

Quality Benchmarks

Roger,

Geoff asked me to respond to your Oct 10 note about a process to identify quality benchmarks. As you are aware, a significant initiative during Geoff's presidency has been to direct MSU to be an institution that makes its decisions in a "data rich" environment and he often refers to us as being "data driven". As a consequence, we have several substantial benchmarking efforts underway. How directly these efforts can be tied to "Quality" is a matter of interpretation. We do think that quality in any system is the result of the interplay of a variety of factors, individuals, resources, expectations, habits and contexts; and as with most academic issues, there will always be great variation between programs and among institutions.

We collect indicators of quality wherever and whenever we can. Pass rates on professional exams, placement rates, national awards won by students and faculty all indicate a level of quality and can be useful as ongoing assessments. A system-wide collection and analysis of this type of data could assist us in better defining and evaluating our overall quality levels.

Where accreditation, both institution-wide and program specific is available, it can also be used as a measure of quality. MSU-Bozeman has been accredited by the Northwest Association of Schools and Colleges since 1932. Eligible professional academic and service programs within the University are accredited by the following agencies:

- Accreditation Board for Engineering and Technology
- Association to Advance Collegiate Schools of Business (AACSB)
- American Association for Family and Consumer Sciences
- American Dietetics Association
- Commission on Collegiate Nursing Education
- Computing Sciences Accreditation Board
- Council for Accreditation of Counseling and Related Educational Programs
- National Architectural Accrediting Board
- National Association of Schools of Art and Design
- National Association of Schools of Music
- National Council for Accreditation of Teacher Education
- American Psychological Association (for PhD level Internships in Counseling and Psychological Services)
- Accreditation Association for Ambulatory Health Care (for Student Health Service)
- National Collegiate Athletic Association (for Intercollegiate Athletics)

Program accreditation is typically a rigorous process and we should be able to take advantage of the process to demonstrate quality in our accredited professional programs.

The Office of Planning & Analysis on the Bozeman campus generates the usual set of metrics used in higher education to compare institutions (e.g. Common Data Set (CDS) and the federal IPEDS reports). We recently produced a "dashboard report" for the Regents to use as they discussed budgets. The OPA produces the following benchmarking reports:

- Key Performance Indicators (KPI) - This report is a ten-year history that allows MSU instructional departments to make internal comparisons with other MSU departments as

well as with their own historical performance. The report tracks expenditures, faculty and GTA FTE, student credit hours (SCH) and student FTE by level, majors, degrees granted by level, and ratios of all of these (e.g. expenditures per SCH).

- The Bozeman and Billings MSU campuses each participate in the University of Delaware studies which will allow MSU departments to compare their performance on various teaching, research and service functions to that of faculty in the same disciplines at other, similar universities. A similar benchmarking study for two-year campuses (that will be referred to as the Kansas Study) is being considered by MSU's COT campuses.
- The University Planning, Budget, and Analysis Committee (UPBAC) on the Bozeman campus is working with the OPA to develop an Instructional Program Evaluation Matrix that can be used to augment the qualitative and quantitative data from the KPIs and from the Delaware studies to evaluate the need, centrality, program costs and productivity of departments.

We also attempt to establish benchmarks for non-instructional areas. The success of those efforts is usually dependent on whether or not a particular area has an active national association. For many facilities related departments we can use APPA data. For Library benchmarks we can look at ARL and/or ACRL figures. For research and technology transfer performance we can look at the AUTM report.

Finally, the Bozeman campus has recently begun a strategic planning effort that is focused on what we need to accomplish to be successful in five years. That effort has identified items in six broad areas and is developing strategies and tactics that we think are essential to University excellence. Those six areas are:

- Student Body
- Faculty and Staff
- Curriculum
- Research
- Partnership
- Physical and Financial Infrastructure

The strategies for achieving excellence in each of these areas will have associated goals and measurable outcomes. Although these are likely to be fairly Bozeman specific, as we achieve these goals we should be able to use the measurements as indicators of quality.

So, there is no shortage of measures to pick from. Indeed, the greatest challenge is likely to be coming to agreement on which measures are most relevant to a discussion of "quality". We look forward to participating in that discussion. Please let us know how we can help you move it along.

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**System Issues Attachment
Montana State University-Northern**

Dear Roger,

A couple of comments to add to Jim Rimpau's e-mail concerning benchmarks....

One thing Jim mentions is a system-wide collection of pass rates on such things as professional exams, placement rates, national awards, etc. This type of data collection would be very useful, particularly for the small institutions since most of us do not have a "position" and/or "person" dedicated to collating and disseminating this type of information. Some of this data collection (particularly with regard to exams) is already happening....for example, nursing and the CPA exams. If the state and/or the institutions with teacher education programs initiates content and pedagogy exams (which I believe will happen by 2005), this type of information will become available as well.

In my opinion, accreditation is not a process of meeting "minimums", but a long, laborious, and expensive process for institutions. One thing I would suggest is that some of the Regents attend training sessions for institutions on various accreditations, and that some of them become trained evaluators. They (the Regents) might not serve on a team for a Montana institution, but it would certainly be useful for some of them to serve on teams evaluating out-of-state institutions. This type of training would (in my opinion) be a very valuable learning experience, and they could experience "first-hand" the accrediting processes.

What I don't believe we have done a good job with is external benchmarking (either within the MUS or with our peer institutions). However, if this were to be completed system-wide, we would need to agree on the benchmarks and performance indicators that we are going to use. For example in undergraduate education this might be items such as...

