshmen and thus provides a "value-added" measure of performance, giving colleges credit for students' learning growth while they're actually enrolled at the institution. It also compares seniors' scores to the score statistically predicted by their performance on the SAT or ACT.

The circles on Figure 2 show CLA results for freshmen (in dark blue) and seniors (in light blue) at 45 institutions,

Figure 2. Freshman and Senior Scores on the Collegiate Learning Assessment (CLA) and the ACT at 45 Colleges and Universities



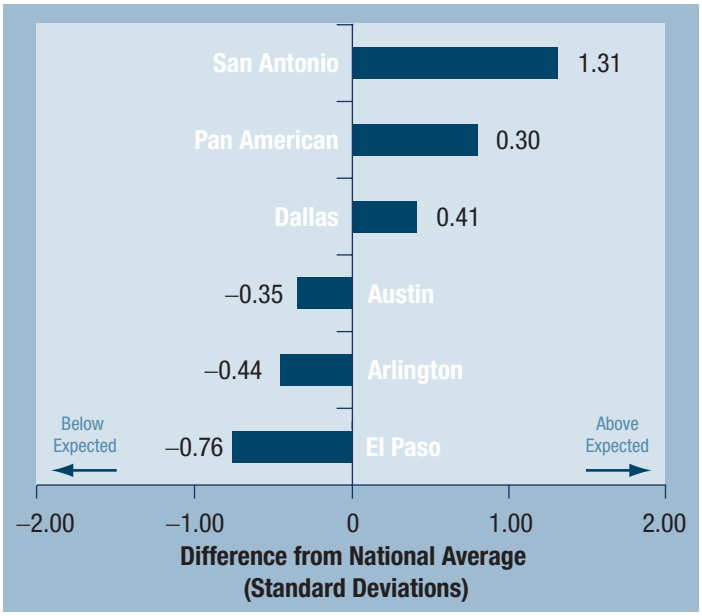
Source: Council on Aid to Education.

plotted against students' ACT scores. The two measures are strongly correlated—as ACT scores rise, so do CLA scores. The light and dark blue lines show the statistically predicted relationship between the two. At some institutions, freshmen score *below* the predicted CLA score, but seniors score *above*, suggesting high value-added from the start of college to the finish. Other institutions have the opposite effect: freshmen start out ahead and finish behind. According to *U.S. News*, the highest-rated schools would all be on the right side of the chart, where ACT scores are highest. By the CLA's growth measure, some of the highest-rated colleges are on the *left* side of the chart, where ACT scores are *lowest*.

Most institutions haven't released their CLA results to the public—as with NSSE, they participate with a guarantee of confidentiality. The University of Texas system, however, has made its results known and they provide further evidence that traditional measures of higher education quality may be missing the mark.

Figure 3 shows the difference between senior scores on CLA performance tasks and their predicted score based on their ACT or SAT scores. The most highly ranked UT campus according to *U.S. News* is, by a wide margin, the flagship University of Texas at Austin. But UT–Austin is actually below average when it comes to senior scores on CLA performance tasks given where they were when they started college. The highest relative score was UT–San Antonio, ranked as a fourth (bottom) tier school by *U.S. News*. UT–Austin seniors did somewhat better on the CLA analytic writing task, but still fell below San Antonio, as well as UT–Pan American and UT–El Paso, also cellar-dwellers on the *U.S. News* list.

Figure 3. Senior Scores Relative to 'Expected' Scores on Collegiate Learning Assessment Performance Tasks at University of Texas Campuses



Source: The University of Texas System 2005–06 Accountability & Performance Report.

Figure 4 shows that the highest-scoring institution in terms of freshman-to-senior growth is UT–Permian Basin, which outscored all other UT campuses, as well as the large majority of tested institutions nationwide. Located in Odessa near the New Mexico border, UT–Permian Basin is an afterthought at best in the *U.S. News* rankings, tucked away on an alphabetical list of the fourth (bottom) tier of master's-granting universities in the western United States. Ninety-five percent of applicants are accepted while only 2 percent of alumni donate money. The university's peer-determined "academic reputation" is 2.1 out of 5.0, one of the lowest of any college or university in the nation.

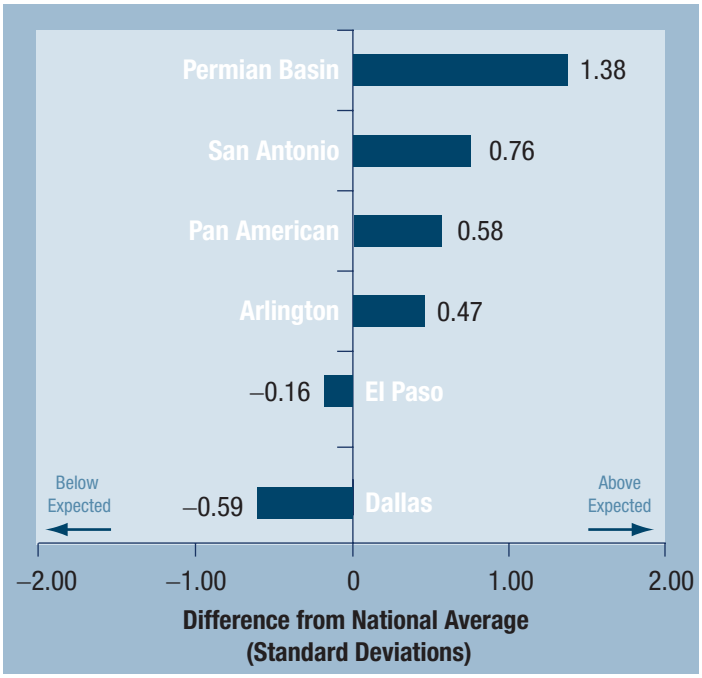
There is no chance of UT–Permian Basin ever distinguishing itself under the current rankings regime. But the CLA results suggest that if rankings and reputations were calculated in a different way—based on institutions' success in helping their students increase their knowledge and skills from their freshman to senior years—that could change.

Engineering Change

While the CLA measures the skills that are often most prized in the modern workforce, it doesn't test the advanced knowledge that college students are supposed to acquire as they specialize and major in specific fields. Fortunately, there are new developments in this area as well, in the form of "outcomes-based accreditation." Perhaps not surprisingly, the effort is being led by one of the more practical and quantitative of the academic disciplines: engineering.

