

# Toward A Balanced Scorecard for Higher Education: Rethinking the College and University Excellence Indicators Framework

## HIGHER EDUCATION FORUM

QCI, Center for Organizational Development and Leadership, Rutgers University  
99-02 • Fall, 1999 • <http://www.qci.rutgers.edu>

Brent D. Ruben\*

One of the defining themes of contemporary organizational theory is the emphasis on *information* and *measurement* for assessing, tracking and promoting organizational excellence. “Information and Analysis” is one of the seven categories in Malcolm Baldrige criteria for performance excellence, and “management by fact” has been a core value in the Baldrige framework (DeCarlo & Sterett, 1989, 1995; MBNQA, 1988-1998), and most other writings on organizational quality for more than a decade (Cortada & Woods, 1995; Deming, 1993; Hiam, 1992; Juran, 1995; Lynch & Cross, 1991, Ruben, 1995).

There is little argument about the value of assessment, measurement, and the use of the information that results therefrom, but the question of what should be measured and how that information should be used has been more problematic.

There is little argument about the value of assessment, measurement, and the use of the information that results therefrom, but the question of what should be measured and how that information should be used has been more problematic. In business, where financial measures have traditionally been the primary focus, a broadened range of performance indicators are being introduced to more fully represent key success factors for an organization. Examples include measures of consumer perceptions and employee satisfaction, and innovation. As issues of performance measurement and issues of accountability become increasingly consequential in higher education, an understanding of the concerns motivating these changes within the private sector and the new measurement frameworks which are emerging can be extremely useful.

### Accounting-Based Measures of Organizational Excellence

Traditionally, business has measured performance using a financial accounting model that emphasizes profitability, return on investment, sales growth, cash flow or economic value added. But in recent years, questions have begun to be raised regarding the heavy reliance on these measures:

The accounting systems that we have today—the historical-cost-based numbers that we all love to hate have developed over hundreds of years. They can be traced back to the first “joint stock” or publicly owned companies of the 14<sup>th</sup> century and even earlier (Zimmerman, 1993, p. 6).

Financial measures provided a basis for accountability and comparability.

Take the case of the East India Trading Company, which was an early joint stock company. Let’s say they had a manager 4,000 miles away running a trading post, and they shipped that person a boatload of goods. The purpose of accounting was to ensure that the manager used those goods to serve the company’s interests and not just his own (Zimmerman, 1993, p. 6).

The need for external accountability and standardized measures for financial comparison across corporations continues today. However, there is a growing sense that these financial performance indicators, used alone, fail to capture many of the critical success factors required for external accountability, and are of limited value for addressing internal management needs (Brancato, 1995; Hexter, 1997).

---

\* Copyright © 1999. Dr. Brent D. Ruben is Professor of Communication and Executive Director of Rutgers QCI, Center for Organizational Development and Leadership, Rutgers, The State University of New Jersey. This paper has been published by The Hunter Group in their Higher Education White Paper Series. Copies may be obtained by writing.

The constraints of conventional financial performance indicators were noted by the Harvard Business School Council on Competitiveness in an analysis of differences in investment patterns in U.S. corporations versus organizations in Japan and Germany. Among the conclusions of the study (Porter, 1993, p. 73) are that the U.S. approach to excellence measurement:

- Is less supportive of long-term corporate investment because of the emphasis on improving short-term returns to influence current share prices.
- Favors those forms of investment for which returns are most readily measurable; this leads to an over-investment in assets whose value can be easily calculated.
- Leads to under-investment in intangible assets—in internal development projects, product and process innovation, employee skills, and customer satisfaction—whose short-term returns are more difficult to measure.

**The general conclusion is that financial indicators alone are limited in their ability to adequately represent the range of factors associated with organizational excellence.**

More generally, accounting-based measures (Brancato, 1995):

- Are too historical;
- Lack predictive power;
- Reward the wrong behavior;
- Are focused on inputs and not outputs;
- Do not capture key business changes until it is too late;
- Reflect functions, not cross-functional process within a company;
- Given inadequate consideration to difficult-to-quantify resources such as intellectual capital.

The general conclusion is that financial indicators alone are limited in their ability to adequately represent the range of factors associated with organizational excellence. Accounting-based measures, for instance, may not capture key elements of an organization's mission, customer satisfaction and loyalty, employee satisfaction and turnover, employee capability, organizational adaptability or innovation, environmental competitiveness, research and development productivity, market growth and success, and other important company-specific factors (Brancato, 1995; Kaplan & Norton, 1996).