- Retention from 1st year to 2nd year
- Graduation rate with 5 years for incoming freshman
- Student/faculty ratios
- Average class size
- Credit hours taught by tenured vs. non-tenured faculty
- Faculty salaries
- Benefit package
- Diversity (faculty, administration, and student body)
- Amount (\$) spent on student services per FTE
- Percent (%) financial aid awards cover student calculated need
- Number of transfer students (in and out of the institution)
- Computing hardware and software availability
- Network access (both on- and off-campus)
- Library resources (books and serials per FTE)
- Cost of library operating expenditures
- Delivery of extension and outreach education
- Number of courses taught via electronic distance delivery
- Academic advising
- On-campus activities for students (number and type)
- Square footage and age of footage per FTE
- Amount of allocated building and renewal replacement \$'s
- Comparison of tuition \$'s and state appropriated \$'s
- Private giving for scholarships, athletics, etc.
- Number of alumni chapters and donors

Yes...the above list is extensive and could go on and on...Jim's comment that "there is no shortage of measures to pick from...the greatest challenge is going to be coming to agreement on which measures are most relevant to quality"....is right on....

Just my two cents...

Cheri Jimeno, Interim Provost
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November 20-21, 2003

System Issues Attachment
Montana State University-Great Falls CoT

October 27, 2003

Dear Roger,

You asked for my input on establishing a process for identifying benchmarks of quality indicators in the Montana University System. It is nice to be asked. Only two points are crucial, and the time of year makes me begin with one. Lest its point become obscure in what follows, let me hint at it at the outset: I worry that attempting to draw lines around "quality," the better to take its measure, will necessarily be an exercise like Frost's wall-mending, as likely to wall out as to wall in.

As a student, teacher, alumna, mother, administrator, and Montanan, I have experienced or witnessed so many indicators of quality in our university system that I cannot list them all. The important thing about the most compelling "quality indicators" of my experience is that I could not have anticipated most of them with any precision and would not care to put a yardstick next to any of them. The most recent of these experiences happened almost a year ago, on the morning of the Bobcat-Grizzly game in Missoula. It's as good an example as any to illustrate my point.

During the course of that morning, the temperature plummeted 30 degrees, which took the leisure right out of my morning. At 7 a.m., I put on the T-shirt and sweatshirt that had been fine the day before and could barely get through 2 miles on Missoula's leaf-cushioned streets before my ears and hands were numb. I hurried back to the hotel, cleaned up, and found an open store with a sweater and jacket suitable for a cold fall day. By the time I arrived at the UC for the President's brunch at 11, even the added clothing was clearly inadequate. A blizzard had begun. It was winter, suddenly.

On the way into the brunch, I ran into Bonnie Willows, who had come to the UM the same year I had, and is now Bonnie Quist. The funny freshman year we shared long ago has been the basis of an improbable friendship that still rings true every five or ten years when we bump into each other. Last year outside the UC, she looked even more beautiful than she had 30 years earlier in that same spot, but there was no time to do much more than exchange a hug and a pleasantry. (We always say we will connect later, "after the game," and we never do.) I left her to hurry into the brunch, thinking I'll just dart in and get out, make an appearance. My real concern was to find my husband and son in the gathering mob outside, dole out tickets, and get into the game.

But at the brunch, something wonderful happened. This girl sang, a UM music student with long dark hair; a pure, pretty face; and a voice like one of those deep, plush chairs they used to have in the lobby of the Algonquin ... the kind of voice you just sink into and can't leave, so delightful and complete is the unexpected luxury. She sang "Summertime," I remember. Barely out of her teens, a slip of a thing, she shimmered in a chocolate-colored sheath, her bare arms still a little brown from the summer sun. That voice of hers ballroom-danced across the glossy notes, the lyrics recalling a languid, Southern summer she had never experienced, while behind her, a blizzard of the type she knew too well swirled soundlessly against the wall-to-ceiling glass of the UC ballroom. The exquisite elegance and utter incongruity ... I thought I would swoon with

ecstasy. But a dean swooning is the kind of thing that, at 11 in the morning before the Big Game, would be misunderstood. So I exercised an unaccustomed restraint.

Later, the Bobcats beat the Grizzlies for the first time in 17 years, and I wanted that to happen because too much winning among siblings is bad for winner and loser alike, but I didn't stay to see it out. Wet, heavy snow had soaked my stupid new coat by the end of the first quarter. My hair froze and my nose ran like a red fire hydrant on the gray cement sidewalk of my face. At halftime I went to Rockin' Rudy's, bought a Sarah Vaughn CD with "Summertime" on it, and headed home in the spare car. I listened to the game on the radio, and at the end, I was happy for the Cats, sanguine about the Griz, and glad that my boy was sitting in the stands with his two buddies. I hoped that, like his dad and his mom, it would be the first of many times that he would practice this ritual or one like it.

And then I put on Sarah Vaughn, listened to "Summertime," and thought of that chocolate woman-child with caramel in her throat and the incredible, incongruous scene from a few hours before. In my sodden coat in my slow-moving car on that snow-glazed interstate, I felt perfectly warm and content. Whenever I hear "Summertime" now, I feel a little bit of both again.

Which part of my experience of the university system that day is quality, Roger? Seeing the bonny Bonnie, or hearing that girl, or the foresight of creating those wall-to-ceiling windows that make storms works of art, or being flanked by the men I love in wintry bleachers, or the thrill of a new talent, Travis Lulay, showing his stuff, or knowing who Sarah Vaughn is and where Rockin' Rudy's is, or the symbolism of any or all of those things, or the fact that something in my education – many things – gave and continues to give me and mine these little moments of warmth, contentment, and even joy that sustain us long after the moments pass? I don't know the answers to those questions. No one does, and of course the university system can't take full credit for any of my "quality indicators." But the true quality of these factors derives in large part from their unexpectedness – an unexpectedness that is, to the educated, expected. And immeasurable.

