

Austerity Measures

Students protest as a cash-strapped government lets British universities triple their fees

By Jon Marcus

MANCHESTER, ENGLAND

THE MASSIVE TOWN HALL in Albert Square is a shrine to this proud onetime manufacturing city's past industrial and scientific reach.

Built in 1877 of 14 million bricks, the massive Gothic-style structure commemorates a legacy of empire that dates back to the Romans. A statue of the general Gnaeus Julius Agricola, who consolidated Roman rule in Britain, looks down from atop the entrance. Above him still reign Henry III and Elizabeth I. Busts of the physicist James Joule and the chemist John Dalton, a pioneer in the field of atomic theory, flank the lobby. The panels of the vaulted ceiling in the Great Hall represent the principal towns and cities all over the world with which Manchester traded in the 19th century. Over the face of the clock in the 280-foot tower is the inscription: "Teach us to number our days."

Today, however, the ornate Great Hall is a cacophonous stew of shouting, jeering,

catcalls, and hand-lettered banners made from old sheets. The anteroom is so crowded with police in neon-colored vests, it's hard to make out the mosaic design of bees on the floor that are the symbol of Manchester industry. Struggling to be heard above the protesters, the Manchester City Council is trying to discuss its annual budget, which will cut \$175 million in spending and 2,000 jobs, scaling back children's services, highway work and garbage collection, and shuttering libraries, leisure

An unlikely governing coalition of the Liberal Democratic and Conservative parties has made the deepest cuts in public expenditures since just after World War II.

centers, even public toilets.

"Liars!" shout the protesters. "Cowards!" "Hypocrites!" "You are ruining lives!"

The drastic measures come in the second year of an austerity campaign meant to reduce a record UK peacetime budget deficit that will hit \$235 billion this year, an amount equivalent to 11 percent of the gross domestic product. That will compound a debt of nearly \$1.5 trillion. By 2016, Britain's debt is expected to surpass \$2 trillion.

An unlikely governing coalition of the Liberal Democratic and Conservative parties has responded by making the deepest

cuts in public expenditures since just after World War II, slashing about \$40 billion a year from the budget, freezing pay for pub-

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JOHN MATTERSON, BLACK STAR, FOR CROSSTALK

At the University of Manchester's Roscoe Hall, student protesters from all over the north of England have been rallying in opposition to an increase in university fees.

"Outcome Funding"

Tennessee experiments with a performance-based approach to college appropriations

By Robert A. Jones

NASHVILLE

WHEN THE NASHVILLE songwriter Kris Kristofferson famously penned the words "freedom's just another word for nothing left to lose," he was not likely contemplating Tennessee's higher education system. But the lines are more apt than he might

have imagined.

Tennessee, long at the bottom of the higher education heap, is throwing out the rule books that have governed its state colleges and universities. With little to lose, the state leadership is gambling that a sweeping reform, anchored by a new approach to funding, will pull the state system out of its long trough and lift it, at least, to the national average.

Beginning this year, Tennessee is promising to boost the production of college graduates by 3.5 percent annually, yielding a cumulative 210,000 more bachelor's and associate's degrees by 2025. At the same time, Tennessee officials say they will reduce college dropouts dramatically, and

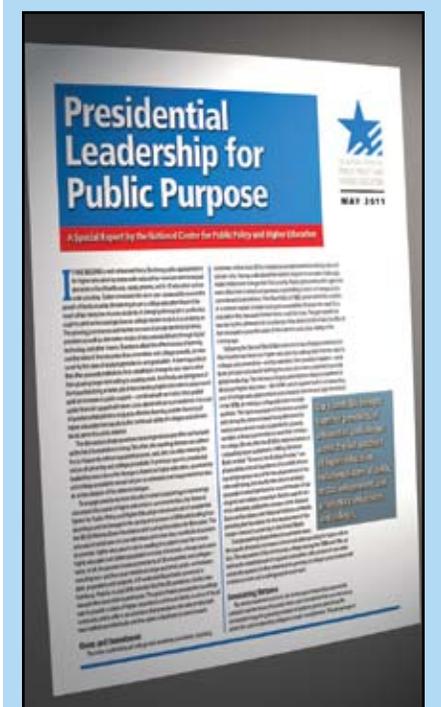
Tennessee, long at the bottom of the higher education heap, is throwing out the rule books that have governed its state colleges and universities.

achieve those results at a lower per-student cost than today.

The reform has attracted national attention because of its scope, which includes every level of public institution from community colleges to the University of Tennessee, and because it incorporates many of

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In This Issue



"Presidential Leadership for Public Purpose," a new report based on interviews and a Presidential Roundtable discussion with college presidents on the challenges facing higher education.



WADE PAYNE, BLACK STAR, FOR CROSSTALK

Jamie Woodson, a Republican state senator, says that "rewarding higher education with larger budgets is not part of the conversation. The conversation is about outcomes."



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National CrossTalk is a publication of the National Center for Public Policy and Higher Education. The National Center promotes public policies that enhance opportunities for quality education and training beyond high school. The National Center is an independent, nonpartisan, nonprofit organization that receives core support from the Bill and Melinda Gates Foundation and Lumina Foundation for Education.

The primary purpose of *National CrossTalk* is to stimulate informed discussion and debate of higher education issues. The publication's articles and opinion pieces are written independently of the National Center's policy positions and those of its board members.

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CENTER REPORTS

Recently Released National Center Reports

Strengthening College Opportunity and Performance Federal, State and Institutional Leadership (December 2010)

A policy report from 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.

Good Policy, Good Practice II Improving Outcomes and Reducing Costs in Higher Education: A Guide for Policymakers (November 2010)

This report revises and updates the 2007 report, *Good Policy, Good Practice*. It is a resource for policymakers and educators seeking examples of programs and policies to improve college access, completion rates and cost effectiveness.

Beyond the Rhetoric Improving College Readiness Through Coherent State Policy (June 2010)

This brief addresses the state policy dimensions of college readiness. It identifies the key issues and problems associated with the college readiness gap, which is a major impediment to increasing the numbers of college students who complete certificates or degrees. This policy brief also provides governors, legislators and state education leaders with specific steps they need to take to close the readiness gap in their state. These findings and recommendations were prepared by the National Center for Public Policy and Higher Education, and the Southern Regional Education Board (SREB).

Policy Alert: Open-Access Colleges Responsible for Greatest Gains in Graduation Rates (February 2010)

This *Policy Alert*, which summarizes research at Vanderbilt University, finds that the largest gains in graduation rates over the past decade have been accomplished at open-access or nearly open-access colleges and universities. In addition, states could see even bigger increases if they directed their policies and supports toward improving graduation rates at these nonselective institutions.

Squeeze Play 2010: Continued Public Anxiety on Cost, Harsher Judgments on How Colleges Are Run (February 2010)

Are college and universities doing all they can to keep costs under control? According to *Squeeze Play 2010*, a new report from Public Agenda and the National Center for Public Policy and Higher Education, six out of ten Americans believe that colleges mainly care about their own bottom lines instead of making sure that students have a good educational experience. *Squeeze Play 2010* is part of a series of surveys, dating back to 1993, tracking public attitudes about college affordability and accessibility. More than half of Americans now say college is essential for success in the work world. Even more, 69 percent, say there are many qualified people who do not have access to higher education, up seven percentage points from two years ago and 22 percentage points compared to a decade ago.

For more information, visit the National Center's web site at www.highereducation.org.

Forthcoming
June 2011

American Higher Education: Journalistic and Policy Perspectives from *National CrossTalk*

The National Center for Public Policy and Higher Education will release a book this summer that chronicles the work of *National CrossTalk* over the past decade. This volume includes articles relevant to the current issues facing higher education institutions and state policymakers.

This book will be available online at
www.highereducation.org



Reversal of Fortune

Ireland's "Celtic Tiger" economic miracle is followed by an epic downturn

"Th' whole worl's in a terrible state o' chassis."
—Sean O'Casey, "Juno and the Paycock"

By Jon Marcus

DUBLIN, IRELAND

THE TOPIC of the Ph.D. seminar in a sunlit classroom at University College Dublin is of more than academic interest to the doctoral candidates who fill every seat. It's called "Politics in Crisis," and it's about how Ireland has managed to find itself in the depths of an epic downturn so soon after the peak of its "Celtic Tiger" economic miracle—a time of incomparably high growth and low jobless rates, when these same students, most then undergraduates, had the world at their feet.

Charts and graphs in PowerPoint chronicle the huge decline in such measures as gross domestic product since then, and a spike in unemployment to some of its highest levels since records began to be kept. Some 266,000 jobs have been lost in this nation of 4.5 million, helping drive the biggest emigration since the 1980s, with 70,000 people leaving last year and another 50,000 likely to follow them this year. Property values in Dublin have plunged 42 percent. The Irish Stock Exchange hit a 14-year low. Struggling with a \$32 billion revenue shortfall, and pushed by a European Union that grudgingly provided a multibillion-euro bailout, the government slashed \$8.5 billion from its annual budget, with plans for another \$13 billion in cuts in the next three years. Public employee salaries were cut, pensions and healthcare threatened. The gov-

ernment itself fell.

Among other things, these events have clearly conspired to create what academics like to call a teachable moment. Later on this same day, in the same building on the same campus, is scheduled another, unrelated program, "Education in Crisis," part of a weekly series that has included discussions about the labor market in crisis, democracy in crisis, migration in crisis, policing in crisis, healthcare in crisis, even Catholicism in crisis.

"There are crises upon crises upon crises," quips James Farrell, a professor of politics at UCD and head of its School of Politics and International Relations.

In addition to Farrell, the speakers at

Irish students are seeing big percentage increases in their contributions to their educations at exactly the time their families have seen declines in their incomes.

this morning's seminar include recently retired high-level civil servants, and before each one shares his candid and depressing take on how Ireland's current sad state of economic affairs came to pass, he checks that Chatham House Rules apply, meaning that he won't be identified by name outside the classroom.

"I want my pension to arrive next week," the former official remarks wryly.

"Your reduced pension," an academic in the audience shoots back, to laughter.

It's with this singularly Irish sense of witty fatalism that many in the country seem to be reacting to their reversal of fortune. "There's resignation across the board, because we know there's no money anymore, and there are few choices," Daniel Hayden, one of the Ph.D. candidates who have come to listen, says during a break in the discussion.

But just beneath the surface are also deep divisions that anticipate those beginning to be felt in higher education in particular, and society in general, almost everywhere. Not only are the causes of the problems familiar—an inflated real-estate market, misdeeds by the banking sector, all but unmanageable public debt. So, increasingly, are the results.

A frustrated public looking for someone to blame is angry at public university faculty, whom they consider lavishly overcompensated. Academics, toiling under increased workloads, are irate at their administrators, whom they say have mismanaged universities and squandered popular support. Administrators bristle at what they consider interference from uninformed and unfairly critical government officials. And government officials want to hold the universities and their faculties more accountable for outcomes.

"There's a very, very profound sense of demoralization and quite a significant sense of anger," said Mike Jennings, general secretary of the Irish Federation of University Teachers. "There's a very strong sense that the public has decided to tar the entire sector with the same brush, and we're all regarded as overpaid and pampered."

And yet, despite this, Ireland has made some unusual strategic decisions that have kept the situation at its universities from becoming even more grave. The budget cuts for higher education, though significant, are not as deep as those that have been suffered elsewhere in the country's public services, or at many public universities in the United States. A threatened "graduate tax" that would have forced students to repay most of the cost of their educations, like their counterparts in England (see related article on page 1), has been tabled. Even a proposed increase in the student registration fee has ended up far smaller than feared. Government spending on university research is up, thanks to a stubborn conviction that new discoveries will help restore prosperity, and campuses have sprouted gleaming, freshly completed buildings that were begun at the peak of the Irish boom years—about \$490 million worth of new construction at UCD alone.

"We're just holding our breath because we know how much worse it could be," one top UCD administrator said. In higher education, "Surprisingly, we've actually got kind of a good situation in Ireland," compared to other countries, said Hayden, who was previously president of the UCD student union. "It could be so much worse," agreed Megan O'Riordan, head of the student union at Dublin City University across town, whose mother was laid off as an accountant when the roofing company she worked for went under. "It could be better, but it could have been much worse. People are negative about how we got here, but they're positive about how we're going to move forward."



"We know there's no money anymore, and there are few choices," says Daniel Hayden, a Ph.D. candidate at University College Dublin. "There's resignation across the board."

And the plan for moving forward relies in great part on the universities. That's a major reason Science Foundation Ireland, or SFI—this country's version of the U.S. National Science Foundation—was one of the few public agencies to see its budget rise, not fall, this year, by \$15 million, to \$225 million. In all, Ireland spends \$1.1 billion a year on research, two thirds of it conducted at its universities and institutes of technology.

But there's a catch. The nation wants results. "People know we're in a deep hole."

Some 266,000 jobs have been lost in Ireland, a nation of 4.5 million, helping drive the biggest emigration since the 1980s.

We know we have to keep investing in the kind of development that will help with our recovery," said Sean Dorgan, chairman of the Centre for Research on Adaptive Nanostructures and Nanodevices, or CRANN, at Trinity College Dublin, which includes a brand-new advanced microscopy laboratory a few blocks from the famous Gothic-style Trinity quadrangle in a former warehouse next to a onetime flour mill. Researchers who work on its focused-ion-beam and electron microscopes in sealed clean rooms include representatives of 74 countries, from corporations such as Intel. "They're very keen for us to have metrics and deliverables regarding commercialization," said Joseph Carroll, the

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"Our work is increasingly necessary to justify on the policy level," says Alan Smeaton, a senior researcher at CLARITY, an interdisciplinary research center. "We need to make the public aware."

from preceding page

American-born associate director of the Biomedical Diagnostics Institute at DCU, which develops medical diagnostic products (a huge growth industry in Ireland, up 12 percent in revenues last year in spite of the economic downturn), in collaboration with corporate partners including Analog Devices, and which just got \$27 million from the government.

“That’s one of the main mandates

Ireland’s budget cuts for higher education, though significant, are not as deep as those that have been suffered elsewhere in the country’s public services.

now,” Carroll said. “Three years ago things were very different. It was just about the science. Now SFI wants us to be self-sustaining. That will be the code word for the next few years—sustainable.” From its increased budget, SFI has quadrupled the number of grants it makes through its Technology Innovation Development Award program, meant to encourage commercially viable research. An otherwise widely panned two-year review of Irish higher education, called the Hunt Report, recommended more than doubling spending on such research, from about 1.4 percent of GDP to three percent. “It’s amazing how financial encouragement can



“We were really set up to be at that industry-academic intersection,” says Brian MacCraith, president of Dublin City University. “It’s amazing how financial encouragement can change behavior.”

change behavior,” said Brian MacCraith, the president of Dublin City University, who acknowledged that this has so far worked to the advantage of Irish higher education.

DCU, which was given university status only in 1989, is a hotbed of such applied research, with the entrepreneurial MacCraith—a physicist and internationally prominent researcher in the field of optical sensing—as its enthusiastic cheerleader. He calls it a university of enterprise, and has assembled a board of advisors from among executives of Intel, Cisco, Merck, Accenture and other multinational corporations. “We were really set up to be at that industry-academic intersection,” MacCraith said at a conference table covered with research reports in his office in the converted 19th-century agricultural training school that is the oldest building on the otherwise thoroughly modern campus.

At CLARITY, an interdisciplinary research center at DCU that develops all kinds of sensor technologies, academics are collaborating with the likes of Disney and its ESPN network to develop everything from maps and screens for theme parks and cruise ships to high-definition cameras that can follow athletes and generate reports about their play, or, for Irish sports leagues, vests that measure breathing and patches that detect the quantity of sodium in sweat. The projects are the subjects of slickly produced posters on the walls, just as the Biomedical Diagnostics Institute has a visitor center for the public. CRANN runs a competition called “Thesis in Three,” in which Ph.D. candidates are challenged to describe their work to general audiences in local pubs, using three slides in three minutes.

“Our work is increasingly necessary to justify on the policy level,” said Alan Smeaton, a professor of computing and a senior researcher at CLARITY. “This is where we are. We need to make the public aware.” Added MacCraith: “When times are tight, you have to be very clear what you’re about.”

So far the payoff has been promising. Ireland has built a science infrastructure from a level equivalent to that of Bangladesh ten years ago to become ranked among the top 20 countries in the world in research. Thomson Reuters’ Essential Scientific Indicators rates it first in immunology. It is third in molecular genetics, sixth in nanoscience, and eighth in materials science. Since the beginning of a concerted technology transfer program that began around the time of the economic crash, Irish universities have more than doubled



PHOTOS BY PETER MATHEWS, BLACK STAR, FOR CROSSTALK

Commercialization is “one of the main mandates now,” says Joseph Carroll, of the Biomedical Diagnostics Institute at Dublin City University. “Three years ago things were very different. It was just about the science.”

their number of inventions and quadrupled their number of startup spinoffs.

“It is remarkable what has been achieved in a relatively short period of time,” said Dorgan. “We went at it with a lot of gusto. The case was made strongly. The issue for the last two or three years has been to sustain that level of investment. Practically everyone in this country has suffered a drop in real income and living standards in the past three years, so it’s up to us to keep communicating the value of this. The universities know that they are beholden to the public for the money that keeps them going.”

The danger, advocates universally concede, is in letting expectations get too high.

“There has been some over-promising, and it creates credibility problems for the whole sector,” said MacCraith. “There is sometimes an expectation for almost instant results, and results that come directly from the investment in research,” added Dorgan, who was previously chief executive of the Industrial Development Agency Ireland.