## The Quality Approach and Expanded Measures of Excellence

The quality approach (e.g., Deming, 1993; Juran, 1995; Ruben, 1995), emphasizing external stakeholder focus, process effectiveness and efficiency, benchmarking, human resource management, and integration and alignment among components of an organizational system, provided impetus for the use of a more comprehensive array of performance indicators. Many major corporations now couple financial indicators with other measures selected to reflect key elements of their mission, vision and strategic direction. Collectively these “cockpit” or “dashboard” indicators, as they are sometimes called, are used to monitor and navigate the organization in much the same way as a pilot and flight crew uses the array of indicators in the cockpit to monitor and navigate an airplane. The usefulness of these indicators extends beyond performance measurement, per se, and contributes also to self-assessment, strategic planning, and the creation of focus and consensus on goals and directions within the organization.

One approach that addresses this need in a systematic way is the Balanced Scorecard concept developed by a study group composed of representatives from major corporations including American Standard, Bell South, Cray Research, DuPont, General Electric and Hewlett-Packard (Kaplan and Norton, 1994, 1995, 1996a, 1996b). As described by Kaplan and Norton (1996, p. 2), “The Balanced Scorecard translates an organization's mission and strategy into a comprehensive set of performance measures that provides a framework for a strategic measurement and management system.”

Specifically, Kaplan and Norton (1995b, p. 10) explain:

The Balanced Scorecard should translate a business unit's mission and strategy into tangible objectives and measures. The measures represent a *balance* between external measures for shareholders and customers, and internal measures of critical business processes, innovation, and learning and growth. The measures are *balance* between outcome measures—the results of past efforts—and the measures that drive future performance. And the scorecard is balanced between objective, easily quantified outcome measures and subjective, somewhat judgmental, performance ...

Organizations that adopt this approach report that they are able to use the approach to (Kaplan & Norton, p. 10, 19):

1. Clarify and gain consensus about vision and strategic direction
2. Communicate and link strategic objectives and measures throughout the organization
3. Align departmental and personal goals to the organizations vision and strategy
4. Plan, set targets, and align strategic initiatives

5. Conduct periodic and systematic strategic reviews
6. Obtain feedback to learn about and improve strategy

As reported by an executive in one company that has utilized this approach (Brancato, 1995, p. 42):

A balanced business scorecard is an information-based management tool that translates our strategic objectives into a coherent set of performance measures. We start with the vision. What are the critical success factors to attain our vision? What are the key performance measures to measure our progress against those success factors? What are the targets, initiatives, and what is the review process to ensure that this balanced business scorecard is the key management tool to run the businesses? And, finally, how do we tie in the incentives?

## Excellence Indicators in Higher Education

Organizations of all types are reconceptualizing the excellence indicators they use, and the uses to which these indicators are being put. For those in higher education, what is of particular significance in the preceding discussion is not so much the particulars of the “balanced scorecard” or other measurement-based approaches, but rather the widespread movement to reexamine the measurement process and its role in advancing organizational excellence.

In higher education, as in business, there are time-honored traditions relative to the measurement of excellence. Rather than emphasizing primarily financial measures, higher education has historically emphasized academic measures. Motivated, as with business, by issues of external accountability and comparability, measurement in higher education has generally emphasized those academically-related variables that are most easily quantifiable. Familiar examples are student and faculty demographics, enrollment, grade point average, scores on standardized tests, class rank, acceptance rates, retention rate, faculty-student ratios, graduation rates, faculty teaching load, counts of faculty publications and grants, and statistics on physical and library resources.

As important as the traditional indicators are, these measures fail to present a comprehensive image of the current status of an institution. They do not reflect some of the key success factors for a college or university, nor do they capture many of the dimensions of a university’s mission, vision, or strategic directions. Traditional measures are subject to other limitations as well. In the area of instruction, many familiar measures such as student grade-point average or standardized test score capture “input”—the capabilities students bring with them to our institutions—but often not the value colleges and universities add through the teaching-and-learning process, nor the outputs,” or benefits derived from having attended. Higher education assessment outcome studies (e.g., Astin, 1993)

have contributed to our understanding of the teaching-and-learning process, but resulting measurement frameworks have generally not been translated into indicators that are useful for monitoring, intervening in, or comparing institutional excellence (Johnson & Seymour, 1996).

## Organizations of all types are reconceptualizing the excellence indicators they use, and the uses to which these indicators are being put.

Other variables which are less obviously linked to academics, less tangible, or less readily susceptible to quantitative analysis have been less a focus for measurement. Thus, dimensions such as relevance, need, accessibility, fulfillment of expectations, value-added, appreciation of diversity, student satisfaction levels, impact and motivation for life-long learning are not widely used indicators of excellence.

