Performance-Based Budgeting
South Carolina’s new plan mired in detail and confusion

By William Trombley
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This IS HOW Austin Gilbert tells the story of South Carolina’s decision to launch an ambitious new performance-based budgeting plan for public higher education.

Gilbert runs a small construction company in Florence, SC. He is also chairman of the South Carolina Commission on Higher Education. In that capacity, he was one of 12 people who met for several months in 1995 to ponder the future of South Carolina’s 33 public colleges and universities.

The study group, appointed by the state legislature, included four state senators, four members of the House of Representatives and four people, including Gilbert, from business and industry. Their discussions were guided by a North Carolina management consultant named Terry Ainsworth, who asked the group to read two books: “Break Point and Beyond,” by George Land and Beth Jarman, and “The Fifth Discipline,” by Peter Senge.

The “Break Point” book made a deep impression on Austin Gilbert.

“They made the point that an organization is like an organism that is constantly evolving,” he recalled during an interview. “In the early stages there’s a lot of enthusiasm and it’s okay to make mistakes. Then you get to the second phase—the ‘break point’—and the organization starts to become more rigid and mistakes are not tolerated as much. People begin to say, ‘We don’t do it that way around here.’”

“In the third phase, beyond the ‘break point,’ you have to reinvent the organization,” Gilbert continued, “with supportive leadership that looks at things in a new and different way, encourages new thinking and says it’s okay to make mistakes. We decided we were in that phase and we had to reinvent higher education in South Carolina.”

Gilbert said the discussions were continued on page 14

“Distance Education” Comes of Age
Western Governors University opens with many unanswered questions

“There’s kind of a dilemma that we’ve got here between pressure to move fast and wanting to do this right.”
—Jeffrey Livingston, Western Governors University’s chief operating officer

AS THE WESTERN Governors University prepares to launch its first pilot projects, some of the problems facing this ambitious attempt at non-traditional higher education have been solved but many more have not.

On the positive side, in little more than two years, WGU has advanced from an idea proposed by two governors—Democratic Roy Romer of Colorado and Republican Mike Leavitt of Utah—to a consortium of 16 states and one territory (Guam) that is about to test its first degree and certificate programs.

Romer, Leavitt and other governors who face rapidly rising college enrollments hope that WGU, emphasizing computer and television instruction and other “distance education” methods, will provide a less expensive alternative to building new campuses.

WGU officials say a limited number of students will be able to sign up for the first three pilot programs in February—a general Associate of Arts degree and an Associate of Applied Science in Electronic Manufacturing Technologies. A non-degree “certificate of mastery” in electronic manufacturing technologies also will be offered.

In addition to offering degrees and certificates, Western Governors University also will serve as a broker, matching students with distance education courses already available from colleges and universities in the member states.

Twenty-one educational institutions and high tech companies have agreed to provide courses for WGU so far (see sidebar). Most are public colleges and universities but one is a private school (Regis University, in Denver) and two are high tech firms—Novell, Inc. and International Thompson Publishing.

An electronic “SmartCatalog/Advisor,” listing WGU’s first 50 or so courses, is expected to be available soon. By April 1, when WGU is supposed to be open to all, perhaps 125 course listings will be in the electronic catalog.

Several “back room” services have been continued on page 6
National Science Foundation’s division of two new engineering schools, each with a generous endowment, will be launched in the next few years. Each hopes to break with tradition in order to produce technologically minded engineers for the 21st century.

The newcomers are the Franklin W. Olin College of Engineering, in Needham, Massachusetts, 20 miles west of Boston, scheduled to open in 2001, and the Keck Graduate Institute at The Claremont Colleges. Their work is scheduled for completion by 2007.

By Carl Irving

Most American colleges and universities educate engineers to become the equivalent of bricklayers, rather than cathedral builders, in the opinion of Marshall M. Lih, director of the National Science Foundation’s division of engineering education.

Despite years of prodding, Lih and other would-be reformers at the National Science Foundation (NSF) believe, most American engineers tend to be narrow specialists who are ill-equipped to fill top jobs in business or industry.

In an attempt to correct this problem, two new engineering schools, each with a generous endowment, will be launched almost simultaneously on opposite coasts in the next few years. Each hopes to break with tradition in order to produce technology-driven engineers for the 21st century.

The newcomers are the Franklin W. Olin College of Engineering, in Needham, Massachusetts, 20 miles west of Boston, scheduled to open in 2001, and the Keck Graduate Institute of Applied Life Sciences, in Claremont, California, which expects to open in 1999.

The two 62-year-old founders and friends, Henry E. Riggs, engineer-educator in Claremont, California, and Lawrence W. Milas, lawyer-president of the F.W. Olin Foundation in New York City, say they want to blend venerable disciplines and seek joint ventures with industry.

Some experts in engineering education question whether such bold plans can succeed outside the nation’s best research universities. But Riggs and Milas do have an instant rooting section: Lih and his colleagues at the NSF—a federal agency which funds scientific and technological research and development—who have argued for years that America needs to prepare more engineers able to rise to executive positions and compete in a global economy.

Despite more than a decade of heavily funded efforts to promote change, less than 25 percent of the nation’s 300 engineering faculties want to overhaul their training programs, according to estimates at the NSF. The price has been bored students with narrow training, and a persistent 50 percent dropout rate from engineering studies by the end of the sophomore year.

Despite the economic recovery led by technology during the 1990s, the number of bachelor’s degrees earned by engineering students has declined nearly 20 percent since 1985. Olin College of Engineering and the Keck Graduate Institute should be large enough to provide a helpful push, said John W. Prados, who directs engineering education reform projects at the NSF. “We can always hope that models out there (such as Olin and Keck) will be imitated,” he said.

Some experts in engineering education have argued for years that America needs to prepare more engineers able to rise to executive positions and compete in a global economy.

Citing the high dropout rates, Bordogna said that “freshman and sophomore years are when students get excited. But they find they’re in a super high school and they get discouraged. It’s not because they can’t do the work.”

“The (recalcitrant faculties) say students have to have the fundamentals first,” Bordogna continued. “We respond that the fundamentals are in group design, and in how to get the concept out the door. Olin College, which eventually will enroll about 650 undergraduates, will combine business and engineering studies at a tuition-free campus, and will join in a partnership with the adjacent Babson Business College. Group projects with local industries will be a central part of the curriculum.

The Olin Foundation has pledged $200 million, one of the largest grants ever made in American higher education, and later may add all its remaining assets, which could equal or exceed the original grant.

The Keck Institute, headed by Riggs, will offer a master’s degree that blends engineering and the life sciences, for 125 students, and will join the six-campus Claremont Colleges consortium. Studies will be linked to joint ventures with local biotech firms.

The W.M. Keck Foundation in Los Angeles has provided $80 million, to be matched by an identical amount or more from other contributors. With the Keck name to be carved into the portals of the new campus, Riggs clearly hopes that the foundation will contribute more in future years.

Prados, a professor of chemical engineering at the University of Tennessee and a past president of the national Accrediting Board of Engineering and Technology, advised Lawrence Milas on preliminary planning for Olin College. Its opening year, he notes, coincides with the date that the nation’s engineering schools will begin to phase in new, more demanding standards for accreditation—ten times more requirements than those that have been in effect since 1972.

According to Prados, the new requirements will focus on intellectual skills and abilities instead of tallying credit hours and subject areas. This change will be consistent with NSF recommendations and “should be a strong force in moving all engineering schools toward the same outcomes,” Prados said. The accrediting board has begun training groups of engineering professors to begin reviewing and judging campus programs in 2001.

Their work is scheduled for completion by 2007. The NSF wants engineering faculties to drop what it considers to be obsolete training methods and courses. Engineering students must learn and memorize too many “unconnected pieces,” said Joseph Bordogna, the NSF’s chief operating officer and former dean of engineering at the University of Pennsylvania.

Bordogna is “very excited” about the Olin and Keck plans. He praises the academic proposals for Olin College because he believes an undergraduate degree in engineering should be a “holistic experience” combining a wide range of studies. Bordogna said that the master’s program at Keck can produce “a cadre of well-educated people who go out and work in the fields of biology and health care, and become industrial leaders.”

Among prominent members of the profession who endorse changing undergraduate engineering is Chang-Lin Tien, a mechanical engineering professor and former chancellor at the University of California at Berkeley.

Studying engineering, said Tien, is like drinking from a fire hose, because new knowledge keeps spurting out and the student hasn’t got the time to consume it all. He advocates giving engineering undergraduates a “sound liberal arts education” and saving specialization for graduate school.

The NSF has provided almost $170
said too few students have been involved tend to be subordinate to other pro-
career leads many bright students to turn
colleges will provide “holistic
Catholic and Georgetown universities, said
Bordogna is enthusiastic about a new
States at international meetings involving
Science Foundation thinks the new
article published by the American Society
become executives. yet never seems to have
executive ladder are “rare exceptions,”
projects combining engineering technology
conceptualize and communicate effec-
tively, management skills and business
to other studies.
are very bright and well prepared and
often refer to the fact that MIT students
are weak in com-
knowledge “in learning about entrepreneur-
ship, he said. A special program places top
ing engineering undergraduates with firms in
the nearby Silicon Valley for summer work. But
students also must take at least nine liberal arts courses. Requirements
include writing, speech, humanities and social
sciences.
Stanford’s electrical and mechanical
engineering departments and the com-
puter sciences department were ranked
first in graduate studies in a 1995 survey by
the National Research Council. Yet a large
majority of Stanford’s engineering faculty
agrees that it is best to limit doses of un-
dergraduate engineering coursework,
Goodman said.
At Penn, the new master’s program has
expanded to nearly 200 students, most of
them sponsored by their employers. Sev-
eral have been promoted while enrolled,
noted Dwight Jaggard, associate dean for
graduate education and research and a
professor of electrical engineering, who
helped to begin the program.
The students spend two years con-
centrating on emerging technologies—
biochemistry, telecommunications,
modern materials and systems engineering.
Half of the coursework concentrates on
technology and half on business—ranging
from economics to international finance.
Jaggard thinks innovative engineering
training programs should be launched at
established research campuses, not as
separate entities like Keck and Olin.
This program was started from scratch.

Despite the economic recovery led by
technology during the ’90s, the number of bachelor’s degrees earned by engineering students has declined nearly 20 percent since 1985.

Jaggard said there is another advantage
to having this program at a prestigious,
established campus: “A Penn degree means something, no doubt. It’s the cachet of an
established university.”

At perhaps the most prestigious en-
ingineering school of all—the Massachusetts
Institute of Technology—undergraduates
may soon be required to include a minor
field of study on the business side,
according to John Vander Sande, associate
dean of engineering.
“It’s probably universally true for
engineering education in the United States,
that graduates often are weak in com-
communications skills,” said Vander Sande, a
professor of material sciences and
engineering and associate dean for the past
six years.
He also conceded that “companies
often refer to the fact that MIT students are
very bright and well prepared and
contribute as individuals, but have not
learned to operate in a team environment as
they should, and must, when joining a
specific workplace... Comments are often
made that we need other science and
social science students, because many don’t practice as
engineers but will move into manage-
ment.”
But “the MIT stance is not to throw the
baby out with the bath water,” he said. The
MIT core of instruction, focusing on
engineering and science, will not change.
MIT graduates may not be as quick to
know how to operate equipment at their
first job, but “they will understand the
underlying principles that will withstand
the test of time, while the equipment may
change.”

