

大学評価 第3号 平成15年9月(論文)

[大学評価・学位授与機構 研究紀要]

The New Accountability for Public Higher Education

From Regulation to Results

Joseph C. Burke

Research in University Evaluation, No.3 (September, 2003) [the article]

The Journal of University Evaluation of National Institution for Academic Degrees and University Evaluation

Introduction	67
Assessing Performance	68
The Financial Crisis of Higher Education	70
Accountability with Teeth.....	72
Performance Indicators	78
Performance Reporting : the preferred Accountability Policy	78
Closing the Accountability Gap	79
Characteristics of Effective Performance Reports.....	80
The Fatal Flaw: Assessing Quality in Undergraduate Education	83
Conclusion	84
References	85

The New Accountability for Public Higher Education

From Regulation to Results

Joseph C. Burke¹

Introduction

The 1990s in the United States saw a shift in accountability for public higher education. It moved from accounting for expenditures to accounting for results. Momentum came from the movements to reinvent government and reengineer business. Osborne and Gaebler (1992), in *Reinventing Government*, focused on performance results rather than on budgetary regulations. Hammer and Champy (1992), in *Reengineering the Corporation*, added an emphasis on product quality and customer service. In a classic case of John Kingdon's theory of "policy spillover," the new management spread from business and government to higher education (Kingdon 1984). By mid decade, one education expert declared: "The cry today and even more tomorrow is for reinventing the college or university" (Keller 1995, 63).

The new management preached a novel gospel for business and a new heresy for government and higher education. Its creed proclaimed that organizations not only could -- but also must -- improve quality while cutting costs and increasing productivity. They championed managing for organizational results rather than controlling by bureaucratic rules, and advocated customer centered rather than provider driven enterprises. By concentrating on performance rather than on compliance, managers hoped to combine the goals of accountability and improvement. Organizations could improve performance while decentralizing authority, by being tight on setting goals and assessing results but loose on the means of achieving them. The new accountability demanded both decentralization and direction. Success in the new era of information and innovation demanded autonomy to encourage the creativity and ingenuity of knowledge workers, but it also required commitment to organizational priorities. Managing, measuring, and rewarding results became the new trinity. Like all creeds, it proved easier to proclaim than to practice. Like all crusades, it inspired both fervent champions and fevered critics, especially in academe.

Although academics developed many of these management theories, the academy considered them all right for business and acceptable for government but anathema for academe (Birnbaum 2000). The new performance based management clashed with both the academic culture and the governance structure of higher education. The culture of the academy in theory followed Birnbaum's collegial model (Ponton 1996). The collective faculty controlled the decision-making process and administrators acted through influence not from authority. Decentralization dominated the internal governance of colleges and universities, which represented "loosely coupled systems" -- where individuals and subdivisions made largely autonomous decisions (Weick, 1976). Cohen and March carried the concept of the collegial campus to its illogical conclusion as an organized anarchy, characterized by problematic goals, unclear technology, and fluid participation.

¹ Director, Higher Education Program, Rockefeller Institute of Government

The American college or university is prototypical organized anarchy. It does not know what it is doing. Its goals are either vague or in dispute. Its technology is familiar but not understood. Its major participants wander in and out of the organization. These factors do not make the university a bad organization, or a disorganized one, but they do make it a problem to describe, understand, and lead (Cohen and March, 1974, p3).

Despite the authors' disclaimers, "Organized Anarchy" seems composed of ninety-nine percent anarchy and one percent organization. Such a nihilistic model could never govern a performance-based institution, since its authors claim that campus activities are often neither planned nor predictable. The anarchy model describes many of the characteristics that are all too common in campus governance. The problem is that Cohen and March and their followers viewed them not as dysfunctional but as inevitable if not desirable. This concept born in the early 1970s lived on until the mid 1980s (Birnbaum 1984). Organized anarchy remained acceptable only so long as the quality of higher education went unchallenged.

The mid-1980s brought a chorus of challenges. The cries for reform of public schools, launched by *A Nation At Risk* (1983) soon echoed in calls for change on college campuses. Criticism of American higher education and student learning came from all quarters of the political spectrum. Bloom (1987), Cheney (1988), and Bennett (1986) issued jeremiads from the right, and groups of leading educators published more liberal pleas in *Involvement in Learning* (1984) and *Integrity of the Curriculum* (1985). Although the two groups of authors preached different ideologies and pushed different solutions, both called for radical and purposeful change in higher education. All of the books criticized the current state of undergraduate education for its lack of a coherent curriculum, level of student learning, and neglect of quality teaching. All of the authors challenged the academic community to clarify the goals of undergraduate education, although the former focused on prescribing learning outcomes, while the latter favored improving the learning processes. Whatever their differences, none of the authors could accept the concept of a college as an organized anarchy, which "does not know what it is doing" (Cohen and March 1974, p3). The questions about the quality of undergraduate learning raised in the mid to late 1980s led to the assessment movement in higher education.