Looking more broadly, traditional assessment frameworks typically fail to consider many other indicators of present and potential excellence. In a study conducted for the Educational Commission of the States on measures used in performance report in ten states (Ewell, 1994), the most common indicators were:

1. Enrollment/graduate rates by gender, ethnicity, and program;
2. Degree completion and time to degree;
3. Persistence/retention rates by grade, ethnicity, and program;
4. Remediation activities and indicators of their effectiveness;
5. Transfer rates to and from two- and four-year institutions;
6. Pass rates on professional exams;
7. Job placement data on graduates and graduates’ satisfaction with their jobs;
8. Faculty workload and productivity in the form of student/faculty ratios and instructional contact hours.

One area deserving of greater attention is the student, faculty and staff expectations and satisfaction levels. In most colleges and universities little attention has been devoted to systematically measuring expectations and satisfaction of students, and even less to faculty and staff within particular units or the institution as a whole, despite the widely shared view that attracting—and also retaining and nurturing—the best and brightest people is a primary goal and critical success factor.

To some extent, as with business, higher education indicators have tended to be primarily historical, limited in predictive power, often incapable of alerting institutions to changes in time to respond, and have not given adequate consideration to important but difficult-to-quantify dimen-

sions. And, ironically, the emphasis on easy-to-quantify, limited measures has, in a manner of speaking “come home to haunt” in the form of popularized college rating systems with which educators are generally frustrated and critical, but which are consistently used as the measures against which they are evaluated by their constituents (Wegner, 1997).

## A Balanced Scorecard for Higher Education

What would a more balanced scorecard look like for higher education?

As a part of its *Excellence in Higher Education* (Ruben, 2000a, 2000b; Ruben & Lehr, 1997a, 1997b, Lehr & Ruben, 1999), a Baldrige-based self-assessment program, the Rutgers QCI program<sup>1</sup> is working with academic and administrative units within the university to define an appropriate array of excellence indicators that broadly reflect the university and unit mission and other critical success factors. While very much a work-in-progress, the general framework<sup>2</sup> that follows is emerging, and may well be of use to other institutions.

The fundamental mission of research universities and their academic units and programs is the advancement of excellence in the creation, sharing and application of knowledge, typically described in terms of teaching, scholarship/research, and public service/outreach.

As important as the traditional indicators are, these measures fail to present a comprehensive image of the current status of an institution. They do not reflect some of the key success factors for a college or university, nor do they capture many of the dimensions of a university’s mission, vision, or strategic directions.

Fulfilling this mission requires a distinguished faculty, high-level research activities, innovative and engaging teaching-learning processes, supporting technology and quality facilities, capable students, competent faculty and staff, and legislative and public support. Although historically less well appreciated, it also requires excellence in communication and a service-oriented culture, appropriate visibility and prominence within the state and beyond; a welcoming physical environment; a friendly, supportive and respectful social environment; expectations of success; responsive, integrated, accessible and effective systems and services; and a sense of community.

More specifically, fulfillment of this mission requires successful engagement with a number of constituency groups, and for each desired and potentially-measurable outcomes can be identified:

- Prospective Students: Applying to a university/program as a preferred choice, informed about the qualities and benefits they can realize through attending.
- Current Students: Attending their university/program of choice with well-defined expectations and high levels of satisfaction relative to all facets of their experience; feeling they are valued members of the university community with the potential and support to succeed.
- Research Contract Agencies and Other Organizations or Individuals Seeking New Knowledge or the Solution to Problems: Actively seeking out the university and its scholars for assistance.
- Families: Proud to have a family member attending the university/program, supportive of the institution; recommending it to friends and acquaintances.
- Alumni: Actively supporting the university/program and its initiatives.
- Employers: Seeking out university/program graduates as employees; promoting the university/program among their employees for continuing education.
- Colleagues at other Institutions: Viewing the university/unit as a source of intellectual and professional leadership and a desirable workplace.
- Governing Boards: Supportive of the institution and enthusiastic about the opportunity to contribute personally and professionally to its advancement.
- Local Community: Viewing the institution as an asset to the community; actively supporting its development.
- Friends, Interested Individuals, Donors, Legislators, and the General Public: Valuing the university as an essential resource; supporting efforts to further advance excellence.
- Faculty: Pleased to serve on the faculty of a leading, well-supported institution/program, enjoying respect locally, nationally and internationally.
- Staff: Regarding the institution/unit as a preferred workplace where innovation, continuing improvement and teamwork are valued; recommending the institution/unit to others.

## Higher Education Dashboard Indicators

Building on the preceding framework, a university’s mission, vision and goals may be translated into “dashboard indicators” with five indicator clusters, each composed of a variety of constituent measures—some quite traditional others less so: The five indicator areas are *teaching/learning*, *scholarship/research*, *service/outreach*, *workplace satisfaction*, and *financial*, as illustrated in Figure 1.