Accreditation is intended to provide quality control for the public, ensuring that all colleges and academic programs adhere to certain minimum standards. But accreditation

Figure 4. Collegiate Learning Assessment Total 'Value-Added' Difference Scores at University of Texas Campuses



Source: The University of Texas System 2005–06 Accountability & Performance Report.

processes, like the *U.S. News* rankings, have historically been focused on measures of higher education inputs, such as curricular requirements and faculty credentials. By the late 1980s, many academic and industry leaders had concluded that the traditional process wasn't doing the job when it came to producing high-quality engineers.[7] New graduates had strong technical knowledge, but were lacking in areas that were becoming ever more important for modern corporations: creativity, design capacity, knowledge of manufacturing and quality processes, communication, and working in teams. The Accreditation Board for Engineering and Technology (ABET), moreover, was seen as a barrier to fixing this problem. ABET's evaluation criteria were lengthy and detailed, but mostly a matter of "bean counting" input measures. Innovative institutions were sanctioned instead of encouraged.

After criticism from the presidents of high profile institutions like the University of Michigan and MIT, ABET decided to change. With support from the National Science Foundation, it worked with representatives of industry and academia to develop a radically new set of criteria for judging engineering programs. Piloted in 1997 and made mandatory for all programs in 2001, the Engineering Criteria 2000 (EC2000) were much less concerned with input measures and much more focused on outcome measures of the skills and abilities of students.

Accredited programs assess their students' ability to apply math and science skills, solve problems, use modern engineering tools and work in teams. Some programs use "industry advisory councils" for this process, on the theory that the people with the best information about whether graduates have been prepared to succeed in the workforce are the employers who actually hire them. At Syracuse University, for example, companies told the program that their new engineers needed better writing and communication skills. As a result, the engineering school brought in a member of the university writing program to co-instruct the senior design course and provide students with a separate grade focused on their communication skills.[8]

Results from the first evaluation of EC2000, released in late 2005, found that students' self-evaluation of their skills increased significantly from 1994 (before the new process) to 2004.[9] When colleges and universities start to be evaluated based on student outcomes, student outcomes tend to improve.

Outcomes-based accreditation has also made inroads in teaching, led by the Teacher Education Accreditation Council (TEAC). Founded in 1997, TEAC-accredited programs gather concrete evidence about what their teacher candidates have actually learned. Programs rate themselves based on subject matter and pedagogy tests, licensure exam passage rates, hiring rates, surveys of alumni and employer satisfaction, and evidence of their graduates' success in the classroom. Some TEAC members have developed more novel measures, such as the extent to which local school superintendents waive interviews for recommended candidates from their program, or whether students in schools with higher densities of program graduates score better on state tests.[10]

ABET and TEAC show that gathering information about how well colleges teach advanced knowledge is more than possible; it's already being done. But like all accreditation processes, detailed results for individual programs aren't available to prospective students trying to choose a college. Most institutions choose to keep

accreditation-based knowledge about how well they're educating their students, like NSSE and the CLA, to themselves.

Students' Best Work

A combination of CLA-type tests of higher-order thinking skills and ABET-type processes for gauging discipline-specific knowledge would be a huge leap forward in measuring college-student learning. But they still wouldn't measure everything. Some institutions use culminating senior theses and capstone projects to evaluate the sum of students' learning, their ability to combine research, analytic, and writing skills with a deep knowledge of particular subjects. This is widely regarded as a best practice in higher education.

Institutions can, at the very least, let the public know whether all students who attend will have the opportunity to have their work evaluated in this way. And some reformers believe colleges and universities could go further still. In a recent publication titled "Our Student's Best Work," the Association of American Colleges and Universities said:

> "In the current climate it is not enough for an institution to assess its students in ways that are grounded in the curriculum; colleges and universities also must provide useful knowledge to the public about goals, standards, accountability practices, and the quality of student learning….Faculty members responsible for milestone and capstone assessments can be trained to judge the level of each student's achievement…. A summary report to an accrediting body, a state official, or the general public can be prepared that aggregates the data across the institution…unlike tests based on quick responses to multiple-choice questions, these will be summaries of higher-order skills such as communication, analytic ability, and integration of knowledge, and will reflect meaningful education projects judged by professionals."

In other words, providing the public with the right kind of information about how well colleges educate students isn't impossible; it just has yet to be done.

Learning by Degrees

By 1989, Bill Bradley, the 6′5″ Basketball Hall of Famer and then-Democratic senator from New Jersey, had heard too many stories of big-time college sports programs racking up stellar win-loss records but abysmal graduation rates. So he spearheaded the "Student Right-To-Know Act," which required colleges and universities to report graduation rates, both for athletic programs and the student body as a whole. In doing so, Bradley created something that had never existed before: a standardized graduation rate measure for every college and university in the nation.

While the Act was passed in 1990, it took a while to bear fruit. Institutions asked for time to upgrade their data systems and get their procedures in place, so reporting wasn't made mandatory until 1996. Since institutions were given up to six years to graduate students, the rates couldn't be calculated until 2002. Some institutions reported late, and the statistics had to be cleaned up and verified, so the first complete data set wasn't released to the public until early 2004. Overall six-year rates had already been reported for many institutions by the NCAA, but this was the first time four-, five-, and six-year graduation rates were released for all institutions broken down by students' gender, race, and ethnicity.

Only 37 percent of students graduated in four years from the institution where they first enrolled. Extending the timeframe to six years brought the average up to 57 percent (typically another 8 to 10 percent transfer and graduate elsewhere). The new minority graduation rates were disturbing—the typical university had a 10 percentage point gap between white and black students, and of the roughly 100,000 black students who started as first-time, full-time, degree-seeking freshmen at four-year institutions, only 6,400 enrolled at colleges with a six-year graduation rate for black students above 70 percent. Four times as many—more than 28,000—enrolled at colleges that gave them odds of graduating on-time of 30 percent or less.[11]

U.S. News places a lot of weight on graduation and freshman-to-sophomore retention rates, which together make up 20 percent of the rankings. This penalizes institutions that enroll large numbers of lower-income, non-traditional, and under-prepared students who are statistically less likely to graduate. Harvard's national-

best 98 percent graduation rate isn't solely a function of its educational greatness; it also has a lot to do with only admitting students who are most likely to succeed.