About half the engineering faculty at
MIT favors curriculum reforms, with the
split most evident between older and
younger members, Vander Sande said.
Three years ago, the would-be reformers
witnessed three to one.
Some faculty critics of reform say,
“What’s good for me is good for the
student,” according to Vander Sande, but
industry complaints that faculty members
who take this stance “don’t know enough
about what the real world is like. They
don’t know. They’re not out there in the
workplace.”

MIT does have several cooperative
programs with industry underway at both
undergraduate and graduate levels,
including smaller numbers of students. The
campus does not have to worry about
retaining its students, however: 92 percent
of them graduate in less than five years,
and alumni urge the engineering school “to
continue to supply an education to our

---Carl Irving

continued next page
students based on fundamental principles—the core element in our engineering education," according to Vander Sande.

He applauded Olin for being "very wise" in its ability to see that the 21st century world will need engineers who understand industrial and business management. But the MIT official questioned whether Olin will be able to succeed by stressing teaching, with little time for faculty research, or whether there will be enough money to make it all come true.

"MIT is a research university, and I believe in a strong relationship between research and education," Vander Sande said. "It's not simply a matter of hiring faculty and saying 'OK, go into the classroom and teach.' In order for those people to be viable, they've got to remain viable, they've got to remain teaching, with little time for faculty research, or whether there will be enough money to make it all come true.

"MIT is a research university, and I believe in a strong relationship between research and education," Vander Sande said. "It's not simply a matter of hiring faculty and saying 'OK, go into the classroom and teach.' In order for those people to be viable, they've got to remain very active in research. And that doesn't happen with nickels and dimes.

"I know (Olin's $200 million grant) is a big lump of money. But I know what it takes for a school of engineering like MIT's. And it's not enough money. They still have a challenge to build a school of engineering that will have the same reputation (Babson) presently enjoys in management. If you want to do this from scratch, you have to realize there are infrastructural costs—it's not just hiring faculty, you have to have a lab."

But founders of the two new institutions, as well as NSF officials, disagree.

"Olin wanted to invest so that every student would get the kind of experience they are trying to produce, and if you put that kind of money into a large institution it would certainly have an impact, but not on all the students," said the NSF's Prados.

"At MIT, one would run into the reward structure which supports research ahead of teaching," said Riggs, who is establishing the Keck Institute in Claremont. "You don't get many rewards for starting a really good teaching program, because it's just not where the glamour is," he said. Milas, president of the Olin Foundation, agreed.

Riggs and Milas have been mutually supportive for many years. In 1990, while Riggs was president of Harvey Mudd, the undergraduate engineering college at Claremont, the Olin Foundation provided a $5.5 million grant for a new science building. Last fall, Riggs—who has counseled Milas regarding startup planning for the Olin College—was part of a committee actively supporting the college's accreditation in Massachusetts.

Startup costs for Olin and Keck are estimated to be two to three times greater than they would have been if either had been part of an established campus. But both Riggs and Milas point out that their campuses will save significantly in faculty and service costs, because they will be joining consortia.

The Olin campus will be constructed on 88 acres of rolling, forested land which the foundation will purchase for about $15 million from adjacent Babson College. In recent years Babson has been strengthened by a $6 million grant from the Olin Foundation for a library and computer center, and another $30 million for a graduate business school complex.

Babson has had popular recognition for its business-oriented studies. The annual rankings in U.S. News & World Report placed Babson's undergraduate program first in the "business specialty school" category from 1989 until 1995, and its graduate program was ranked first in "entrepreneurship" for the past four years.

"We do one thing well," said Sandra T. King, vice president for marketing. "And the campus does not hesitate to boast about it. Last fall, King's office purchased two full pages in the Wall Street Journal to display the pictures of ten successful alumni, all with impressive executive titles. "Their entrepreneurial leadership began at Babson," the headline crowed.

Babson's "culture of innovation and integration will support and foster the same kind of curricular revolution by the Olin College faculty," Milas said. "I don't know of any business college better than Babson." Linked to Babson's studies, Milas said, Olin students will learn about global issues and acquire entrepreneurial skills.

A central focus for Olin College will be joint ventures with local businesses, Milas said. He predicts that Olin's graduates will be prepared to manage technology-based commercial ventures and government agencies, becoming "senior corporate leaders, entrepreneurs, political leaders and specialized professionals in medicine and law."

Last November the Massachusetts Board of Higher Education approved Olin's petition to grant three bachelor of science degrees—in engineering, mechanical engineering and electrical and computer engineering.

For Riggs, the Keck Institute is a logical last career stop. After earning his BA in industrial engineering at Stanford, and an MBA at Harvard, he spent 15 years as an executive with two Silicon Valley companies before returning to Stanford as a full-time, tenured faculty member. He became chairman of industrial engineering and wrote three books about his specialties: business ventures and managing technology. He spent his last three years at Stanford as the campus' chief fund raiser, launching a successful campaign to raise $1 billion.

In 1988, Riggs became president of Harvey Mudd College, a highly regarded undergraduate campus specializing in engineering, within the Claremont Colleges group. In 1996, to the consternation of many Mudd faculty members, he announced his resignation in order to found the graduate campus just across the road. The consortium donated an 11-acre site and agreed to let Keck become the first new campus to join the Claremont Colleges since 1963. Keck will share the consortium's graduate library and administrative services.

The other members of the group are Pomona College, founded in 1887; Claremont Graduate University, 1925; Scripps College, 1926; Claremont McKenna College (formerly known as Claremont Men's College), 1946; Harvey Mudd College, 1955; and Pitzer College, 1963.

The setting is on flat land at the edge of an attractively landscaped cluster of campuses. On rare days when the smog disappears, the stately San Gabriel Mountains rise abruptly to the north. Riggs believes the location will generate joint ventures with a growing number of biotech firms in the Los Angeles basin.

"In recent years, human understanding of the fundamental building blocks and processes of life has accelerated exponentially," said Riggs. "Many declare that we are now entering the biotechnology century, defined by the life sciences and our ability to harness their power for the benefit of humanity."

Riggs says he has no concerns about industry dictating coursework. Industrialists he consulted have applauded his plans to include ethical and policy questions in coursework. He intends to have a bioethics specialist on the faculty.

"This school will help eliminate a big problem now hampering the industry—engineers and life scientists unable to talk to each other," said Keck's planning director, Bernadette Busenberg. For example, she said that biotech researchers often must deal with microscopic batches of life. Engineering, combined with biochemistry, can project ways for quantifying such testing, and thus visualize how to produce useful discoveries on a world-wide scale.

Riggs believes that too many engineers in industry have spent too much time—up to eight years—earning Ph.D. degrees by dipping deeply into small research areas. Firms hire them because they have no alternative, he said. He hopes to help "shoo the gap" by providing students with two graduate years of broader studies, trained by a faculty "bent differently, who will be more interested in teaching than more typical scholars."

Carl Irving is a former political and education writer for the San Francisco Examiner.
The Cost of Higher Education
National commission does an about face

By William Trombley
and Kristin D. Conklin

W hat a difference a draft makes.

The final report of the National Commission on the Cost of Higher Education, approved at a January 21 meeting in Washington, D.C., has a very different tone from the draft report that was circulated late last fall.

The earlier version began with the ringing declaration, “as a public good, higher education, far from being expensive, is priceless.” The final report is less stentorian: “The Commission is convinced that American higher education remains an extraordinary value.

Last fall’s draft acknowledged public “sticker shock” over rapidly rising tuition and other costs but said most students were still getting a bargain. “Three-quarters of all full-time undergraduate students attend four-year colleges that charge less than $8,000 a year in tuition, about what a decent used car would cost,” it said.

This unfortunate analogy, which was widely reported, has disappeared from the final document.

The November draft blamed the news media for much of the public’s concern about high prices. “Sensational reporting has both heightened and distorted public concern,” it said at one point and, at another, “damaging, too, are editorials that proclaim, and usually denounce, costs that are (to pick a few common phrases), out of hand; ‘beyond reason,’ and ‘threatening to put a college education beyond the reach of most Americans’”

All of this has disappeared from the final version, which says, mildly, “Although concerns and perceptions about price are not entirely wrong, they are not always based on sound factual information.”

There was very little criticism of colleges and universities in the November draft but the final version acknowledges that the institutions themselves have played an important role in the price run-up.

“Most academic institutions have been content to maintain a veil of obscurity over their financial operations and have yet to confront seriously basic strategies for reducing their costs,” the final report says. “Unless academic institutions attend to these problems now, policy makers at both the state and federal levels will impose unilateral solutions that are likely to be heavy-handed and regulatory.”

What happened between November and January to change the tone from a polemic in defense of rising tuitions and other college costs to a gentle prod to educators to do a better job of explaining why prices increases are needed?

Most importantly, the two Republican congressmen responsible for creating the commission—William F. Goodling of Pennsylvania and Howard P. (Buck) McKeon of California—sharply criticized the November draft report.

“Any suggestion that we do not have a college-cost crisis in higher education flies in the face of common sense,” the two lawmakers said in a joint statement. “Every American family knows that college costs are too high.”

Since Goodling and McKeon will play key roles in Congressional action to extend the Higher Education Act next year, their words carried great weight with the 11 members of the commission, nine of whom are either higher education administrators or lobbyists who work with colleges and universities. Quickly, the commission’s rhetoric became more subdued.

The final report notes that tuition charges at public colleges and universities more than doubled between 1987 and 1996—from $1,688 to $3,918—and almost doubled at private four-year institutions—from $6,665 to $13,250.

“Public anxiety about college prices has risen along with increases in tuition,” it states.

There is a lot of discussion about the “price” students pay to go to college and the “costs” of educating them once they are on campus. Prices have risen faster than costs, according to the report, largely because state appropriations for higher education declined sharply in the late 1980s and early 1990s.

The document lists many factors that might have increased the cost of running a college or a university—from the need to provide more remedial classes to the “rising expectations” of faculty members, students and their parents—but then concludes that it is “difficult to draw direct relationships between any of the cost drivers…and increases in tuition.”

In part, the commission’s inability to figure out what is driving up college costs is blamed on the unwillingness of many academic institutions to “make themselves more transparent, to explain their finances.”

Whereas the November draft blamed the news media, politicians and accrediting agencies, among others, for confusing the public about college costs, the final report places some of the blame on colleges and universities themselves for being financially “opaque.”

In both versions, the public is portrayed as baffled and angry but unable to grasp the finer points of higher education finance.

“Any suggestion that we do not have a college-cost crisis in higher education flies in the face of common sense. Every American family knows that college costs are too high.”

—Representatives William F. Goodling and Howard P. (Buck) McKeon

The report recommends that “academic institutions must achieve more in the way of cost containment and productivity improvement” but is light on specific suggestions.

Many of the report’s recommendations ask for less federal and state regulation of higher education, for a streamlined student financial aid system and for accrediting procedures that do not drive up costs. However, the report does not suggest that, even if all of these things were done, the impact on tuition and other college costs would be very significant.

I DON’T KNOW WHAT HAPPENED... WHEN I FIRST SAW HIM, HE WAS JUST A CUTE LITTLE PUPPY...

Student Debt
Distance Education
continued from page 1

arranged. Washington State University will handle course registrations, the University of New Mexico will offer online library services, and the Illinois-based Follett Corp. will provide bookstore services through an extensive online catalog.