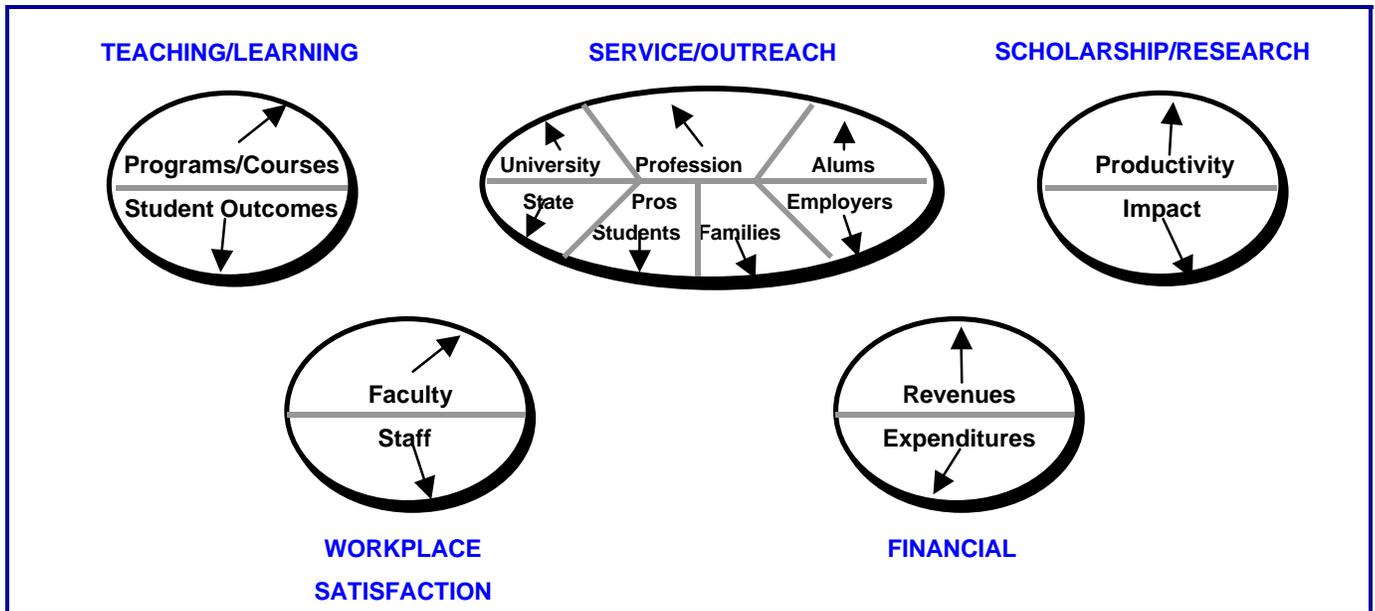


Figure 1. Higher Education Dashboard Indicators

## 1. Teaching/Learning

In the proposed framework, instruction is composed of quality assessments in two primary areas: 1) *programs and courses* and 2) *student outcomes*.

The model points to the value of incorporating multiple dimensions, multiple perspective and multiple measures in evaluating the quality of programs/courses and student outcomes. Appropriate to these assessments are systematic inputs from peers/colleagues (at one's own and perhaps other institutions), students (at various points in their academic careers), alumni (providing retrospective analyses), employers and/or graduate directors (providing data on workplace and graduate/professional school preparation).

Each group can contribute pertinent and useful insights and collectively, these judgments yield a comprehensive and balanced cluster of measures that help to address concerns associated with a reliance on any single perspective of measure (Williams & Coci, 1997, Trout, 1997).

Colleagues from one's own or another institution, for example, can provide useful assessments of instructor qualifications and the scope, comprehensiveness, rigor, and currency of programs/course content, etc. Students and alumni can provide valuable assessments of the clarity of course/program expectations, curricular integration, perceived applicability, and instructor delivery skills, enthusiasm, interest in students, accessibility, and other dimensions.

Examples of assessment dimensions that can be included in these indicators are listed in Table 1. In the case of the *program/courses*, the *cascade of measures*<sup>3</sup> might well include clarity of mission of programs/courses, disciplinary standing, need, coherence, rigor, efficiency, qualifications of instructors, currency and comprehensiveness of course materials, adequacy of support services, and

teaching-learning climate.

These dimensions can be operationalized in any of a variety of ways. Typically, evaluations of disciplinary standing are derived from external review, accreditation or other peer review systems. The need for programs/courses can be assessed by a consideration of such factors as unfulfilled demand for a program or course, offerings at other institutions, and systematic input from employers or alumni. Coherence would consider measures of internal curricular linkage and integration, and rigor assessment would likely include data on assignment standards and grading practices with student and alumni input. Efficiency could include cost-student enrollment ratios, student/faculty instruction ratios, etc. Qualifications of instructors, course content, and delivery assessments can be based on peer, professional review, and other inputs (e.g., Braskamp & Ory, 1994). The adequacy of support services can be evaluated through surveys of student, faculty and staff assessments.