Nor is there consensus about the wisdom of this tactic, especially considering that the number of teaching faculty at Irish universities is simultaneously in decline. “There’s no shortage of money to do anything as long as it’s not the frontline mission of the university, which is to teach,” said Jennings. “Politically the universities keep trying to justify their existence as if they were the R&D department of the government. Rather than talking about the pursuit of knowledge, they have concentrated an unwise degree on this idea of R&D that can deliver jobs. And in the current economic climate, when people want to hear that, they’re saying it more and more. There is a frustration that the teaching part of what we do has been downgraded to second place behind the research part.”

The government’s austerity measures have forced universities to cut their

faculties by six percent since 2008, and there is a freeze on hiring. This despite the fact that enrollment is up 20 percent from a decade ago, thanks largely to immigration. It’s another familiar theme, but one that’s new in Ireland, which had no real history of immigration until the Celtic Tiger years, when immigrants flocked here to fill low-paying service-sector jobs. Their children often attend poor urban secondary schools and don’t speak English as their native language. Fifteen-year-olds in then-homogeneous Ireland ranked fifth in literacy as recently as 2000, according to the Organization for Economic Cooperation and Development, well above the OECD average. Now, with immigrants comprising eight percent of the school-age population,

Government spending on university research is up, thanks to a stubborn conviction that new discoveries will help restore prosperity.

Ireland has plummeted to 17th.

When they arrive at Irish universities, these underprepared students put even more pressure on a shrinking faculty, said Andreas Hess, a senior lecturer in sociology at UCD. “We’re all happy to take on more students. Everybody would be happy for a better-educated workforce,” Hess said. “But we’re not given the means to teach them.”

Other resources are also in decline. Disproportionately dependent on the government, Irish universities have 85 percent of their costs covered by public funding, compared to 73 percent in OECD countries on average, 65 percent in the UK, and 44 percent in the United States. That

makes them particularly vulnerable in tough times. (Even in good times, Ireland ties for a distant 16th among developed countries in spending on higher education relative to per-capita GDP, and 17th in spending per student.) Given this, the only thing surprising about the budget cuts for universities is that they haven't been worse. Funding was slashed by seven percent, from \$1.7 billion last year to \$1.5 billion this year. As in America, some of that shortfall is be-

Ireland has built a science infrastructure from a level equivalent to that of Bangladesh ten years ago to become ranked among the top 20 countries in the world in research.

ing made up on the backs of students in the form of fees. Irish students pay a "registration fee," first imposed in the 1980s when the country chose to make higher education tuition free. Originally \$700 a year, that charge has gradually reached \$2,100 and will rise again next year to \$2,800.

Even though some 43 percent of students come from families whose low income excuses them from paying it, the additional revenue from registration fees reduced the cut to universities to 2.5 percent. Still, this comes at a time when, according to the Hunt Report, the equivalent of a 33 percent increase would be needed just to handle the rising enrollment.

These woes, and particularly rising student-faculty ratios, have already taken a rapid and quantifiable toll on the enormous progress made by Irish universities in the last ten years. When the first of what would become the highly regarded Shanghai Jiao Tong international university rankings came out in 2003, only Trinity and UCD among all Irish institutions were in the top 500, and those only barely. The best they

did in the *Times Higher Education* magazine standings, when those were first released in 2005, was 111th and 221st respectively. But by 2009, Trinity had shot to 43rd and UCD to 89th, joined in the top 500 by DCU, University College Cork, National University of Ireland Galway, NUI Maynooth, and the University of Limerick. It took only one year for all of this to come undone, and for Trinity to fall back out of the top 50 with UCD gone from the top 100.

To stanch the bleeding, the presidents of all seven Irish universities, the Hunt Report and the Fine Gael political party all support a drastic change in higher-education funding under which university budgets would be bulked up not only by raising the registration fee even higher, but by making students pay substantially more of the cost of their educations retroactively after graduation, based on their courses of study and their incomes—a so-called graduate tax like the one in England. An arts graduate would have to repay \$11,200, an engineering student \$22,400, and a newly minted doctor \$75,600. But after elections in March, Fine Gael was forced to form a coalition government with Labour, which opposed even the first step of increasing the student registration fee beyond the current level. In a compromise, the graduate tax was tabled "for further study," and Labour agreed to raise the registration fee, though not as much as Fine Gael wanted.

There things stand, and that has managed to leave no one happy.

Though they get a better deal than their counterparts in many other countries, Irish students nonetheless are seeing big percentage increases in their contributions to their educations at exactly the time their families have seen declines in their incomes. As part of the government's austerity measures, they also face a four percent decrease in the maintenance grants about a third of them receive toward their living expenses while in school. "People are just living on less now," DCU's Megan O'Riordan said with a shrug. "We're at the threshold now. Any more cuts and we're really going to feel it."

Students' short-term futures appear no

less bleak. More than 90,000 people under 25 are unemployed, and more than 59,000 of those are university graduates. More than half of last year's graduates still don't have jobs. Those who do are being forced to take lower-paid and lower-skilled work, according to the National Economic and Social Council. Offices all over Dublin advertise U.S. work visas or Australia or New Zealand travel for students who are choosing to join the ranks of those who plan to emigrate.

Still they keep on coming. The number of university applications for the fall is up another 14 percent, driven by the unemployed and by students from England, who under EU law pay the same as Irish students, and for whom Irish universities are now a bargain.

Nor does there appear to be much public sympathy for this generation, raised as it was in a time of plenty and disparaged in popular caricatures as spoiled and entitled. Today's students are known as the Broke and in College. "These are tough times for Irish students like Jamie," the Sunday magazine of the *Irish Independent* wrote sarcastically about an imagined typical student. "The old man is lying low these days, arguing on the phone with some lawyer guy about what he meant by personal guarantee...and Jamie lives at home and works in a convenience store to pay for Jägermeister at the weekend."

Facing new taxes and fewer services, two-thirds of Irish adults support charging students more for their educations, a poll by the *Irish Independent* found. Forty percent think universities should be paid for partly by the government and partly by higher student fees, and 25 percent support the graduate-tax idea. Fewer than a third think taxpayers should continue to bear most of the cost of higher education, as they do now.

Academics are even more unpopular. At a hearing, one member of the Dáil, or lower house of the Irish parliament, accused them of working only 15 hours a week—the amount of time they spend in lectures. "Most politicians have no clue what academics are actually doing. That's the biggest challenge, explaining to them that we're not sunbathing on some beach," said UCD's Hess. "There's a certain sense of, so many people have lost their jobs and there are rumors of how much money we make." Added Jennings: "We are working harder than we've ever worked, we've taken significant cuts in our salaries, and still the image is being allowed to get abroad that we have a luxurious existence."

The government has proposed a pay-for-performance system for faculty, and



"We know we have to keep investing in the kind of development that will help with our recovery," says Sean Dorgan, chairman of CRANN, at Trinity College Dublin.

new provisions specifying workloads and teaching hours. Faculty are being required to teach for an extra hour per week, on top of their current annual workload of 560 hours, and face penalties if they fail to win satisfactory ratings under a proposed evaluation system based in part on certain learning outcomes. Faculty unions are fighting these plans, and most have refused to sign on to the Croke Park agreement (named for the Dublin sports complex where it was

"Politically the universities keep trying to justify their existence as if they were the R&D department of the government."

**—MIKE JENNINGS,
IRISH FEDERATION OF
UNIVERSITY TEACHERS**

negotiated), under which other public-sector workers agreed to cooperate on money-saving reforms in exchange for a promise from the government to make no further pay cuts or forced layoffs. "I'm not a service provider," Colin Coulter, a lecturer in sociology at NUI Maynooth and an outspoken critic of these ideas, fumed about them before a lunchtime discussion in a steeply banked DCU lecture hall packed largely with fellow academics. "I'm a lecturer. What the hell is a learning outcome? We teach social theory. One of the expected

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The politicians need to stop micromanaging, says Philip Nolan, incoming president of NUI Maynooth. "If there was one thing we would ask for it's that the government would stop worrying about the details of how we do things."

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learning outcomes is to be confused.”

Faculty, in turn, direct their anger at administrators, whom they consider meddling and overpaid. It didn't help when news broke that UCD gave nearly \$1.7 mil-

Disproportionately dependent on the government, Irish universities have 85 percent of their costs covered by public funding. That makes them particularly vulnerable in tough times.

lion in bonuses to top employees over ten years as a reward for landing a collective \$112 million a year in grants and other income. The government says the payments were illegal, and wants the money back. Trinity College also may be fined for slipping retroactive raises to 27 staff in spite of

a moratorium on promotions. (The university says the promotions were made before the moratorium took effect.)

Nor did the university presidents' knack for public relations serve them when they made no response at all to an appeal from the then-education minister that they take a voluntary pay cut. “What I hear constantly among my members is, if you look back at the negative stories in the Irish media over the last five years over who has brought universities into disrepute, it's the senior people who are paying themselves very high salaries,” said Jennings.

Administrators do bear some fault, said Philip Nolan, incoming president of NUI Maynooth. “The controversy surrounding that pay was damaging, there's no doubt about that,” said Nolan, who is moving on from his job as registrar and deputy president at UCD. “At the moment the public sector in general are natural lightning rods for public anger. And in a crisis like this, people are going to look for somebody to blame.”



PETER MATTHEWS, BLACK STAR FOR CROSSTALK

“The teaching part of what we do has been downgraded to second place behind the research part,” says Mike Jennings, general secretary of the Irish Federation of University Teachers.

For an OECD conference called “Doing More with Less,” Nolan coauthored a paper laying out four choices for Irish

universities to rebound, without recommending any particular one: capping enrollment and cutting costs; increasing enrollment to generate more income; increasing student fees; or enrolling more students who pay higher fees—meaning, in this case, students from outside the EU. (In fact, the government has set a goal of increasing the number of international students at its universities by 50 percent over the next five years, bringing in nearly another \$1.3 billion a year.)

But he said that, in general, the politicians need to stop micromanaging.

“If there was one thing we would ask for it's that the government would stop worrying about the details of how we do things,” Nolan said. “What the government needs to do is set goals for the sector, agree the outcomes, and then get off the pitch.”

That's unlikely in a country so deep in crisis, and with so much at stake.

“To misquote Seamus Heaney,” Jennings said, after thinking the situation through for a moment: “Hope and history aren't rhyming. In this case they're clashing.” ♦

Jon Marcus is a writer based in Boston who covers higher education in the U.S. for the (UK) *Times Higher Education* magazine.

TENNESSEE

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the strategies currently favored by education foundations and think tanks. As such, Tennessee is seen as the laboratory where those strategies will be tested.

“We are doing these things aggressively. It seems a little strange to say it, but Tennessee has become the leading edge of change in higher education,” said John Morgan, chancellor of the Tennessee Board of Regents. “Other states are now looking at us to see what's going to happen.”

Reform, and promises of reform, constitutes a way of life in higher education, of course. Many such attempts fail to produce

long-lasting change and, collectively, the makeovers have not stemmed the decline that has seen the United States fall from first place to tenth among nations in the percentage of young people earning a college degree.

Education experts are hoping the Tennessee plan will turn out differently, and they see a couple of reasons for optimism. First, according to Dwayne Matthews of the Lumina Foundation for Education, the Tennessee approach is comprehensive rather than piecemeal, and derives its authority not from agency directives but from legislation passed with overwhelming support from both Democrats and Republicans.

That legislation, the Complete College Tennessee Act, was passed in 2010 and spells out specific goals such as increases in graduation rates and the retention of students in the first years of college. It then ties future funding for each institution to the achievement of those goals.

Stan Jones, president of Complete College America (a national nonprofit organization that advised the state at various times in the process), sees a second hopeful sign. “The most elegant reform plan will do no good if it's not supported by high officials in the state,” he said. “In Tennessee the leadership has consistently provided support, and they have built a consensus that continues to the present.”

Jones noted, for example, that the Tennessee legislation was sponsored by former Governor Philip Bredeson, a Democrat, and now has been endorsed by the new Republican governor, Bill Haslam.

Ironically, Tennessee is also seen as fertile ground for an education experiment because of its lamentable past. Today, 31 percent of Tennessee adults ages 25–34 have a college degree, a figure that ranks the state just below Mississippi. An analysis by Complete College America shows that only 12 percent of Tennessee's ninth graders will eventually earn a four-year or two-year degree.

The state's flagship institution, the University of Tennessee, is widely seen as a ho-hum research university subject to rapid turnover of presidents. At the state's community colleges, two-thirds of the students fail to transfer to four-year institutions or to graduate. And the state's parsimony in funding has pushed tuition so high that the National Center for Public Policy and Higher Education, which publishes *National CrossTalk*, gave Tennessee an F in college affordability in 2008. The situation has only worsened since then.

“Large states like California and New York, especially if they see themselves having a proud history, can be very difficult places to get consensus on reform,” said Jones. “A place like Tennessee is an easier environment to work in because it's smaller, and no one is kidding themselves about the need to get the job done.”

The high concept behind the Tennessee plan is disarmingly simple: The state will reward each campus according to its “outcomes”—the production of degrees, retention of students, and other measur-

The Complete College Tennessee Act of 2010 spells out specific goals for each institution, then ties future funding to the achievement of those goals.

able factors—rather than its enrollment. Each institution will be given its own set of goals and will be measured according to its success in meeting those goals.

This strategy, known as performance funding, has been used for decades in other guises. Typically it was employed as a reward, or cherry, on top of an enrollment-based funding formula. If college administrators achieved certain goals they would be favored with a few extra percentage points of funding.

The Tennessee plan tosses out the enrollment formula altogether and puts performance funding on steroids. Henceforth, in Tennessee, 100 percent of funding will be based on outcomes and none on enrollment.

It comes as no surprise that this idea



WADE PAYNE, BLACK STAR, FOR CROSSTALK

“We will see some institutions with improved performance who receive fewer dollars because others improved even more,” says Joseph DiPietro, president of the University of Tennessee. “That's when the in-fighting will start.”

did not come bubbling up from the campuses. The architects, rather, were a handful of officials at the Tennessee Higher Education Commission (THEC), working with the legislature and the office of then-Governor Bredeson.

“A lot of things came together at once,” said Richard Rhoda, executive director of the commission. “We had a governor who would ask questions like, ‘Why aren’t students graduating from our colleges?’ At the same time, the state was reforming its K–12 system, and the issue became, how are we going to provide for the larger number of kids successfully graduating from high school?”

Bredeson was a Democrat, and a plan to alter the higher education system typi-

An analysis by Complete College America shows that only 12 percent of Tennessee’s ninth graders will eventually earn a four-year or two-year degree.

cally would set the stage for a political battle in the legislature. But that did not happen, largely because the proposals emanating from THEC and its consultants emphasized accountability, cost savings, and the production of educated workers—themes beloved to Republicans.

Gordon Fee, a retired Lockheed Martin executive at the Oak Ridge National Laboratory, said state businessmen were ready to support a change in direction because they were increasingly frustrated by the lack of skilled and educated workers in the state.

“I would hear stories that managers were going further and further outside the state to attract people who could fill the jobs they had,” said Fee. “You got the sense that the state was producing graduates with the wrong skills or in the wrong field, and that we needed to make a change.”

By early 2010, the Complete College Tennessee Act was passed with hardly a dissent in the legislature. The first provision of the act directed THEC to link higher education to “the state’s economic and workforce development.”

College leaders initially were a harder sell. Dennis Jones, president of the National Center for Higher Education Management Systems and a Tennessee consultant, said many campus presidents saw danger signals in the legislation but were eventually persuaded that a major change was necessary to pull the state out of its trough.

“Tennessee is so far below the national average that small tweaks weren’t going to work,” said Jones. “And a big selling point was the economic impact of success. If higher education met the new graduation goals, Tennessee’s per capita income could rise 20 percent. That’s huge.”

The THEC plan that grew out of the legislation developed several strategies to

ease students’ path toward a degree, such as uniform core courses and uniform course numbering in community colleges and universities.

In addition, all remedial or developmental education was handed over to community colleges, whether students are enrolled in a community college or a university. Cleveland State Community College in southeastern Tennessee has become a national leader in designing computer-assisted developmental courses, and it is hoped that the Cleveland successes will be adopted on a larger scale.

But, in general, Tennessee laid out few such programs. According to David Wright, director of policy at THEC, the planners in Nashville decided they would determine “the what and not the how” of the reform.

“We did not want to pretend that we had all the answers here in Nashville,” Wright said. “It seemed a better idea to let each institution handle the issue of how to achieve the goals. And if a particular institution comes up with a great approach, it’s our hope that we can seize on those good ideas and scale them up across the system.”

And so Tennessee’s fate in higher education rests almost exclusively on the success of its incentive funding. And in that area, the state planners have broken new ground.

To begin, each campus was assigned a mission statement, an otherwise innocuous-looking document that has the effect of defining—and limiting—that institution’s academic pursuits. The University of Tennessee at Knoxville’s mission statement, for example, heavily emphasizes research, professional education such as nuclear engineering, and, curiously, printmaking.

In effect, the mission statement gives UT Knoxville a license to pursue and expand those programs. And because other institutions’ mission statements will not include some of UT’s programs, UT Knoxville will be protected from incursions into its turf. For the time being, printmaking appears to be safe at the home of the Vols.

But what the mission statement gives, it also takes away. Nowhere does UT Knoxville’s mission statement mention a medical school. The campus does not have a medical school—the main UT medical school is located in Memphis—and the mission statement makes it more certain that the situation will remain so.

Those limitations were intentional. “Under the old funding formula using enrollment, the way (for a campus) to get

The Tennessee plan will reward each campus according to its “outcomes”—the production of degrees, retention of students, and other measurable factors—rather than its enrollment.

more money was to start new programs, and sometimes we saw a duplication of programs,” said Rhoda. “Under the new plan, which rewards the production of graduates, a lot more thought will be given to where programs are likely to be high producers.”

Not surprisingly, the development of the mission statements set off a lively round of lobbying by campus presidents to make sure their institutions were defined in the most satisfactory and rewarding fashion.