Measuring quality necessarily limits it, fences it into a generalized expectation, which all too soon becomes mediocrity. Maybe the "quality university system," appreciating the limitless possibilities created by the broad range of human potential and the even broader range of circumstances, changes, and accidents of fate that can and do happen over time, maybe that system puts the pieces in place that have the best odds of capitalizing on possibility – or potential, as our constitutional framers called it. I know we're all about outcomes now, and they have their place. But only a place. If you want to ensure the capacity to capitalize on the unexpected and the habit of doing so, which is the whole point of formal education, you have to put your faith in inputs. And the patience to let them play out as they will.

There are other things to say, things having to do with our Constitution, but of that, another day. This is what seems important today.

Qualitatively speaking,

Mary Sheehy Moe
Incurable Sap

Measuring by Value in the Montana University System

“It is the goal of the people to establish a system of education which will develop the full educational potential of each person.”

Montana Constitution, Article X, 1.

In its “Education Article,” Montana’s constitution clearly establishes the purpose of public education in Montana, whether pre-school or post-doc. The purpose is to develop the full educational potential of each citizen. It’s a tall order – daunting on its own, without throwing in the advancement and dissemination of knowledge, the creation of beauty, the health of the economy, the cultivation of an educated citizenry, or whatever drumbeat we dance to any particular era. As policy-makers and advocates, we tend to focus on these societal benefits of Montana’s system of education, perhaps in the vain attempt to entice the public to support it more meaningfully. However, our constitution all but declares that the system exists for the individual, and if that is so, any measure of its quality must focus on individuals and the degree to which the breadth and depth of individual potential is tapped by higher education.

Perhaps the framers understood that, with the development of each individual’s full educational potential, those larger, more generally experienced goods would follow as the night the day. If so, they didn’t speak of it much in their deliberations, and they did not commit that understanding to words in the document itself. It appears that they just wanted every individual to have a chance to get ahead, and they believed higher education gave each individual the best chance at doing just that.

In my first installment on this subject, I alluded to several individual and societal benefits accruing from higher education in Montana, any of which might be described as indicators of quality. My point was that measuring quality was not only futile but also perilous to quality itself. Value, however, is a different matter. I think it is appropriate for the board that oversees the system to identify the values the higher education system in Montana should have, to measure whether those values are being achieved, and to set and correct its course of governance in light of those measures. I also think that the Board has been doing that for quite some time.

The key question in arriving at statements of value is this: If the goal of the system is to develop the full educational potential of every citizen, what would Montanans find valuable in the design of the system? Here are some answers that make sense to me.

1. **The Value of Offering a Range of Educational Programs.** To develop the full educational potential of every individuals, we must identify the areas in which educational potential is likely to exist and ensure that Montana’s higher education system is designed to develop each major area. This is more difficult than it appears for at least two reasons:
 - a. Traditionally, the valuable areas have been seen as aesthetic, professional/vocational, scholarly, research, creative endeavor, and technology development and transfer Is the generally recognized range of individual educational potential broader today than it was in 1972 when the constitution was adopted?
 - b. Is there a certain base-level of programming that all institutions in the system should have, or are some of those areas logically reserved for only some of them? How do we resolve issues of duplication with equity of access to full range of basic options that meet the constitutional imperative?

2. **The Value of Ensuring the Accessibility of Educational Experiences.** Even if the system has the range of educational programs likely to develop full educational potential in the individual, the issue of access to these programs is a real one. In our dashboard indicators and other projects in the last five years, we've established some fairly good outcome measures that may relate to access: demographic information on admissions, retention, completion; completion rates, etc. Two "input" measures might also be helpful:
 - a. Alternative delivery systems—evening classes, summer, on-line, interactive video, compressed/flex schedule—that accommodate the work/family demands of a more diverse student population.
 - b. Just-in-time models—accelerated learning for high school students, customized training for incumbent employees, outreach and continuing education.

3. **The Value of Affordability.** There is not much point in having a system designed to develop educational potential of every citizen if the average Montanan cannot afford to tap into it. What is the measure of affordability, above which we will not go? Also related to affordability are a number of trends that can be monitored – transferability of credits, numbers of true articulation agreements (as opposed to recommended courses of study), excess credits.

4. **The Value of Ensuring Capacity at the Institutional Level.** There is not much point in having a system with the capacity to develop the potential of individual Montana citizens if the system must sell seats to non-Montanans to the extent that Montanans themselves must choose an option that does not meet their needs. At what level does non-resident enrollment in our universities unacceptably limit Montanans' access to their own system? If access to some units is sold to non-residents to the extent that Montana citizens must go elsewhere, what are the elements of developing "full educational potential" that other units of the system must maintain in order to meet the constitutional imperative?

Certainly these are not the only values that the Montana University System has to the individual or to society; but they are the ones most germane to ensuring that individual educational potential is fully developed through the system.

Mary Sheehy Moe, EdD
November 3, 2003

MontanaTech

THE UNIVERSITY OF MONTANA

Office of the Chancellor

To: Roger Barber
Interim Deputy Commissioner for Academic and Student Affairs

From: Frank Gilmore *Frank Gilmore*
fgm

Date: October 23, 2003

Subject: Quality Benchmarks

Roger, thank you for the opportunity for input into the process to identify Quality Benchmarks. First, I feel it is important that the Regents appoint a small committee to address this subject or that your office do this. I would urge you or the Regents to appoint Susan Patton to this committee.

Quality is very difficult to define and will probably cause us more grief than we want. Quality is like beauty in that it is in the eye of the beholder. What the Regents are really interested in are standards. Standards can be measured because they have a quantitative aspect. Benchmarks are really standards. For example, the Regents might set as the standard for the MUS a student to faculty ratio of 10/1 or more realistically a ratio of 20/1. They might set faculty and staff salaries at the national average of CUPA for rank and discipline. For efficiency, we might use cost per FTE student divided by percentage placement rate at graduation. Kiplinger uses things like SAT or ACT, Student/Faculty ratio and four- or six-year graduation rates to indicate quality (?). Again, I feel that if we set these as standards and not as measures of quality we might get some level of agreement.