Having an established set of measures that operationally define "excellence" for an institution/unit is of great value for assessment and over-time tracking. For the institution as a whole or particular units within, they provide the basis for a straightforward, accessible, and mobilizing answer to the question: "How are we doing?"

*Student outcome* could include measures of program/course preferences, selectivity, involvement, learning outcomes (knowledge and competency acquisition), fulfillment of expectations, satisfaction, retention, preparedness, placement, and motivation for life-long learning, and other variables that may be appropriate to the mission, vision and/or goals of the institution or program. Preference measures, for instance, would document answers to questions such as: “Was this college/program my preferred choice?” Selectivity would reflect “input” measures of the “quality” of students enrolled in courses/programs, and learning outcomes assessment would measure cognitive and behavioral competencies. Thus, in addition to content learning, assessment might also include the ability to engage in collaborative problem solving, appreciation of diversity, leadership skills, interpersonal and presentational communication skills, ethical thinking and other capabilities appropriate to the mission, vision and goals of the institution/program.

Surveys and focus groups with student and alumni groups would provide the basis for evaluating and overtime tracking of satisfaction with academic programs, support services, facilities, etc. For instance, alumni could be asked some years after graduation, whether they choose the same university and/or program were they to be enrolling today<sup>4</sup>. Preparedness for careers or further graduate study could be assessed through input from graduates, recruiters/employers, and graduate program directors. Placement measures would be derived through systematic alumni tracking.

## 2. Scholarship/Research

Research and scholarship are composed assessments of quality in the areas of: 1) *productivity* and 2) *impact*. In the areas of research and scholarship, colleges and universities generally have well-developed measures of achievement.

Typically, productivity indicators include activity level. Depending upon the field, activity level measures would encompass frequency of presentations, performances, article and paper submissions, publications, and funding proposals. Impact measures for research and scholarship typically include publication rate, selectivity and stature of journals or publishers, citation, awards and recognition, editorial board membership, peer assessments of scholarly excellence, funding of research, and others (Carnegie Foundation, 1994; Braskamp & Ory, 1994).

## 3. Public Service/Outreach

The *public service and outreach* indicator cluster would be composed of measures of the extent to which the university, unit or program addresses the needs and expectations of key external stakeholder groups. As illustrated in Table 1, this cluster should include measures for each of the groups whose assessments of the quality and performance of the institution/program have important implications for the unit in terms of mission fulfillment, reputa-

-tion, recruitment, economic viability, etc.

The definition of *key* external stakeholder groups depends on the nature of the institution or unit and its mission. Generally, for academic units, the list of potential candidate groups would include: the university (beyond the unit itself), profession/discipline, alumni, potential students, organizations/individuals seeking new knowledge, family members/parents of students, employers, community, state, region, governing boards, friends of the institutions, donors, legislators, and the public at large.

Once the scope of key stakeholders is defined, the measures for each should capture the quality of contributions of the unit based on *criteria of significance to the external group* and reflecting *their* perspective. Some general measures that are appropriate for a number of these stakeholder groups are: activity level, selection for leadership roles, reputation, meeting perceived needs, and satisfaction level.

In some cases, measures would be specific to the stakeholder group. For instance, in the case of the university (beyond the particular unit), measures might include promotion and tenure rates, requests to serve on thesis and dissertation committees in other programs and invitations to serve on and play leadership roles in key committees and projects, in addition to other general measures of engagement and perceived contribution to university life.

In the case of potential employers, for example, preferences for university graduates as employees, and likelihood of promoting the university among their employees for continuing education would be important measurement considerations. In the case of organizations or individuals seeking new knowledge or the solution to problems, the number of contacts, requests for information, proposals requested and initiatives funded would be among the appropriate measures. For alumni, key financial and moral *support of the university and its initiatives* would be key measures, and the extent to which the university is perceived to be an essential state resource would be an important indicator of public support. For parents and families, issues of interest would include attitude toward having a family member attending the university, and likelihood of recommending the institution to friends and acquaintances.

While institution data may be available as input in some instances, focus groups, survey programs, and other systematic approaches to capturing the perspectives of these groups are required.