The Education Trust, a nonpartisan research and advocacy organization, recently used the new graduation rate data to compare rates at every four-year institution in the country to rates at other similar schools. It found that the highest performers by this "peer comparison" measure are often nowhere near the top of traditional lists of "best colleges."[12] Table 3 shows a group of universities ranked as "third tier" by *U.S. News*, each of which had 2004 six-year graduation rates much higher than most other institutions with a similar size, mission, funding level, and student body. *U.S. News* actually calculates a "predicted versus actual" graduation rate measure, which produces similar results. But it only makes up 5 percent of the rankings, not enough to move these institutions out of the lower echelons.

Like NSSE and the CLA, peer graduation rate comparisons give all institutions an opportunity to demonstrate their success in helping the students they enroll. The *U.S. News* rankings reward institutions for enrolling students that have already gathered the most momentum; these measures recognize institutions that do the most to help their students succeed.

The Pursuit of Happiness

Once teaching, learning, and graduating are finished, students move on to the rest of their lives. Well-educated people do more than pass tests and acquire credentials; they succeed in life as learners, workers, and citizens. The true test of students' higher education may not occur until years after they leave the institution.

That makes evaluation very difficult for the vast majority of colleges and universities, which don't have the resources to keep tabs on every one of their graduates (university development offices notwithstanding).

Advances in information technology, however, have created new ways to judge colleges and universities by how well their graduates succeed in further education and their careers. State governments gather data about earnings and field of employment for virtually every wage earner in the nation, so they can calculate unemployment insurance benefits for people who are laid off. This data can be matched with student records provided by colleges and universities.

That would give students and parents a huge amount of new detailed information about which colleges help their graduates get jobs in their field of study and earn a good living. Say you're a Latino high school senior who wants to design the next-generation space shuttle or send men to Mars. You'd want to know which universities nationwide graduate the most Latino engineers who get well-paying jobs in the aerospace industry. Linking education and employment data—information that already exists today—would give you the answer.

A handful of states have already made this connection. Florida is the best example, having developed what is generally regarded as the most advanced state education/employment information system in the nation. Florida's system has its genesis in the mid-1980s, when state policymakers wanted to increase the accuracy of student enrollment counts submitted by K–12 schools for the purpose of calculating state funding allocations. By assigning a unique identification number to each student, the state prevented double-counting and allowed enrollment counts to be adjusted for students who transferred from one district to another.

As this new K–12 data system was coming on line in the early 1990s, Florida was also improving its higher education data infrastructure by wiring the state's nine public universities together, allowing them to share information with each other and state agencies.[13] The universities serving as "nodes" in this network became

Table 3. Unusually High Graduation Rates

Institution	*U.S. News* ranking	Percentage-point difference between 2004 six-year graduation rate and median rate of peer institutions*
Troy State	3rd tier	12.6
Bowling Green	3rd tier	9.1
South Carolina State	3rd tier	17.7
Fisk University	3rd tier	25.3
Westminster College (PA)	3rd tier	23.7

**Source:* www.collegeresults.org.

points at which K–12 districts could upload their enrollment data to the state, well before the Internet made such data transfers easy for everyone.

Florida also has an unusually integrated higher education system. Both the community college and four-year university systems use unique student identifier numbers and common course numbers to facilitate transfer between institutions. By the late 1990s, Florida had all the pieces in place for a comprehensive data system—individual student records at both the K–12 and higher education level, an established system for moving data to a central location, and employment data from the unemployment insurance and job training system. All that was left to do was to put the pieces together.

That began in 2001, when the state constitution was amended to change the superintendent of public instruction from an elected to gubernatorially-appointed position, and the legislature restructured the state's elementary, secondary, two-year, and four-year university systems into a single, integrated system. The legislature appropriated $6 million over the next few years to put all the information from those systems in one place: The Florida K–20 Education Data Warehouse, which currently stores over 1.5 terabytes of information on more than 10 million individual students from more than 16,000 education institutions.

Having the government build giant databases of information about people's education and work lives naturally raises the specter of Big Brother-type oversight and intrusion. That's why Congress passed the Family Education Rights and Privacy Act (FERPA) in 1974, which makes public disclosure of individual education records a felony. It's also why Florida keeps records containing Social Security numbers and other sensitive data at a separate physical location from the rest of the data warehouse, stored on computers that are not connected to the Internet or other electronic networks and are shielded from hackers.

Integrating education and employment information as Florida and a handful of other states have done opens up vast opportunities to create interesting, useful information about colleges and universities. For example, Florida publishes an annual profile of public university graduates living in state the fall after finishing college, detailing whether they went on to further education and/or entered the workforce, as well as the amount of money they earned and whether they received public assistance or were in jail. Table 4 shows data from the most recent report, along with each institution's ranking according to *U.S. News*.

Of Florida's nine biggest public universities, six rank relatively poorly, either falling in the fourth (bottom) tier of national research universities or below the top 50 master's-granting universities in the South. But anyone expecting to find a correlation between those rankings and students' prospects for finding a well-paying job in state after college would be mistaken. In fact, the four institutions with the highest average earnings all fall among the six low-ranked universities. The school ranked highest by *U.S. News*—the University of Florida—ranks second to last on Table 4 in terms of the average earnings of graduates.[14] This is not a one-year anomaly; similar numbers were reported for 2003 and 2002.

There are many possible explanations for this. Perhaps more of the University of Florida graduates who took high-paying jobs left the state—although that would be cold comfort for state policymakers who invested taxpayer dollars in their flagship university. Perhaps more were younger or went on to earn sub-subsistence wages in graduate school—although the difference in the percentage of students who continued their education in state from the University of Florida—23 percent—and top-earning, low-ranked Florida International—17 percent—isn't all that large.

Or perhaps some low-ranked institutions do a much better job of preparing their students to succeed in life and their careers than their status in the *U.S. News* rankings would suggest.

Painting a complete picture of university success in preparing students to succeed in their careers requires a great deal more information than is found in Table 4. It would be important to have data for different kinds of students, in different majors and employment categories, over an extended timeframe. That hypothetical future Latina rocket scientist, for example, might be interested in earnings data specifically for students who majored in science, technology, engineering, and mathematics (STEM) disciplines. She might also want to see a profile of graduates six years after leaving college, to get a sense of whether a particular institution's students not only land jobs in their field but prosper once they get there.