My concern is that if we start trying to define quality, we will fall into a pit that is so deep that we cannot climb out. If the Regents will accept something that can be measured such as standards and then set goals that are realistic to measure how we are doing, I feel we might be able to succeed. The trouble with things like graduation rates as a measure of quality is that faculty will often argue that because of grade inflation, graduation rates go up but quality goes down. I am not sure that any relationship exists between graduation rates and quality of graduates. Is accreditation a measure of quality? I doubt it in that I was told a few years ago that Harvard University has never been accredited by a regional accrediting association. Despite this, I believe the general population would say that Harvard is a quality institution. If we use dollars spent /FTE student as a measure of quality, Montana Tech would look bad compared to institutions such as Cal Tech. However, if we use employer satisfaction with graduates/cost per graduate, Montana Tech looks great compared to Cal Tech.

We need to set some standards for comparison of MUS institutions with realistic standards for improvement, but we should not try to make them measures of quality. If my aim were to avoid having to worry with these benchmarks, I would recommend that we proceed full speed ahead on defining quality because we would become so mired in the muck that we would never have to do anything.

Again, thanks for the opportunity to comment.

c: Susan Patton

SREB

Linking Higher Education Performance Indicators to Goals

February 2000

Southern
Regional
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EDUCATIONAL BENCHMARKS 2000 SERIES

Goals for Education: Challenge 2000

BY THE YEAR 2000—

All children will be ready for first grade.

Student achievement for elementary and secondary students will be at national levels or higher.

The school dropout rate will be reduced by one-half.

90 percent of adults will have a high school diploma or its equivalent.

Four of every five students entering college will be ready to begin college-level work.

Significant gains will be achieved in the mathematics, sciences and communications competencies of vocational education students.

The percentage of adults who have attended college or earned two-year, four-year and graduate degrees will be at the national averages or higher.

The quality and effectiveness of all colleges and universities will be regularly assessed, with particular emphasis on the performance of undergraduate students.

All institutions that prepare teachers will have effective teacher-education programs that place primary emphasis on the knowledge and performance of graduates.

All states and localities will have schools with improved performance and productivity demonstrated by results.

Salaries for teachers and faculty will be competitive in the marketplace, will reach important benchmarks and will be linked to performance measures and standards.

States will maintain or increase the proportion of state tax dollars for schools and colleges while emphasizing funding aimed at raising quality and productivity.

COLLEGE EFFECTIVENESS

BY THE YEAR 2000—

The quality and effectiveness of all colleges and universities will be regularly assessed, with particular emphasis on the performance of undergraduate students.

“Each state should spell out the kinds of assessment systems it requires. These assessment systems should take into account the diversity and differences in mission and scope among a state’s colleges. At the same time the state has a responsibility — indeed, an obligation — to assert certain minimum expectations for all colleges and universities, on the one hand, and, on the other, to provide ways to identify and reward superlative performance. **State systems for assessing institutional effectiveness should make the goals of the institutions widely known and report to the public the progress made in achieving these goals.**”

SREB Goals for Education, 1988

How are states measuring the effectiveness of higher education?

Nearly all SREB states have developed performance indicators that are being used to describe how higher education is responding to what policymakers and the public expect from higher education. Some states passed legislation during the past decade requiring colleges and universities to report on specific indicators. In other states, higher education agencies report on performance indicators as a part of the planning and budgeting process.

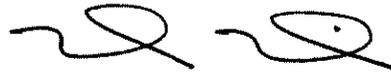
This report in the Educational Benchmarks 2000 series:

- tells what we have learned about reporting on higher education performance in the last 10 years;
- describes the kinds of information being used to inform policy-makers and the public about higher education;
- provides examples of how the information is linked to states’ goals for higher education and is being reported; and
- illustrates how the information can help develop state and institutional policies and practices that are likely to achieve goals for higher education.

COLLEGE EFFECTIVENESS

Why is it important that the public know more about higher education performance? The value higher education adds? The return on investment? Some say the reasons it is important are as simple as one, two, three.

1. The public increasingly insists on accountability for all of state government.
2. Competition for funding forces colleges and universities to show their efficiency and effectiveness.
3. Higher education must demonstrate its value to students, to business and industry, and to the public to gain the support it needs.



Mark Musick
SREB President

Linking Higher Education Performance Indicators to Goals

Ten years ago, no SREB state issued a comprehensive report on higher education that provided information directly related to the state's goals for higher education. Today, most SREB states do. All have identified indicators related to colleges' and universities' effectiveness and efficiency. Annual reports on higher education now include data and commentary on key indicators of progress toward goals.

That is not to say that all measures on which higher education should be judged are being reported. In addition, the measures being used are not always designed for the purpose of

improving the effectiveness of programs or the efficiency of the process. Yet higher education agencies in the SREB states now have identified performance indicators that can provide the public and policy-makers with more and better information.

Why should we have performance indicators for colleges and universities? What kinds of information should policy-makers look for in reports on higher education? Can performance indicators and "report cards" on higher education bring about changes in policies and practices?

Why are measures of higher education's effectiveness needed?

Higher education is "the engine that drives the economy." That is not a cliché; many believe it is a truth that is becoming increasingly self-evident. Establishing goals and measures of effectiveness and reporting on progress can generate the public support needed to fuel the engine.

The general public greatly admires higher education but lacks understanding of it. Most people think that higher education is "a good thing" but do not comprehend its strengths and weaknesses.