## 4. Workplace Satisfaction

In addition to indicators associated with instruction, scholarship, and service/outreach, another important indicator is workplace satisfaction—for faculty and for staff. Inputs to indicators for each group could include measures of attractiveness of the institution as a workplace, turnover, compensation, assessments of workplace climate, and faculty and staff morale and satisfaction. Measures in this category will include a combination of institutional data (analysis of application and retention data) and also per-

Table 1. Possible Cluster Measures for Higher Education Dashboard

INSTRUCTION	PUBLIC SERVICE/ OUTREACH	SCHOLARSHIP
<p><b>Programs/Courses</b></p> <ul style="list-style-type: none"> <li>• mission clarity</li> <li>• disciplinary standing</li> <li>• need</li> <li>• coherence</li> <li>• rigor</li> <li>• efficiency</li> <li>• instructor qualifications</li> <li>• currency/comprehensiveness of course materials</li> <li>• adequacy of support services</li> <li>• teaching-learning climate</li> </ul> <p><b>Student Outcomes</b></p> <ul style="list-style-type: none"> <li>• preferences</li> <li>• selectivity</li> <li>• involvement</li> <li>• learning outcomes</li> <li>• satisfaction</li> <li>• retention</li> <li>• preparedness</li> <li>• placement</li> <li>• life-long learning</li> </ul>	<p><b>Prospective Students</b></p> <p><b>University</b></p> <p><b>Profession/Discipline</b></p> <p><b>Research Agencies</b></p> <p><b>Alumni</b></p> <p><b>Families</b></p> <p><b>State</b></p> <p><b>Employers</b></p> <p><b>Community</b></p> <p><b>Governing Boards</b></p> <p><b>Public at Large</b></p> <ul style="list-style-type: none"> <li>• activity level/contacts</li> <li>• selection for leadership roles</li> <li>• reputation</li> <li>• meeting perceived needs</li> <li>• satisfaction levels</li> <li>• contributions/funding</li> <li>• preferences</li> </ul>	<p><b>Productivity</b></p> <ul style="list-style-type: none"> <li>• presentations</li> <li>• performances</li> <li>• submissions</li> <li>• publications</li> <li>• funding proposals</li> </ul> <p><b>Impact</b></p> <ul style="list-style-type: none"> <li>• publication stature</li> <li>• citation</li> <li>• awards/recognition</li> <li>• editorial roles</li> <li>• peer assessments</li> <li>• funding</li> </ul>
	<p><b>WORKPLACE SATISFACTION</b></p> <p><b>Faculty</b></p> <p><b>Staff</b></p> <ul style="list-style-type: none"> <li>• attractiveness</li> <li>• turnover</li> <li>• compensation</li> <li>• climate</li> <li>• morale</li> <li>• satisfaction</li> </ul>	<p><b>FINANCIAL</b></p> <p><b>Revenue</b></p> <ul style="list-style-type: none"> <li>• funding levels</li> <li>• endowments</li> </ul> <p><b>Expenditures</b></p> <ul style="list-style-type: none"> <li>• operating expenses</li> <li>• debt service</li> <li>• credit ratios</li> <li>• deferred maintenance</li> </ul>

ceptual data from faculty and staff groups and information derived from sources such as exit interviews, focus groups, and/or surveys.

## 5. Financial

The final set of indicators are financial including revenues by source, such as state appropriations, tuition, donations, endowments, grants, etc., and expenditures—operating budgets, debt service, credit ratios and ratios, deferred maintenance and expenditures for the university/unit. Clearly, the specifics appropriate to this indicator would vary substantially depending on the level and type of unit involved.

## Observations

A few general observations are offered based on the foregoing framework and discussion.

- The list of five dashboard indicators—and specific measures suggested for each—should be regarded as preliminary. The list is not definitive, prescriptive nor necessarily appropriate for all institutions, units or programs. Depending on the mission and goals of the college or university the appropriate components of the dashboard might be quite different.
- The “generic dashboard” developed by a college or university as a collective entity need not necessarily be identical to that of particular academic or administrative units within the institution. Individual units might well have their own set of indicators that highlight dimensions of particular relevance to their mission, direction and goals, yet at the same time align with the university dashboard of directions and priorities.
- Administrative units would have dashboards composed of indicator clusters that would be quite different from those of academic units. Indicators for instruction and research, for instance, would be replaced by measures appropriate to the unit’s particular mission. For instance, the “top row” indicators would include measures of activity and satisfaction for all units within (or outside) the university for whom services are being provided by the department. Thus, for example, physical plant departments would include measures of the satisfaction of those departments for which they provide maintenance, building, or renovation services. University communications department indicators would likely include activity, impact, and satisfaction measures from the perspective of administrative departments within the university, administration, faculty and staff, and local media for whom they provide services.
- Having an established set of measures that operationally define “excellence” for an institution/unit is of great value for assessment and over-time tracking. For the institution as a whole or particular units

within, they provide the basis for a straightforward, accessible, and mobilizing answer to the question: “How are we doing?”