Such information is available in Florida. Figure 5 shows exactly that information for the nine Florida public universities, tracking the 2002 earnings of students who graduated in 1996. University of Central Florida STEM graduates had the highest median earnings, more than $53,000, while the lowest earnings were found for non-STEM graduates from the University of West Florida, who earned only $25,000 on average. The University of Florida ranks somewhat higher than on Table 4, but remains behind some of its in-state peers.

Much more analysis is possible—the Florida data system can break all of these numbers down by students' gender, income, and race/ethnicity, as well as calculate placement and earnings in specific industry categories. The number of states that could calculate similar data is rising quickly—a recent survey found that 37 states are currently gathering individual student data in a way that could support Florida-type data systems, and others are planning to follow suit.[15]

But for all the rich new information Florida can provide about the success of its public universities, the impact of these reports on institutional reputations has been small. This is likely because the information is relatively new, limited to public institutions, and only based on graduates who stay in state to live and work. The fact that the data is nowhere to be found on the state's Web site for students choosing colleges probably doesn't help. In the long run, employment outcome data will only be useful to students choosing colleges—and thus, meaningful to institutions—when it becomes available for *all* colleges and universities nationwide.

Beyond Work

There's more to life than getting a job and making money, of course. Knowing if colleges prepare students to become lifelong learners and healthy, enlightened citizens is also valuable information for students and parents to have. Comprehensive alumni surveys are a way to get this information. While many institutions survey their alumni, the quality and type of survey varies greatly, making it impossible to compare alumni outcomes at one institution to another.

The Collegiate Results Survey (CRS) could help solve this problem. Piloted at 80 colleges and universities in 1999, the CRS surveyed more than 34,000 former students who graduated between 1991 and 1994, asking about their occupation, earnings, job skills, educational attainment, religion, physical fitness, civic engagement, and lifelong learning. It also explored their perceived competencies and deficiencies in communications, information gathering, and quantitative reasoning.

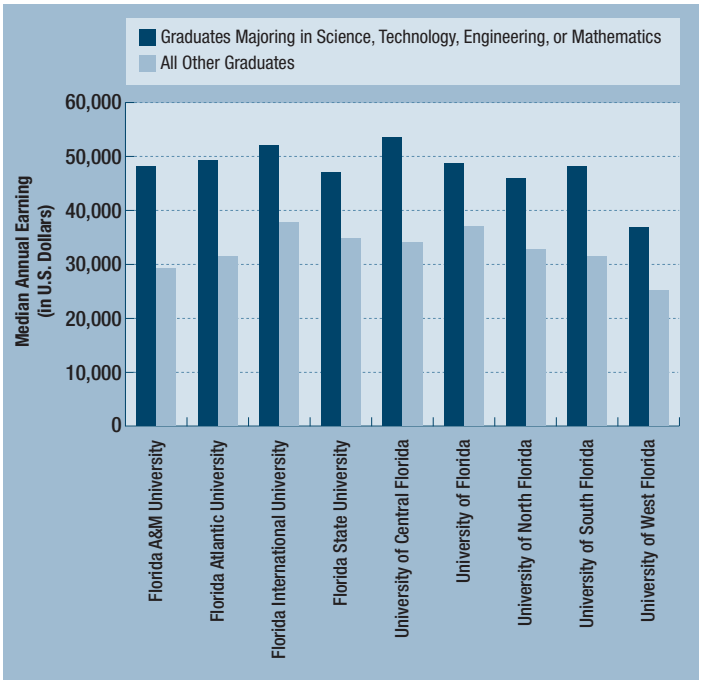
The CRS results reveal areas where most institutions have much room to improve. The results also show that some institutions do much better than others. Figure 6 shows

Table 4. Outcomes for 2003–04 Florida Public University Graduates, Fall 2004

Institution	Average earnings	*U.S. News* ranking	Percentage of graduates employed in state	Percentage of graduates continuing their education in state	Percentage of graduates earning at least $22,000
Florida International University	$34,756	4th Tier	70.0	17	75.4
Florida Atlantic University	$33,867	4th Tier	72.2	16	71.9
University of North Florida	$31,236	54th*	76.7	15	74.0
University of South Florida	$30,462	4th Tier	71.9	18	70.9
University of Central Florida	$29,278	3rd Tier	71.3	18	66.2
Florida A&M University	$27,383	58th*	53.5	18	61.7
Florida State University	$27,010	2ndTier	60.4	18	62.2
University of Florida	$25,773	1st Tier	57.8	23	54.1
University of West Florida	$24,712	60th*	63.7	16	60.9

*Among Southern Masters-granting institutions.
Source: http://www.firn.edu/doe/fetpip/sus.htm.

Figure 5. Median Annual Earnings in 2002 for 1996 Florida Public University Graduates Living In-State



Source: Florida Department of Education.

that at the typical institution, between 30 and 50 percent of alumni display a "strong" commitment to arts and culture.[16] But at some institutions that percentage was less than 20 percent, while at others it was greater than 70 percent.

The CRS was licensed to the for-profit *Peterson's* college guide, which uses the data and survey framework for a Web site designed to help students pick colleges.[17] But the process is opaque—while students answer a range of questions and get a list of likely college matches, the actual results for individual institutions are not published. The results, moreover, aren't based on a representative sample of students, since the survey is only taken by students who self-select to log onto the *Peterson's* Web site.

Many colleges and universities commission alumni surveys for their individual use, but the results are generally kept from the public eye. Like a great deal of other useful information about America's colleges and universities, sophisticated alumni survey data exists, but it is not available to the prospective students who arguably need it most.