At the University of Memphis, President Shirley Raines said she tried, and ultimately failed, to have her campus described as a research institution more or less equivalent to UT Knoxville. The difference between what she wanted and what she got might appear subtle to a casual observer, but Raines said the distinction looms large because a broader research role would ultimately bring more dollars into her university.

“We produce something like 150 doctorals a year,” she said. “I think we compare very favorably to UT Knoxville on that score, and we haven’t given up on this issue. There’s going to be an opportunity to tweak these things over the next year, and I expect we will take advantage of that.”

The mission statements have another, more nervous-making purpose. By defining each campus, they serve as the basis for that campus’ funding formula, the metric that will be used to judge its performance.

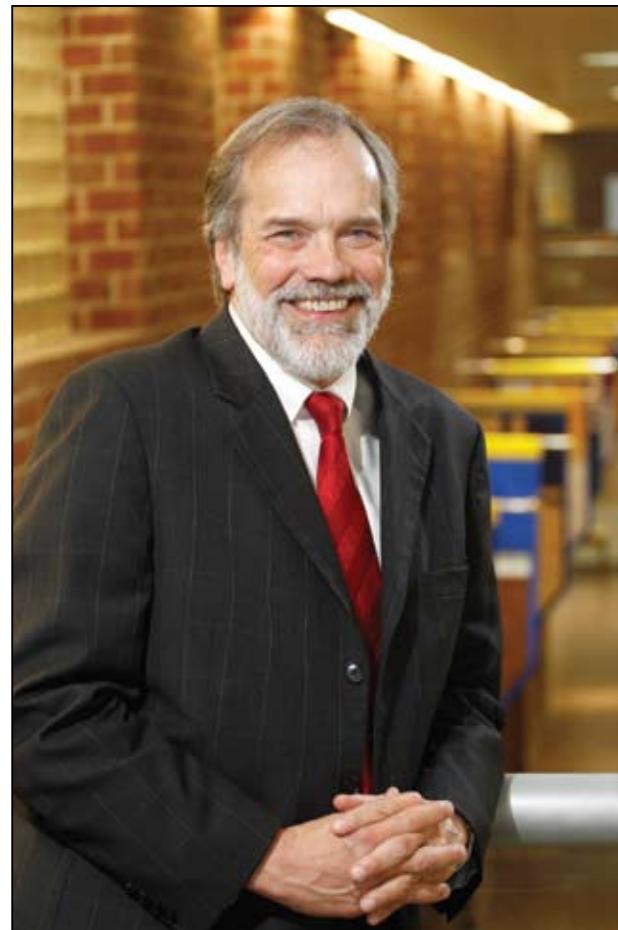
The metric, in fact, is the beating heart of the Tennessee system. It employs ten criteria, ranging from freshman retention to research dollars gained. Each year an institution will receive a score for each criterion. The higher the total score, the more funding that campus will receive.

But the criteria are weighted differently for each institution according to its mission statement. Thus the University of Memphis, whose research component is not described as loftily as UT Knoxville’s, will be rewarded less vigorously for an increase in research activity than will the UT campus.

According to Raines, that difference could amount to millions of dollars per year. Raines says she very much supports the concept of an outcome-based approach to university funding but is wary of what she sees as the devils in the details. “I firmly believe that the people (at THEC) are working in good conscience, and these issues will get resolved,” she said.

The new funding system begins this year but will incorporate what one education official termed a “soft roll-out.” In effect, that means the impact of campus performance on funding will grow slowly over the next three years until it reaches the 100 percent level.

Because of the soft roll-out, no campus will experience a sharp uptick or downtick



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in funding. And even after three years, when the new system is fully operational, the formulas will limit the annual loss or gain for an individual campus to approximately two percent a year, according to Russ Deaton, director of fiscal affairs at THEC. “It is designed to produce incremental impacts,” he said. “Of course, over time those impacts could compound for an institution with consistent low scores.”

The reality that campuses will be competing with each other for available dollars

The reality that Tennessee’s campuses will be competing with each other for available dollars has not been lost on college presidents in the state.

has not been lost on college presidents in the state. All presidents and other campus officials interviewed for this article expressed at least guarded support for the new system, but the uncertainties have lent a breathless quality to the experience.

A two percent swing at the University of Memphis, for example, could amount to more than \$5 million a year. With a metric containing ten criteria, and a different weight assigned to each criterion, predicting the result in advance at any campus becomes virtually impossible.

“I applaud Tennessee for being bold with this plan,” said Carl Hite, president of Cleveland State Community College in southeastern Tennessee. “No other state has come close to going from 100 percent

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seat-count funding to 100 percent outcome funding. At this point, though, I don't think anyone knows how the system will play out for their campus."

To add some clarity—and perhaps to get the juices flowing—THEC has posted a “dynamic model” of the new funding mechanism on its website that allows administrators to play with different outcomes. A college president, for example, can plug in an improvement in freshmen retention and see the extra dollars flowing to the campus. Since the dynamic model assumes a zero-sum environment, he can also see equivalent dollars being subtracted from other campuses.

Hite said he suspects every campus president has spent some time with the dy-

Ultimately, the fate of the funding issue will depend on economic recovery in Tennessee over the next year, which is unpredictable.

amic model, spinning out scenarios, and he laughs about his own experiences. “If I have a target of 100 in a certain area and I type in a result of 110, I can see how much we get, and then I can see who’s going to be mad at me because I took their money. When someone wins, someone else loses.”

The complexity of the system also raises the question of whether it could be gamed by clever campus officials. For example, if retention and graduation rates reign supreme in the new system, could some institutions raise their scores by judiciously reducing the number of risky freshmen they admit? Could graduation awards, or other criteria results, be shifted from one year to the next?

Rhoda, the executive director of THEC, concedes that any funding system is vulnerable to manipulation, but he believes the new model will prove to be more honest

than its predecessor. “In the past, with enrollment funding, the game was to bulk up in the fall when students were counted,” he said. “The new approach has been pored over by campus presidents and chief academic officers, and we’ve tried to keep it as straightforward as possible. If soft spots show up with the new system, we can fix them.”

John Morgan, the Board of Regents chancellor, says another wrinkle lies in the system’s subtle but perverse incentive for administrators to withhold strategies that prove successful. “If you are a campus president and you find the secret of success, you might want to keep it to yourself because your discovery gives you a competitive advantage,” he said.

The answer might be a device that rewards collaboration, allowing the originator of a new strategy to share in the success of others who adopt it.

The largest uncertainty surrounding the new funding system, however, is not the response on the campuses where, as one administrator said, “we’ve all drunk the Kool-Aid.” Rather, it’s the response in Nashville where a new Republican governor and a legislature with 20 newly elected conservative Republicans will hold sway over the higher education system and its budget.

Haslam, the new governor, took office in January and thus far has voiced support for the outcome-based program. Haslam comes from a wealthy family in Knoxville that has a long history of involvement with the University of Tennessee, and he made higher education reform a central part of his gubernatorial campaign.

The legislature is more of a wild card. It turned decidedly more conservative after last November’s election, and many of the new members campaigned on a small-government platform.

Higher education officials say they have little fear that the legislature would attempt to dismantle or seriously tinker with the program. After all, the system reflects many Republican ideas in regard to government.

The anxiety, the officials say, stems from the fear that the legislature and Haslam



“The most elegant reform plan will do no good if it’s not supported by high officials in the state,” says Stan Jones, president of Complete College America. “In Tennessee the leadership has consistently provided support.”

may not accept what the higher education community sees as the implicit political deal of the new system. In a nutshell, that perceived deal says that if higher education succeeds in its gamble and operates at higher efficiencies, then the state will reward it financially. It amounts to pay-for-performance, another Republican ideal.

Education officials argue that this deal is not merely a matter of fairness. Rather, it is crucial for the new system to survive and thrive.

Joseph DiPietro, president of the University of Tennessee, described the problem this way: “If everyone performs well and the funding stays flat, we will see some institutions with improved performance who receive fewer dollars because others improved even more. That’s when the infighting will start.”

Right now, said DiPietro, “We are all locked arm in arm, and we are convinced this is going to be a major step forward. With flat funding, that attitude could erode.”

Morgan reiterated that rewarding better performance is “the key to the program’s success. Without it, you’re going to get cynicism and resentment. College administrators are not going to bust themselves trying to increase productivity if they believe they will be punished for it. Nobody wants that.”

Hite, the president of Cleveland Community College, noted that the old route of increasing budgets by increasing enrollments has been taken away, and college presidents now need the assurance of another route toward expansion other than snatching funds from their brother institutions.

“The legislature told us that the new standard would be the outcomes at our institutions. OK, that’s fine, but if we measure up to the new standard, don’t come back and say we have to cut you more,” Hite said.

The crucial year, the educators say, will be 2012, when the financial results of the outcome funding are first felt on the campuses. If the state provides enough money so that every campus with improved performance sees an uptick in funding, the new system may be over the hump.

But the idea of an implicit deal is greeted with some skepticism in the state

capital. Mark Cate, a senior advisor to Governor Haslam, said the question of whether improved performance would be rewarded with more funding is “impossible to answer today. Appropriations are always a matter of what’s possible and what’s not. Everyone is also curious how the new (Republican) players in the legislature will affect things going forward.”

Jamie Woodson, a Republican state senator and a co-author of the Complete College Tennessee legislation, agrees that reform in a zero-sum game is “a real challenge for the leadership in higher education.”

“At the end of the day, though, that’s their job. It’s not about getting more

Mission statements define each campus, and they serve as the basis for that campus’ funding formula, the metric that will be used to judge its performance.

money,” Woodson said. “What I’d want every institutional leader to do in the morning when they get in the shower is think what they can do to align their institution with the needs of the state, which means making Tennessee a more competitive place for growth and jobs.”

Right now, Woodson added, “rewarding higher education with larger budgets is not part of the conversation. The conversation is about outcomes.”

Ultimately, the fate of the funding issue will depend on economic recovery in Tennessee over the next year, which is unpredictable. As of yet, a resurgence in the economy and tax revenues has not occurred in any dramatic fashion. Several weeks after Woodson made her comments, Haslam unveiled his budget for the upcoming year. It proposed a two percent cut in higher education. ♦

Robert A. Jones is a former reporter and columnist for the *Los Angeles Times*.



Richard Rhoda, executive director of the Tennessee Higher Education Commission, believes the new funding system will prove to be more honest than its predecessor. “We’ve tried to keep it as straightforward as possible,” he says.

Interdisciplinary Curriculum

Newly established University of Minnesota Rochester has a radically different approach to higher education

By Kathy Witkowsky

ROCHESTER, MINNESOTA

IT'S NOT UNUSUAL to see student artwork displayed in the halls of universities. But student science projects? To highlight his institution's unusual interdisciplinary approach to health sciences, that's what Stephen Lehmkuhle, chancellor of the newly established University of Minnesota Rochester, chose to hang in the reception area next to his office. The informational posters explore specific health issues, their causes and their possible solutions. Designed last year by students enrolled in UMR's first-ever freshman class, the two framed examples—one on

With a current enrollment of 140 students and just 20 faculty members, UMR is able to be far more flexible and innovative than larger institutions.

malaria, the other on melanoma—resulted from a joint assignment in biology, organic chemistry and writing, all required courses. As they often do at UMR, students worked on the project in small groups, which provides an interactive learning experience and teaches them how to function as part of a team. Then they had to present their findings to faculty—because public speaking is another key life skill.

"It really epitomizes what we're trying to do," said Lehmkuhle, who has set out to create what he calls "the university of the

future": one that, as he puts it, "prepares students for jobs that don't yet exist, to solve problems that aren't yet known, using technologies that have not yet been invented." Indeed, he says, the world is changing so quickly that much of what freshmen learn will be outdated by the time they are juniors. So rather than stuffing students full of knowledge, universities should increase their capacity, as well as their desire, to learn.

That's not a new goal for educators. But because he was hired to start UMR from scratch, Lehmkuhle (pronounced "lem-cool") has been able to go about achieving it in a very intentional way. "What attracted me here was the opportunity to create the change rather than manage the change," said Lehmkuhle, who left the University of Missouri to take the job as UMR chancellor.

What Lehmkuhle and his vice chancellor, Claudia Neuhauser, have created is an undergraduate curriculum focused exclusively on the health sciences, with a strong liberal arts component. More crucially, it is also based around, and tracks, a set of student learning outcomes and objectives, rather than faculty interests; it employs state-of-the-art technology and best-teaching practices to account for different learning styles; and it rewards tenure-track faculty for effective teaching as well as research—research in both their areas of expertise and on their students' learning.

With just one undergraduate program—a bachelor of science in health sciences (in the fall, it will add a second undergraduate degree, a bachelor of science in health professions)—UMR also turns the traditional approach to higher education on its head by mandating a rigorous, tightly prescribed curriculum for its students' first two years, then allowing them

to broaden into other areas as juniors and seniors, rather than the other way around. That gives the school the ability to ensure that all its students have the academic background and skills they need before they focus on their so-called "capstone" experience that will mark their final two years: up to 30 credit hours of research, internships, study abroad or other type of exploration in their chosen field.

It also means that UMR can coordinate its curriculum so that concepts are picked up and reinforced throughout a student's education, combating what Lehmkuhle calls the "Las Vegas" approach to learning that dominates at traditional institutions, where "what goes on in the classroom, stays in the classroom." Too often, he says, students study disparate ideas and concepts—and subsequently forget them—because it's not clear how those concepts connect to other disciplines or are otherwise relevant to their lives. Professors design courses they want to teach, and academic departments are financially rewarded based on course enrollments rather than student progress.

UMR has taken a radically different approach. "We want to make sure we actually build a curriculum, and not just individual courses," said Neuhauser. "A new campus is such an opportunity to do things that are hard to do at an established university." Its small size is also a distinct advantage: With a current enrollment of 140 students and just 20 faculty members, UMR is able to be far more flexible and innovative than larger institutions.

A mathematician by training, Neuhauser began focusing on interdisciplinary instruction after she had her own "Las Vegas"-style experience in education in the mid-1990s, when she was teaching calculus at the University of Minnesota's Twin Cities campus. The students didn't seem to appreciate why they should bother with the subject. "I knew it was important, but it wasn't reflected in the course I was teaching," said Neuhauser. Recognizing that students learn better when they learn in context, she went on to write a calculus textbook specifically designed for biology majors.

At UMR, interdisciplinary assignments ensure that concepts don't get lost in one course, but are picked up repeatedly. For instance, freshmen enrolled in both sociology and statistics have tried to figure out

how much a pack of cigarettes would have to cost to cut the number of smokers in half; chemistry students have made glucose, then studied its effects in biology; students in bioethics have examined issues surrounding animal testing, specifically how big the animals' cages should be and yet still be efficient, then designed and built cages in their statistics class.

"What we want to get them to do is understand that what they're learning has practical applications in the world they're going to be in," said assistant professor

Students at the University of Minnesota Rochester often work on projects in small groups, which teaches them how to function as part of a team.

Rebecca Bamford, who teaches bioethics. Bamford came to UMR from Hunter College, where, she said, she rarely had an opportunity to interact with faculty in different disciplines; her only conversation with a chemistry professor, for instance, was on a bus on the way to a graduation ceremony. At UMR, by contrast, the professor who teaches chemistry is just down the hall, and Bamford has attended his classes to figure out ways they can collaborate. Faculty often sit in on each other's classes; in some ways, Bamford said, it feels like "we're actually taking the courses

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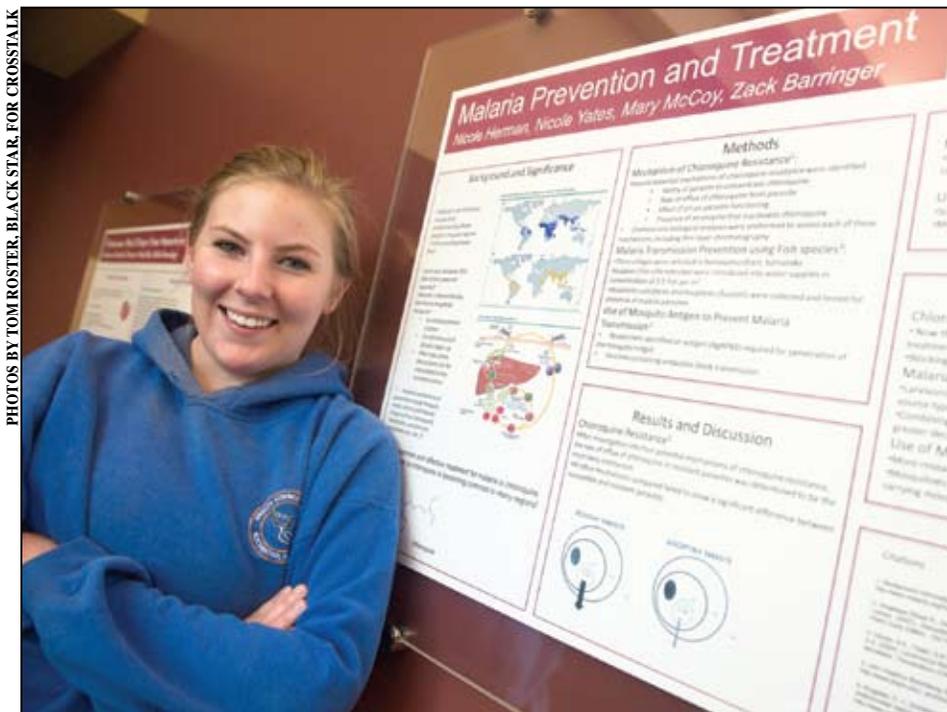


Stephen Lehmkuhle, chancellor of the University of Minnesota Rochester, has set out to create a "university of the future" that "prepares students for jobs that don't yet exist, to solve problems that aren't yet known."