But many important tasks remain undone.

WGU will be “competency-based.” That is, students will advance only after they have demonstrated mastery of the material, not after completing a certain number of courses or credit hours. Their progress is to be monitored by “mentors”: full-time WGU employees who come from either academic life or from business or industry. However, only one mentor had been hired when this article was completed in mid-January.

Jeffrey Livingston, WGU’s chief operating officer, said only a few mentors are needed for the pilot programs and that many more will be hired later. However, several educators who have been watching WGU’s development closely believe the multi-state university will have a hard time gaining its badly-needed accreditation unless much more is known about both the size and the quality of the mentor corps.

A set of competencies for the first two pilot program degrees has been largely completed—by the national Center for Higher Education Management Systems, in Boulder, Colorado—but an assessment council that is supposed to evaluate the tests is not in place, nor are there as yet any assessment centers, where students can go to have their mastery of course material tested.

Plans for student centers, where advice and counsel and access to technology would be available to students, and where assessments could be made, seem to have been moved to the back burner. Once, these were believed to be critical to the success of the Western Governors University. Now, according to Robert Albrecht, chief academic officer, they are still in the plans but are not at the top of the agenda.

“One of our financing mechanisms didn’t come through,” Jeffrey Livingston explained, so the student centers have been delayed. “We don’t think we need to have them for the pilots but we still think they are crucial and we’ll have to have them in place for our general opening in the spring.”

There is no certainty that the Western Governors University will be accredited by the several regional accrediting bodies that now are studying the question.

Jeffrey Livingston, former aide to Utah Governor Mike Leavitt, is chief operating officer of the Western Governors University.

WGU still has not announced what courses will be offered when the pilot programs begin nor what they will cost. Livingston said registration fees might be waived for students in the pilots but they will have to pay tuition to provider institutions for the courses they take. Albrecht estimated that these costs could range from $75 to $400 per course.

There are transfer problems to solve, since WGU will measure student progress through “learning modules,” not the credit hours or courses completed that are commonly used by colleges and universities.

There is no certainty that the Western Governors University will be accredited by the several regional accrediting bodies that now are studying the question. Nor is it clear how WGU will scale the barriers created by the many different higher education laws and regulations in each of its member states.

With all these problems still to be solved, many people involved in the WGU effort have urged a “go slow” approach. “Let’s not promise more than we can deliver,” one of them said. But people close to the planning process say that some governors are pushing for a fast start, even if WGU is only partly ready.

“There’s a political reality that’s making all this possible,” one planner said. “There’s a pace that has to be maintained that is, frankly, overwhelming.”

Some planners fear that WGU is making a mistake by making claims that cannot be supported, at least not yet.

“Two of the hype is out in front of the infrastructure,” one insider said. “There is a substantial disconnect between the PR about WGU and what is actually there.”

Said an accrediting agency official, “Their public information effort is four and a half steps ahead of the people who are doing the work.”

Livingston acknowledged the problem. “There’s kind of a dilemma that we’ve got here,” he said, “between pressure to move fast and wanting to do this right.”

Western Governors University has dual headquarters. Livingston and the marketing and public relation staff are in Salt Lake City, Utah, while Albrecht’s small academic staff is housed in Aurora, Colorado, outside Denver.

The planned budget for this fiscal year is $12 million. Livingston said, while the financial plan calls for an annual budget of $50 million to $75 million by the 2005–2006 academic year.

Where this money will come from is a mystery.

Each state paid $100,000 to join the consortium but that money was spent long ago. WGU has received several foundation grants, and the State of Colorado recently chipped in $3 million for curriculum development. The university will receive some fee revenue for brokering distance education courses by member state institutions.

Of late, WGU has turned increas-ingly to private corporations for help. Several companies, including Micro-soft, 3-Com, IBM, Apple and AT&T, have paid at least $250,000 apiece, in cash or “in kind” services, for the privilege of joining the WGU National Advisory Board.

This movement toward a corporate funding model has caused WGU to lose some of its original appeal in large western states with small populations.

“The need for money is driving this now,” said a top higher education of official in one of the member states who asked not to be identified. “The emphasis is on job-training programs for large corporations in urban settings, not on distance education in remote locations.”

Livingston disagreed. “I don’t believe the board would allow us to drift away from the remote rural areas,” he said, “since that was one of the initial purposes of WGU.”

Even corporate support is not likely to keep WGU afloat until student revenue allows the multi-state institution to become self-supporting. How will bills be paid in the meantime?

“We’re exploring with our board some different options for raising dollars but we’re not ready to discuss them publicly yet,” Livingston said.

So long-range financing for WGU remains uncertain, as do many other aspects of its operations. It is difficult to write about the Western Governors University because so many details are murky and are likely to remain so for some time. However, what follows is an attempt to describe where things seem to stand in several important areas:

Pilot Programs

The electronic manufacturing technologies certificate and degree were selected because of a need for workers in the microchip industry and related businesses. The general Associates of Arts degree is intended, in part, for students who want to transfer to the four-year baccalaureate programs that WGU hopes to offer in the future.

No more than 200 students will be permitted to enroll in the pilots, which Livingston described as “a way to test all our systems.” With the starting date almost at hand, however, WGU officials could not say what courses would be offered, how much they would cost or how and where student mastery of the course material and required skills would be tested.

While testing the degree and certificate programs, WGU expects to be actively engaged in arranging for its students to take distance education courses already offered by many colleges and universities in the member states.

That is fine with institutions like Washington State University where on-campus enrollment is flat but off-campus, distance education enrollment is skyrocketing. President Samuel H. Smith thinks that teaming with WGU will add even more off-campus students.

“We’re gambling that down the road a significant part of the market is going to want non-traditional course delivery,” Smith said. “If you’re willing to make changes and take risks, this is a growth period.”

An unanswered question is: Why would off-campus students bother to enroll in the Western Governors University if they can get the same computerized or electronic instruction directly from Washington State?

Curriculum

WGU degrees will not be unusual in subject matter or scope but the structure will be very different. Each Associate degree will consist of about 12 “learning modules.” For example, one module in the general Associate of Arts degree would cover quantitative analysis, including mathematics and math reasoning skills.

“A course is normally defined in terms of credit hours, or time,” said Albrecht, the chief academic officer, “but a WGU mod- ule is defined in terms of content.”

When a student, under the guidance of a mentor, has learned the material in one of these modules—by taking courses listed in the “SmartCatalog” or in some other way—that student asks to be tested. Much of the testing is to be done at the assessment

A Lineup of Course Providers

T H E WESTERN Governors University’s first course providers include 16 public colleges and universities, one private university and two corporations:

Public Institutions:

- University of Alaska Learning Cooperative
- Northern Arizona University
- Colorado Electronic Community College
- Dallas County Community College (Texas)
- University of Guam
- University of Hawaii
- Montana State University (Bozeman)
- Community College of Southern Nevada
- North Dakota State College of Science
- Chadron State College (Nebraska)
- Eastern New Mexico University
- Oklahoma State University
- Eastern Oregon University
- Utah State University
- Washington State University
- University of Wyoming

Private Institution:

- Regis University (Denver, Colorado)

Corporate:

- Novell, Inc.
- International Thompson Publishing
Content for the pilot programs apparently has been agreed upon but WGU officials were not able to say which courses from what providers would enable a student to meet the requirements.

"SmartCatalog/Advisor"

This electronic system will tell students what courses are available—the medium (such as the Web or videocassette or satellite), the time courses are offered, what they cost and other necessary information.

Students also will be able to use the catalog/advisor to register for courses, order books, request library materials and monitor their progress toward a degree, said Sally Johnstone, director of the Western Cooperative for Educational Telecommunications, which did the design work. “This is a ‘one of a kind’ system,” Johnstone said.

At first the electronic catalog will list only about 30 courses—two or three from each of the 19 providers (see sidebar). Some of these will relate to the pilot programs; some will not. WGU officials and planners were unwavering as late mid-January to say what these courses might be. By April 1 there could be as many as 125 listings, they said.

Assessment

“As a competency-driven institution, the testing aspect of WGU is going to be crucial,” said Peter Ewell, senior associate at the National Center for Higher Education Management Systems.

Some assessments will be paper and pencil tests; others, when appropriate, will be hands-on tests conducted in laboratories or work settings. According to Albrect, the assessments will cost $75 to $100 each.

Ewell is in the process of identifying currently available tests—like the New Jersey Test of Basic Skills—that match the WGU learning modules. He said 80 to 90 percent of the modules can be tested by instruments that already exist. For example, there are nationally accepted standards for the skill levels needed to earn the electronic manufacturing technologies certificate and degree.

However, the assessments must be done at secure locations and these have not yet been identified. A ten-member Assessment Council, which will help to select and evaluate the tests that are used to measure student progress, has yet to be named.

The members of this council and two others—a Providers Council, which will screen courses and programs for the SmartCatalog/Advisor, and a Program Council, charged with supervision of the content of WGU degrees and certificates, will be college and university faculty members working part-time for WGU. But none of this is in place as the pilot programs begin.

Mentors

These will be full-time WGU employees who “will have the same credentials as beginning faculty,” Livingston said. “They will hold the terminal degree in their fields.”

A WGU mentor will serve as the student’s primary academic advisor, exploring the student’s background and goals, determining what skills the student already has and which ones need to be acquired. Most of this will be done by telephone or e-mail.

When the mentor determines that the student has mastered, say, four learning modules needed for a particular degree, the mentor will advise the student to take those competency assessments.

“The heart of this degree work is in helping the student find sources for the content and then coming for assessment,” Albrect said. “That’s the guts of it.”

He stressed that how the student acquires the knowledge or skill, whether through work experience, self study, distance learning or standard college courses, is not important. What is important is proof of the knowledge gained or skills mastered.

But the role of the mentor is crucial in this process and, although both Albrect and Livingston say there are plans to hire at least 100 mentors, so far there is only one.

Student Centers

In early discussions, these were considered all-important to WGU’s success but they seem to have fallen in importance as the planning effort has continued.

The centers are to be outposts in each member state where students can gain access to computers and other technological tools and where they can get advice from actual human beings, not from electronic devices. The centers might also be used for assessment purposes.

However, as soon as WGU establishes a physical presence in a state, it becomes subject to strict higher education laws and regulations that vary from state to state. For example, how will WGU deal with the fact that each state charges a different out-of-state tuition fee?

John Calhoon, former senior policy advisor to Colorado Governor Romer and a consultant to WGU, has compiled a four-inch-thick report detailing every complexity facing WGU as it seeks to operate in all of its member states.

According to Calhoon’s report (which excludes Texas, which was not yet a member when the report was prepared), WGU probably will be able to gain entry into all of the member states on some sort of experimental basis, because of the political clout of the governors involved.

“But still, the details of how each state will have to be handled will be on an individual basis,” Calhoon emphasized. “There are no shortcuts. It’s a huge process.”

Costs

These are difficult to pin down, even though the start-up date for the pilot programs is at hand. WGU has not announced its registration fees or what students will be charged to take courses listed in the SmartCatalog. The only firm figure is the $75 to $100 per assessment charge cited by Albrect.

A consultant’s report suggested that WGU charge an admission fee of $50, plus a $20 enrollment fee for each course. In addition, there will be fees for using the online library and book services. Livingston suggested that fees might be waived for students in the pilot programs, but said they would have to pay for the courses themselves. Albrect said these charges could range from $75 to $400.