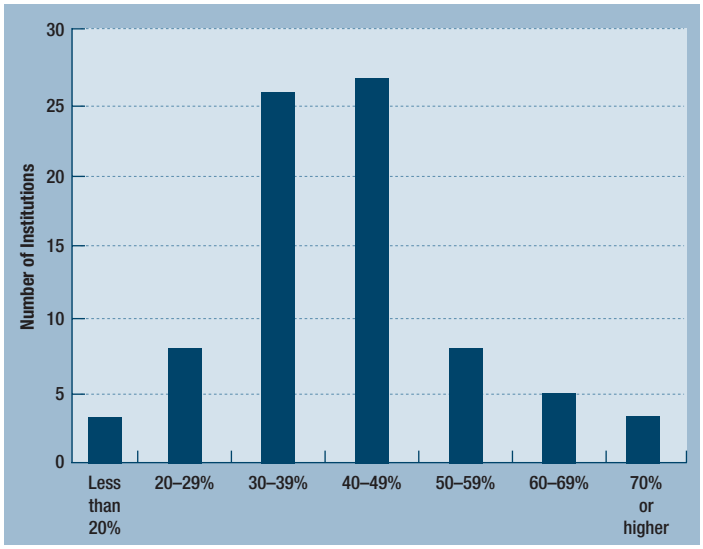
New College Rankings

Higher education is a complex endeavor. A rankings system can only succeed if it can reflect that complexity accurately and fairly, by combining information from a variety of sources. With the advent of NSSE, the Collegiate Learning Assessment, outcomes-based accreditation, and new data about graduation, employment, and life outcomes, that critical mass of data now exists. There is now enough information to create sophisticated rankings of higher education quality to replace the wealth-exclusivity-fame paradigm of the *U.S. News* rankings.

Table 5 shows what a ranking system based on this new information would look like:

Twenty percent of the new rankings would be based on teaching. Instead of ranking universities based on faculty salaries and academic credentials—things that have nothing to do with how well faculty teach—or simplistic measures like class size, 4 percent of the rankings would be based on each of the five main NSSE categories. These student-based measures are much more detailed, sophisticated, and comprehensive than the current *U.S. News* measures, ranging from the degree of academic

Figure 6. Percentage of Alumni Who Displayed a 'Strong' Commitment to Arts and Culture on the Collegiate Results Survey



Source: "A Report to Stakeholders on the Condition and Effectiveness of Postsecondary Education, Part One: The Recent College Graduate," *Change*, May/June 2001.

challenge, collaborative learning, and student/faculty interaction to the availability of enriching educational experiences and a supportive campus environment. NSSE also measures important aspects of college outside of academics, like community service and working with students from different economic, social, racial, and ethnic backgrounds.

Thirty percent of the new rankings would be based on learning. The Collegiate Learning Assessment would account for 15 percent, rating colleges and universities on their success in teaching students the higher-order thinking and communication skills they need to succeed in the modern workforce. While the current *U.S. News* rankings give institutions credit for how much students knew when they arrived at college, in the form of SAT scores, the CLA gauges how much students learn while they're *at* college, by measuring the value added from the freshman to senior years. Another 10 percent would be based on the results of outcomes-based accreditation processes, reflecting the deep knowledge students should acquire in specific fields. And 5 percent would be based on culminating projects that tie higher-order thinking skills and deep knowledge together into a cohesive whole.

Twenty percent of the new rankings would be based on retention and graduation. The *U.S. News* rankings include simple graduation and retention rates, penalizing institutions that enroll large numbers of students who have more barriers to college completion, such as first-generation students, non-traditional students, lower-income students, and students who were poorly prepared in high school. By ranking institutions according to the difference between their actual retention and graduation and their statistically *predicted* graduation rates—based on factors such as those listed above—institutions will be rewarded for exemplary graduation rates given their specific mission and student body.

Thirty percent of the new rankings would be based on success in life after college. The narrow, largely meaningless *U.S. News* measure of alumni donation rates would be jettisoned in favor of more concrete, detailed measures of students' success in their further education, their careers, and their lives. Five percent would be based on student success in going on to further education and succeeding there. Ten percent would be based on graduates' earnings one, five, and 10 years after graduation. These amounts would be compared to typical earnings in students' field of employment, so as

Table 5. Components of the New Rankings

Measure	Percentage of ranking	Measured characteristic	Total
NSSE: Academic Challenge	4%	Teaching	20%
NSSE: Active and Collaborative Learning	4%	Teaching	
NSSE: Student-Faculty Interaction	4%	Teaching	
NSSE: Enriching Educational Experiences	4%	Teaching	
NSSE: Supportive Campus Environment	4%	Teaching	
CLA: Value-added and freshmen-senior growth	15%	Learning	30%
Outcomes-Based Accreditation Results	10%	Learning	
Culminating Projects	5%	Learning	
Freshman Retention Rates: Predicated versus Actual	5%	Graduation	20%
Graduation Rates: Predicted versus Actual	15%	Graduation	
Post-Grad Education: Placement and Success	5%	Success in Life	30%
Employment Results: Earnings	10%	Success in Life	
Employment Results: Placement/Licensure	5%	Success in Life	
Alumni Surveys: Satisfaction and Success	10%	Success in Life	

to not penalize institutions that specialize in academic or vocational fields that are generally less well-paid than others.

Five percent would be tied to job placement, based on the percentage of students who obtain work in their field of study and success rates on professional licensure examinations. Ten percent would be based on alumni surveys like the Collegiate Results Survey, which can provide a full picture of the academic, vocational, artistic, and religious values that higher education represents and fulfills.

The Benefits for Students, Colleges, and Society

Replacing the current *U.S. News* ranking regime with this new system would have a number of important and long-lasting benefits.

Students and parents would have far more useful information for choosing colleges. Rather than relying on rankings that say virtually nothing about higher education quality, students would be able to find institutions that will actually teach them well and help them succeed in life. Most of the data that informs the new rankings can potentially be broken down by student characteristics like race, gender, and economic status, as well as by academic programs inside of institutions. This would further allow students to find the best college or university for them, given who they are and what they want to study.

The vast majority of colleges and universities would finally have fair terms under which to compete and excel. Instead of being forced to model themselves after a few elite institutions in a futile attempt to climb the greased pole that is the reigning status hierarchy in higher education, institutions could distinguish themselves for being good at what they were meant to be—educators of undergraduate students. Institutions that have focused their energies and ambitions on improving learning and success for students would finally get the recognition they deserve.

The higher education community would be armed with far better information to argue for more public resources. The percentage of public dollars devoted to higher education has declined in recent years, squeezed out by the demands of public safety, health care, and K–12 schools. Public officials are less receptive to investing vast sums of money in institutions that don't provide solid evidence of efficiency, effectiveness, and lasting benefits for the public. New evidence of improved teaching, greater learning, and better outcomes in the job market would help persuade policymakers to reinvest in higher education.