PHOTOS BY TOM ROSTER, BLACK STAR, FOR CROSSTALK



"Obviously, building a totally new program is a challenge," says Claudia Neuhauser, vice chancellor of the University of Minnesota Rochester. "We want to make sure we actually build a curriculum, and not just individual courses."



Mary McCoy, a sophomore at the University of Minnesota Rochester (posing next to a poster about malaria that she helped to research and design), appreciates the campus' highly structured curriculum and interdisciplinary approach.

from preceding page ourselves.”

Interdepartmental rivalries are non-existent because there are no academic departments. Instead, UMR has divided the traditional duties of a professor into separate jobs. There are tenure-track “design-based” faculty, who are responsible for designing the curriculum they teach, as well as continuing research in their field of expertise; and “student-based” faculty, instructors who help implement the curriculum and are available outside of class to answer any questions the students have. Classes are team-taught between them. The school also has hired student “success

Interdepartmental rivalries are non-existent because there are no academic departments. Instead, UMR has divided the traditional duties of a professor into separate jobs.

coaches” who function as academic and career-path advisers throughout the students’ time at UMR.

Because it’s so new, there are few data by which to judge UMR, which will not graduate its first class until 2013. But students said that they like its highly structured curriculum and interdisciplinary approach. “It makes me more interested because then I can see [a subject] from all perspectives,” said Mary McCoy, a sophomore who helped research and design the poster about malaria that hangs outside Chancellor Lehmkuhle’s office.

Lehmkuhle was hired to take the helm of UMR in 2007, after many years at the University of Missouri, where he served in several senior administrative positions, including vice president for academic affairs. With a Ph.D. in experimental psychology,

his interest in learning goes back to his days as a graduate student. Specifically, he studied how the brain processes visual information. Isolated brain cells, he notes, are ineffective at encoding information; the brain’s tremendous abilities derive from interconnectivity among many cells. Lehmkuhle believes that is an appropriate metaphor for an effective university as well.

So at UMR, connections are the name of the game. Connections between faculty, who coordinate teaching modules and assignments; connections between faculty and students, who are continually called upon to provide feedback about teaching methods (the faculty through research, the students through evaluations); and connections between the school and the Rochester community, especially with its renowned Mayo Clinic, which provides guest speakers and other opportunities for students (such as job shadowing and observing surgeries) as they explore careers in the health sciences.

Those connections are reinforced by the school’s location and layout: It occupies the third and fourth floors of University Square, a high-end mall that connects with much of downtown Rochester, including the Mayo Clinic, through a series of skywalks and underground passageways. Classrooms, known in UMR parlance as “learning labs,” are designed so students face each other to optimize interaction and small-group work. All students are issued Lenovo ThinkPad laptop computers that they lease from the school, so they can network with each other and broadcast onto central classroom monitors. Private study rooms, administrative offices and a number of the classrooms surround a student commons area that contains a cluster of comfortable chairs and sofas and tables where students—and often faculty as well—hang out when they are not in class.

UMR has quickly earned the respect and support of the Rochester business community, said John Wade, president of the Rochester Area Chamber of Commerce, which is hoping to see 8,000 to 10,000 new jobs created over the next de-

cade. The school’s innovative, collaborative model is exactly what Rochester needed, according to Wade. “It’s absolutely essential to the growth and development of this community,” he said.

But the modest setting wasn’t necessarily what folks in the Rochester community had in mind as they lobbied for years to get the University of Minnesota to locate a branch campus there. “People think of universities in terms of infrastructure and sports. They wanted a lot of students. They wanted to be big. They wanted a football stadium,” said Lehmkuhle.

But Lehmkuhle believed that economic realities required him to develop a niche-based, tuition-driven school. So what the community got instead when UMR welcomed its first 57 undergraduates in 2009 was a lean, highly focused academic institution, a place where the library, called the “information commons,” consists of a couple of shelves of reference books, a dozen computers and an interlibrary loan program; a university that has a mascot—but no sports teams; and where the local YMCA functions as the student gym.

None of which seems to bother the students much. Sophomore Evan Doyle, who’s from Canton, South Dakota, and is president of UMR’s newly created student government—the Rochester Student Association—said that what the school lacks in traditional extracurricular activities it more than makes up for in the opportunity to help build UMR from the ground up, to create new student clubs and activities, and to contribute feedback for the development of the curriculum. In fact, Doyle joked, “The hardest part about going here is convincing your friends that it’s a school—because it’s above a mall.”

There are no plans for a football team or stadium, but UMR is involved in a private-public partnership that will provide student housing and additional classroom and office space in a downtown building next year. The new building will be a complete living-learning environment, and will accommodate enrollment growth: UMR plans to increase its freshman class by 50 students each year, Lehmkuhle said, until total enrollment hits 1,000, not including another 400 to 500 students enrolled in joint programs UMR operates in conjunction with other institutions.

Long-range, the school does intend to

Student “success coaches” function as academic and career-path advisers throughout the students’ time at UMR.

have its own campus on the edge of downtown, but it will be limited in scope; the school is likely to retain its current space above the mall as well. “Bigger is not necessarily better. So I don’t want to measure our success on how big we are, but rather on how good we are,” Lehmkuhle said.

That’s fine with sophomore Hannah Salk, of St. Cloud. “I don’t feel like I’m missing out at all on the things a large school has,” said Salk, the great granddaughter of Jonas Salk, who developed the polio vaccine. On the contrary, she prefers the small environs of UMR. “I like that professors know my name and where I’m from, and that they can gear their classes to the students,” she said.

With their encouragement, she has also starting to explore and value her own learning style. After struggling to understand and remember biological processes—such as aerobic and anaerobic respiration,



“Students want to impact the success of the program as much as the faculty do,” says sophomore Evan Doyle, who is president of UMR’s newly created student government.

calcium absorption and DNA replication—Salk, an enthusiastic artist in high school, took to sketching them on paper bags. When her professor, Robert Dunbar, saw the drawings, he suggested she use them for an independent study project. Now she is working with him and a professor of literature to turn those drawings into an instructional book for kids. That’s something that probably would not have happened at another university, she said. “Anywhere else, they don’t care how you learn as long as you learn. Whereas here, they focus a lot on different styles of learning,” she said.

But that was a secondary reason for enrolling. A former patient at Mayo, Salk decided to attend UMR in large part because of its ties to the medical clinic—a connection that she said has paid off. On three different days during March, for instance, she and her classmates from anatomy and physiology descended the escalator and walked through a passageway to Mayo Clinic lab where, supervised by their UMR professor as well as two professors

from Mayo's department of anatomy, they were able to dissect and examine human cadavers.

"It was a huge learning experience. And not just in an anatomical sense—in a tactile way," Salk said afterward. She was struck by how spongy the heart is, and by the size of the aortic valve and esophagus. And she was excited to feel how tight tendons really are, and to learn where the nerves innervate the muscles.

It was an unusual opportunity for underclassmen, and Salk was thrilled. She had originally wanted to be a dentist, but now, after being exposed to other options at UMR, she plans to become a doctor. "Studying from a book gets old," she said.

Classrooms, known in UMR parlance as "learning labs," are designed so students face each other to optimize interaction and small-group work.

"Going to a lab like this just reignites the passion." She said that she felt completely prepared on both an emotional and intellectual level, thanks to numerous discussions she'd had in different classes.

"Pretty much since the get-go, we've been talking about using cadavers," Salk said. During the first semester of her freshman year, her humanities class discussed different cultural attitudes toward death. In her second semester, her ethics class addressed questions associated with the use of cadavers, while her biology class had the option of attending a lab where Mayo Clinic faculty, staff and medical students pointed out anatomical features in cadavers that had already been dissected. (Salk was fascinated, but the experience prompted some of her classmates to realize they needed to rethink their career goals—an equally useful result.) Prior to that lab, the students had a presentation by Mayo Clinic faculty and staff on what to

expect in the lab.

When Salk returned to school as a sophomore this past fall, a UMR literature professor with expertise in historical medical texts visited her anatomy and physiology class, where she tried to get them to think about the human body as a learning tool without completely objectifying it. As part of that discussion, students partnered up and identified superficial anatomical structures such as muscles and tendons on each other's bodies—in the process, learning how to be personally and culturally sensitive. And just prior to the three cadaver labs this spring semester, the director of anatomical services at Mayo came to Salk's class and gave a presentation explaining how the cadavers are procured (most die from natural causes, and all have chosen to donate their bodies) and about appropriate behavior in the lab.

"I had all the tools that I needed," Salk said. "So I knew what to expect."

True to UMR form, her professor, Robert Dunbar, administered a survey of the students before and after the labs. What he discovered was encouraging, he said: After the lab, more students said they would be willing to donate their bodies to science. "They really saw the value in the experience," Dunbar said.

Like his UMR colleagues, Dunbar, an associate professor who earned a Ph.D. in neuroscience, was hired because he has a passion for teaching as well as research. So he often checks in with his students to get their reactions. Based on student feedback, he adjusts exam dates, assignment due dates—even assignments themselves. Now Dunbar, who has an interest in learning and memory, is studying the dynamics of group learning, by having his students take exams twice: once as individuals, and once in small groups. He has discovered that the group scores are consistently 15 to 20 percent higher, and he is trying to figure out why.

As for the interdisciplinary nature of UMR's program, "it's just incredible," Dunbar said. "The depth of my understanding of a topic is improved tremendously by engaging with people outside my discipline. And that manifests itself in the classroom."



The student commons area at the University of Minnesota Rochester includes comfortable chairs and sofas and tables where students—and often faculty as well—hang out when they are not in class.

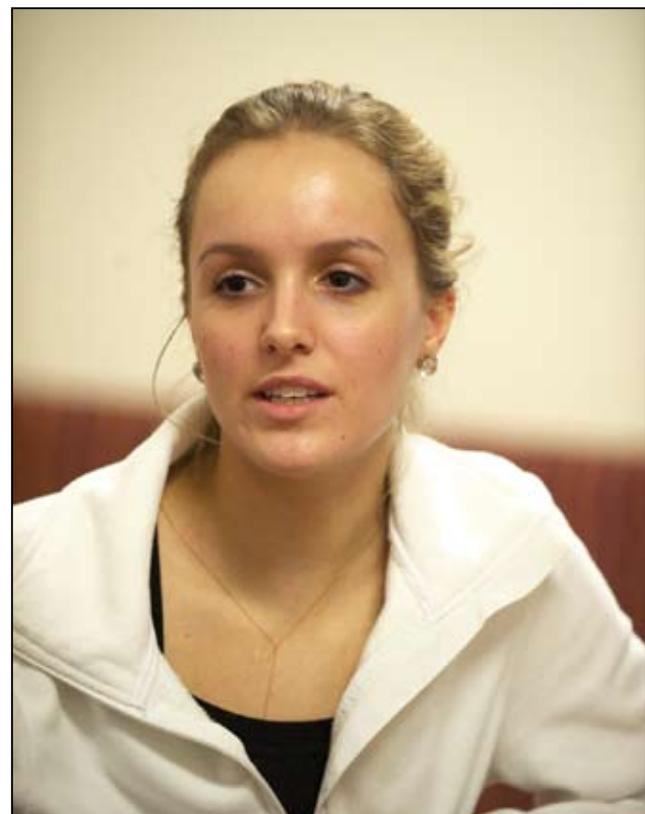
Also like his colleagues, Dunbar acknowledged that the interdisciplinary approach is a lot of work. "It can be a pain," he said. "It can be much more labor intensive than doing it on your own." Just as the students sometimes struggle with working in groups, so, too, do the professors, he said.

In fact, it has been more challenging than anticipated to coordinate the curriculum, said Vice Chancellor Neuhauser. Initially the plan was to have all students take the same courses for the first two years, and for learning modules or units to be taught across all the classes students were taking. That has proven to be unwieldy, because some students—transfers, for instance—might not need some of the required courses. And it is too difficult for faculty to coordinate subjects across the entire curriculum. Classes are still designed and taught in modules, and faculty still endeavor to know and reiterate what their colleagues are teaching. And they continue to design interdisciplinary assignments—just not in every course that students are taking. "Obviously, building a totally new program is a challenge," Neuhauser said. "But overall I think it's working quite well."

At this point, Neuhauser's conclusion is based on anecdotal evidence and retention rates. Only 43 of 57 students who enrolled at UMR in the fall of 2009 returned the next fall; the sophomore class is now down to 35. But this year, 98 of 102 freshmen who started in the fall returned to campus for the spring semester, where they were joined by seven new students, for a net gain of three students. Chancellor Lehmkuhle said he believes that the retention rates have improved, in part, because UMR is getting better at identifying and recruiting students whose interests and academic abilities are suited to the program.

Soon, UMR hopes to have more sophisticated means to assist its students. Typically, an institution records only student grades. UMR is capturing not only grades but all of its students' assignments, which are preserved electronically, in essence saving a portfolio of work that the entire faculty can analyze, the same way doctors look over a patient's entire medical record to diagnose them and prescribe a course of treatment. "Over time, we will begin to mine that data to look for relationships between how students perform in different concepts in different courses," said Lehmkuhle. That, in turn, will enable UMR's administration and faculty to adapt its teaching techniques to be more responsive to the needs of individual students, he explained.

Both students and faculty appear acutely aware that they are involved in what could be an important experiment. "I feel a little bit of responsibility to this uni-



"I don't feel like I'm missing out at all on the things a large school has," says Hannah Salk, a sophomore who decided to attend UMR in large part because of its ties to the Mayo Clinic.

versity," said student government president Doyle, who plans to become a doctor. "I feel if I don't succeed, then this university won't succeed." So while the constant course evaluations students are asked to fill out can sometimes be "annoying," Doyle and his peers take them seriously. "Students want to impact the success of the program as much as the faculty do," he said.

UMR is capturing all of its students' assignments, which are preserved electronically, in essence saving a portfolio of work that the entire faculty can analyze.

"What really attracted me to this job was that they were trying so many unique and creative things with teaching," said Molly Dingel, an associate professor who teaches sociology. Not everything has been successful, she said. But, she added, "When you're trying new things, not everything is going to be successful."

Chancellor Lehmkuhle agrees. "We're building and flying the plane at the same time," he said. He does hope that as higher education is redesigned, as he believes it will have to be, UMR will be able to serve as a model for other institutions looking to deliver education tailored to the needs of the modern world. But to be effective, higher education must continue to adapt. So ideally, UMR will be a constant work in progress. Said Lehmkuhle: "Once we think we have it figured out, we're doomed." ♦

Kathy Witkowsky is a freelance reporter in Missoula, Montana.

OTHER VOICES



The West Virginia Experience

Creating a sustainable public agenda for higher education

By Brian Noland

THE DIVERSE INSTITUTIONS that comprise the American system of higher education are currently operating in an extremely volatile policy environment marked by shrinking state support for operations, rising tuition costs, fluctuating commitments to financial aid, and constant institutional efforts to garner essential resources while concurrently reducing operating costs. While these pressures are unrelenting, the demands on higher education to serve the multiple missions of teaching, research and service have amplified as states increasingly turn to universities to serve as drivers of innovation and economic development. These pressures are inflated by the growing state and federal focus on productivity, college completion, and heightened calls for accountability.

As institutions struggle to adapt and respond to these uncertainties, policy leaders have urged states to establish a public agenda for higher education that is focused on developing clear and consistent policy mechanisms whereby institutions work strategically to meet statewide, rather than institutional, goals. At the core of this call to action is the need for institutions to work in a coordinated manner to meet the nation's growing demands for higher education. Concerns over this need have been amplified by the declining position of the United States as a world leader in human capital production. Consequently, critics argue that higher education must re-evaluate and modify its mission so that it meets the educational, economic and workforce demands of the nation. Unless institutions are accountable to these changing demands, many fear that they will lose legitimacy and relevance in the face of an evolving educational marketplace in which the for-profit sector is actively creating and expanding market opportunities.

While there is an understanding and appreciation of the need for states to forge a public agenda for postsecondary education, there has been scant attention paid to how states actually develop, implement and sustain an environment that engages institutions in finding solutions to these broad public policy challenges. The remainder of this essay will focus on actions taken by policymakers in West Virginia to establish a public agenda. While the policy experience is unique to the state, it contains a variety of elements common across state systems of higher education.

Creating a Public Agenda—The West Virginia Experience

In 2006 the state's coordinating body, the West Virginia Higher Education Policy Commission, began a strategic planning process that resulted in the creation of "Charting the Future: A Master Plan for West Virginia Higher Education." Built upon civic, corporate and community partnerships, "Charting the Future" outlined the state's public agenda for higher education and focused on addressing critical policy challenges facing West Virginia, such as: leaks in the education pipeline, the loss of knowledge workers, blurring institutional missions, increased student debt, and changing job market demands. Concurrently, the state synchronized master planning with the creation of an incentive-based funding formula and the development of new accountability metrics for postsecond-

ary education. Together, these provided the basis for West Virginia's public agenda and served to frame the conversation about the role of institutions across the system in addressing statewide goals.

The public agenda in West Virginia is predicated on the recognition that the democratic and economic viability of the state rests on educating more underrepresented (e.g., first-generation, low-income, rural) students. West Virginia is among those states with the lowest levels of postsecondary educational attainment and the highest number of underrepresented students. U.S. Census data demonstrate that West Virginia has the lowest percentage of adults with a bachelor's degree in the country, ranks 48th with respect to the percentage of people ages 25–34 with an associate's degree or higher, and has the sixth highest percentage of citizens living below the poverty line. A recent study by labor economist Anthony Carnevale estimates that the state will need to produce at least 20,000 more residents with postsecondary credentials by 2018. To reach the more aggressive goal set by Lumina Foundation for Education, 60 percent degree attainment across the United States, West Virginia would need to increase the number of adults with postsecondary credentials by approximately 400,000.