Accreditation

Western Governors University, which has no campus, no faculty (except the “mentors”) and no courses of its own, presents special problems for the nation’s accrediting bodies.

Because WGU hopes to set up shop in so many different places, four different regional accrediting agencies formed a special body known as the Interregional Accrediting Commission (IRAC) for the exclusive purpose of dealing with WGU’s complex accreditation request. This was done after Governors Romer and Leavitt met with accreditors several months ago.

IRAC includes representatives from the North Central Association of Colleges and Schools, the Northwest Association of Colleges and Schools and two subsets of the Western Association of Schools and Colleges—one for community and junior colleges and the other for senior institutions.

Steve Crow, executive director of the North Central agency, said the four regional bodies were motivated to work together because WGU afforded an opportunity to create a potentially important alternative model. “There is a clear awareness of a new age,” Crow said. “We don’t want to get caught with a limited number of accrediting tools. We’ve got to come up with new approaches and answers.”

At the same time, accreditation officials worry about the quality of WGU’s offerings.

“We want to be sure the accreditation process doesn’t kill this promising idea,” said one, “but we also don’t want it to kill us.”

At this point, WGU has not submitted an eligibility application to IRAC. Eligibility means only that WGU is potentially accreditable. Beyond that lies the “candidacy” period, during which the institution must conduct a self-study and also must submit to evaluation by others.

So far IRAC has come up with a list of 20 eligibility requirements that WGU must meet before it can continue with the accreditation process. “If WGU fulfills its plans, it has the potential to be accreditable,” Steve Crow said. But he added, “I’d like to see them move a little faster.”

Other accrediting agency officials said that without such important elements as the mentors, faculty councils and assessment and student centers in place, it will be impossible to judge WGU’s quality. “There’s nothing there yet to look at,” said one.

It is too early to know how the recent decision of Texas to join the WGU consortium will affect the accreditation process. The inclusion of Texas means that yet another accrediting agency—the Southern Association of Colleges and Schools Commission—comes into play.

James T. Rogers, executive director of the southern agency, said that he, like other accreditors, has questions about WGU’s quality control. “The jury is still out as far as issues of quality assurance,” Rogers said, “and my office is reluctant to extend overwhelming approval until the quality of technologically-delivered education can be compared to traditional offerings.”

He added, however, that the southern association would be happy to work with IRAC.

With so many unanswered questions and unsolved problems, the Western Governors University faces an uncertain future. But many believe that WGU, whether it succeeds or fails, has changed forever the higher education landscape.

“Whatever happens, WGU has advanced the discussion about non-traditional forms of higher education, especially distance education, by ten years,” said one close observer.

And most of those who have been struggling to bring the Western Governors University to life remain optimistic. “Sure, there are problems but they are not insurmountable,” said Sally Johnstone of the Western Cooperative for Educational Telecommunications “All the pieces are there. Now we have to make sure they all fit.”

Jim Dixon, author of “Virtual College,” lives in San Diego, California.
All That Glitters

Controversial gold mining project would benefit tiny Montana Tech

By Kathy Witkowsky

By Kathy Witkowsky

Butte, Montana

O

A CLEAR, chilly late fall afternoon in Butte, eight Montana Tech students sit in a basement classroom of the school’s Mining and Geology building, diligently typing commands into their computers. When they successfully enter the correct information, their screens display a 3-D image of a viable open-pit gold mine—a hollow, multi-tiered cake turned upside down and set into the ground. “If you can’t grow it, you have to mine it,” said graduate student Kevin McDonough, echoing a popular phrase on campus, and explaining why he chose his course of study.

For the students enrolled in this “Computer-Aided Mine Design” class, the assignment is just one more step toward completing their education as mining or geological engineers. When they graduate, they are almost assured of employment: Montana Tech, once known as the Montana School of Mines, has one of the nation’s largest and best respected mining departments, last year boasting a 92 percent job placement rate for its students—100 percent for mining engineers.

The worldwide boom in the mining industry is considered good news for the school. “My job is to train mining engineers,” said Pete Knudsen, who teaches the mine design class and also is dean of Montana Tech’s School of Mines. “If they don’t have any place to work, why should we train them?”

Not only do mines generate jobs for alumni, but mining companies are among the school’s largest corporate contributors. That is because the companies count on Tech to provide high-quality employees. Knudsen said.

Now the school stands poised to receive its biggest single windfall ever—from an enormous open-pit gold mine proposed near Lincoln, Montana. The core of the Seven-Up Pete Joint Venture (named for a legendary local miner), also known as the McDonald Gold Project, is situated on state trust land and earmarked to benefit Montana Tech. If approved, the project would generate an estimated $60 million in royalties for the school. The money would be kept in trust, eventually earning approximately $3.4 million each year in interest—about one-fifth the school’s current total annual operating budget.

“We’re looking forward to the productive use of that resource to benefit Montana Tech,” said John Hintz, vice chancellor for administrative and student affairs. Hintz’ enthusiasm for the project should come as no surprise: Tech faces a half-million dollar budget shortfall this year.

But not everyone agrees the proposed mine is such a great idea. Its location, in a scenic and environmentally strategic area, and its enormous scale have made it the focus of an intense battle waged by environmental groups. Wedged a quarter mile from the confluence of the Blackfoot River and the Landers Fork, about six miles west of the Continental Divide, the proposed pit alone would be a mile long, three quarters of a mile wide and as much as 1,500 feet deep. The entire operation would cover four square miles.

Environmentalists charge that the proposed mine threatens the water quality of the Blackfoot River and the Landers Fork. Long beloved by Montanans, the waterway gained international fame as the setting of A River Runs Through It, author Norman Maclean’s tale of flyfishing and family, popularized by a Hollywood film.

The mine’s potential to pollute the river recently prompted American Rivers, a Washington, D.C.-based conservation group, to include the Blackfoot on its list of the nation’s 20 most threatened rivers.

“There are some places that are mineable with acceptable risks to the environment and there are some places that aren’t. And this is a place where the risks are unacceptable,” said Jim Jensen, executive director of the Montana Environmental Information Center (MEIC), which is at the forefront of a coalition of environmental organizations trying to stop the mine.

According to critics, those risks are numerous, given the cyanide heap-leach technology the mine would employ. Simply put, this is how the process works: The ore—laden rock is dynamited and stacked into piles 300 feet high. When a cyanide solution is trickled through the piles, the gold bonds with the cyanide, then leaches to the bottom of the pit, where it is recovered from plastic liner pads. The cyanide is channeled into holding ponds.

Critics of the mine say studies show the plastic liners—which are about the thickness of a nickel—often leak. Even a tiny amount of cyanide could be devastating to fisheries in nearby streams, and might even contaminate groundwater. Although cyanide breaks down quickly when exposed to sunlight and oxygen, it can persist indefinitely without those elements.

Mine opponents also charge that the mine pit may generate toxic acid-mine drainage, which occurs when sulfide rock is exposed to oxygen and water; the resulting acid breaks down surrounding heavy metals, which can then run off into surrounding waterways. That is what happened in Butte’s Berkeley Pit. Once the largest truck-operated open-pit mine in the nation, it is currently filling with water that has alkaline content similar to battery acid.

Lastly, mine opponents charge that plans to pump out and re-route seven million gallons of water each day to keep the pit dry during the life of the mine could threaten the area’s hydrology. Nearby streams serve as spawning grounds for endangered bull trout, as well as native cutthroat, rainbows, browns and brookies.

By protecting the river, environmental groups say they are doing more than preserving the environment. They also are protecting the ranching, fishing and recreational economies of the Blackfoot River valley.

Mine spokesman Bill Snoddy said mine opponents are presenting a false dichotomy. Montana, he said, can have both the mine—with the estimated $117 million it will generate in total revenues for the state—and the river, which by itself generates an estimated $7.5 million annually in fishing dollars.

Company-financed tests indicate the mine site contains extremely low quantities of sulfide rock, plus large amounts of calcium carbonate, which acts as an acid buffer. Therefore, Snoddy said, it poses only an extremely low risk of acid-mine drainage. The company’s reclamation plan, in fact, calls for the pit to fill up with water after the ore has been mined; Snoddy promised the result will be a clean lake, able to support aquatic life. Critics sneer at that suggestion, and say it is simply a way for the company to avoid the costs inherent in reclaiming the pit.

As for cyanide leaks, Snoddy said the mine’s design protects more than adequately against them. “Our project is going to be economically a boon to the state,” he argued. “Environmentally it’s going to be a boon to the state, and we’re happy to let people know that. By demonstrating here how good mining can be, it will help the state overcome some fears about the industry.”

Thanks, but no thanks, say mine opponents who have heard similar reassurances in the past from mining companies that have gone on to pollute. Spokane-based Pegasus Gold Inc., for instance, recently settled a $37 million lawsuit stemming from violations of the Clean Water Act at its Zortman and Landusky mines in eastern Montana—which also are cyanide heap-leach gold mines.

“I don’t trust these mining companies or bureaucrats when they say, ‘Oh, everything will be fine,’” said MEIC’s Jensen.

“The evidence is absolutely, irrefutably clear: Cyanide heap-leach gold mining causes damage to water, damage to the land. Wildlife is killed, birds are killed, and economies are disrupted.”

But mine spokesman Snoddy vehemently disagreed. He compared the use of cyanide heap-leach technology to hiking in areas populated by grizzly bears. Both, he said, are manageable risks.

A view of Butte, Montana, home of Montana Tech. In the middle distance is one of the many mining “gallows” that still stand, though no longer in use.

Dean Pete Knudsen of Montana Tech, in front of a statue of “Copper King” Marcus Daly that stands at the campus entrance.
Administration of the state’s nearly six million acres falls to the State Board of Land Commissioners, a group of five elected officials chaired by the Montana governor. According to Montana Tech officials, the size and complexity of the project should not keep the Land Board from approving it. “The intent of the land grant is to benefit the school,” said Vice Chancellor John Hintz. “We know that the safe use of our resources is not only possible, we enable it through our training programs.”

Furthermore, Tech faculty often contract as consultants to mining companies—a practice that is strongly encouraged. Graduate school director John Brower works on retainer for the McDonald Gold Project as an independent consultant. Mining School Dean Knudson has consulted in the past for Canyon Resources, which owns the McDonald Gold Project. Montana Tech’s outgoing chancellor, Lindsay Norman, serves on the board of directors for Pegasus Gold Inc., which operates the Zortman and Lansdusky mines. And the acting director of the McDonald Gold Project is a Montana Tech alumnus.

“That’s one of the reasons our students are popular,” said Graduate School Director Brower. “They’re exposed to people who have a lot of contact with the industry.” Brower rejects any notion that the money at stake might sway his or his colleagues’ opinions about the mine. “I’d be a different matter if we all knew we were going to get $50,000 bonuses,” he said. Instead, the money would be folded into Tech’s general operating budget.

Mine opponents say the Land Board needs to look beyond Montana Tech’s budget when they consider the McDonald Gold Project. They point out that, unlike copper or other metals, gold is simply a luxury. More than 80 percent of the gold mined each year is used for jewelry. “Half the people in Butte don’t know the [McDonald Gold] project exists,” said School of Mines Dean Knudson. Added Vice Chancellor Hintz: “We don’t consider it much of a controversy. Why not? ‘It’s just another mine,’” one student said with a shrug. “There are mines being permitted and constructed all over the world daily.”