Institutions would have incentives to improve many of their practices. Instead of focusing on recruiting students with the highest SAT scores, institutions would focus on recruiting students with the greatest potential for academic growth. Instead of giving more financial aid to wealthy students—a practice that has become all too common in recent years—institutions would give more aid to low-income students to help them stay in school and graduate. Instead of focusing single-mindedly on raising and spending more money, institutions would focus on using money effectively to improve academic, career, and life outcomes for students. Colleges would have fewer incentives to be exclusive and more incentives to be inclusive, to admit students with a wider range of ability. The smartest, most effective, most well-managed institutions could expand and capture a greater share of the market without being penalized for diminished exclusivity.

Higher education abounds with examples of institutions and educators that have successfully implemented programs to help students learn and graduate. But many of these best practices have never been widely adopted because the current rankings and status hierarchy offer no incentives for institutions to seek them out. The lack of good ideas successfully implemented in higher education is not a problem of supply; it's a problem of demand.

Researchers, for example, have long known that impersonal lecture classes are a lousy way to teach. Students need more active, collaborative learning environments to succeed. But that costs money that most institutions don't have or aren't willing to spend. In recent years, however, researchers have found ways to use technology to change that equation. From 1999 to 2004, Dr. Carol Twigg of the National Center for Academic Transformation worked with 30 colleges and universities to improve their large introductory classes (50 percent of all enrollments at community colleges and 35 percent of enrollments at four-year schools are in just 25 introductory courses in foundational subjects like English and biology). Instead of passively absorbing information in a

cavernous lecture hall, students worked in active learning environments where they had online access to tutorials, student discussion groups, and real-time, on-demand feedback and support. The technology also reduces the amount of time instructors need to prepare lectures, introduce content, and grade homework, lowering staff costs per student.

The result: more learning at a lower cost to the university. Scores in a redesigned biology course at the University of Massachusetts, for example, increased by 20 percent, while the cost to the university per student dropped by nearly 40 percent.[18]

But while Twigg's efforts are well known in some higher education circles, there has been no great rush to replicate them nationwide. That's because college administrators don't feel much pressure, for the sake of their careers or of the bottom line, to replicate educational best practices. Indeed, universities are notorious for basing hiring and tenure decisions on publishing and prestige, hardly indicators of the quality of teaching. The amount of time a professor devotes to publishing may be inversely related to the quality of undergraduate instruction. Improving educational quality is a fundamentally *optional* goal for colleges. That won't change until institutional reputations are primarily based on how well they educate students.

The new rankings would also help address the problem of rising college costs. Tuition and fees increase every year, raising barriers to access for low- and middle-income students. The *U.S. News* rankings exacerbate this problem. With 30 percent of the rankings based directly or indirectly on expenditures, colleges are *rewarded* for prying more money out of students and parents and then spending it, regardless of whether they spend it well. Institutions can raise prices with relative impunity, since demand is rising and it's very hard for new competitors to enter the market for traditional students. Colleges and universities today have few incentives to cut costs or become more efficient.

The new rankings would help shift the market dynamics from price to *value*. Value measures compare benefits to price. But students currently have little or no information about real benefits in terms of learning outcomes, and prices—particularly among private colleges that can charge what they like—tend to be about the same. The *U.S. News* college guide perfectly illustrates the current lack of real value measures in higher education. Under the heading of "Great Schools, Great Prices," *U.S. News* lists the top five "best values" among national universities as Cal Tech, Harvard, Princeton, Yale, and MIT—five of the top seven overall universities *absent* price. The top five "best value" liberal arts colleges are Williams, Amherst, Wellesley, Pomona, and Swarthmore—also five of the top seven on the main list.

Because the reputations of these institutions are basically set in stone, potential competitors have no opportunity to pursue an efficiency-centered strategy, offering customers the same benefits for less money, or more benefits for the same money. The new rankings would create a far larger, far more level playing field on which many more institutions could compete, making quality *and* efficiency necessary components of a successful long-term strategy.

The new rankings would also bring two-year institutions more fully into the mainstream conversation about higher education quality. *U.S. News* doesn't publish a guide to "America's Best Community Colleges" because there's no market for it. People almost always choose two-year colleges that are close to home. As the Institute for Higher Education Policy recently noted, two-year colleges are also ill-served by state accountability systems.[19] This means the nearly half of all American college students who attend two-year institutions are denied the benefits of real accountability of any kind. Because the new rankings are primarily focused on value-added measures—learning growth and graduation rates given the students who enroll—as well as measures of quality teaching practices that any college could, and should, provide, they create an opportunity to compare and contrast two- and four-year institutions on common ground. NSSE has already succesfully launched a community college survey of student engagement, the results of which (unlike those for four-year institutions) are made publicly available. There's a tacit assumption in higher education that any four-year institution is better than any two-year institution—the data in the new rankings could put that to the test.

Similarly, the new rankings would also open up the market to non-traditional providers, such as those who provide services primarily over the Internet. The current rankings rate institutions based on what they *are*—specifically, how much they resemble traditional, established, elite institutions. Any great deviancy in approach or strategy

from that long-established model is penalized by definition, freezing out innovators from the opportunity to provide the high-value degrees students and society prize most. The new rankings primarily rate institutions on what they *do* and what they achieve for their students, opening the door to anyone who can prove that they offer superior teaching, learning, and chances for graduation and success in life.

Obstacles to the New Rankings

There is, however, one great obstacle to realizing these many benefits of the new rankings: higher education's unwillingness to make much of this new information available. NSSE, the CLA, alumni surveys, and accreditation results, which collectively provide more than half of the information for the new rankings, are for the most part held out of public view by colleges and universities. And some recent attempts to build new data systems that could support the rest of the ranking components, including post-graduation employment outcomes and more accurate graduation rate measures, are being fiercely opposed by factions within the higher education establishment.

The biggest obstacle to liberating higher education from the tyranny of the flawed *U.S. News* system is thus higher education itself. Some of the objections are grounded in reasonable—but addressable—concerns about the accuracy of information. Others go deeper, reflecting both a strong desire for autonomy and a basic instinct to preserve the status quo.

Making the Perfect the Enemy of the Good

Some people will object to the new rankings on the grounds that the measures driving them are not sufficiently accurate, reliable, or complete. Students responding to surveys like NSSE don't always evaluate their own educational experiences objectively. The Collegiate Learning Assessment is much better than a multiple choice, fill-in-the-bubble test, but is still only an estimate of students' analytic and communication skills. Outcomes-based accreditation is easier to implement for more vocational disciplines like engineering and teaching than it is for philosophy or semiotics. State wage data doesn't include income earned from investments. Current federal graduation rate measures don't account for students who transfer from or to other schools.