Public perception is complicated by conflicting messages about higher education. Colleges and universities are not funded adequately but enrollments have expanded to record levels. Students have trouble getting into courses required for graduation but colleges are providing remedial instruction to many entering students. A "seamless web" of education may be in the future, but for now credits earned at two-year colleges too often do not count when students transfer to four-year colleges.

Skepticism about higher education can be heard in questions where higher education is discussed. Is there sufficient emphasis on teaching? Is research emphasized too much or does it lack focus? Do big-time athletic programs

skew colleges' perspectives? Are ambitious administrators, faculty and supporters trying to expand institutional missions beyond the state's needs?

What have we learned from a decade of reporting on higher education?

- **There is more and better information available for making judgments about higher education now than 10 years ago.**

Debate continues over the usefulness of some performance indicators. Yet, the performance indicators used by different states are similar.

Definitions of specific performance indicators continue to differ from state to state, but

institutions within each state now use the same definitions for reporting purposes. The SREB-State Data Exchange is working with states to develop comparable data on graduation rates, continuation rates and faculty teaching loads for public institutions.

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- **State agencies need to issue reports that link the information to established goals for higher education.**

Reports should include information on trends, not just a one-year snapshot. State residents need to know the impact of the state's system of higher education and the long-term effects of changes in important indicators of progress.

Reporting too much on too many indicators can overwhelm the reader, and reporting too little can be misleading. State agencies continue to work toward finding an appropriate balance.

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- **Most states have not established standards for what is "good enough" on the higher education indicators.**

Reporting changes over time in the performance indicators shows policy-makers and the public whether improvement is occurring. Using similar measures to draw comparisons among peer institutions makes the indicators more meaningful. But states also should consider establishing standards for performance as

well as indicators of progress. For example, what is a "good" graduation rate? What is the acceptable percentage of entering students who require a remedial course in mathematics? What is a "good" rate at which students transfer from two-year to four-year colleges?

- Most SREB states now require colleges and universities to assess what college students know and can do when they complete general education courses or earn a degree. Few states require all colleges and universities to use a common measure.

Colleges and universities do assess what students know and can do. Individual colleges and universities use various methods and examinations to assess college students' knowledge and skills upon completing general education programs or earning a degree. It is difficult to establish a common measure to be used by all colleges because each college or university has developed its own core general-education programs and course requirements for degrees.

In the absence of a common assessment, results on entrance examinations to graduate and professional schools and licensure examinations are being used as indicators of what college graduates know and of program quality. The students taking these examinations may not represent all college graduates, but these may be the only examinations taken by a significant number of students at different colleges and universities.

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- Measuring and reporting on performance can bring changes in institutional and state policies and practices.

By monitoring student performance and how an institution uses human and physical resources, states can identify how well policies and practices are working. State-level assessments of higher education have resulted in revised requirements for completing degrees;

guidelines for transfers between two- and four-year colleges; changes in course pricing when the number of courses taken significantly exceeds the number required for a degree; and the elimination of duplicative programs.

*What information is being reported about colleges' and universities' performance?
Where can you find it?*

In the 1990s state leaders called for changes in the way higher education does business. They expressed concerns about how much time and money students spend in completing college degrees, how much time faculty members spend in classrooms and with students, and whether students are being prepared for the challenges of an information age and a global economy. A decade ago, many state lead-

ers believed colleges and universities and higher education agencies were unresponsive and arrogant when asked about these matters.

SREB states adopted legislation in the late 1980s and early 1990s that directed higher education agencies to collect and report information related to concerns expressed by state leaders.

Key questions about higher education and related performance

(Note that some performance indicators respond to more than one question.)

How "good" are the programs offered by higher education?

- the number and percentage of programs that are accredited
- the results of program reviews by the institution, state higher education agencies, and associations such as the National Research Commission
- assessments of graduates by employers
- assessments of programs and services by students and alumni
- student evaluations of faculty
- alumni's assessments of how the college or university prepared them for careers or graduate and professional schools
- graduates' performance on certification and licensure examinations
- percentage of graduates who enter professional and graduate schools

Is higher education using its physical and human resources efficiently?

- number of student credit-hours taught at lower-, upper- and graduate-divisions
- number of hours classrooms and other facilities are used
- analysis of student demand for courses
- student/faculty and student/administrator ratios
- amount of time faculty spend teaching, researching and engaging in public service
- percentages of upper- and lower-division courses taught by full-time faculty, part-time faculty and graduate assistants
- use of technology for instruction
- expenditures per student

How well are entering students prepared for college?

- scores on college entrance examinations
- percentage of entering freshmen who have completed college-preparatory core courses
- percentages of applicants who meet college admissions requirements
- number and percentage of students who take remedial courses
- percentage of entering students who receive credit for Advanced Placement courses

indicators

What happens to students who enroll in colleges and universities?

- percentages of entering students who continue from year to year at the institution they first entered or transfer to other institutions and complete degrees
- length of time it takes students to complete degrees
- course availability in general education and in the major field of study
- percentage of students who transfer from two-year to four-year colleges
- number of degrees awarded

What do college students know and what can they do?

- college students' performance on assessments of general education
- percentage of graduates who pass certification and licensure tests
- graduates' scores on entrance examinations to graduate and professional schools
- job placement rates for graduates
- alumni's assessments of the preparation they received
- students' assessments of their instruction

How is higher education helping the state respond to changing social and economic conditions?