Consequently, one of the initial steps undertaken to ensure that higher education is accessible to all West Virginians was to develop partnerships with legislative and executive leaders to reframe and restructure the state's complement of financial aid programs. West Virginia has historically demonstrated a strong commitment to financial aid; the state ranks fifth nationally according to a recent NASGAAP survey of grant aid per full-time equivalent student. While the state has a rich complement of need- and merit-based aid programs, it faced mounting cost and demand pressures at the onset of the master planning process that placed the sustainability of the largest aid programs in jeopardy. Given the integral role of financial aid as a support structure for the public agenda, higher education leaders worked vigorously with elected officials to restructure these programs and protect and promote the goals of student access and affordability. Faced with escalating cost pressures in the merit-based financial aid program—the PROMISE scholarship—higher education led a series of reform efforts that restructured the program, yielding both additional funding and programmatic stability, thereby negating the annual need to raise academic eligibility standards to maintain budget solvency.

By forging a partnership with legislative leadership, higher education was able to build support for the programmatic goals of PROMISE, as well as the need for increased funding to support the public agenda. As a result, over the course of five consecutive legislative sessions significant annual improvements have been made to the state's financial aid programs, with more than \$20 million in new revenues appropriated to support student access and affordability. Furthermore, during the 2011 legislative session, additional need-based aid funding was provided to offset potential declines in the federal Pell grant program.

Once these structural changes were made to the aid programs, the next step in the implementation of the access goals of the public agenda was the simplification of the college application process. In order to ensure that students and families were aware of financial aid opportunities, the state launched and intensively marketed a one-stop web-portal that provided information on planning, applying and paying for college. Modeled after a similar effort in North Carolina, the College Foundation of West Virginia (CFWV) was launched in October 2009. Funded through a seed grant from the legislature, CFWV enables middle school students, high school students and adults to explore college and career options, apply to college, and find financial aid.

In addition to the traditional students who enroll in college after high school, policy attention was also given to the 173,000 adults in the state with some college but no degree. In conjunction with institutional leaders and Shepherd University President Suzanne Shipley, chair of the system's Council of Presidents, the RBA Today initiative was launched. Through direct marketing of the program to adults who had completed 60 or more hours of credit but did not complete their degree, RBA Today (which enhances the state's existing Regents Bachelor of Arts program) has provided a flexible and accelerated degree alternative that supports the broad public agenda goal of diversifying the state's workforce.

In addition to the items noted above, the system has been active in its pursuit of federal and external grant opportunities. Rather than piecemeal federal programs such as GEAR UP and the College Access Challenge Grant, the state worked to coordinate activities under a unified planning structure via the West Virginia Higher Education Policy Commission's Division of Student Success and P-20 initiatives. In concert with institution staff, the commission has deepened its outreach efforts to underserved communities and strengthened its policy relationships with our P-20 partners.

The second area of emphasis within the state's public agenda focused on cost and affordability. Like many states, West Virginia has struggled to protect affordability in an era of fluid state support. Over the past two decades, the landscape of funding for higher education has been characterized by rising costs, shrinking public appropriations, and an increased hostility to the tuition increases that inevitably follow. With a systemic budget malaise that often prevented policymakers from looking beyond short-term solutions to long-term problems, policymakers yearned for more effective education and fiscal policy. This tension was ultimately mitigated with the passage of Senate Bill 595 in 2008, which called for higher education to develop and implement the finance and accountability goals inherent within "Charting the Future." This legislation cemented the partnership between the

West Virginia is among those states with the lowest levels of postsecondary educational attainment and the highest number of underrepresented students.

legislature and higher education, as both entities worked in concert to develop policies that contained incentives linked to the goals of the public agenda such as college completion, degree production, and increasing the enrollment rates of adult students.

As a result of these efforts, higher education was better positioned to provide the legislature with a series of data-driven benchmarks to assess performance, as well as to articulate the need for sustained investments to promote the competitive health of the system. The creation of a unified finance policy clarified the inherent link between state support and student-generated revenues, and demonstrated that, absent state appropriations, fee increases may be needed to protect the core components of the public agenda. Such increases were avoided in the short term as the system was able to successfully negotiate with the governor and legislative leaders a multi-year commitment to hold higher education harmless from budget reductions, in return for concurrently freezing tuition and fees for the 2010-11 academic year.

The third area of emphasis within the state's public agenda is the focus on student learning and accountability. A key part of our focus in this area has been to deepen the alignment across both the secondary and postsecondary levels of our education system. Such P-20 efforts are centered upon curricula alignment, early identification of college readiness, early remediation of academic deficiencies while students are enrolled in high school, and enhanced professional development via faculty exchanges. To support these objectives, the commission developed a series of report cards for parents, students, policymakers and the general public that demonstrate the quality and performance of public higher education. These reports address numerous accountability indicators such as academic preparation, participation, affordability, educational outcomes, and staffing. Much of this work formed the foundation of the state's participation in Complete College America, the SREB college completion initiative, and former Governor Joe Manchin's Complete to Compete initiative as chair of the National Governors Association. Under Manchin's leadership, significant focus was placed on college completion, a policy realm that is a particularly large challenge for West Virginia, where the systemwide six-year college completion rate is below 50 percent. In order to bring attention to the issue and develop a clear plan for addressing it moving forward, higher education leaders have developed a systemwide taskforce that cuts across institutions and brings together business and university leaders, faculty members, K-12 representatives, and students to identify barriers to completion and develop plans for achieving the state's goals.

The final area of the state's public agenda, economic growth and innovation, strikes to the core of the changing expectations placed on our nation's system of postsecondary institutions. As noted in a broad array of articles published by the National Center for Public Policy and Higher Education, the success of institutions will be determined by the extent to which they serve as drivers of economic expansion, job creation and human capital development. In order to remain competitive in an increasingly diverse global marketplace, institutions must strive to utilize the creative capacities of their faculty to drive innovation, research and service to our communities.

As part of West Virginia's efforts to implement the economic imperatives of the public agenda, presidents from across the system worked in concert with members of their respective governing boards to highlight the importance of investing in applied science and research to stimulate economic growth and job creation.

Over a four-year period, \$60 million in state funding was secured for research via the Eminent Scholars Recruitment and Enhancement initiative and the "Bucks for Brains" Research Trust Fund. Each of the programs requires institutional matches of state funds, thereby doubling the impact of the initial state investments. Targeted toward the state's two research institutions, Marshall University and West Virginia University, these programs have assisted institutions in their efforts to recruit scholars with demonstrated research competitiveness in specialties that build on their core research strengths.

In addition to these efforts, the commission, in conjunction with the Battelle Memorial Institute, is working to redevelop the West

Virginia Education, Research and Technology Park, which served as the former international headquarters of the Union Carbide Corporation. The Park serves as the backbone of the state's growing economic and community development efforts and provides a venue through which the resources of the institutions can be brought to bear in a collaborative manner with regional industries to create new economy businesses in West Virginia.

Contextual Issues—Impacting Policy Outcomes

One of the items central to the development of the public agenda in West Virginia was the establishment of a shared commitment among legislative, executive and external constituencies for the goals of the public agenda. As the plan evolved in West Virginia, members of institutional governing boards also became integral partners in the process. Key leg-

U.S. Census data demonstrate that West Virginia has the lowest percentage of adults with a bachelor's degree in the country.

While West Virginia has a rich complement of need- and merit-based aid programs, it faced mounting cost and demand pressures that placed the largest aid programs in jeopardy.

islation was passed in 2009 which required the professional development of board members as a condition of service, provided an impetus for partnerships across institutions, and brought the influential voices of the boards into the policy discourse. Through the annual Board of Governors summit, system leaders in conjunction with the staff of the Association of Governing Boards brought attention to critical elements of the public agenda, such as completion and cost efficiencies, as well as a deeper sense of board responsibilities beyond the confines of the individual institutions. The importance of boards as active partners in this policy journey cannot be overstated.

Despite the challenges facing West Virginia, a higher education policy strategy focused on critical areas of need and cooperation with other agencies has helped improve the outlook for the future of the state. The state has been fortunate to have economic stability in a time of severe national fiscal constraint, but the challenges other states are facing has brought a keen awareness on the part of higher education leaders and state policymakers to be proactive about setting policy and program strategies. In the end, the success of the public agenda in West Virginia can be traced to the fact that the state developed a plan, worked the plan, and strategically aligned policy and legislative initiatives to implement the plan. From small actions such as adjusting the agenda of board meetings to align with the goals of the plan, to linking staff performance reviews so that individual performance connected to planning outcomes, the state has placed an unwavering focus on the goals of the public agenda.

Conclusions

The paradox of American higher education is that while the pressures on academe to serve as both the great social equalizer and a vehicle for economic development have increased, the economic commitment provided to the corpus has decreased. In many states, funding for higher education has declined significantly as a result of the Great Recession, a trend that will only grow more troubling in the years to come. Current economic pressures are forcing institutions to redefine their missions and become more efficient in the delivery of their services. While the demands on higher education are increasing, the economic capacity to handle these demands is decreasing.

The decades of shifting the funding responsibility away from state appropriations and toward students' resources have not been the result of a well planned or thoughtful policy discourse. Given the critical role that higher education plays as a facilitator of human capital development, policymakers must remain attentive to the diverse needs of all students requesting access to postsecondary education. Unless careful and deliberative attention is given to the establishment of a public agenda for higher education that builds consensus and support for its broad goals, the academy will continue to suffer a loss of support in the American polity. ♦

Brian Noland is chancellor of the West Virginia Higher Education Policy Commission.

Over the course of five consecutive legislative sessions significant annual improvements have been made to the state's financial aid programs.



"Critical Thinking"

Can assessments determine whether college students are learning what they need to know?

By William R. Doyle

THE FINDINGS reported in "Academically Adrift," the recent book by Richard Arum and Josipa Roksa, have come as a shock for the higher education community. The authors report on a study in which the Collegiate Learning Assessment (CLA) was given to students at four-year colleges across the country at the beginning of their freshman year and in the spring semester of their sophomore year. The CLA measures critical thinking among college students. It is a written assessment that gauges the ability of students to make or break arguments in a coherent and well-reasoned fashion. According to the authors, only about half of the students in their sample showed any improvement on this assessment in the first two years of college. This is shocking: Could it be that so few students make any gain at all in critical thinking in the first two years?

Probably not. The basis for the claim that only 45 percent of students show any learning

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gains is an analysis that does not adhere to standard methods of calculating improvement. Every test administered to students results in a score that has two components. First, there's the component that's due to the student's actual performance on the assessment. In the case of the CLA, this is the part of the score that reflects the student's critical thinking ability. The second part is due to measurement error—this is the component of the score that is due to an essentially random set of circumstances that would make students score higher or lower than they ought to, given their actual level of critical thinking skills. For instance, some students with strong critical thinking skills may not respond well to a certain question on the test, while other students with weak critical thinking skills may possibly perform better because the exam asks about an area that they happen to know well. Measurement error on a well-designed assessment like the CLA is, on average, zero. Yet for any individual student, the amount of measurement error might be quite large.

Roksa and Arum, in a methodological appendix co-written with Melissa Velez, acknowledge that the CLA has a large amount of measurement error. Not to worry, they say, since measurement error simply makes estimates at the group level somewhat less precise. They argue that this is not problematic, as the CLA should not be used for high-stakes assessments of individual learning.

Yet, puzzlingly, the authors subject the students in their sample to exactly this kind of

According to Richard Arum and Josipa Roksa, only about half of the students in their sample showed any improvement in critical thinking in the first two years of college.

high-stakes test. To determine whether students have increased their critical thinking between entering college and the spring of their sophomore year, the authors compare each individual student's scores from the first time they took the test to the second time. If the student's score did not increase by more than a benchmark determined by the authors—a benchmark described by Alexander Astin in the *Chronicle of Higher Education* as “utterly arbitrary”—they say that the student did not learn during their three completed semesters in college. According to this calculation, 45 percent of students did not improve their critical thinking skills. This calculation is highly sensitive to the benchmark chosen. If one were to choose slightly different bench-

marks for increases in learning, the proportion of students determined to have improved or not would change markedly.

This is not the way we usually calculate gains in learning. Instead of comparing individuals, we compare groups. When the authors compared the sophomores in their sample to the freshmen as groups, they found that, on average, scores did increase. This increase was modest, but real. In fact, when calculated on a semester-by-semester basis, the amount of gains in learning shown by students in the Arum and Roksa study is about the same as the amount of gains in learning calculated by Terenzini and Pascarella in their comprehensive summary of student learning in the 1980s. The gains shown by students in the Arum and Roksa data were apparent across sub-groups, including those with differing levels of parental education and students from different racial or ethnic groups.

Arum and Roksa's results do provide us with an important addition to our body of knowledge. They confirm that students gain a modest amount of critical thinking skills in their first two years of college. Their subsequent analyses also provide us with important confirmation of several of the factors that have long been suspected to affect learning in higher education. Students who spend more time on classwork and homework perform better on critical thinking tests than their peers. Students who are more engaged in academic life—being enrolled in a campus where faculty have high expectations, studying by themselves out of class—show bigger increases in critical thinking than students who do not. Students distracted by other parts of their life, and most importantly by non-academic extracurricular activities, show lower increases in critical thinking skills.

The work by Arum and Roksa joins a long line of studies that indirectly measure some of the things we hope will happen in college. This includes increases in critical thinking, academic engagement, social engagement, changes in work habits, and general increases in maturity. Their work, like the other work, demonstrates that it is simply not enough to expect that colleges and universities, left to their own devices, will ensure that learning gains occur. While the increases in critical thinking may not be occurring in as few students as the authors suggest, there is no way to characterize it as anything other than modest among students as a whole.

It is important to know that increases in critical thinking are quite modest in the first two years of college. Yet most students don't come to college to increase their critical thinking skills. They also don't come to college to do the kinds of things that other indirect assessments, like the National Survey of Student Engagement, measure. Instead, most students come to college so they can get a better job. They expect that they will learn some specific concepts and actual skills so that they can be employable when they leave.

Similarly, a large part of the support that colleges and universities enjoy with the broader population and with the business community have little to do with any of the peripheral activities associated with a college education. Instead, the public and businesses expect that

It's time to stop beating around the bush and instead begin directly measuring what students know and are able to do.

colleges and universities will create an educated workforce that can ensure graduates with a good standard of living.

The higher education community has developed several high-quality, but indirect, assessments of collegiate performance. We need more assessments that tell us exactly what students know and are able to do. Arum and Roksa's finding of a 0.5 standard deviation gain in critical thinking skills over the first three semesters of college could be worrying or

While the increases in critical thinking may not be occurring in as few students as the authors suggest, there is no way to characterize it as anything other than modest among students as a whole.

not—one would have to be quite knowledgeable about the psychometric properties of the exam to assess this finding. Business leaders and the public could readily assess the meaning of tests that told us what percentage of students are proficient in interpreting a budget, or drawing up a plan for directing a project, or interpreting the results of a laboratory test.

Despite the fact that two of the major constituencies of higher education are concerned primarily with specific skills and knowledge, we still have not turned the corner in assessing higher education to be able to say what students know and are able to do. The same arguments for why this isn't appropriate were also aired during the standards revolution in K–12 education. They were just as unconvincing then.

In some of the few assessments that have been conducted recently that actually measure students' specific knowledge and skills, the results were no more encouraging than the results from the Arum and Roksa study. For instance, the National Assessment of Adult Literacy found that only 31 percent of college students scored as being proficient in quantitative literacy, a stunning revelation given that these are precisely the kinds of skills most rewarded in the current labor market.

It's time to stop beating around the bush and instead begin directly measuring what students know and are able to do. It's not as though these kinds of assessments do not exist now. A large percentage of students, from several of the most popular undergraduate majors, must take standards-based exams to be licensed in their fields. Teachers, engineers, nurses and accountants, amongst others, must take a high-stakes exam that measures specifically what they know and are able to do in their current fields. Of course, there is debate about the quality and relevance of these exams. This hasn't stopped their widespread adoption. The reason is that for these fields there is a general acknowledgment that we must have *some* standard of quality for graduates. It is not enough in these fields to simply trust that students will get what they need from college. But for the large group of undergraduates who do not plan to work in fields that require these certifications, there is no standard of quality beyond the degree from their institution. Why do we trust colleges in these areas but not in others?

Even though students in fields such as nursing or engineering have been subject to specific standards of learning that will be measured on exams, instruction in these areas hasn't been completely devoted to “teaching to the test.” Instead, the traditions of academic freedom and faculty governance have worked exactly like they should. In institutions where the results of these tests are taken seriously, the faculty have shown a large amount of flexibility in adapting their instruction so that students can learn what faculty think is important *and* be able to measure up to the standards of the field. The two concepts are not divorced from one another.

Indeed, it is actually much easier, and intellectually richer, to shape instructional activities around specific learning goals rather than more general concepts such as “critical thinking.” While it seems likely faculty do indeed hope that their students gain in their ability to think critically, it also seems unlikely that they specifically teach this. Instead, one imagines that faculty teach what they've been hired to teach—English, chemistry, music, physics, and so on. It's much more likely that a chemistry professor will be able to reshape her instructional techniques in order to improve learning in chemistry as opposed to improving critical thinking.

For the purposes of public policy, what we need to know is the level of educational capital in the population as a whole, including the population of college graduates. Work by Margaret Miller and Peter Ewell as part of the *Measuring Up* project has led the way toward this objective. We next need to understand the contribution of colleges and universities to this level of educational capital. Last, we need to understand how colleges and universities can go about ensuring appropriate levels of performance relative to real standards for specific topics. None of these steps needs to happen in exactly the same way in every state, nor for every college. There is adequate room at every stage for diversity and experimentation.

Continuing with further indirect measures of collegiate outcomes will give us the same kinds of results we have seen—appealing, revealing, yet ultimately difficult to act on. It's time to get to the specifics of what needs to change. ♦

Most students come to college so they can get a better job. They expect that they will learn some specific concepts and actual skills so that they can be employable when they leave.