All of these criticisms are accurate, and every effort should be made to increase the reliability of the data that drives the new rankings. Some solutions are there for the taking—a national data system like Florida's, for example, can solve the graduation-rate accuracy problem by tracking students who transfer from one institution to another. More resources should be devoted to researching new and better ways to measure teaching, learning, and success in life. None of the current measures are the be-all and end-all of higher education performance measurement—existing measures can be improved and new metrics can be developed.

But the possibility of improving the accuracy of the new class of higher education information is not a *prima facie* argument for preventing the public release of that information, nor, by extension, an argument against new, outcome-based rankings.

U.S. News rankings are based on largely accurate measures of factors that are disconnected from student learning. It is easy to be precise in measuring such things as spending per student. It is almost impossible to measure something as complex as student learning with the same exactness. But colleges and students would be far better off with rankings based on possibly less accurate measures of the right things, rather than very accurate measures of the wrong things. Currently-available measures like NSSE, the CLA, and outcomes-based accreditation are more than accurate enough to be rich and meaningful—if they weren't, hundreds of institutions wouldn't be voluntarily paying for them every year. The benefits of waiting for even more accurate information, moreover, must be weighed against the cost of perpetuating today's flawed rankings.

Preserving Autonomy

Some higher education reformers support the idea of creating more public information about higher education outcomes, but object to using that information to create new rankings. Conversations about rankings in higher education frequently seem to imply that *U.S. News* might simply close up shop some day. In reality, college rankings

are here to stay. The only issue to be debated is who will create them and whether they'll be based on the right information or the wrong information.

The National Association of State Universities and Land-Grant Colleges (NASULGC) embodies this more-information-but-not-for-rankings stance. The organization, whose member institutions educate 3.8 million students, recently published a draft white paper called "Elements of Accountability for Public Universities and Colleges." The proposal represents a good-faith commitment to providing more public information about teaching, learning, graduating, and succeeding in life. But it explicitly warns against using that information to give consumers what they want.

"We vigorously oppose creating any overall ranking scheme based on the bundle of accountability measures we recommend here," the organization argues. Elsewhere, NASULGC warns that colleges should only be compared against "their own past performance and with other universities with similar missions, academic programs and admissions practices." Moreover, "even comparable universities should be limited to individual accountability measures, not indices composed of multiple accountability measures."

These principles are quite reasonable when applied to the *U.S. News* rankings—comparing the public City University of New York to the private New York University based on SAT scores and graduation rates makes little sense. But many of the components of the new rankings are either relative measures—value-added on the CLA, graduation rates compared to peers—or represent goals like teaching well in the classroom, which any college or university accepting students for admission can and should be able to achieve. Understanding how very different institutions are more or less successful in producing results is the essence of informed consumer choice. Institutions may not like having multiple measures condensed into one ranking, but students choosing colleges can only choose one to attend—often at great expense.

As an alternative to new rankings, NASULGC advocates that data "be presented [for each] institution with the user of the data encouraged to place whatever weight on the individual data elements she/he prefers." The idea of prospective students creating their own rankings is appealing on the surface, but it falls short on two counts.

First, students and parents need more than just raw data. They need and want someone to make *sense* of that information, someone to make informed judgments about which measures of quality are most important, in a way that facilitates the process of choosing a college.

Second, individualized rankings won't do what the *U.S. News* rankings do: change institutional behavior.

Colleges object to universal, highly public, well-understood rankings precisely because they're so influential. Rankings limit colleges' ability to control their image and the terms of their own success. Antipathy to rankings, as well as the consistent refusal of the higher education establishment to provide clear, detailed, public information about how well it serves students, is rooted in an intense desire for independence.

To be sure, diversity, freedom, and lack of burdensome and inefficient government regulation are among the principal virtues of the American higher education system. But that autonomy has come at a cost—nobody really knows what's going on inside the ivory tower. By comparison, private companies whose shares are traded on the stock market are models of openness and disclosure, filing detailed quarterly reports with the Securities and Exchange Commission outlining their financial performance. Many would probably rather avoid this kind of government-mandated transparency, particularly when results are bad.

But that's the price that must be paid for the public benefit of being traded on the market. It's universally acknowledged that while individual companies may have a selfish short-term interest in keeping certain kinds of information private, the public at large has a huge long-term interest in transparency and well-informed markets. Private companies also have a strong *collective* interest in transparency, because the competition it creates drives everyone to improve. It also gives people confidence when they invest their money, bringing more capital to the market.

Contrast this to the higher education sector, where behavior is distorted by an information-starved market, where institutional quality stagnates due to lack of competitive pressure to improve vital areas like teaching, where innovators are ignored at best and stifled at worst, where public investment is diminishing by the year due

in significant part to a lack of information—and thus, confidence—in what the public receives in return.

Unfortunately, the best interests of most higher education institutions are being held hostage to the interests of a few, particularly elite and private institutions. These highly-esteemed universities occupy one of the most advantaged market positions imaginable. Despite sometimes-enormous wealth and administrative salaries on par with the corporate sector, they pay no income taxes. While demand for their product is consistently rising, opportunities for new competitors to enter the market and meet that demand are virtually nil, allowing them to raise prices with near-impunity every year. Their reputation as the world's best education institutions is virtually unquestioned by the general public, which sees them as both symbols of society's best values and portals to economic and social opportunity.

They are, in other words, institutions whose best interests lie in using whatever means necessary to prevent the release of any information that would upset the status quo or call their privileged position into question. That's why they're the least likely to participate in and release results from new measures like NSSE—when *U.S. News* asked institutions to voluntarily disclose some of their 2004 NSSE results, not a single one of the top 50 national research universities, and only three of the top 50 liberal arts colleges, complied. When the conventional wisdom says you're the best, you have no interest in proving otherwise.

The depth of private college opposition to new higher education information was recently made clear, when the U.S. Department of Education proposed making its higher education data system more like Florida's by using privacy-protected data about individual students. Public universities largely supported the new system. But lobbyists for private colleges put on a full-court press to block the proposal, pressing Congress to prohibit its creation and publicly denouncing it as "Orwellian" and "an assault on Americans' privacy and security in the shadow of the Fourth of July."[20]

A Time for Federal Action

Given this deep-seated opposition, there is no prospect that the higher education sector in its entirety will ever voluntarily agree to support a real system of rankings-based accountability. And that's what it would take—the only way to displace the reigning paradigm is to do what *U.S. News* does: consistently gather information from *every* college and university in the country, so students and parents can use a common measure to decide where to enroll.