- availability of postsecondary educational opportunities to adults statewide
- enrollment trends by gender and race/ethnicity
- reports on public service by faculty
- research and development activities and expenditures
- percentage of high school graduates who continue their education
- percentage of adults in the state with college degrees
- information on impact of public service and research
- information on institutions' roles and missions
- percentage of graduates employed and information on annual incomes

During this same period, the Commission on Colleges of the Southern Association of Colleges and Schools added "institutional effectiveness" to its criteria for accreditation. As a result, accreditation reviews no longer focus only on resources but also emphasize results. In this context "institutional effectiveness" meant using information to "re-evaluate goals, to make essential improvements and to plan for the future."

Accrediting agencies list the following measures that frequently are used to assess institutional effectiveness:

- the percentages of entering students who return for their sophomore, junior and senior years and who complete degrees;
- students' achievement in general education and in their majors;
- surveys of students' perceptions of and satisfaction with their academic programs;
- opinions from students, alumni and employers about the quality of graduates;
- job placement rates of graduates;
- the number of students admitted to graduate and professional schools and their performance in these schools;

- the percentage of students who transfer and how they perform after transferring; and
- recognition by outside sources of students' and graduates' achievements.

Accreditation and program reviews also call for information about faculty qualifications; the number of student credit-hours produced; enrollment trends; the number of degrees awarded; ratios of students to faculty members; faculty members' research and public service activities; and the adequacy of classrooms, library facilities, student services and other support services.

The national "Student Right to Know" legislation requires colleges and universities to inform prospective students about the percentages of students who continue from year to year, graduate, get jobs or continue their education.

All of these actions mean that, at the close of the 1990s, colleges and universities and higher education agencies are providing much more information about performance than they were at the beginning of the decade. The kinds of information now being reported are shown on pages 8 and 9.

What is the effect of reporting on higher education performance?

Public support for higher education can improve

Clear, concise, matter-of-fact reporting on things that matter intuitively to the public can answer many questions about higher education's priorities. How many and what percentage of high school graduates enroll in college? How prepared are they for college-level work? What percentage of students who begin college

complete programs and earn degrees? How long does it take to complete a degree? What kinds of jobs do college graduates get, and how much do they earn? What percentage of college graduates go on to professional schools and graduate schools?

Illustrations of reporting on higher education performance

The Tennessee Higher Education Commission reports annually to the legislature on colleges' and universities' progress toward goals established in 1989. The report includes information about data and trends in enrollment; the percentage of entering students who need remedial courses; the rates at which students continue from year to year, transfer, graduate and find employment; performance on professional licensure examinations; performance on examinations that measure general education; the number of teacher education graduates and pass rates on the licensure examination; expenditures on research and public service; faculty salaries and state appropriations for higher education; and student financial aid. The report is about 50 pages long and presents the performance indicators in a straightforward manner.

For more information, contact the Tennessee Higher Education Commission, Suite 1900, Parkway Towers, 404 James Robertson Parkway, Nashville, TN 37219-5380.
(www.state.tn.us/thec)

The Texas Higher Education Coordinating Board issues a biennial report on statewide trends in higher education. While the report is designed primarily for legislators, the public also may find the information important and useful. The report focuses on five issues facing higher education: quality; access; diversity in educational offerings; funding; and leadership and management. The report examines information and actions related to improvements in quality, expansion of access, promotion of educational diversity, changes in funding and improvements in the use of human and physical resources.

For more information on *Higher Education in Texas: 1998 Status Report*, go to www.thecb.state.tx.us/divisions/grpi/statohe98/statmain.htm.

In response to legislative directives, the University of North Carolina General Administration issues reports throughout the year about the effectiveness of student learning, faculty quality and development, and progress toward achieving institutional missions. Each report focuses on indicators related to a specific interest: academic, student and administrative services; orientation and advising services; alumni employment; student gains and educational goals; and teaching effectiveness and quality of education.

For more information go to www.ga.unc.edu/UNCGA/assessment.

Reporting on higher education performance (continued)

West Virginia's *Higher Education Report Card* summarizes strategic plans for public colleges and universities and reports on key indicators in several areas: student preparation for college; access to higher education; student outcomes; economic and work-force development; productivity; and characteristics of faculty and staff. The indicators monitor progress toward six goals spelled out in legislation: "better preparing students to enter college; providing greater access to higher education for all West Virginians; preparing students to compete in a global economy; focusing resources in those areas which offer the greatest opportunities for students and for job creation and retention; using resources to their maximum potential to ensure that West Virginia higher education is more productive; and compensating faculty and staff at competitive levels to attract and retain quality personnel."

For more information go to www.scusco.wvnet.edu/www/data/rc99/rc99.htm.

Higher education performance indicators can be linked to budgeting decisions

States increasingly link performance indicators to budgeting and resource allocation. Most states use performance indicators for informational purposes in institutional and state budgeting. Information on performance is considered in deciding whether to provide funding to continue programs or to develop new ones. Some states also provide incentive funding that institutions can earn by achieving certain goals.

The higher the stakes (i.e., funding, rewards and incentives), the more important it will be for states to ensure that the information reported is valid and accurate. State leaders and educators must pay careful attention to what is being measured and to the quality of the information gathered. One observer has noted that "what is measured is not always important and what is important is not always measured."

Illustrations of linking higher education performance to budgeting

In 1984 Tennessee began basing part of its funding for higher education on institutions' progress on a limited number of indicators. Now about 5.5 percent of funding is based on 10 performance indicators in what is the nation's longest-standing program of its kind. Every public college or university can earn additional funds by meeting performance goals. Even after 15 years, policy-makers continue to periodically review the indicators that are used, how they are defined, and debate whether the additional funding is sufficient to motivate institutions to change their policies and practices. Institutional performance on indicators has improved over the years. Currently the performance funding system is being reviewed to determine what changes, if any, need to be made.