ENGLAND

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lic employees earning more than \$34,000 a year, hiking sales and capital-gains taxes, and increasing the retirement age to bring down an estimated \$1 trillion pension obligation.

They have also moved to shift much more of the burden of the cost of higher education off the cash-strapped government and onto students, letting British universities as much as triple their fees to a maximum of £9,000, or \$14,490, starting in 2012. The financing structure is increasingly similar to the American one (with all the associated problems, including expected declines in diversity), though in England students will not have to pay the cost until after they graduate, in increments based on their incomes.

If a camel is a horse designed by a committee, the same principle appears to apply to a budget drafted by a coalition. This one has succeeded in angering everyone and pleasing almost no one—including the people who proposed it, who turn out to have little control over whether universities honor provisions meant to help low-income students pay. What's happening in Manchester is only the latest local vestige of the tempest.

These dramatic changes, combined with the other public-service cuts, amount to class warfare, say newly radicalized students, who have taken to the streets by the tens of thousands to demonstrate against the government. They swarmed Conservative Party headquarters, breaking windows and hurling a fire extinguisher from the seventh floor onto police below. (No one was seriously hurt.) They famously surrounded a Rolls-Royce limousine heading to the theater with Prince Charles and his wife, Camilla, the resulting photos of whose panicked faces were immediately flashed around the world.

A major university town, Manchester has been a particular hotbed of this dissent, and students are well represented among the chanting demonstrators at the city bud-

get hearing in the Great Hall. They'll go anywhere to make their voices heard against the tripling of fees in a movement that is as stubborn and persistent as it appears futile.

"Please, can you be quiet!" the chairman thunders at them, with no apparent effect.

The students will be only slightly affected by the draconian city budget. Their presence here is easier to understand when a council member starts to speak who is from the Liberal Democratic Party, which pledged before the last elections to oppose a university fee increase but broke its word after joining the Conservatives in the governing coalition. Nick Clegg, leader of the Liberal Democrats, and now deputy prime minister, has been beaten by students in effigy and had to have a cordon of security around him at his own party's spring conference. (Clegg has said his party's reversal was forced by the precarious state of the country's finances, and that the only alter-

An austerity campaign is meant to reduce a record UK peacetime budget deficit that will hit \$235 billion this year—11 percent of the gross domestic product.

native to raising university fees would have been to increase the already high income tax, which Conservatives staunchly oppose, or cut spending on science and other programs.)

The Liberal Democrats are working to get more money for Manchester, the speaker at the city council meeting insists, but there's only so much they can do.

"It's lucky you're in the government, then, isn't it?" a student in the audience shoots back sarcastically, giving voice to the sense of betrayal that has motivated him and others like him to break windows, throw fire extinguishers, and attack the royals.

What's happening in England is a referendum on the hottest philosophical argument in international higher education, over whether it is a public good—profiting society at large by providing an informed, competent and competitive citizenry—or a private one, benefiting the students who receive it, by increasing their potential earnings.

Neighboring Ireland, which has kept its university registration fee comparatively low in spite of fiscal pressures arguably even worse than those in the UK (see related article on page 3), has so far come down on the "public good" side of the debate. American public universi-

ties, steadily raising tuition to offset their own budget cuts, can't seem to decide. But England has, at least from students' point of view. And they're not happy about it.

Higher education, says David Willetts, the minister of education, "is clearly both" a public and a private good. "It's good for the economy as a whole, and it's of course good for social capital," he said. "But there is a very clear economic gain for individuals in terms of extra lifetime earnings, and given that here is this direct financial benefit, it is reasonable to expect the graduate to pay back the cost of their higher education."

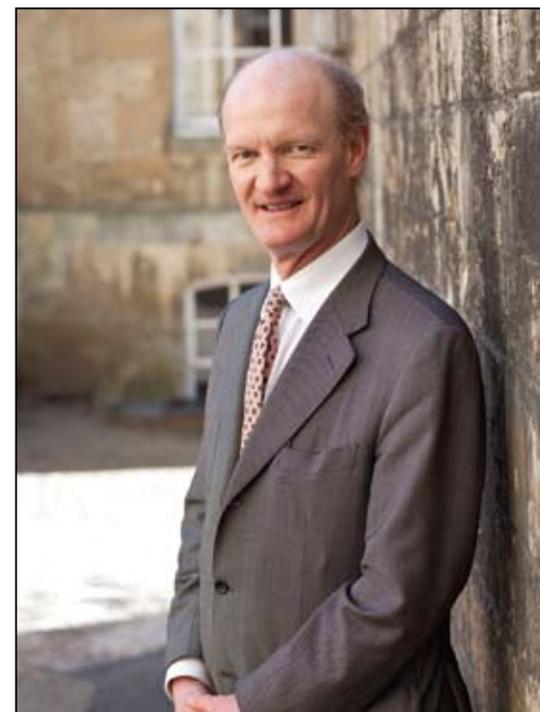
No it isn't, says Charlotte Palmer, a student at Manchester Metropolitan University, whose mother is a social worker likely to lose her job. "Education should be a right. But it's going back to being something only for the privileged," she said. "The money should be taken from bankers and from people who can afford it." Raising university fees, said Palmer, "is indefensible when the bankers are getting six-figure bonuses."

Pierced and tattooed, Palmer was speaking over a cigarette in front of Roscoe Hall at the University of Manchester. Two lecture halls inside the building—named for Sir Henry Roscoe, a 19th-century professor of chemistry who was instrumental in moving what was then called Queens College to this site, and who later served as chancellor of the University of London and a minister of parliament—have been occupied since February by small groups of students from all over the north of England in protest of the fee increase. The conversation was taking place outside because a security guard had thrown out a journalist at the direction of the university's press office, which also later barred a photographer.

"You Are Being Lied To!" blare the posters hanging from the building's walls, next to handwritten schedules and placards. Students man a table draped with more signs and piled high with pamphlets, under the gaze of the hyper-vigilant guards, whose disposition isn't helped by the fact that, as public employees, they have seen their pay frozen and overtime eliminated. (One guard, a student confided, brings them snacks.)

"It's really just a right-wing ideological attack," said Omid Kashan, a first-year Manchester student. "There's no other way to look at it. It's for the rich. It's just another way to keep the working people from getting an education. There's an argument that you never see the money" until the bill comes after graduation. "But it's hanging over you."

Ideological or not, the imposition of tuition has occurred in England with breathtaking speed. Maximum charges of less than \$15,000 may not seem worth rioting over when U.S. private universities' tuition, room and board costs more than three times that much, but students until recently paid nothing at all to go to English universities. It was not until 1998 under Conservative Prime Minister John Major that they were charged a first-ever tuition



DAVID WILLETTTS, BLACK STAR, FOR CROSSTALK

"It is reasonable to expect the graduate to pay back the cost of their higher education," says David Willetts, the minister of education.

fee of \$1,610.

In 2003, the Labour government under Tony Blair let universities set their own tuition up to \$4,830—after having promised in the preceding election not to do so—which would be repaid by students after graduation. Universities lobbied hard for this "top-up" fee, which was supposed to cover the amount of money they said they needed on top of their allocations from the government, and almost all of them immediately charged the maximum allowed and kept pushing to increase it again.

If any party is happy with the fees arrangement, it's the universities, for which the revenues will help make up for almost \$4.7 billion in government funding cuts under the austerity measures over the next few years (offset slightly by a one-time \$435 million infusion to make room for 14,000 more students in science, technology, engineering and math in September).

"We know these are difficult decisions, but in an era of public funding cuts, we have to look fairly and squarely at who pays for the cost of higher education," said Steve Smith, president of the university association Universities UK. "The alternatives would mean universities having to reduce the number of student places or returning to a period of underfunding. Both of these would be hugely damaging to students, universities and the economy." Less money from the government also means less vulnerability to political shifts, less bureaucratic interference, and more freedom for the public higher education sector, which has long been tightly regulated. "It's potentially quite good news for the universities," said Bahram Bekhradnia, director of the independent Higher Education Policy Institute. "They're the winners in all of this."

But the plan has quickly seemed to unravel. The government expected only a small number of the most elite universities to raise their tuition to the maximum \$14,490, but after a brief period of waiting each other out, one after another—Oxford, Cambridge, Exeter, Durham, Surrey,

continued next page



ALEX FOLKES

Nick Clegg, leader of the Liberal Democratic Party, and now deputy prime minister, says the precarious state of the country's finances forced his party to break its pledge to oppose a university fee increase.

from preceding page

Imperial College London—announced that they would charge the full amount, just as they had done in 2003. When 150 academics at the University of Cambridge petitioned administrators to explain their decision in detail and guarantee financial aid, the appeal was rejected. “There has not been a really serious attempt to see how you might reduce costs in the interests of affordability for the student,” carped Malcolm Gillies, vice chancellor of London Metropolitan University, which, in a rare break in the ranks, became the first university to set tuition lower than the maximum.

Students, after all, keep coming. There are almost 400,000 more students in English universities now than there were before tuition started to be charged. The number of applicants rose nearly 12 percent last year and another 5.1 percent this year.

The government promised it would make sure universities provide enough financial aid to keep low-income students from being shut out, but that assurance seemed to ring hollow when its own watchdog agency, the Office for Fair Access, reassured the universities that they would not face sanctions except for “serious and willful” violations—and that this did not include failing even to meet their own targets.

That is an important issue because the commission that proposed the higher fees, chaired by former BP chief executive Lord Browne of Madingley, conducted research (which it left out of its report) showing that students and their parents thought tuition over \$9,660 was unreasonable. “Those from lower socioeconomic groups were more debt averse and concerned that the tuition-fee premium of a more expensive course was not necessarily worth the associated debt,” the survey found. “Some students and parents from across socioeconomic groups thought that variable fees might reinforce a perception that some universities and courses were only for those from higher-income households.” It said most students and their parents

thought the government should pay at least half the cost of higher education, believing that the public benefits were equal to the private ones. (In a survey, 222 companies that do business in the UK predicted that higher tuition fees will result in a less qualified and diverse supply of graduates. Some, including KPMG, Glaxo-SmithKline and Deloitte, say they will now hire new employees as trainees at 18, pay them a salary, and put them through school, or reimburse the workers’ university fees.)

The universities’ decisions won’t just force students and their families to pay more than they want to spend. They might undo what the government had hoped to save.

The problem is that the government will have to cover the cost of students’ tu-

What’s happening in England is a referendum on the hottest philosophical argument in international higher education, over whether it is a public good or a private one.

ition until they graduate, find a job, and reach a certain income threshold, after which they will repay the money just as if it were a loan. This has political advantages, since categorizing these payments as loans means they won’t be counted toward the deficit, and the cost of any defaults will be the problem of some future government, not this one. But Gareth Thomas, the Labour Party’s shadow minister for education, calls it “smoke and mirrors.”

That’s because, with more universities than expected charging the maximum tuition, the plan will cost the government some \$1.3 billion more than anticipated to

subsidize students while they are in school, according to the research arm of the House of Commons—almost half of what it hoped to save by cutting direct payments to the universities in the first place. (The Higher Education Policy Institute, which is based in Oxford, also calculates that the government’s projections of income-based repayments are based on overly optimistic estimates of what students will earn when they graduate.)

“The one bit that will stay on the main public accounts is the estimate of what won’t be repaid, and the estimates vary wildly around how much will

be repaid and not repaid,” said Thomas. “As a result, the government are going to have to find extra money, because they’re not going to find as many savings as they thought.” One result, he said, is that the cuts in direct appropriations to universities may have to be even deeper. So while students would be paying much, much more tuition, they’d be getting much, much less.

In fact, many universities have already merged or closed departments and reduced services and staffs. “I can’t see the reasoning in cutting so much and then raising fees on top of that,” said Jasmine Dunning, who plans to begin at university next year but is already taking part in the Manchester sit-in. “They do need to make up their minds.”

Then there is the vexing issue of how to make European Union students who go to university in England repay their tuition after graduation. Under EU rules they have to be treated (and charged) the same as English students, but when they return home they will be out of UK jurisdiction. EU students already owe the British government \$269 million, up from \$68 million in 2008, even without the tripling in fees, and the number of EU students at English universities continues to rise significantly. “It seems obvious to me, but it seems difficult for the government to admit, that it will be much more difficult to get the loans repaid by students living in other countries,” said HEPI’s Bekhradnia. (Non-EU foreign students, many from the United States, pay tuition of as much as \$41,860, a huge source of income for the universities, which have been fighting a change in visa rules expected to significantly reduce it. Last year one out of every ten dollars earned by English higher-education institutions was paid in by non-EU students from abroad.)

In the end, Bekhradnia said, “if the sums were right, it could give rise to savings in public spending. The reality is that the sums are probably wrong, and the spending will be, if not as great as now, then not very much less. The taxpayer may be better off, but I suspect not, because the government will probably be paying more than it bargained for.”

The government has warned that if too many universities charge the highest fees, it will retaliate by making deeper cuts in direct allocations, including for research. Settling so widely on the maximum tuition will be “extremely hard for institutions to defend,” Willetts said in a speech at the University of Nottingham. He said some were “rushing to £9,000 without thinking about the impact on students.” Willetts is also trying to foster competition by supporting private universities, including private, for-profits with U.S. ties such as BPP, owned by University of Phoenix parent the Apollo Group.

Even in the worst case, Willetts said, the math does add up. “If you replace £1,000 of teaching grants with £1,000 of fees and loans, of which you get back even £700, it makes sense all around,” compared to a current system under which the gov-



Gareth Thomas, the Labour Party’s shadow minister for education, says the government’s plan to recover tuition costs from students after they graduate is “smoke and mirrors.”

ernment recoups none of its investment in higher education. “And for the universities there’s the same amount of resource coming in as there was before. I see it as a win-win.”

Besides, Willetts said, the change will bring a needed structural reform. Where now the government sets enrollment numbers, and funds universities based on them, “In future, the money will go with the students to the universities that the students choose. It is a liberalization,” he said. “We are trying to move toward a much more flexible system at the micro level. The competition will be first of all between existing universities, because we hope it will be easier for universities at the high end to expand their places. But there will indeed be alternative providers and a flexibility in the system to ensure that alternatives will come in. We’ve already got some, like BPP, but I suspect there will be more.”

Even here, Bekhradnia said, “The rhetoric is that the taxpayers shouldn’t fund teaching directly. That suggests that the

At the University of Manchester two lecture halls have been occupied since February by small groups of students in protest of the fee increase.

public benefit of higher education is close to zero. The private benefit is all there is, and the student should be forced to pay.”

Back in Manchester, the city council, to no one’s surprise, passes its austerity budget, and the students return to their sit-in. Charlotte Palmer takes another drag on her cigarette. Wait until the higher charges take effect, she says. Then you’ll see real protests. ♦

Jon Marcus is a writer based in Boston who covers higher education in the U.S. for the (UK) *Times Higher Education* magazine.



Less money from the government, with higher fees, is “potentially quite good news for the universities,” says Bahram Bekhradnia, director of the Higher Education Policy Institute. “They’re the winners in all of this.”

Presidential Leadership for Public Purpose



THE NATIONAL CENTER FOR
PUBLIC POLICY AND
HIGHER EDUCATION

MAY 2011

A Special Report by the National Center for Public Policy and Higher Education

IT HAS BECOME a well-rehearsed litany. Declining public appropriations for higher education by states with reduced tax revenues and increased demands to fund healthcare, roads, prisons, and K–12 education as first-order priorities. Tuition increases that each year substantially exceed the growth of family income, threatening to put a college education beyond the reach of too many low-income students. A changing demographic profile that ought to yield an increasingly diverse college student body but is not doing so. The growing prominence and market success of private-sector/proprietary providers as well as alternative modes of educational delivery through digital technology and other means. Questions about the effectiveness of learning and the value of the education that universities and colleges provide, as measured by the rates of student persistence and graduation. A seeming gridlock that often prevents institutions from adapting to change by any means other than growing larger and adding to existing costs. And finally, an abridgment of the hope that doing a better job of documenting higher education's value would yield an increase in public support—combined with an instinct that greater public financial support will never come about without such evidence. It is a set of questions that pertains not just to effective learning and the financing of higher education but equally to the continued ability of colleges and universities to serve the public interest.

The discussions these questions have engendered are often as fractured as the list of lamentations is long. Too often, the resulting debates are without focus, frequently without apparent purpose, and, alas, too often missing the voices of university and college presidents. In previous epochs, presidential leadership was a force for change in American higher education, as university and college presidents served not just as witnesses and respondents but also as active shapers of the national dialogue.

To engage presidents more directly in what is becoming an increasingly rancorous discussion of higher education's current priorities, the National Center for Public Policy and Higher Education convened a set of presidential soundings and exchanges in the spring and summer of 2010 with funding from the Bill & Melinda Gates Foundation and Lumina Foundation for Education. The process included one-on-one interviews and a two-day roundtable discussion to consider higher education's role in meeting the nation's need for a more highly educated and skilled population in a time of dramatic change and uncertainty. In all, the process involved presidents of 28 universities and colleges—including two- and four-year institutions large and small, public and independent, proprietary and nonprofit. A Presidential Roundtable convened in Leesburg, Virginia, in July 2010 included 16 of the 28 presidents initially interviewed who were able to participate. The goal of these presidential soundings was to provide a vision of higher education's continued vitality in a time of fiscal constraint, and to offer a set of actions that presidents can take to help both their institutions individually and the nation collectively to move forward.

Vision and Commitment

The irony confronting all college and university presidents, including

ourselves, is that most of the institutions we lead were founded by men and women who, having understood the need to respond to societal challenges, made institutional change their first priority. Public policy and public agencies were often their institutional partners in promoting a vision of change and a commitment to excellence. The Morrill Act of 1862, which led to the creation of a national system of state land-grant universities, foresaw the need for a population that, because it knew more, could do more. Though signed into law during the upheaval and uncertainty of the American Civil War, the Morrill Act conveyed a powerful vision of the nation's productive vitality in the coming age.