This effectively gives veto power over the creation of new rankings that would ultimately benefit the sector as a whole to any institutional sub-sector of significant size. Some state governments have played a valuable role in creating new higher education data, and all states should work to promote more information and accountability for their colleges and universities. But the diversity of state policymakers and the strong political influence of universities in state legislatures means that it would take only a few holdout states to derail the entire system.

Therefore the only plausible path to a rankings-based accountability system that would be truly valuable to students and parents lies with federal action. The U.S. Congress should consider legislation to do the following:

1) Direct the U.S. Department of Education to create a "unit record" higher education data system to provide more accurate information about all colleges and universities.

2) Direct the U.S. Department of Education to coordinate with states to connect the unit-record system to information from state unemployment insurance databases.

3) Increase the annual budget of the U.S. Department of Education's Fund for the Improvement of Post-Secondary Education (FIPSE) from $22 million to $100 million, end the practice of using FIPSE as a source of local higher education-related pork projects, and direct FIPSE to prioritize projects that would create new information about how institutions succeed or fail to teach students well and help them learn, graduate, and succeed in life.

4) Require all colleges and universities wishing to enroll students who pay their tuition with federal student aid (so-called "Title IV-eligible" institutions) to participate in the NSSE, CLA, selected alumni surveys, and other surveys and processes needed to understand institutional success. Appropriate sufficient funds to defray the costs of participation.

5) Require all Title IV-eligible institutions to disclose the results of accreditation review and other processes generating information about institutional success.

6) Direct the Secretary of Education to appoint a commission of persons from within and outside higher education to translate the results of those surveys, along with retention, graduation, and employment data derived from the unit record system and other available information into a new system of college rankings that rate all institutions on a common scale, the principal components of which are institutional success in teaching students and helping them learn, graduate, and succeed in life.

7) Require the commission to meet annually to consider adjustments to the rankings and the inclusion of new or more accurate information as it becomes available.

8) Direct the Secretary of Education to disclose the results of the new rankings to institutional leaders for three years on a confidential basis to give institutions the opportunity to understand how they are being evaluated and to begin efforts to improve.

9) After the three-year transitional period, direct the Secretary of Education to publish the new rankings and mail a copy to every student in the country enrolled in grades seven or higher, along with detailed information about the performance of local institutions.

Americans often declare with self-satisfaction that the nation's colleges and universities are the best in the world. But the reality is that colleges and universities do not have to teach undergraduates well in order to prosper. Higher education institutions do what all human institutions do: they respond to the incentives and values of the systems and markets in which they exist. They can't be regulated or threatened into improving their service to students. They have to *want* to change, not just vaguely or to a slight degree, but so much so that they're willing to spend the resources and endure the conflict that change inevitably brings.

The new rankings would provide those reasons. They would create fair terms of competition for everyone, giving educators and institutions that truly excel on behalf of their students the recognition and rewards they deserve. They would, in other words, make the values that govern higher education and the values that inspire it one and the same.

Endnotes

[1] www.pbs.org/merrow/podcast, from the PBS documentary "Declining By Degrees."

[2] J.D. Baer, A.L. Cook, S. Baldi, *The Literacy of America's College Students*, American Institutes for Research, 2006.

[3] Paul Boyer, *College Rankings Exposed: Getting Beyond the Rankings Myth to Find Your Perfect College*, Peterson's Guides, 2004.

[4] Kati Haycock, *Promise Abandoned: How Policy Choices and Institutional Practices Restrict College Opportunities*, The Education Trust, 2006.

[5] Amy Graham and Nicolas Thompson, "Broken Ranks," *The Washington Monthly*, September 2001.

[6] Richard J. Shavelson and Leta Huang, *A Brief History of Assessing Undergraduates' Learning: Carnegie Foundation for the Advancement of Teachings' Heritage*, unpublished draft, Stanford University, 2006. This paper is the source of subsequent descriptions of the history of standardized testing in higher education.

[7] John W. Prados, George D. Peterson, and Lisa R. Lattuca, "Quality Assurance of Engineering Education through Accreditation: The Impact of Engineering Criteria 2000 and Its Global Influence," *Journal of Engineering Education*, January 2005. This paper is the source of subsequent descriptions of the history of the engineering accreditation process.

[8] Personal interview with Dr. Eric Spina, Interim Vice Chancellor and Provost, Syracuse University, July 25, 2006.

[9] Lisa R. Lattuca, Patrick T. Terenzini,and J. Fredericks Volkwein, *Engineering Change: A Study of the Impact of EC2000*, Executive Summary, Center for the Study of Higher Education, Pennsylvania State University, October 2005.

[10] http://www.teac.org/membership/meetings/Novel%20Categories%20of%20Evidence1.ppt#9.

[11] Kevin Carey, *One Step From the Finish Line: Higher College Graduation Rates are Within Our Reach*, The Education Trust, 2005.

[12] *Ibid.*

[13] This "Florida Information Resource Network" was originally put in place in the 1970s and 1980s.

[14] Florida Education and Training Information and Placement Systems (FETPIP), http://www.firn.edu/doe/fetpip/sus.htm.

[15] National Center for Education Accountability, 2005 Survey of State Data Collection Issues Related to Longitudinal Analysis.

[16] "A Report to Stakeholders on the Condition and Effectiveness of Postsecondary Education, Part One: The Recent College Graduate," *Change*, May/June 2001.

[17] www.bestcollegepicks.com.

[18] http://www.thencat.org/PCR/R2/UMA/UMA_Overview.htm.

[19] Wendy Erisman and Lan Gao, *Making Accountability Work: Community Colleges and Statewide Higher Education Accountabilty Systems*, Institute for Higher Education Policy, 2006.

[20] http://www.naicu.edu/news/releases/Student_Privacy_Poll_Release.shtm.

EDUCATIONSECTOR

Independent Analysis, Innovative Ideas

1201 Connecticut Ave., N.W., Suite 850, Washington, D.C. 20036
202.552.2840 • www.educationsector.org