Linking higher education performance to budgeting (continued)

Florida legislation creates a direct link between colleges' and universities' performance and a portion of the state's appropriations. For example, performance indicators first were used in determining about 2 percent of the total 1996-97 appropriations to Florida's community colleges. A review of the system found that the incentive fund provides a simple, straightforward way to distribute incentive money to community colleges. The review recommended developing more comprehensive performance measures, improving data quality and now establishing standards for performance. Results show some improvement in the percentages of students completing programs and the amount of time it takes to complete programs. The State University System of Florida began participating in 1997-98.

For more information go to www.oppaga.state.fl.us/reports/topic/eductop.html.

South Carolina legislation calls for all funding of higher education to be based on performance indicators. This is the nation's most ambitious performance-funding legislation. South Carolina has identified 34 performance indicators that vary for each sector of postsecondary education: two-year technical colleges; two-year campuses of the University of South Carolina; comprehensive colleges and universities; and research universities. South Carolina's performance indicators fall into nine categories:

- mission focus;
- faculty quality;
- instructional quality;
- institutional cooperation and collaboration;
- administrative efficiency;
- entrance requirements;
- graduates' achievements;
- institution's user-friendliness; and
- research funding.

The South Carolina Commission on Higher Education establishes funding levels for each institution to meet its mission. These levels are based on projected enrollment by discipline and include projected costs for instruction, research, public service, libraries, student services, physical plants and administration. Each institution's revenues are subtracted from the total cost of its operations to identify the amount of state funding needed. The performance indicators then are used to determine the percentage of state funding each institution will receive.

For more information go to www.che400.state.sc.us/web/performe.htm.

Performance indicators can bring about changes in statewide and institutional policies and practices

State higher education agencies and colleges and universities throughout the SREB region are making efforts to improve policies

and practices. The following examples show how performance indicators can lead to improvement.

Illustrations of changes in policies and practices

The Oklahoma State Regents for Higher Education uses performance indicators to focus resources on high-priority academic programs and student services. As a result of this system of academic planning and resource allocation, more than 600 duplicative and lower-priority programs have been eliminated since 1991. Millions of dollars — nearly \$7 million in the last two years — have been redirected to higher-priority programs and services.

For more information go to www.okhighered.org/studiesreports.html.

The University of North Carolina General Administration collects data from all 16 campuses and reports on student retention and graduation rates; students' ratings of instruction and programs; entering students' academic preparation; results of internal and external program reviews; and faculty research and community service. Data collected helped individual campuses to focus their attention on problems such as the low percentages of students returning to college from year to year, the low percentage of students earning degrees, and the length of time students were taking to complete degrees. Institutions were required to submit plans to improve retention and graduation rates. Students who exceed the number of hours required for an undergraduate degree by 15 percent now must pay the full cost of the additional courses. These actions have resulted in a steady increase in the percentages of students who return for their sophomore, junior and senior years and who graduate.

For more information go to www.ga.unc.edu/UNCGA/assessment.

The University of Florida found that many students took far more credit-hours than required for the final degree and that about one-half of those hours could be eliminated by improving students' progress through the system. The university implemented a university-wide system to track students, improved access to and the quality of academic advising, and ensured that core classes were available each semester. As a result, more students are being admitted and more are returning from year to year.

For more information see "Measuring University Performance" (various reports), University of Florida, Office of Institutional Research, at www.aa.ufl.edu/aa/oir/.

Is reporting on higher education useful?

Assessing higher education's quality and effectiveness and reporting the results take time and effort by institutions and state agencies. Setting expectations and standards based on performance indicators can help a state judge the adequacy and benefits of its higher education system.

This fact might be illustrated best by an excerpt from *Vision 2020: An Agenda for Kentucky's System of Postsecondary Education*:

"The following questions help shape our plans and actions. They identify some concrete, tangible indicators of what should result from our efforts. These indicators need to be made specific for the system and its member institutions. Then they need to be measured to determine the extent of our success. Offered now, they help us to begin with the ends in mind.

"Are high school graduates going on to postsecondary education in greater numbers? Are they fully prepared when they get there? Are they advancing through the system smoothly and in a timely fashion? Are they graduating in greater proportions?

"Are we helping people prepare themselves to lead fulfilling lives, be good workers and perform their civic responsibilities? Are our students ready for the global marketplace of the 21st century?

"Is Kentucky creating its own businesses as well as attracting new businesses, industries and jobs? Are Kentucky employers able to find the qualified employees they need? Are continued training opportunities available to keep workers' skills up-to-date? Are major industries and small businesses receiving adequate advisory and research support? Are governments and corporations investing more research-and-development dollars in Kentucky's research universities?

"Have our schools, colleges and universities become nationally respected for their progress and their commitment to helping build better lives for all Kentuckians?" (For more information go to www.cpe.state.ky.us/.)

As the Southern Regional Education Board noted in the 1990s, performance indicators and higher education report cards are most valuable when:

- the information leads to improvements in campus operations and student learning;
- the information helps the public understand higher education's role in today's society; and
- the information contributes to better policy-making at the state level.