During a visit to a “mine waste dumps” class, six of eight students said mining—assuming plans conform to state and federal environmental regulations—is appropriate virtually everywhere, including within national parks. That is because they have learned that it can be done safely, the students said. “I’d mine it all!” declared one young man, apparently in complete sincerity.

The school’s geographical and intellectual isolation along the Continental Divide has Tech “hermetically sealed,” said John Ray, a professor of speech and political science. Ray is one of two faculty members vocally opposed to the mine (the other is his wife). “I have no doubt if a vote were taken on campus [about the McDonald Gold Project] among the students the overwhelming winner would be, ‘What are you talking about?’”

Ray, who serves on the board of the Montana Environmental Information Center, is hoping to puncture the “hermetic seal” in early 1998 with a conference he is arranging on the McDonald Gold Project.

The potential income from the mine doesn’t create the school’s pro-mining bias, but it certainly reinforces it, Ray said. “It’s a gold mine in more ways than one,” acknowledged John Brower, a professor of mineral economics and director of Montana Tech’s graduate school.

The money is sorely needed, and so are the in-state jobs, said mine proponents. “We are a great source of employment— for jobs in Nevada,” said a frustrated Brower. “Nevada is expanding their mining industry and ours is contracting. Montanans want to live in Montana. They want to see this thing go simply because it will provide employment where they want to live.”

Mining provides just 5,400 jobs in Montana, about 1.3 percent of the total employment. But mining jobs pay considerably better than most Montana occupations. A company-financed study predicted that workers at the McDonald Gold Project would earn an average $34,000 a year, well above the state’s average annual wage of $21,000.

It is likely more will be hired if the mine is approved, said project spokesman Snoddy. The mine is expected to provide about 385 jobs over its 12-year lifespan, he said. About 40 of those hires are expected to come from Lincoln, the rest from surrounding communities.

Still, opponents argue that the mine may cost more than it pays. “The old issue of ‘You have to have jobs or the environment’ has been turned on its head...Now in order to have jobs you have to have a clean environment,” said former Democratic Congressman Pat Williams, who is currently a senior fellow at the Center for the Rocky Mountain West, a University of Montana think tank. “Because the cash register of the Northern Rockies is becoming predominated by tourism and recreation...that’s where the jobs are.”

Mining, with its relatively high-paying jobs, may bring short-term gains to local economies, but in the end the industry’s boom and bust nature leaves the communities worse off than they were to start with, said Williams, a Butte native.

The Land Board must make the final decision on the mine permit. The state constitution tells Land Board members that the “guiding principle is that these lands and funds are held in trust for the support of education and for the attainment of other worthy objects helpful to the well-being of the people of this state.”

Although they routinely make decisions regarding leases for mining, drilling, logging continued next page
and agriculture, the Land Board never has dealt with a project of this magnitude, said Randy Mosley, an assistant to the director at the Department of Natural Resources and Conservation, which manages the state trust lands. Montana Governor Marc Racicot has characterized the McDonald Gold Project as one of the most complex mining proposals ever considered by the state.

The Department of Environmental Quality (DEQ) is the state agency responsible for evaluating and permitting mine applications, the agency and its precursor have dealt with a project of this magnitude, said School of Mines Dean Knudsen. “Pseudo-science is a big part of some people’s agenda,” charged Hintz.

That’s too convenient a response, said John Ray. “There’s nothing wrong with being emotionally committed to protecting a natural resource,” he said. “Any environmental group in this state has evidence and information to back up their points.”

Besides, supporters of the project often employ similar tactics: After all, what could be more emotional than the issue of jobs—especially jobs for Montanans? Land Board members have not indicated whether they will permit the mine. But “politics plays a part,” acknowledged State Auditor Mark O’Keefe, whom many people suspect has his eye on the governorship. “Not only is the economic return important but the cultural character, the societal character of Montana is important. And the uses of these lands should be consistent with the wants, desires and needs of Montanans and their communities.”

In a recent poll commissioned by Lee Newspapers of Montana, 48 percent opposed the mine, 39 percent supported it, and 13 percent were undecided.

Meantime, the mine has been plagued by administrative changes and highly publicized charges of ineptitude and bias in the ongoing environmental review process. In September, the original majority partner, the copper giant Phelps-Dodge, pulled out of the project, selling its 72 percent interest to Canyon Resources, a relatively small Colorado gold-mining company with a troubled financial past.

The sale—for a paltry $5 million up front—was considered a victory by environmental groups, who said it showed that Phelps-Dodge realized the project wasn’t feasible. And it prompted a skeptical editorial in the usually conservative Missoulian newspaper warning that “It will take enormous sums of money, an incredible commitment and much luck to mine the gold without harming the river and environment.”

In October, a key player in the development of the mine’s environmental impact statement resigned, criticizing members of the team as “inexperienced specialists.” Several weeks later, the spokesperson for the state Department of Environmental Quality quit, accusing the agency’s top brass of controlling media access to information about that incident in order to further their own agenda.

And with gold prices at a 12-year low, even mine proponents at Montana Tech now question whether the proposed McDonald Gold Project will remain economically viable. Prompted by a report about the sagging financial fortunes of Pegasus Gold Inc., a second Missoulian editorial about the project also questioned the wisdom of banking on a gold company to finance the mine reclamation.

Bill Snoddy said that despite the negative publicity, Canyon Resources will continue to pursue the project.

Kathy Wikowsky is a freelance writer who lives in Missoula, Montana.

A Letter to the Editor

I APPRECIATE your attention to my involvement in higher education governance and reform (National CrossTalk, Fall 1997). However, one statement attributed to me, either misquoted or taken out of context, might lead to a serious misinterpretation of my views and record.

Specifically, I am quoted as saying that it is not the SUNY Board’s “job to contradict (Governor George Pataki).” Lest this be taken to mean that I perceive of the board as an agent of the governor, I hasten to inform you that, at the time of my appointment, I was explicitly exhorted by the governor to bring my best, independent judgment to bear on issues relating to the State University.

I am a public official who has sworn to represent all the citizens of New York State, and my views on issues affecting the system may or may not coincide with those of the governor.

Correction

IN THE FALL issue of National CrossTalk, the photo identifications of Anne Paolucci, chairwoman of the City University of New York’s Board of Trustees, and Candace de Russy, a member if the State University of New York Board of Trustees, were transposed. The editor regrets the error.

Lincoln, Montana, eight miles from the proposed mine site, was briefly famous as the home of Unabomber suspect Ted Kaczynski.

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Successful political systems grow from the culture in which they exist. A top-down command system of government cannot be imposed on institutions of higher learning.

By Robert M. Rosenzweig

When things are going well, few people pay much attention to the way in which institutions of higher education are governed. Indeed, when attention is paid to how universities are run, the words used are more likely to be found that schools of business administration than in departments of political science.

Fortunately, since World War II (with one major exception and a few minor ones) the university world has been blessed by growth in enrollments and expansion across a broad front. During most of that time, money has been relatively plentiful and the world was reasonably peaceful and orderly. When the stars are in alignment, governance systems all seem to work pretty well.

When that has not been the case, though, it has been clear that the way in which universities are organized to make decisions makes a considerable difference. One such time came during the Vietnam War period when many universities faced a direct challenge to their ability to perform the most basic governance tasks—keeping order and protecting institutional values. Many, if not most, failed the challenge when the first wave of student disruptions hit them.

I believe we are in another such period now. The precipitating cause today is not disorder on the campus, but the prospect of a long period in which institutional progress cannot be achieved through growth, and in which seizing new opportunities for improvement must come at the cost of doing less of something currently being done, or of foregoing some other attractive opportunity.

For public universities, especially, the prospect of increased enrollment pressure is not matched by increased state appropriations poses in sharp relief the question of how their decision-making processes (i.e., their political systems) either help or hinder them in finding solutions to the resulting problems. A recent report by the Rand Corporation concluded that, “In our view, the most pressing reform needed today in the higher education sector is redesign of the governance structure of institutions so that decision makers can think and act strategically.”

When dissatisfaction about the way universities do their business breaks out publicly, it is usually the role of the faculty, in some form of what is commonly called shared governance, that is identified as the obstacle to whatever the need of the moment seems to be. This is as it should be, for it reflects the central place of faculty in any institution of higher learning.

Whether one approves of that role or not, and I believe that it is on the whole a good thing, it is important to understand that it is a political fact that grows not from conspiracy or sloth, but from the very nature of the institutions in which the tradition grew. Viewed from the perspective of a corporate chief executive, the role of faculty often seems an irritating nuisance that would not be tolerated in any well-run business organization and should not any longer be tolerated in a well-run university. Faculty do not, as the Rand report implies, “think strategically,” and so, the argument goes, they should yield their place in governance to those who do.

Even if that were a good idea, it could only work by making universities into something other than what they now are. Successful political systems grow from the culture in which they exist. If the framers of the Constitution had attempted to sell a unitary, non-federal system of government to thirteen fractious American colonies, much less to the nation of continental scope that grew from them, they would have failed. And if they had perchance succeeded at the outset, the system would have failed. A top-down command system of government cannot be imposed on institutions of higher learning.

While shared governance has come to have a rather bad name recently, it is, in fact, the most common form of governance in the United States. The Constitution created a system of shared governance between the states and the federal government and among the branches of the federal government. That is the only kind of system that could have worked in a society that was hostile to centralized authority, that valued liberty over order, and in which efficiency in decision-making had a much lower priority than the need for institutions that would mediate among competing interests without allowing any to dominate.

That is a fair description of a university. Thus, shared governance in a university is not an option, it is a necessity unless and until we decide that we want different kinds of universities.

If that is correct, does it mean that America’s universities are bound to confront their problems without coherent and thoughtful approaches to them, hoping that the aggregate of separately made decisions will somehow add up to sound policy? That may well be the case in many places, but it need not be. A different view of the matter may come from understanding the nature of the university presidency.

The presidency of a modern university is, by any standard, a weak position. The reasons are fairly easy to see:

• The president is chosen by absentee landlords who, in the case of public universities, increasingly carry their own or their political masters’ agendas, and whose primary loyalty is not, in any case, attached to their president.
• The president does not choose, and has little role in rewarding or punishing, the group that actually does the work for which the institution exists: the faculty.
• The faculty has little structural reason to support their president. Faculty loyalties have turned increasingly to patrons outside the university. In the case of the sciences, that means principally government and industry. And in all disciplines, loyalties extend to what have been called the “invisible academies” of professional associations.

This development has enormous consequences for issues as disparate as the debate over indirect cost recovery to striking a reasonable balance between teaching and research, with many stops in between. In the present context it means that the one group that can most readily bring a presidency down, and without whose acquiescence little of consequence can happen, is severely distracted by competing loyalties.

Moreover, this development is not limited to faculty. Virtually every administrative function on campus is represented by a national organization that may well take positions on issues that are contrary to the best interests of any given campus.
• The president has no control at all over the most numerous class on campus: the students. And their capacity to make mischief has been demonstrated many times in recent years.
• The president has few powers of appointment, and for the key positions that are his to offer, his range of choice is often circumscribed by internal search procedures.

It is, all in all, a weak executive position, and the weakness is compounded by a disability common to all modern politicians—a growing distance from the polity over which they preside. Just as the life and outlook of career politicians has grown more distant from their constituents, so, too, has the life and outlook of career academic administrators.