Following the Second World War a second set of federal initiatives further transformed American higher education by making clear that the nation's colleges and universities—and by extension, their president-leaders—were to be principal vehicles for fulfilling the vision of a nation prepared to provide global leadership. The first was a largely serendipitous federal investment in American higher education—the GI Bill, which resulted both in an expanding pool of college-educated workers and a federal commitment, later formalized in the 1970s, to making a college education broadly available. The rapid expansion of the American economy during this time increased living standards for nearly everyone and made it possible for growing numbers of American families to send their children to college. Shortly after the GI Bill's implementation, a compelling report published in 1945 by Vannevar Bush, entitled "Science, the Endless Frontier," emphasized the critical importance of scientific discovery and progress not just for the advancement of human well-being, but also for the nation's strategic purposes in what had become a world theater of ideological and military contention. Bush's case for science ultimately yielded the creation of the National Science Foundation and National Institutes of Health, providing the foundation for the development of the modern research university in the United States.

Complementing these federal investments were the equally dramatic increases in local and state spending for higher education. The expansion of the community colleges during the 1950s and '60s, as well as the establishment of regional universities, often as part of new state university systems, further extended the promise of college to any student with a desire to learn and a willingness to work hard.

Constricting Horizons

By nearly everyone's account, the landscape of expanding opportunity created in earlier times of societal vision and commitment has now become a constricted range for growing numbers of students, particularly those for whom the cost of attending college is a major consideration. The percentage of

Our roundtable brought together presidents of universities and colleges across the full spectrum of higher education, including leaders of public-sector, independent, and proprietary universities and colleges.



Presidential Roundtable facilitator Robert Zemsky, professor and chair, the Learning Alliance for Higher Education, University of Pennsylvania (left), and Gail Mellow, president, LaGuardia Community College

Photos by John Troha, Black Star, for CrossTalk

In previous epochs, presidential leadership was a force for change in American higher education, as university and college presidents served not just as witnesses and respondents but also as active shapers of the national dialogue.

whites who have earned a Bachelor of Arts or a Bachelor of Science continues to outpace the degree attainment rate of Hispanics and African Americans by a factor of roughly two to one.

For those of us who participated in the Presidential Roundtable, this disparity in college participation and attainment has become higher education's principal challenge—one that directly confronts the nation's continued vitality, particularly when coupled with two other facts. First, the United States has fallen substantially behind many of the nations with which it com-

petes in the global marketplace in terms of the proportion of its citizens with a college education. Second, the populations that are growing the fastest across the United States are those that have been least well-served by the current system of higher education. More here is at stake than simple equity. What is required is a fundamental expansion of educational opportunity, as expressed in the Obama administration's call for an additional eight million college graduates by 2020 beyond those currently predicted to earn a college degree.

At the same time, there is a continuing need to educate all Americans, providing the critical knowledge and skills that allow graduates to function as thinking, engaged, and contributing members of society throughout life. The challenges of the future will require an American population that possesses verbal and numerical literacy, critical thinking, and effective communication as a foundation for participation in a nation based on democratic principles.

Many have observed that higher education has evolved into a mature industry, organized and run in essentially the same way for half a century. Dramatic changes have occurred through these decades—in the nature of societal needs and challenges, in methods of creating information, and in modes of teaching and learning. Changes in the nation's demographics are yielding a population that is more diverse in terms of ethnic, cultural, and economic background—a population whose members bring widely divergent levels of preparation for college, who approach the act of learning in different ways, and who are accustomed to using digital technology as an integral part of their learning.

The problem, simply stated, is that American higher education at its core remains vested in a structure designed for a student population more characteristic of past decades than of the present or future: a structure designed to serve what was then a middle-class, predominantly white student body—a subset of the 18- to 22-year-old population that had chosen to attend college

even though other opportunities had then existed for productive employment without a college degree. This was a student population that for the most part matriculated directly from high school, enrolled full-time, and graduated in four or five years. With the virtual disappearance of opportunities for unskilled labor in the U.S., in this century a college education has become essential for anyone who seeks meaningful employment and social mobility. However broad the spectrum of traditional higher education institutions in terms of mission, size, and control, too many have yet to recognize what it means to provide students from a broader range of educational and socioeconomic backgrounds with an education that allows them to find fulfilling and productive places in the workforce and in society itself.

American higher education faces a major challenge in its capacity to edu-

cate students in the numbers required to increase the nation's competitiveness in a global economy. Virtually every state now faces severe constraints in its ability to support the system of traditional public and independent higher education institutions within its borders. Public universities and colleges inevitably find that the amount of their budgets funded by state appropriation accounts for a steadily shrinking share of the whole. For the past 30 years, both public and independent nonprofit institutions of higher education have met the need for additional resources, in large part through tuition increases which have averaged three percent to five percent above inflation and growth in family income per year in real dollars.

The nation's system of higher education is often described as a pyramid in which the foundation layer consists of students attending open-enrollment institutions, including students who matriculate in community colleges, technical institutions, and proprietary institutions offering two-year degrees or certification in targeted employment skills. Further up the pyramid is a substantial cohort of students in public regional universities as well as in less selective independent liberal arts colleges. The next stages of the structure include students in state flagship research universities, and finally students enrolled in the nation's most selective independent colleges and research universities.

As it tapers toward the top, the pyramid comprises an ever smaller number of institutions with selective admissions that enroll the nation's highest-achieving students, who in many cases are also the most advantaged students in terms of educational and socioeconomic background. What may be less clear from the image of the pyramid itself are the different expenditures made to educate students at each tier of the structure. In fact, the dollars expended per student in the lower tiers of the system are substantially less than the dollars spent to educate students in the upper strata. From the standpoint of meeting the nation's need for a better educated and more highly skilled population in the coming decades, the higher education pyramid as it now exists would need to be inverted.

It is the nation's community colleges and regional universities—open-enrollment or less selective institutions with a strong mission to promote educational access—that have experienced the effects of financial recession in the most direct and painful ways. In recent years, these institutions have accommodated substantial growth in enrollment with little or no corresponding increase in public appropriation; very often these two- and four-year institutions feel the double whammy of increased enrollment accompanied by double-digit percentage reductions in the rate of state appropriation. The inevitable result is larger class sizes, a deteriorating ratio of full-time to adjunct faculty, and fewer opportunities for the direct faculty-student interaction and mentorship that often mark a turning point in a student's life. Some community colleges in particular have found themselves stretched to the very limits of their capacity, forced to turn away applicants with a sobering message that says essentially, "There is no room at the inn."

Too often universities and colleges tend to focus more intently on emulating their more selective peers than on taking stock of their students' learning needs and helping them achieve educational success. Institutions of every kind



Craig Swenson, chancellor, Argosy University System (left); Paul Zingg, president, California State University, Chico; and Gregory Wegner, Managing Editor, *Policy Perspectives*, Knight Higher Education Collaborative, University of Pennsylvania

naturally seek to enroll students of promise among their study body, though in some cases a desire to attract the best and brightest can eclipse a commitment to educate students from a range of educational, ethnic, and socioeconomic backgrounds including first-generation college students. Very often the strategic vision pursued is to advance an institution on the scale of public esteem—whether measured by the annual media rankings of colleges and universities or by other factors that make an institution appealing to the more advantaged and high-achieving students, to the public, and to other members of the profession generally.

The element that tends not to figure substantially in the visions and strategic plans of institutions is a concern for measurable improvement in learning.

The expansion of the community colleges during the 1950s and '60s further extended the promise of college to any student with a desire to learn and a willingness to work hard.

The more typical strategy is to focus an institution's imagination, energy, and resources on becoming more selective, more attractive to the best students and faculty, rather than on configuring the institution to educate the student body of the future. While there are promising signs in some states that have mandated steps for more seamless transfer between two- and four-year institutions, many four-year institutions need to build more constructive relationships with regional community colleges to facilitate coherent

progress for students who have chosen to begin their college education in a less costly institution.

Even less likely to appear in the aspirations of most four-year public and independent higher education institutions is a goal of working constructively with regional K–12 schools to foster a better understanding among students of the advantages that result from a college education, and to help students and schools identify the middle and high school courses and the habits of mind that best prepare one for college-level study. The fact that K–12 teachers are trained for their professions by the nation's universities and colleges represents a substantial and largely missed opportunity to establish strong linkages of reciprocal engagement with teachers and their school systems, helping to realize the vision of a more seamless K–16 education.

Value and Utility

Continuing these trends will inevitably result in a further separation between the prevailing nature of higher education and the most pressing needs of a nation struggling to maintain its place in a global economy. Many regard higher education as having commodified itself, having lost much of the passion and commitment that characterized an earlier time when the goals of universities and colleges were perceived to be more closely aligned with the nation's needs for higher education. Some foresee a worst-case scenario in which higher education devolves further into a series of niche markets—in which the most selective institutions offer a boutique education to those most able to pay, in which proprietary institutions with low overhead costs attract growing numbers of students to career development programs for which there is high market demand, and in which public institutions highly dependent on declining state appropriation experience both an erosion of educational quality and a diminished appeal to potential students as tuition increases place them beyond the threshold of affordability.

One result of this increasing commodification of higher education is a weakened proclivity among parents, students, policymakers, and the general public to regard higher education as having intrinsic value—a quality in its own right that prepares students for a lifetime of learning and growth and thereby strengthens the nation's social, moral, and civic well-being. The more prevalent disposition is to regard higher education in terms of its utilitarian purpose. While the rationale for the support of higher education has never been devoid of practical considerations—ranging from the need to train future pastors in

the 18th century, educate a rising generation in the agricultural and engineering sciences in the 19th century, or train K–12 teachers for the influx of the baby boom generation in the 1960s and '70s—there is now far less willingness to regard universities and colleges as special kinds of institutions, deserving of respect and support as stewards and creators of knowledge.

The financial recession of the past two years has increased the public perception of higher education institutions as being more attuned to their own vitality than to the well-being of those they serve. Recent national surveys conducted by Public Agenda indicate that while most Americans consider higher education as essential for a fulfilling and economically productive life, a growing proportion of the American public perceives no essential difference between the behaviors of traditional higher education institutions and other enterprises concerned mainly with their own financial health. In a Public Agenda survey conducted in 2007, 52 percent agreed with the statement that “colleges today are like most businesses and care mainly about the bottom line.” In 2008, 55 percent assented to this statement, and by 2009, 60 percent of survey respondents conveyed this view. A declining share of the public now regards colleges and universities as institutions chiefly concerned with the quality of education they provide or the affordability of their academic programs.

In another respect, it is the tension between changing societal priorities and the seeming inertia and introspection of traditional institutions that feeds a decline in the intrinsic value accorded to higher education. Perhaps no societal institutions, including colleges and universities, can ever be perceived with the same generosity of spirit in the wake of continuing public scandals involving virtually every profession from Watergate forward. There are also many cases in which societal values themselves become fixated on matters that lead to costly and often unproductive outcomes. The U.S. has become a nation that spends more on prisons than on higher education. In higher education itself, an example of skewed priorities can be seen in the fact that in some institutions, intercollegiate sports attains a stature and appeal out of all proportion to its role in fostering a student's educational and social development in college.

Beyond these factors, the sense of exasperation often heard among policymakers and the general public stems from a sense that many public-sector and independent universities and colleges, particularly four-year institutions, are slow to respond to emerging changes in social and economic circumstances. Too often there is a sense of disconnect between the language of legislators and the public, on the one hand, and the language of traditional higher education institutions on the other. Higher education administrators and faculty talk about the values that inform learning and the



Daniel Hamburger, president and CEO, DeVry Inc.



Robert Atwell, president emeritus, American Council on Education (left), and Richard Legon, president, Association of Governing Boards of Universities and Colleges



James Votruba, president, Northern Kentucky University (left), and Patrick Callan, president, the National Center for Public Policy and Higher Education

pursuit of knowledge. Those outside the academy talk about the need for jobs and a population with employable skills. One of the great challenges confronting higher education is to connect these two conversations more effectively than before.

These factors, in combination with a major economic recession, have helped to feed a set of attitudes among policymakers and the general public very different from those that gave rise to the Morrill

Act, the GI Bill, and the higher education amendments that created the Pell grant program. The current assessment by legislators and other public policymakers is that higher education, given its prevailing inward focus, is not a major part of the solution to the challenges facing the nation; in fact, many perceive that, unlike K–12 schools, colleges and universities are neither in crisis nor can they be counted upon to help reshape the nation's agenda.

Structure and Change

The financial recession of the past two years has driven home a sobering awareness that colleges and universities cannot expect to receive a substantial reinvestment of public dollars. Even if state governments were in a position to appropriate more dollars, neither higher education in general nor a state's publicly financed colleges and universities would likely rise to the top of the list of contenders for increased public funding. While policymakers may consider higher education to be important, there are three observations about these institutions that are likely to give pause to legislators in any consideration of resource priorities:

- Universities and colleges as a whole have not been as responsive as they could have been in meeting the evolving public need for higher education, preferring instead to grow and develop on their own terms.
- Too often traditionally organized colleges and universities, both public and independent, seem incapable of innovation or change except by adding to the full range of programs currently in place.
- Many universities and colleges have not succeeded in improving either persistence or degree attainment.

Collectively these observations represent a call for greater agility and innovation on the part of our institutions as well as a capacity to increase substantially the proportion of citizens who both begin and complete a college edu-

cation. In a more fundamental sense, the observations represent a call for higher education institutions to become more accountable for the dollars that states provide them. In the minds of many policymakers, business leaders, and the general public, higher education institutions too often seem unwilling to be held accountable for the public dollars invested on their behalf. Our institutions must accomplish what to many will appear a truly daunting task of educating more students while simultaneously doing what they have largely proved unable to do for the last 50 years—curtail those habits and customs that have caused our costs to increase substantially faster than household income.

Even when our institutions want to change, the forces acting to preserve existing programs, customs, and procedures remain extraordinarily strong. The agents that can inhibit change within a college or uni-

versity are both internal and external. Any proposal for a change in academic programs or personnel can expect to encounter resistance from faculty; apart from the natural instinct to protect one's own domain, the internal argument against radical change is that it will cause the institution to lose standing among peer institutions. Board members can also align themselves with particular programs and intervene to prevent needed reform. Many public universities and colleges find another impediment to change in the strong regulatory environment state governments have created, which in some cases requires state approval for virtually any step that an institution or a set of public institutions wishes to take.

Not every institution needs to change in the same way; differences in mission will point to different courses of action in different universities and colleges. Regardless of the type of institution, however, a process of meaningful change will require strong presidential leadership in order to succeed. A practice of simply staying the course, pressing on in the hope of renewed public appropriation, is not a strategy for the future. As long as universities and colleges present themselves as being continually in need of more money, both the public and its elected officials will likely consider higher education as part of the problem, not the solution.

Different Modes of Proceeding

Even though the exemplars of meaningful change in higher education remain comparatively few, our conversation identified several instances of innovation that offer the hope of new pathways through the gridlock of conventional practice within the academy. Some of these constitute meaningful steps to work within the culture of traditional public and independent universities and colleges. Others are initiatives that essentially begin with a blank slate, setting about to create educational programs of value from the ground up.

Streamlining the curriculum. One of the prime opportunities any institution can pursue to make the pathway to a degree more straightforward and efficient is to focus the programs of study more directly on essential courses that



Donald Farish, president, Rowan University (left), and Frank Friedman, president, Piedmont Virginia Community College

are fundamental to the institution's learning goals. Many colleges and universities have experienced a proliferation in course and program offerings as a result of the laissez faire environment that gave rise to dramatic curriculum expansion from the late 1960s forward. In a system that requires 120 credits to graduate, it is not uncommon to find that more than one-third of students who graduate have taken 145 or more credits. This phenomenon represents tremendous inefficiency not just for the institution but also in terms of costs that students incur in earning a four-year degree.

The array of courses listed in the catalogs of many institutions today evokes the image conveyed 25 years ago by the Association of American Colleges (now AAC&U) in its "Integrity in the College Curriculum": that the undergraduate curriculum has become a smorgasbord in which anything goes. While the thought of making structural change in the curriculum to increase the effectiveness of students' progress toward the degree may seem attractive in the abstract, achieving this goal is extraordinarily difficult for any traditional

There is a continuing need to educate all Americans, providing the critical knowledge and skills that allow graduates to function as thinking, engaged, and contributing members of society throughout life.



Jane McAuliffe, president, Bryn Mawr College (left), and Charles Reed, chancellor, the California State University

college or university in the U.S. It is a goal that cannot be achieved without presidential leadership. Curricular reform requires that an institution take a deliberate step back from the array of graduation requirements both within the major and general education. Requirements for some disciplinary majors result from national accreditation standards, though in other cases a growth in the number of required units for the major may derive primarily from a department's wish to sustain its enrollment levels.

At a time when fewer students may aspire to graduate school, it is reasonable in some cases to ask how many specialized courses for a major are actually necessary. Reducing the number of electives could also result in a more focused curriculum and a sense of shared progress among cohorts of students, who would be more likely to proceed together through the curriculum and provide mutual support in learning. Such a step could also effectively increase the institution's capacity to staff courses in the core curriculum with

full-time tenure-line faculty, yielding a reduced need for adjunct faculty and a reduction of costs. Making headway on curriculum reform must involve steps that make such a change in the faculty's own interests. Creating a more focused and direct set of routes to the degree could reduce institutional costs and increase the likelihood of students completing their studies and graduating in a timely way.

Applying digital technology.