- To provide a broader context for interpreting indicator data, benchmarking and comparisons with peer, competitive, and/or leading institutions/units are essential. In some areas such information is available. However, depending on the unit, its mission, and the selected indicators, it may well be necessary to develop methods for gathering the appropriate information.
- Beyond their value for measurement, *per se*, there is perhaps nearly as great a benefit to be derived from the dialogue and consensus-building process through which dashboard indicators (and benchmarks) are developed. It can be a process that focuses, energizes, and informs faculty and staff, and in so doing one that broadens responsibility for leadership within the unit.

**Being proactive in defining and using excellence measures is likely to be more satisfying and productive than waiting until accountability and performance measures are defined and imposed by others—more often than not by groups which have a considerably more restricted view of what constitutes excellence than will administrators, faculty and staff of the institution/program.**

## Concluding Comments

Many colleges and universities are engaging in dialogue about appropriate measures, often as part of discussions of performance-based assessment and accountability, typically motivated by pressures from external stakeholders. In 1997, 18 states were using performance-based assessments in funding or budgeting, and at least 18 others had indicated that it is likely they will adopt these measures within the next five years (Burke & Serban, 1997).

As noted by Joseph Burke, Director of the Rockefeller Institute, Public Higher Education Program:

The performance funding indicators as adopted or proposed in most ... states obviously respond to external complaints about the quality and quantity of faculty teaching and student learning, the preoccupation with graduate studies and research and neglect of undergraduate education, the lack of priorities and productivity, the allowance of mission creep and program sprawl, and the swelling of administrative positions and support staff (1997, p.19).

Being proactive in defining and using excellence measures is likely to be more satisfying and productive than waiting until accountability and performance measures are defined and imposed by others—more often than not by groups which have a considerably more restricted view of what constitutes excellence than will administrators, faculty and staff of the institution/program.

It is interesting to note in this regard, the five most commonly employed indicators in eight states that were leaders in instituting performance-based measures:

- Retention and graduation rates
- Faculty teaching load
- Licensure test scores
- Two- to four-year transfers
- Use of technology/telecommunications/distance learning (Burke, 1997)

Notably missing from this list are many measurement categories and specific measures that are suggested by a “balanced scorecard” approach. Absent also in typical lists of selected performance indicators—and of great concern—is a linkage to a comprehensive view of higher education excellence.

The “balanced scorecard” approach offers an institution the opportunity to formulate a cascade of measures to translate the mission of knowledge creation, sharing and utilization into a comprehensive, coherent, communicable and mobilizing framework—for external stakeholders, and for one another. As pressures for performance measurement and accountability mount, the need to rethink and reframe our excellence measurement frameworks has never been more pressing.

<sup>1</sup> Rutgers QCI is the Rutgers University Program for Organizational Quality and Communication Improvement, established in 1993. For further information write: Rutgers QCI, 4 Huntington Street, Rutgers University, New Brunswick, NJ 08901-1071; voice (732) 932-1420; fax (732) 932-1422; email: volpe@qci.rutgers.edu

<sup>2</sup> The framework presented in this section is based on various Rutgers QCI documents including the 1997 Rutgers QCI-Middle States Accreditation Committee Report, copies of which are available upon request. It is also reviewed in Leadership and Performance Excellence. Report No. 15, The Conference Board: Global Center for Performance Excellence, New York, 1999.

<sup>3</sup> I am indebted to Dr. Henry Wiebe of the University of Missouri-Rolla for suggesting this term.

<sup>4</sup> This approach is used in research by Joseph Cerny and Maresi Nerad, The Graduate Division, University of California-Berkeley.