Some try to deal with that by teaching a course or maintaining a laboratory, but no one really is fooled. The fact is that the modern university president has quite likely come to the presidency through a route that may have started in the faculty, but diverged into administrative positions. Once in the presidency, he or she lives in a different world from others on campus. Thus, the natural and healthy tension between faculty and president is no longer a tension between colleagues who happen for a while to be performing different roles, but between people in different careers and different lives. When times are tough and support is needed, that can spell the difference between success and failure.

All in all, this is not a recipe for strong leadership, but notwithstanding all of the disabilities inherent in the role, some people do not despair about the possibility of effective presidential performance. There is another example of a structurally weak office that has no business working, but often does: the presidency of the United States. The American continued next page
FROM PRECEDING PAGE

president, like the university president, can only achieve his purposes with the cooperation, or at least the acquiescence, of a body—the Congress—which is constitutionally independent and over which he has little control, even if it is run by his own party.

In fact, most American presidents have been weak. In a system explicitly designed to prevent the aggregation of power, that is surely no surprise. But there have been strong American presidents, and they are generally reckoned the great ones. Their strength and their greatness has come from the interaction of the skills they brought to the job and the problems the nation faced during their terms of office.

There were no structural changes between the administrations of James Buchanan and Abraham Lincoln, or between those of Herbert Hoover and Franklin Roosevelt. What the latter of those two pairs brought that was new was a clearer vision and a keener appreciation of the problems the nation faced, a willingness to put forward ideas around which they could rally political support, and the skill to do so.

It does not take a Lincoln or a Roosevelt to be a successful university president, but it does take one who understands the system in which he or she operates, who is willing to put forward a coherent conception of the problems and opportunities ahead, who can offer a statement of the institutional values and purpose from which specific policies should emerge, and who has an appetite for the debate that will ensue when internal and external constituencies rub up against that formulation.

In truth, there is no real alternative—or to put it differently, the available alternatives are far less promising. If one accepts as a premise that universities can no longer afford to change simply through the separate initiatives of freely acting faculty—the principal engine of change in the past—because to do so will bring a kind of valueless free market into a situation in which assessments of value are the essence of the enterprise, then it is clear that what is needed is a process through which coherent deliberations about comparative value can take place.

That, in turn, requires that someone put forward a guiding conception that will form the backbone of the deliberations. That is, in somewhat oversimplified form, what great U.S. presidents have done, and it is only from that central position that it can be done. The faculty is no more able to produce such a conception on its own than is the U.S. Congress. Both can negotiate, shape and refine proposals put before them, and both are capable of stopping bad ideas, but it is the rarest of occasions when either is capable of generating a coherent program and executing it on its own. That’s where presidents come in.

It’s a tough job, and a risky one. Not many university presidents have been up to it, and I expect that only a minority will in the future have the courage and the political skill to try it, much less pull it off. Those institutions that are lucky enough to have such leadership will do well. The others had better hope for winning football seasons.

Robert M. Rosenzweig is President Emeritus of the Association of American Universities.

This article is adapted from “The Political University: Policy, Politics and Presidential Leadership in the American Research University,” by Robert M. Rosenzweig, Johns Hopkins University Press, 1997.

THE EROSION OF EDUCATIONAL MONOPOLIES

By Virginia B. Smith

COLLEGES AND UNIVERSITIES have enjoyed several near monopolies that have protected their almost exclusive share of the market of certain students who seek higher education. With the advent of technology, however, many colleges and universities may find that their monopolies no longer function as effectively in bringing prospective students to their doorsteps.

Whether or not all institutions of higher education support the changes that technology offers, they need to prepare for its challenges if they plan to remain competitive in attracting students during the 21st century.

Monopoly #1: Offer a degree = offer the instruction to get it

Higher education has generally assumed that the institution that awards a certificate or degree has a near monopoly in providing the instruction that will lead to the degree. We have assumed, in short, that receiving a degree is inextricably linked to earning credit, and that credit for the most part is earned through courses, some designated number of which must be taken at the institution conferring the degree.

Even though this monopoly has been modified by providing transfer credit, that credit also is based on instruction provided in courses at a campus-based institution.

But technology, along with new emphases on validating learning derived from technically received instruction, has spurred us to give more attention to assessment in general. In traditional classrooms we were content to consider grades, seat time and contact hours as the valid measures of progress toward a degree. Since these are difficult if not impossible to apply to distance education, there is growing demand to improve techniques that validate what has been learned—in other words, assessment of learning outcomes.

If learning can be successfully validated by assessment techniques, then controlling the processes of instruction loses its primary quality assurance role. This in turn leads to the possible decoupling of instruction and assessment.

Some would argue that this has long been the case at Oxford and Cambridge. But neither Oxford nor Cambridge would allow a person to write the final if they had not been enrolled in the college and participated in many, if not all, of its educational activities.

Many American colleges offer some credit by examination: through challenge exams, the College Level Entrance Program (CLEP), portfolio assessment for learning gained through experience, or similar programs. But these usually take place in an institution that is providing some of the instruction and awarding the degree. Only Regents College, in New York state, and Edison College, in New Jersey, may be exceptions to this. Decoupling assessment and instruction within an institutional setting has far different consequences than decoupling outside the institution.

Western Governors University may provide a model for an institution that offers a degree in which all the learning needed for the degree is validated by assessment without reference to how or where that learning is acquired. If degrees based on assessment of learning—rather than on credits earned through classroom-based instruction—become more available and popular, the market for instruction could change dramatically.

Monopoly #2: Location = convenience

For many colleges and universities, offering students a convenient campus location has always been assumed to be a crucial factor in maintaining or increasing student enrollments. In many states, this is particularly true of small independent institutions and community colleges, most of which rely heavily on local or regional student enrollments.

As the average age of college students continues to rise in the United States, it could be argued that convenience is becoming even more important. Many of these older students prefer to remain where they are currently located, whether because of jobs, families or other responsibilities.

Through the educational opportunities offered through distance learning, however, students can enroll in a course of study, complete their course work and receive a degree right at home. The University of Maryland and a number of other institutions already offer this form of learning. Since distance learning requires access to computer terminals and modems rather than traditional classrooms or campuses, it threatens to erode the location monopoly that many colleges and universities currently enjoy.

It could be argued, of course, that correspondence courses have always threatened the location monopoly. These courses, while popular for some students, have not seriously reduced the numbers of students at local colleges. Distance learning, so the argument goes, offers no additional threat to local college enrollments.

This reasoning, however, fails to account for the interactive possibilities of new technologies as compared to the “snail mail” slowness of correspondence courses. Whereas correspondence courses place all of the burden of motivation on the student, recent technological advances offer students wider, quicker and more interactive access to their teachers, to other students and to campus services—however removed they are physically.

Learning through computers also can be a lot more fun. Like correspondence classes, distance learning will most likely attract certain kinds of students (such as those who can work on their own). But they offer a world of different possibilities for more engaged learning. If this form of instruction grows more popular, those institutions that rely primarily on local or regional enrollments will need to understand the implications of distance learning for their own student body.

Monopoly #3: Offer a program = offer the courses

In the past, when a college added a program of study, the college assumed that it would hire the faculty members who would provide all of the instruction for that program. Now it is becoming more feasible to “outsource” courses; through technology, colleges and universities can provide classes on campus without local instructors.

These courses can be offered entirely through a computer lab, in conjunction with lectures provided through a large-screen format in a traditional classroom, or in conjunction with a video of lectures that the student can view at home. As a result of these possibilities, offering a program of study to meet the changing needs of students might no longer require such a substantial investment; the college might cover only a portion of the required courses with its own faculty and import the remainder of the classes through technological means.
This shift would, of course, create a very different “feel” for the institution. Much more so than today, each college would need to determine its strengths and weaknesses. For instance, to what extent—and in what fields—should a college become a producer or an importer of instruction? If a college could not financially support an entire program of locally produced classes, it could import key courses and offer others locally, so that students could still benefit from that program of study.

Each college also would have the opportunity to market its strengths, exporting its best classes elsewhere. In such an institution, the role of the faculty in quality control of imported instruction could become as crucial as maintaining the quality of classes produced locally.

The erosion of the first two monopolies listed above—in which the institution providing the degree also provides the instruction, and in which the convenience of instruction is based on the location of a campus—could shift the competitive edge away from campus-based institutions. This is particularly true for those colleges and universities whose students are most likely to take advantage of the opportunities provided by assessment-based degrees or distance learning.

But the erosion of the third monopoly—in which a college offering a program also provides almost all instruction for that program—could enhance the competitive edge of those campus-based institutions that understand how to maintain an appropriate balance between imported and home-grown instruction.

There has been much discussion about a projected increase in demand for higher education during the next decade. At the same time that the demand is expected to increase, however, the market is changing. Those colleges and universities that fail to understand the market’s effects on student demand—that is, those institutions that do not stay in touch with the preferences of their students in relation to the new opportunities that the market offers—do so at their own peril.

Virginia B. Smith is president emerita of Vassar College

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Challenging Questions

New ways of thinking about tuition policy

By Lee R. Kerschner

‘R AISE IT!’ “Lower it!” “Freeze it!”

These have been the competing tuition mantras of higher education trustees, students, faculty and their legislative friends. In an effort to encourage new and aggressive thinking about tuition policy, the Minnesota State Colleges and Universities system recently sponsored a conference that produced both basic principles for tuition setting, and some radical proposals for change.

The conference agreed on 19 basic principles, the top seven of which were quite modest in breaking new ground:

- Pricing should always require state (financial) commitment
- Pricing strategies should meet specific institutional and system goals
- These strategies should also meet specific societal goals
- Pricing should be market driven
- Pricing strategies should assure access
- Pricing strategies should engage businesses
- Tuition should be predictable over time

These principles, and 12 others that emerged from the process, have yet to be considered by the Board of Trustees of the Minnesota State Colleges and Universities, but I am hopeful that some will have an impact on the tuition-setting process. In planning discussions for the conference, and at the meetings themselves, other intriguing ideas were suggested by Chester Finn, who was the conference keynote speaker, and others. In this paper I wish to focus on some of these ideas.

I start from the premise that higher education is one of the last of society’s institutions to undergo fundamental reform. The other is corrections. Health care, welfare, military and industry all have been radically reorganized. Higher education is simply naive to think it is immune.

Health also has public and private hospitals and medicine, both secular and religious. Think of professors as doctors, staff as nurses, students as patients. Why shouldn’t we have higher education “HMOs” or “PPOs,” perhaps even keeping some “fee for service” options?

Why shouldn’t students pay a monthly lifelong learning fee at the higher education “HMO” or “PPO” of their choice? Why couldn’t employers pay for such learning as part of a cafeteria approach to benefits?

The airline industry also has undergone a massive reorganization. “Yield management” has resulted in widely different prices for the same flight, depending on the time of day, season of year, Saturday night stay-over, advance purchase or customer commitment to a specific airline (“frequent flyer” plans).

Refund policies and “charge fees” are part of the process. This is all based on the logic that any revenue for a seat is better than an empty seat. Why cannot higher education price according to early sign-up, time courses are offered, space available, demand for courses and convenience to the customer (student), perhaps with similar refund policies and course change fees?

If welfare recipients are required to work, why not tie higher education support to on-campus employment for all students? (This is a new idea.) What other ideas could we borrow from the welfare restructuring process? Could we limit the total number of units that are taken with state support? For example, state subsidies plus tuition might pay for the equivalent of five undergraduate years but all subsequent credits would be priced at full cost.