Beyond its ability to support distance education, digital technology creates the capacity to rethink the processes of teaching and learning. Digital tools infuse the interactions between students and faculty in tradi-

tional college courses, creating a variety of modes for instruction and dialogue both within and outside of class. Technology creates avenues for faculty members to engage students in different ways, and to create new teaching materials in digital form. A generation of students has come of age in the presence of technology, and these students fully expect that their own learning process will involve digital means of interaction with the faculty, their student peers, and sources of knowledge.

The power of the Internet has created an environment of unmediated access to information, in contrast to an earlier time when higher education and

the academic disciplines served essentially as stewards of important knowledge. One of the essential skills higher education must impart to students in the digital age is the ability to think critically, to discern the value of information they encounter, and to make responsible choices based on what they have discovered. Some institutions have taken a further step in applying the tools of technology to rethink fundamentally the teaching and learning process. Such innovations often emphasize project-based learning and concept mastery over the sheer memorization of content which can easily become outdated.

Regardless of how far an institution chooses to pursue the avenues to improve learning through technology and alternative pedagogies, there is a need to mentor faculty members in the use of these tools to meet the learning needs of current and future students. Working effectively in these modes can result in increased student success in learning and graduation.

Learning from private-sector institutions. The dramatic and steady growth in the number of proprietary institutions of higher education through the past decade makes clear that these

institutions have introduced a viable and important set of options to higher education. Private-sector institutions do not experience the constraints that often inhibit change in traditional colleges and universities; they have proven themselves particularly adept in addressing the needs of adult learners who must combine education with work and other responsibilities. The enrollments of proprietary institutions now approach 12 percent of all postsecondary education enrollments in the U.S. To be certain, there are pointed questions and increasingly vociferous disagreements—among policy-makers, higher education leaders, and members of our own roundtable—concerning potential abuses in recruitment and financial aid practices as well as the quality and utility of some program offerings in proprietary institutions. Yet proprietary institutions have clearly found ways to respond to shifting demand for higher education with greater alacrity than traditional public-sector or independent institutions.

The increased flexibility of proprietary colleges and universities derives principally from their different traditions of ownership and decision-making. In proprietary institutions, it is the institution, rather than the faculty, that owns the curriculum. The institution can set standards for instructional quality and method, and then scale its programs up in multiple settings. The institution has no obligation to offer a full range of courses, and it need not continue a program if the market demand has diminished. The profits that proprietary institutions earn are allocated not just to shareholders and taxes but also to capital expenditures to enhance the learning environment of students. Private-sector institutions have also proven themselves more proficient than most traditional colleges and universities in applying technology to achieve their educational purposes.

The difference everyone focuses on, however, is that faculty in private-sector enterprises generally do not receive tenure or even the assurance of continued employment. While proprietary institutions do employ some full-time professors, the appeal made to most faculty is very much a "pull" strategy—one that attracts faculty members through incentives—the prospect of auxiliary income, linked in some cases with the opportunity to approach the teaching and learning process in different ways with different students. Many of those who serve as instructors at private-sector institutions are also tenure-line faculty members at traditional universities and colleges; and it is sometimes observed that faculty members who are strong and vocal advocates of academic governance in their "home" institutions are more amenable to policy changes

American higher education faces a major challenge in its capacity to educate students in the numbers required to increase the nation's competitiveness in a global economy.



Gene Block, chancellor, University of California, Los Angeles

implemented by the managers in a proprietary setting.

We do not believe the issue is tenure per se—it is a practice that has served higher education well in preserving and strengthening the independence of the faculty-scholar. We do believe, however, that the active consideration of other forms of contractual relationships between those who teach and the institutions they serve is long past due.

Creating revenue-generating centers within not-for-profit institutions.

A promising strategy to serve public purposes and generate an alternative source of revenue is to establish self-funding units within a traditional public

The financial recession of the past two years has driven home a sobering awareness that colleges and universities cannot expect to receive a substantial reinvestment of public dollars.

or independent institution. One possibility is to create a program of adult continuing education within a public or independent university or college. Often these units are able to explore different models and reconfigure themselves to address emerging needs and opportunities in ways that the traditional academic program cannot. Because they serve primarily students who are seeking educational skills and certification for employment, these units may not elicit the full respect of an institution's more traditional academic departments.

Part of the challenge is to create the incentives—to exercise the “pull strategy”—that helps faculty members see the benefits that result from the ability to innovate expeditiously in continuing education programs. A program of this kind can operate as a limited liability company (LLC), in effect combining attributes of a not-

for-profit mission with a unit that generates revenue to cover its costs and provide incentives for faculty to participate. In such an arrangement, state funds may well support the university's core undergraduate and graduate programs, while the adult education classes are funded entirely from that program's own tuitions. While faculty members are not typically required to teach in an institution's continuing education program, there are incentives for them to act in ways that benefit the public interest as well as their own professional development.

Presidents to Presidents: Making Personal Commitments

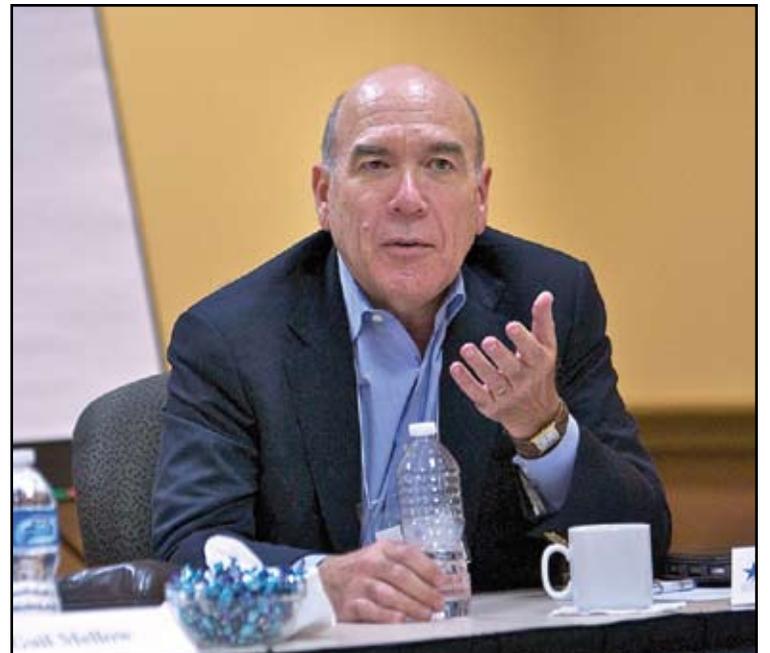
In our willingness to take on the significant challenges facing higher education, at times speaking what others might well consider the unspeakable, we drew strength from our very diversity. Our roundtable brought together presidents of universities and colleges across the full spectrum of higher education,

including leaders of public-sector, independent, and proprietary universities and colleges. Our conversation exemplified the extent to which there is essential agreement among different sectors of higher education in the assessment of current challenges and in the kinds of actions institutions can take to address those challenges. At the same time, none of these challenges can be effectively addressed without the strong leadership that presidents must provide. The actions that we propose require a strong personal commitment of presidents to pursue as key goals in their professional lives. Our recommendations are made in the first person plural: By speaking in this collective voice, we underscore the need for a kind of presidential leadership that is willing to work collaboratively with others to achieve shared goals, within and across higher education institutions.

As we hope we have made clear, we understand that the issues confronting higher education are both substantial and often divisive. What American higher education will require in the decade ahead is a willingness to rethink its deeply embedded structures. There will need to be changes in how our institutions



Stephen Lehmkuhle, chancellor, University of Minnesota Rochester (left), and David Maxwell, president, Drake University



Richard Lariviere, president, University of Oregon

both budget our resources and teach our students. Institutions will need to explore and take advantage of new models, drawing from promising instances of innovative approaches to change within traditional public and independent institutions, as well as from private-sector providers that constitute a vital and growing share of higher education. Institutions will need to consider curriculum reform as a core element both for improving educational attainment and containing costs. Even more broadly, colleges and universities need to evaluate what they teach, how they teach it, and how they evaluate learning success.

Responding successfully to these challenges will result in a roster of institutions that are less homogeneous, more distinctive in character and structure, as each sets about to improve the learning of its students while constraining what it costs to deliver an effective and quality education. While no president can single-handedly ensure this result, no institution will likely succeed in both improving student learning and constraining costs without presidential leadership. The same paradox applies to the question of ensuring that American higher education comes to be truly representative of the national body politic. No amount of presidential exhortation will close the attainment gap—yet no institution on its own is likely to contribute to the necessary re-making of the nation's collective student body in the absence of strong leadership on the part of its chief executive.

Here, then, is our collective agenda for presidential action:

Be a Public Advocate for the Beneficial Impact of Higher Education

- Convene the conversations—within your institution and with higher education's external stakeholders—that focus on higher education's sustaining commitment to advance public well-being by providing a high-quality, affordable education to a changing population of learners.
- Articulate the need for public institutions to have sufficient flexibility within state regulatory structures to pursue alternative approaches to fulfilling their mission in a changing financial, demographic, and learning environment.
- Make a personal commitment to reach communities of young people who are underrepresented in higher education. Visit schools, churches, com-

In the minds of many policymakers, business leaders, and the general public, higher education institutions too often seem unwilling to be held accountable for the public dollars invested on their behalf.

munity organizations, and other venues to convey both the benefits that result from a higher education and the kinds of courses in middle and high school that prepare students for college success.

- Make a concerted effort to tell your institution's story, particularly as it relates to achieving public purposes. Cite examples—to legislators, and to the public in general—of how your institution has transformed the lives of graduates.

Develop Partnerships with Other Stakeholders

- Lead the efforts within your institution to strengthen partnerships with K–12 schools, building on the fact that colleges and universities train the nation's K–12 teachers for their professions. Work with leaders of K–12 schools to develop ways of helping more students understand both the benefits of a college education and the steps needed to prepare for college study through the middle and high school years.
- Forge meaningful linkages with K–12 schools that can help advance education at all levels. Without presuming that higher education can “fix” the challenges confronting K–12 schools, presidents should provide public support and offer assistance as requested by K–12 leaders to ensure that more students are able to read, write, and perform arithmetic functions by fourth grade. This benchmark offers a telling measure of students' likelihood of achieving educational success, in school or in college. In taking these steps, a president affirms that program completion is a full system problem involving higher education as well as K–12 schools.
- Establish strong partnerships among two- and four-year institutions in the local region to minimize the hurdles students often encounter in the transfer process.

Lead Your Institution in Understanding Challenges and Making Needed Change

- Draw the attention of faculty to the changing environment for higher education and the implications of those changes for your institution in the future. The issues of higher education quality, affordability, and capacity must be topics of active discussion inside your institution as well as without.
- Lead your faculty in understanding the changing composition of higher education's student body—in terms of ethnicity, financial circumstance, modes of learning, and goals after graduation—and the implications of those changes for higher education in the decades ahead.
- Work to shed new light on the common, though mistaken, assumptions about the cyclical rebounding from a financial recession. Actively counter the perception within your institution that the most fitting strategy is to hunker down and await the return of more favorable economic circumstances rather than engage in meaningful structural change.
- Provide strong leadership to eliminate some of the obstacles that prevent your institution from doing the right thing in fulfillment of core educational and social values. For example, impress on tenure committees the need to take account of the important service that an African American faculty member contributes to your institutional mission in being a mentor to minority students.
- Lead the charge in bringing the full power of institutional commitment to beneficial actions that too often exist as isolated boutiques or cottage industries within your institution. Commit your institution to goals that lend themselves to measurement and accountability for achieving a public purpose—for example, a goal of enrolling a certain percentage of the student body who are first-generation college students, and actively supporting their educational progress and success.

Provide Strong Leadership for the Improvement of Learning

- Provide professional development opportunities and support for faculty members who seek to improve your institution's graduation rate. Support faculty efforts to develop evaluation procedures and intervention strategies that can increase the rate of student persistence and success.
- Support the measures of persistence and sustained learning as criteria for institutional effectiveness. Lead your institution in such actions as adopting a Head Start program for tutoring students preparing for college.
- Commit your institution to adopt better means of assessing the teaching and learning process—what happens “inside the box.” Higher education

can no longer expect to win public support through an assurance that “inside the black box, amazing things happen to students.” Commit your institution to voluntary accountability reporting that demonstrates how it is meeting its educational goals.

A Continued Journey

Though it was not without tough-minded candor that we confronted the challenges facing the nation's colleges and universities, our roundtable conversation nonetheless gave cause for optimism. Our exchanges over two days

reaffirmed the essential mission and purpose of our universities and colleges to serve the nation's public well-being through education and the creation of new knowledge. Different though our institutions are in some respects, they share a common heritage and commitment to serving public purpose. The changes our institutions have experienced and will continue to face are substantial, and the pathways to meeting those challenges are neither simple nor straightforward. Most of our institutions bring strong commitments to faculty autonomy, curriculum, col-

legial governance, and organizational structure. These traditions have contributed substantially to higher education's achievements while helping ensure the freedom of academic pursuit and the integrity of institutional decision-making.

Presidential leadership of the kind we describe does not mean issuing proclamations and expecting broad compliance; it means working productively with faculty members, providing them with information on changes within society and higher education, and gaining their trust as partners in a shared effort to ensure the continued vitality and well-being of the institution. The specific actions presidents must take to lead the process of transformation will differ by institution as each confronts the need for change in the context of its particular values and culture. We are convinced that with strong and effective presidential leadership of this kind, colleges and universities will continue to progress on a course that stresses commitment to quality and inclusiveness, even in an environment of reduced public resources.

It is often observed that no other country has equaled the United States in the rich capacity and diversity of its higher education institutions. Colleges and universities have been part of the fabric of this nation and a strong factor in many of its spectacular achievements through the 20th century. Yet higher education's seminal contributions in the past do not guarantee its success in educating a student population that is larger, more diverse in culture, ethnicity, educational and economic background—and one that differs from previous generations in its modes of learning and sequencing of higher education. Quite simply, more of the past cannot suffice for serving the nation's educational needs in the future. College and university presidents must take the lead in reminding their faculty of the primary role of higher education in ensuring the nation's continued economic productivity, civic engagement, and competitive strength in the years ahead. Nothing less than the sustaining, forceful leadership of presidents is required to advance the heritage of higher education in the 21st century. ♦



David Breneman, university professor, University of Virginia (left); Catharine Hill, president, Vassar College; and Richard Celeste, president, Colorado College

Our roundtable conversation gave cause for optimism. Our exchanges over two days reaffirmed the essential mission and purpose of our universities and colleges to serve the nation's public well-being through education and the creation of new knowledge.

This essay derives from a Presidential Roundtable convened in July 2010 in Leesburg, Virginia, by the National Center for Public Policy and Higher Education. The National Center has focused primarily on policy issues concerning higher education access, affordability, and learning effectiveness within state contexts. Among the Center's seminal contributions to the public policy dialogue are the series of state-by-state report cards, *Measuring Up*, a series of policy essays, as well as its work with Public Agenda to gauge public opinion about higher education's contribution to the nation's public purposes.

The National Center, with funding from the Bill & Melinda Gates Foundation and Lumina Foundation for Education, launched an initiative to bring university and college presidents more directly into the national dialogue concerning the challenges and prospects facing higher education. The process began with individual interviews of presidents of 28 higher education institutions, including the heads of state university systems, public research universities, public comprehensive institutions, community colleges, private-sector institutions, and independent colleges and universities. A summary document recounting the thinking of presidents on several key questions was prepared and distributed to all of those who had been interviewed. That summary served as background for the roundtable discussion.

The following individuals were participants in this roundtable and helped shape the resulting essay's central themes:

Robert Atwell
President Emeritus
American Council on Education

Gene Block
Chancellor
University of California, Los Angeles

David Breneman
University Professor
University of Virginia

Patrick Callan
President
National Center for Public Policy and Higher Education

Richard Celeste
President
Colorado College

Donald Farish
President
Rowan University

Joni Finney
Vice President
National Center for Public Policy and Higher Education
Practice Professor
University of Pennsylvania

Frank Friedman
President
Piedmont Virginia Community College

Daniel Hamburger
President and CEO
DeVry Inc.

Catharine Hill
President
Vassar College

John Immerwahr
Professor of Philosophy
Villanova University

Richard W. Lariviere
President
University of Oregon

Richard Legon
President
Association of Governing Boards of Universities and Colleges

Stephen Lehmkuhle
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University of Minnesota Rochester

David Maxwell
President
Drake University

Jane McAuliffe
President
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Gail Mellow
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Craig D. Swenson
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James C. Votruba
President
Northern Kentucky University

Gregory Wegner
Managing Editor, *Policy Perspectives*
Knight Higher Education Collaborative
University of Pennsylvania

Robert Zemsky
Professor and Chair
The Learning Alliance for Higher Education
University of Pennsylvania

Nancy Zimpher
Chancellor
State University of New York

Paul Zingg
President
California State University, Chico

The following presidents were interviewed for the Presidential Roundtable:

Edward Ayers
President
University of Richmond

Donald Eastman
President
Eckerd College

John Fry
President
Franklin & Marshall College

Gordon Gee
President
The Ohio State University

John Hitt
President
University of Central Florida

Freeman Hrabowski, III
President
University of Maryland, Baltimore County

Mark Huddleston
President
University of New Hampshire

William Kirwan
Chancellor
University System of Maryland

Robert Mendenhall
President
Western Governors University

Diana Natalicio
President
University of Texas at El Paso

Eduardo Padrón
College President
Miami Dade College

John Schlegel, S.J.
President
Creighton University

The interviews of presidents were conducted by Robert Atwell, David Breneman, John Immerwahr, and Robert Zemsky. David Breneman prepared a summary of themes from the interviews of presidents, which provided foundations for the Presidential Roundtable discussion. The Presidential Roundtable was facilitated by Robert Zemsky, and the essay developed from the roundtable discussion was drafted by Gregory Wegner and Robert Zemsky.