## References

- American Institute of Certified Public Accountants (AICPA) Special Committee on Financial Reporting. (1994). *Improving business reporting—a customer focus: Meeting the information needs of investors and creditors*. New York: American Institute of Certified Public Accountants.
- Astin, A. W. *What matters in college?* San Francisco: Jossey-Bass, 1993.
- Blake, R. B. & Tagg, J. (1995). From teaching to learning—A new paradigm for undergraduate education. *Change*, Nov/Dec, 27(6), 13-25.
- Brancato, C. K. (1995). *New corporate performance measures*. New York: The Conference Board.
- Braskamp, L. A. & Ory, J. C. (1994). *Assessing faculty work*. San Francisco: Jossey-Bass.
- Burke, J. C. (1997). *Performance-Funding Indicators: Concerns, Values, and Models for Two- and Four-Year Colleges and Universities*. Albany, NY: The Nelson A. Rockefeller Institute of Government.
- Burke, J. C. & Serban, A. M. (1997). *Performance Funding and Budgeting for Public Higher Education: Current Status and Future Prospects*. Albany, NY: The Nelson A. Rockefeller Institute of Government.
- Carnegie Foundation for the Advancement of Teaching. (1994). *National Survey on the Reexamination of Faculty Roles and Rewards*.
- Cortada, J. W. & Woods, J. A. (1995). *The McGraw-Hill encyclopedia of quality terms and concepts*. New York: McGraw-Hill.
- DeCarlo, N. J. & Sterett, W. K. (1989). *Quality: The Journal of the Japanese Society for Quality Control*. Reprinted in adapted form in B. D. Ruben, (ed.), (1995), *Quality in higher education*, (pp. 79-93). New Brunswick, NJ: Transaction.
- Deming, W. E. (1993). *The new economics*. Cambridge, MA: MIT Center of Advanced Engineering Study.
- Ewell, P. (1994). Developing statewide performance indicators for higher education. In S. S. Ruppert (ed.), *Charting higher education accountability: A sourcebook on state-level performance indicators*. Denver: Education Commission of the States.
- Hexter, E. S. (1997). *Case studies in strategic performance measurement*. New York: Conference Board.
- Hiam, A. (1992). *Closing the quality gap*. Englewood Cliffs, NJ: Prentice Hall.
- Johnson, R & Seymour, D. (1996). The Baldrige as an Award and Assessment Instrument for Higher Education. In D. Seymour, (ed.), *High Performing Colleges I: Theory and Concepts*, (pp. 54-71). Maryville, MO: Prescott.
- Juran, J. M., World War II and the Quality Movement. The Juran Institute. Reprinted in adapted form in B. D. Ruben, (ed.), (1995), *Quality in higher education*, (pp. 65-78). New Brunswick, NJ: Transaction.
- Kaplan, R. S., (1990). Analog devices: The half-life metric, *Harvard Business School*, Case #9-190-061.
- Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard*. Cambridge, MA: Harvard Business School.
- Kaplan, R. S. & Norton, D. P. (1992). The balanced scorecard—Measures that drive performance. *Harvard Business Review*, Jan-Feb.
- Kaplan, R. S. & Norton, D. P. (1993). Putting the balanced scorecard to work. *Harvard Business Review*, Sept-Oct.
- Kaplan, R. S. & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system, *Harvard Business Review*, Jan-Feb.
- Lehr, J. K. & Ruben, B. D. (1999). Excellence in higher education: A Baldrige-based self-assessment guide for higher education. *Assessment Update*, 11, 1.
- Lynch, R. L. & Cross, K. F. (1991). *Measure up? Yardsticks for continuous improvement*. Cambridge, MA: Blackwell Business.
- Malcolm Baldrige National Quality Award Criteria. (1988-1989). National Institute of Standards and Technology. Department of Commerce.
- Porter, M. E. (1992). Capital disadvantage: America's failing capital investment system, *Harvard Business Review*, Sept-Oct.
- Ruben, B.D. (2000a). *Excellence in higher education 2000: A Baldrige-based guide to organizational assessment, planning and improvement*. Washington, DC: National Association of College and University Business Officers, 2000 (in press).
- Ruben, B.D. (2000b). *Excellence in higher education 2000: A Baldrige-based guide to organizational assessment, planning and improvement. Workbook*. Washington, DC: National Association of College and University Business Officers, 2000 (in press).
- Ruben, B. D. (1995). The quality approach in higher education: Context and concepts for change. In B. D. Ruben, (ed.), (1995), *Quality in higher education*, (pp. 1-34). New Brunswick, NJ: Transaction.
- Ruben, B. D. & Lehr, J. (1997a). *Excellence in higher education. A guide to organizational self-assessment, strategic planning and improvement*. Dubuque, IA: Kendall Hunt.
- Ruben, B. D. & Lehr, J. (1997b). *Excellence in higher education. A guide to organizational self-assessment, strategic planning and improvement. Workbook*, Dubuque, IA: Kendall Hunt.
- South Carolina's 'performance indicators.' (1997). *The Chronicle of Higher Education*, April 4, p. A27.
- Trout, P. A. (1997). What the numbers mean. *Change*, Sept-Oct, pp. 25-30.
- Wegner, J. W., (1997). Rational, accessible way to rank law schools. *National Law Journal*, July 14.
- Williams, W. M. & Ceci, J. J. (1997). How'm I doing? Problems with student ratings of instructors and courses. *Change*, Sept-Oct. 12-23.
- Zimmerman, J. (1993). Relationship investing and shareholder communication. *Journal of Applied Corporate Finance*, Vol. 6. No. 2.

For more information, please visit the Rutgers QCI web page at [www.qci.rutgers.edu](http://www.qci.rutgers.edu). You may also write to: Brent D. Ruben, Ph.D. Executive Director, Office for Quality and Communication Improvement—The Center for Organizational Development and Leadership, Rutgers, The State University of New Jersey, 4 Huntington Street, Room 222, New Brunswick, NJ 08901-1071; or email [ruben@qci.rutgers.edu](mailto:ruben@qci.rutgers.edu).