Loan forgiveness is already part of strategies to influence behavior—to produce more teachers or doctors for rural areas. Why not reward performance or provide loan rebates based on academic success?

Why not use tuition as a tool to redirect students? In its simplest form, high-demand institutions would raise tuition, while those with empty classroom seats would lower the price to attract enrollment—sort of the reverse of airline pricing but still based on yield management. This would be applied to all students without regard to the time they sign up or to the majors they choose.

Why not permit individual institutions (not systems) to utilize tuition as a tool for internal redirection, yield management or development of a particular curriculum? Some campuses and systems already are discussing this idea.

Why not use tuition to meet a state’s economic goals? Lower tuition where manpower supply is low and raise it to reduce manpower in areas of surplus?

Why not let institutions use market demand to set prices? The market will sort out which institutions and/or programs survive.

Why not “de-construct” college costs? For example, put the student union, health service, student government, athletic tickets, intramural athletics and counseling services on a “fee for service” basis. Thus, students would pay only for those non-instructional services they want. They also could be charged for courses, either credit or non-credit, with, as noted above, different prices for different courses, depending on demand or yield management.

Can we capitalize individual students so that investors with risk capital could bet on individual future performance? Should there be a market in “educational futures” based on individuals or classes of individuals?

There could be “niche” pricing—for instance, a state department of corrections might subsidize criminal justice majors, or a state education department could pay tuition for elementary and secondary school teacher candidates.

Should a university out-source all of its non-core instructional programs, such as remediation, English as a second language, foreign language skills (but not literature or poetry) as a means of reducing tuition?

Should colleges and universities convert to a trimester system so that students can graduate in two and two-thirds years, with a tuition bonus, if they choose to do so?

Should students be provided with educational choices such as a basic package at X tuition level, an enhanced package at X plus Y level, or a super package for X plus Y plus Z?

Should institutions market blocks of tuition tickets for business to use with employees, employee families or preferred customers as perks? For example, should preferred customers get tuition credits instead of “frequent flyer” miles or other rewards?

Should business be charged for narrow vocational training that directly benefits them? Or, to raise the question differently, should all vocational training be contract-based?

Should the state convert college and university budgets to a voucher system and rely on a competitive market to determine the level of additional dollars needed? Such a voucher could have a lifetime limit—perhaps $25,000—and would function like a debit card.

I am not advocating any of these ideas or principles, many of which are not new. I am advocating a national debate or brainstorming session that would push the edges of the current discussion beyond “Raise it!” “Lower it!” or “Freeze it!”

Lee R. Kerschner, vice chancellor (emeritus) of the California State University, also is former executive vice chancellor of the Minnesota State Colleges and Universities. The ideas in this article are the author’s own and do not represent those of either system, or of the conferes.
marked by “good will and camaraderie...this was a peak experience for me...everybody put the issues right out on the table and the openness of the discussions was wonderful.”

None of the 12 members came from higher education, although the chair, State Senator Nikki G. Setzer, a Democrat, has been chairman of the Senate Education Committee for eight years, and Gilbert has been a member of the state higher education coordinating body for five years.

“There was kind of a gentlemen’s agreement that we didn’t want that kind of pressure,” Gilbert explained.

Administrators and faculty leaders were in the audience when the group met but could not speak unless they were asked specific questions. Few outside experts were consulted and most of their advice was ignored.

The committee members were “largely unencumbered by knowledge of higher education,” remarked Jack Parson, a political science professor at the College of Charleston and head of the statewide Council of Faculty Chairs.

“You had business people and others who thought they knew how things should be done in higher education,” said Sally Horner, executive vice president at Coastal Carolina University, a 4,500-student campus near the popular resort community of Myrtle Beach. “This would be like me sitting on a committee to study the South Carolina banking industry.”

But Terry Ainsworth, the group’s “facilitator,” said the absence of college administrators and faculty members “could be a positive—the people involved didn’t have any particular biases.”

Toward the end of their deliberations, study group members began to decide which were “critical success factors” for public higher education in the Palmetto State. Using key pads called “innovators,” so no one could see how others were voting, they selected 37 “performance indicators,” ranging from graduation rates to “use of best management practices.”

Act 559, passed by the General Assembly and signed by Governor David M. Beasley, mandated that future funding of public higher education should be based on these 37 indicators, not on the enrollment-driven formula of the past.

This year, 25 percent of the increased funding for public higher education, or about $46 million, was awarded according to the indicators. Next year, 75 percent of the “new money”—perhaps $30 million or more—will be distributed in this manner. Beginning with the 1999-2000 academic year, 100 percent of state funding is to be allocated on the basis of the 37 “quality indicators.”

Or so the theory goes. As a practical matter, each public institution will receive a “minimum resource requirement” (MRR), and only 15 percent or less of its funding will depend on performance.

“The MRR is really a base budget for each institution,” said a member of the higher education commission who requested anonymity, “but we can’t call it that and we can’t refer to a ‘funding formula’ because the PR we’re putting out says we’re awarding 100 percent of the money according to performance.”

R. E. Small, director of finance for the higher education commission, predicted the new budget approach will mean “no more than a one or two percent change for any given institution” because it will be “politically unacceptable” for the state to reduce financial support for any college or university significantly on the basis of poor

**Budgeting for Results**

**Use of performance indicators increases in popularity**

As GOVERNORS and state legislatures press for more accountability in public higher education, performance budgeting has increased in popularity.

Only South Carolina plans to base all of its public higher education spending on performance factors but some states already use this approach to allocate a small part of the annual budget, and others are planning to do so.

The growing popularity of considering results in the funding of state colleges and universities is clear, according to a recent report from the Nelson A. Rockefeller Institute of Government at the State University of New York. The report said two-thirds of the states “either have or are likely to adopt programs that use results in their budgeting for public higher education.”

Joseph C. Burke, who directed the study, said only eight states, including South Carolina, currently tie appropriations directly to some kind of measurement scheme but 18 others are expected to adopt such plans in the near future.

“We don’t yet know if this is a trend or just a fluke,” Burke said. “The rationale makes sense but the implementation details are very difficult.”

Dennis Jones, president of the National Center for Higher Education Management Systems in Boulder, Colorado, agrees that this approach to budgeting sounds appealing but is devilishly difficult to administer.

“You need a clear understanding of the measurements, so there is no ambiguity,” said Jones, whose organization has worked on performance budgeting plans in several states.

“And you need agreement on what you are trying to do: Are you trying to increase the graduation rate? Do you want to improve access? What are the goals? Often, that’s not clear.”

The movement has gained strength because governors and legislators, facing increased pressure for more spending on health, welfare, public schools and prisons, are seeking evidence that dollars spent on public higher education produce results. In South Carolina and other states, they have been joined by coalitions of business leaders who are dissatisfied with the performance of public colleges and universities.

The business attitude tends to be, “If we can make these decisions in the business world (cutting costs, downsizing, introducing technology), why can’t it be done in higher education?” said Michael Smith of the South Carolina Commission on Higher Education.

This attitude annoys many educators.

“I don’t think these business comparisons are valid,” said Bill McCulley, director of academic programs for the Tennessee Higher Education Commission. “I’m not making boxes of cereal here; we’re improving the lives of our citizens.”

Nevertheless, the argument that public higher education should improve its efficiency and quality, in order to justify the large sums it draws from the public treasury, is gaining ground.

Performance funding “makes the public feel more comfortable in giving us increases in the core budget,” said Stephen Lehmkuhle, acting vice president for academic affairs for the University of Missouri system. “That has been healthy and good.”

The programs in Missouri and Tennessee are considered by some researchers and policy analysts to be among the most successful in the country. Both are incentive-based, utilizing a limited number of performance indicators to allocate about five percent of the total state higher education budget.

The Missouri approach, called “Funding for Results” (FFR), uses graduation and retention rates, scores on nationally-normed senior tests and graduate school entrance examinations and other assessment information to determine how much money should go to each public institution.

For the current academic year, the four-campus University of Missouri system will receive $5.1 million in FFR funding, while Truman State University (formerly Northeast Missouri State) will receive about $1 million, roughly three percent of the campus budget. “It’s a very small percentage, but it’s money that can make a difference,” said Ralph Cupelli, assistant to the vice president for academic affairs at Truman State.

“Culturally, higher education is beginning to become more accepting to being accountable,” said the University of Missouri’s Lehmkuhle said.

“Initially, it (performance-based funding) was feared to be a way to build in accountability and standards set by the state, but that’s starting to change.”

In Tennessee, where performance funding has been used since 1979, the higher education commission applies ten indicators to determine how much incentive money (up to 5.4 percent of the campus budget) should go to each school. The indicators include graduation and retention rates, accreditation of academic programs, job placement rates, and scores on national tests among others.

Incentive funding has amounted to about $300 million since the program began, according to Bill McCulley of the higher education commission. This year’s allocation is $26.7 million, out of a total appropriation of about $1 billion.

The commission has reported that job placement rates in vocational programs have increased from about 65 percent to about 95 percent since the program began; that the percentage of accredited major programs has risen from the mid 60s to more than 90 percent; and that scores on national tests have improved dramatically.

The Tennessee legislature is “very happy” with performance funding and would like to expand it, McCulley said, “but the institutions are concerned that their base funding might be cut if this goes much over five percent.”

Joseph Burke, of the Nelson Rockefeller Institute, hopes that the successes in Missouri and Tennessee can be repeated elsewhere and that performance funding will not go the way of earlier, unsuccessful attempts to assess the accomplishments of public colleges and universities.

“If this turns out to be just one more fad,” Burke said, “I’m afraid governors and legislators are going to throw up their hands in disgust and forget about trying to fund higher education.”

—William Trombley and Donald Severn

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**SOUTH CAROLINA continued from page 1**

**This is costing the state a fortune. We have a number of people who are dedicating a significant part of each day to this, and when all the numbers fall out, what are they going to mean?”

—MARCIA G. WELSH, UNIVERSITY OF SOUTH CAROLINA
The only answer I get is that the law says state thought local politicians would allow for performance, and no other state has tried to on Higher Education, keeps asking why performance plan through the South enough, unprepared students and low graduation rates. Some businessmen believe good jobs are being lost to other states because South Carolina colleges and universities are not producing enough well-trained graduates.

Public support for higher education is said to have waned in South Carolina in recent years. There have been complaints about faculty members who do not teach enough, unprepared students and low graduation rates. Some businessmen believe good jobs are being lost to other states because South Carolina colleges and universities are not producing enough well-trained graduates.

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Public confidence is thought to have been further weakened by the escapades of former University of South Carolina President James B. Holderman, who resigned in 1990 after an expense account scandal and later was imprisoned for lying to federal bankruptcy officials.

State Senator Setzler and others believe that requiring greater accountability from public campuses through performance-based budgeting will help to restore public confidence.

“I don’t think there’s any question that, with this movement to excellence, you will see legislative and public support for appropriating funding for higher education,” Setzler said in an interview. “And that clearly was one of the goals of the committee and the legislation.”

Others are not so sure.

“When all is said and done, I don’t think the people will be more money for higher education,” said David Fleming, director of institutional research at Clemson University, one of three research institutions in the state (the others are the University of South Carolina and the Medical University of South Carolina). “Higher education doesn’t have a strong voice like other constituencies—senior citizens or public schools or crime. Politicians can’t get elected on higher education.”