Selected Reports on Higher Education, SREB States

Enhancing Our Strengths Through a Shared Vision: Planning for Alabama Higher Education 1996-2000 and 1997-98 Annual Report, Alabama Commission on Higher Education, 1999

Fact Book: Arkansas Public Higher Education and Student Enrollments, Fall 1998, Arkansas Department of Higher Education, 1999

Fact Book, Delaware Higher Education Commission, 1999

1999 Annual Report — Challenges, Realities, Strategies: Progress in Implementing the Master Plan for Florida Postsecondary Education in the 21st Century, Florida Postsecondary Education Planning Commission, 1999

A Vision for the University System of Georgia and Information Digest, University System of Georgia, 1999

The 1999 Status Report to the Governor and General Assembly and 2020 Vision: An Agenda for Kentucky's System of Postsecondary Education, Kentucky Council on Postsecondary Education, 1999

Accountability Report, Louisiana Board of Regents, 1999

1999 Data Book and 1999 Trend Book, Maryland Higher Education Commission, 1999

IHL System Profile and The Almanac, Mississippi Institutions of Higher Learning, 1999

Statistical Abstract of Higher Education in North Carolina and reports on topics such as remediation; retention, graduation and time-to-degree; research and public service activities; and teaching workload. University of North Carolina General Administration, 1999

Student Data Report and Annual Employment Outcomes Report, Oklahoma State Regents for Higher Education, 1999

Minding Our "P's" and "Q's": Indications of Productivity and Quality in South Carolina's Public Colleges and Universities, South Carolina Commission on Higher Education, 1999

The Status of Higher Education in Tennessee, Tennessee Higher Education Commission, 1999

Higher Education in Texas, 1998 Status Report, Texas Higher Education Coordinating Board, 1998

Core Performance Measures for Higher Education, 1998, Virginia Department of Planning and Budget; *Strategies for Excellence: Advancing Virginia Higher Education*, State Council for Higher Education in Virginia, 1999

West Virginia Higher Education Report Card 1999, Central Office of the State College and University Systems of West Virginia, 2000

TO: Deputy Commissioner Roger Barber

FROM: Chancellor Ron Sexton

RE: Your letter of October 10, 2003 on Quality Benchmarks

DATE: October 28, 2003

I appreciate the opportunity to share our Campus' perspective on "Benchmarking". My recommendation would be to embrace currently recognized industry-wide performance measures. Hence, system-wide comparisons are readily available. The majority of our "Benchmarks" are already in place. I would offer the following categories as the most relevant "Dashboard Benchmarks" for judging quality at our institution:

1. **Retention** – Graduation Rate Survey is a key indicator of our success to meet the needs of our students. The Integrated Postsecondary Education Data System (IPEDS) is a system of surveys designed to collect data from all primary providers of postsecondary education. This survey collects the number of students entering the institution in a particular year (cohort) and completing within 150% of normal time. Our Senior campus reporting is 6 years and the College of Technology reporting is 3 years. Data are collected annually.
2. **Customer Satisfaction** – Utilizing standardized survey instruments such as the Student Opinion Survey by ACT allows us to compare ourselves with regional as well as national peer institutions.
3. **Employability** – The true measure of our ability to provide our students with the knowledge and skill sets to meet their ambitions. OCHE has typically defined employability as the percentage of respondents, typically 75% of graduates, with jobs in their field of study within 6 months of graduation.
4. **Deferred Maintenance** – The backlog of Deferred Maintenance compared to the Replacement Value of the Infrastructure (Facility Condition Index, FCI). This is an internationally accepted benchmark of The Association of Higher Education Facilities Officers (APFA) and has been adopted throughout the Montana University System. Bi-annually we inspect and update the FCI.
5. **Institutional Effectiveness** – Probably the most contentious yet enlightening benchmarks for the system would be measuring the institution's effectiveness. Three of our most significant measures would be Faculty/Student ratios, Full-time versus Part-time professors teaching courses and Outcomes Assessment. Considerable analysis needs to be devoted to these measures to assure us they are qualitative.

6. **Value** – The cost or expenditure (which could be either tuition & fees or the cost of attendance) per student is a more significant measure of accessibility on our non-traditional Campus than perhaps our sister units.

7. **Support** – Technologies and equipment appropriate to support programs, curriculum and administration. As we continue to become more dependant upon technology, our ability to prepare students to meet the needs of industry dictate that they be proficient in state of the art technology. Establishing renewal cycles commensurate with industry standards assures us that we remain up-to-date and competitive.

8. **Accreditation** – Probably the most recognizable measure of quality is accreditation. As an institution, we continue to meet the rigorous standards set forth by our National Accrediting Organization the Northwest Association of Schools and Colleges. Additionally, specific program accreditation might be utilized on a campus-by-campus basis.

Of course for Benchmarking to be successful we must continually analyze the data to assure ourselves we know what we're measuring and why. It's fundamental to Continuous Process Improvement yet rarely have I heard of Benchmarking being a successful tool in allocating resources. We look forward to working with your office on this meaningful endeavor.

CC: Geoff Gamble, Mary Moe, Alex Capdeville

MONTANA STATE UNIVERSITY – BILLINGS

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CHANCELLOR MSU

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10/29/03

Category/Groups	Staff Senate	Student Affairs	Admin Directors	Academic Senate
Retention	Retention of Students, Faculty and Staff	Same	Same & Growing Enrollment	Same & Professional Development
Customer Satisfaction	Standardized survey instrument (Student Opinion Survey by ACT) compared to statewide/national statistics.	Same	Same & Employee Satisfaction	Alumni Satisfaction, Comprehensive & Progressive educational opportunities
Employability	% of students w/jobs in their field of study, % of in-state vs. out-of-state students & average salaries.			Same & On going effective advising for graduation & career
Employer Satisfaction	Surveying the businesses, school districts, and other organizations where our graduates are employed to gauge the perceived quality.	Same	Same & Positive Public Perception	Same
Affordability Value		Cost of education as a % of median income.	Same	
Experience			Qualified Staff	Strong relevant discipline knowledge & experience, % c Faculty with Terminal degrees
Deferred Maintenance		Deferred Maintenance to the Replacement Value of Infrastructure (FCI).	Same	
Support			Number of Trouble Calls/Computer	Technical Support for Academic Programs
Institutional Effectiveness		Delivery Cost per Credit Hour	Same & Support Staff to number of Employees	Average Expenditure per Student, Faculty/Student ratios, Full-time professors teaching courses, Outcomes Assessment
Accreditation				Achievement of standards set forth by National Accrediting Organizations