In the 1995–96 academic year, South Carolina local and state expenditures per full-time equivalent student in four-year institutions were $4,613—about $250 less than the average for the 15 states belonging to the Southern Regional Education Board, according to an SREB report.

“The basic problem here is that higher education is drastically underfunded,” said a college president who asked not to be identified. “No amount of ‘performance indicators’ or any of that other stuff is going to change that.”

Or, as Mary Thornsby, president of Trident Technical College in Charleston, put it, “there’s a strong interest in South Carolina in rolling back taxes of every sort.”

In that kind of climate, she said, more “accountability” is unlikely to earn large increases in spending for public higher education.

Nevertheless, because “this is the law”—as one college administrator after another referred to it in interviews—a massive data collection and reporting process is underway throughout the state.

For the 1997–98 academic year, the plan’s second year, 14 of the 37 indicators were used to judge the performance of each public college and university. Next year, eight more will be added and in the third and final year of the phase-in period, all 37 will be in play.

Some indicators have several parts. If all of the parts of all of the indicators are used to judge all of the campuses, measurements could total in the thousands.

Each campus establishes a “benchmark” for each indicator. This year, the benchmarks have little meaning because they are based on past performance. To some extent, that will be true for the second year as well. Beginning in the 1999–2000 academic year, however, each school must demonstrate that its benchmarks have been met or exceeded in order to earn a high rating from the Commission on Higher Education, which administers the entire unwieldy process.

Once a year, the commission assigns ratings of one to six for each indicator at each institution and then issues a single-sheet “report card.”

This year, for example, Clemson received a “6” for holding down “overhead costs per FTE student” but only a “4” for “average class size.” The university’s total score was 92 percent, tenth highest in the state.

The highest score—101 percent—was recorded, surprisingly, by the University of South Carolina’s branch campus in Lancaster, a lower-division (freshman-sophomore) school with about 1,200 students and a modest academic reputation.

After studying these scores, Fred R. Sheheen, the state’s former commissioner of higher education, wrote, “No other method of which I am aware would render such results, including the ancient practice of spelling the enthrails of goats on the ground and reading messages from the patterns formed thereby.”

“I was just as surprised as anyone else,” said Deborah Cureton, dean of academic and student affairs at Lancaster. “I guess we just looked particularly good on some of those first 14 indicators.”

Michael Smith, who is coordinating the new plan for the higher education commission, warned that the first-year scores don’t mean much because only a limited number of indicators were used, the benchmarks were based on past performance instead of future goals, and there was insufficient planning time.

“We’re feeling our way,” Smith said. “We’re looking for answers. We don’t know what works and what doesn’t until we have all 37 indicators in place and we’ve been using the whole system for a couple of years.”

But critics wonder if the scheme will ever make sense. They believe large amounts of meaningless information are being compiled that, in the end, will make little difference in state financial support.

South Carolina’s 37 Steps

The NEW SOUTH CAROLINA budgeting plan appropriates money to public colleges and universities according to 37 “performance indicators”:

- Expenditure of funds to achieve institutional mission
- Curricula offered to achieve mission
- Approval of a mission statement
- Adoption of a strategic plan to support the mission statement
- Attainment of goals of the strategic plan
- Academic and other credentials of professors and instructors
- Performance review system for faculty, to include student and peer evaluations
- Post-tenure review for tenured faculty
- Compensation of faculty
- Availability of faculty to students outside the classroom
- Community or public service activities of faculty for which no extra compensation is paid
- Class sizes and student-teacher ratios
- Number of credit hours taught by faculty
- Ratio of full-time faculty compared to other full-time employees
- Accreditation of degree-granting programs
- Institutional emphasis on quality teacher education and reform
- Sharing and use of technology, programs, equipment, supplies and source matter experts within the institution, with other institutions and with the business community
- Percentage of administrative costs compared with academic costs
- Use of best management practices
- Elimination of unjustified duplication and waste in administrative and academic programs
- Amount of general overhead costs
- SAT and ACT scores of student body
- High school standing, grade-point averages and activities of student body
- Postsecondary non-academic achievement of student body
- Priority on enrolling in-state students
- Graduation rate
- Employment rate for graduates
- Employer feedback on graduates who were employed or not employed
- Scores of graduates on postgraduate professional, graduate or employment-related examinations and certification tests
- Number of graduates who continue their education
- Credit hours earned by graduates
- Transferability of credits to and from the institution
- Continuing education programs for graduates and others
- Accessibility to the institution for all citizens of the state
- Financial support for reform in teacher education
- Amount of public and private sector grants
- Number of “distance education” credit hours
Some indicators, or “critical success factors,” are puzzling.

For instance, one tries to measure “institutional emphasis on quality teacher education and reform” when the state’s 21 two-year colleges do not train teachers.

Act 359 calls for the Commission on Higher Education to apply “objective, measurable criteria” in judging a school’s performance, but for some indicators no such criteria exist. For instance, one indicator asks if “curricula (are) offered to achieve the (the) mission” of a given school. Any judgment about that would be, as Fred Sheheen has written, “subjective” and “largely in the eyes of the beholder.”

Most campus officials who were interviewed agreed that some of the indicators are valid measures that can be quantified, at least to some degree: Does the institution have a strategic plan? How do enrollment, causing a revenue loss of more than $50,000 that the state will not reimburse.

“We have always done a very good job of retaining the students who enroll here, including those with low test scores,” said Leroy Davis, South Carolina State’s president. “I should think that would be a more significant indicator of quality than entering test scores.”

Another indicator calls on campuses to gather “employer feedback on graduates who were employed or not employed,” a measure that Susan Pauly, director of planning at the University of South Carolina at Lancaster, called “ludicrous—employers aren’t going to take the time to do that and, if they answer honestly, they might be opening themselves to lawsuits.”

Class size seemed at first to be an appropriate quality measure but problems developed immediately. How can an introductory course in political science or psychology, almost always a large lecture, be compared with the one-on-one instruction required in some programs at the Medical University of South Carolina?

Commission staffs first decided not to apply this indicator to the medical campus. Then they limited it to freshman to freshman, junior to freshman, and sophomore classes. Campus officials doubt that the evanescent indicator has much meaning.

In order to generate more money for faculty salaries and other high priorities, Coastal Carolina University increased its student-faculty ratio gradually from 19-to-20 to 25-to-one. “This was cost-effective and we were convinced quality did not suffer,” said Sally Horner, the campus executive vice president. “But we got a low rating (3.5) on that indicator.”

Some of the people who are working on implementation of Act 359 understand that some indicators need to be modified and others should be tossed out altogether.

Change has been made already, such as limiting the class size measure to the lower division. Other modifications are coming.

Work is being concentrated on indicators that seem practical, while others are being silently ignored.

“We’ve found, as we work through this, we tend to find problems that were not apparent until our work began,” Dalton Floyd, who chairs the higher education commission’s planning and assessment committee, said diplomatically.

Floyd, a 59-year-old attorney from Surfside Beach who specializes in golf law, is given credit for bringing calm and reason to the implementation process since taking over the planning committee a few months ago.

However, every formal attempt to reduce the number of indicators or make other substantive changes has been given short shrift by Senator Setzler and other supporters of the plan.

When a committee from the three research institutions suggested that 15 of the indicators should be dropped as largely irrelevant, they were rebuffed.

“Some people want to do some measure,” Austin Gilbert said. “But I tell them, ‘No, it’s like the knob on your radio—if it’s not right, you adjust it but you don’t remove it altogether.’”

Setzler believes the implementation problems have been exaggerated.

Thomas Hallman, associate chancellor at the University of South Carolina’s 3,000-student branch campus in Aiken, said a successful student assessment program has been “significantly reduced” because campus administrators are spending so much time on the new budget plan.

But Joseph C. Burke, who has been studying performance budgeting at the Rockefeller Institute of Government, is not sympathetic to these complaints.

“Shouldn’t they have been gathering much of this information already?” Burke asked. “If some people in higher education had their way, nothing new would ever get started because you can always think of more criticisms than reasons to do it.”

Several administrators agreed that the plan has forced them to analyze their campuses more carefully and to do better planning.

At Coastal Carolina University, for instance, seven task forces, including about 50 faculty members, have been involved in fashioning campus responses to the higher education commission’s requests. “I think we all know a lot more about the institution than when we started on this,” Executive Vice President Sally Horner said.

“We feel, with hard work and good sense, it will become a useful exercise,” said Conrad Fest, provost at the College of Charleston, a handsome liberal arts campus in the heart of Charleston’s historic district.

“It forces us to look together planning, budget and assessment in ways we haven’t done before.”

But Jack Parsor, who has taught political science and international relations at the college since 1980, is less optimistic.

“The best we can hope for,” Parsor said, “is to be able to go back to the public and the legislature and say: Here are the indicators, we seem to be doing pretty well and, now that you have the evidence it’s time to appropriate more money for higher education.”

“This may enable higher education to regain some of the credibility it has lost, not only in South Carolina but nationwide,” Sally Horner said. “But do I think it will affect, in the near future, what goes on in the learning experience of a single student in this state? No, I don’t think so.”

Attorney Dalton B. Floyd, Jr. heads a committee to work out the budget plan’s details.

When questions arose last year, “we sat everybody around the table (and) we learned that there really wasn’t the disagreement they thought there was and everybody was on the same song sheet,” Setzler said in an interview. “Certainly, I think any postponement of implementation would be an effort to either dilute or kill the legislation, and I certainly would not support that.”

“I think we need to work with this awhile before we make any significant changes,” Dalton Floyd said. “I don’t think the legislature would look in a friendly way at any major changes at this stage.”

Now that Setzler, Floyd and others are being invited to talk about the South Carolina budget plan at national higher education meetings, it will be even harder to make needed changes, some campus officials fear.

Said one, “Senator Setzler is getting praise for this and now his ego is so big, he doesn’t want to hear about any defects” in the plan.

So the expensive, time-consuming process continues.

“Costing this state a fortune,” said Marcia G. Welsh, associate provost and dean of the graduate school at the University of South Carolina’s main campus in Columbia. “We have a number of people who are dedicating a significant part of each day to this, and when all the numbers fall out, what are they going to mean?”

“It’s really frustrating,” she continued. “Higher education is in such tough shape in this state, the situation is growing more and more desperate, and we’re spending all this time and effort on this exercise.”

The legislature did not appropriate any additional money for performance-based budgeting, so the institutions are absorbing the costs. University of South Carolina officials estimate they have spent at least $150,000 on start-up costs alone.

Clemson’s David Fleming said he had put 62,000 miles on his Mercedes in the last two years, most of it traveling from the Clemson campus in the western part of the state, to meetings at the state capital in Columbia.

Gathering the massive amount of data required for the performance review process has been especially burdensome for smaller campuses.

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**South Carolina Statistics**

*Fall 1996*

- Number of public campuses: 33
- Three research universities, nine four-year comprehensive universities, five two-year regional colleges, 16 technical colleges
- Enrollment: 157,363 (headcount)
- Students: 73 percent white, 27 percent minority (mostly African American)
- Operating budget: $642,407 (1996–97 academic year—14.7 percent of total state revenue)
- Tuition and fees: average for four-year universities $3,133, for two-year regional colleges $1,850, for technical colleges $975

(Source: South Carolina Commission on Higher Education)