Assessing Performance

Outsiders could have predicted that the accent on efficiency in the new accountability would arouse campus opposition, but few would have guessed that the earlier focus on quality in assessment would prove a greater obstacle. Colleges had declared "Quality Job One" centuries before Ford. Unfortunately, the academic community never determined -- with any precision -- the objectives of undergraduate education nor developed systematic methods for assessing campus achievements. By default, the perception of institutional quality reflected what Astin (1985) labeled the Resource and Reputation Model of institutional excellence. Quality in colleges and universities both public and private depended on the quantity of campus resources, the quality of admitted students, and the reputation of faculty research. This Model -- based entirely on the resource inputs of funding, students, and faculty -- said nothing about the quality or the quantity of the services provided to students, states, and society by colleges and universities. Astin (1985) attacked the traditional

resource and reputation model of institutional excellence and sought to replace it with a value added concept that stressed student cognitive and affective development from admission to graduation.

Writing as early as 1983, Ewell noticed the changed attitude toward higher education and the new demands for outcomes assessment in colleges and universities.

Until recently, the higher education community saw little point but no small threat in explicit assessment of student outcomes. The positive impact of college upon the student remained an almost righteously unexamined premise the great self-evident of higher education.... Now, of course, things are different. As institutional resources tighten, colleges and university administrators at all levels are growing more concerned about identifying and improving the impact of their programs on students. ...The same set of forces has produced a demand for greater accountability on the part of those controlling the use of resources in higher education. More and more, institutions are being asked explicitly somewhat skeptically to show that they make a difference (pp., 1-2).

Assessment of undergraduate learning appeared to offer an antidote for perceived ills of higher education. It asked colleges and universities to identify the knowledge and skills that their graduates should possess, to design indicators that reflected those objectives, to evaluate the extent of their achievement, and to use the results to improve institutional performance. The Assessment movement swept the country in the late 1980s. Governors, legislators, and coordinating boards liked it so much they mandated assessment policies in two-thirds of the states (Boyer, 1987). They even wanted it enough to let campuses decide how to do it. Every one of the six regional accrediting agencies made assessing student outcomes a requirement for accreditation (Nettles et al. 1997). These agencies sought to shift the stress of accreditation from the inputs of admission scores, library holdings, faculty credentials and the processes of campus governance to the outcomes of student learning. In 1994, Campus Trends reported that fully 94 percent of colleges and universities had some form of assessment activity (EI-Khawas 1995).

Although assessment spread widely to colleges and universities, its impact rarely ran deep. Many professors thought the task impossible and others believed it unnecessary. Only a distinct minority approached it as a difficult but essential duty. All of the state assessment programs proclaimed the dual goals of external accountability and institutional improvement, but most campuses focused on institutional improvement and resisted the demands for credible evidence of external accountability for improved results (Burke, 1999; McGuinness, 1995). Lenth (1993) put his finger squarely on the problem when he wrote of the "dynamic tension within assessment between the internal and external, between improvement and accountability, between formative and summative uses, and between those doing it and those who need to know it" (15).

Although eight in ten campuses had assessment activities underway in 1991, nearly half of the public four-year campuses said that only 11 to 20 percent of the faculty participated in these activities (EI-Khawas, 1991).

Though nearly all campuses claimed to be doing something called assessment, it remained a marginal activity to most professors. On most campuses especially the larger universities, the majority of the faculty considered assessment as an added activity at best, and a bureaucratic burden

at worst (Burke 1999). Unfortunately, assessment like many reforms -- remained a cottage industry on campus. Exciting practices flourished in a hundred places, while the institution plodded its traditional path. Decentralization and autonomy smile on individual innovations but stifle institutional reforms. Assessment, like most innovations on campus, had ardent advocates but little institutional acceptance.

The assessment movement failed to meet the needs of the new accountability. Despite the commitment to the dual goals of external accountability and institutional improvement, the campus programs tended to emphasize improvement and slight accountability. Their assessment reports presenting different goals and diverse formats that prevented statewide analysis and institutional comparisons. Governors and legislators found the inability to compare institutional results a shortcoming of the assessment reports. They claimed that comparing campus achievements constituted the best -- perhaps -- the only way to assess performance.

The assessment mandates provided more decentralization but little direction. Campuses had seized the offer of autonomy, while slighting the responsibility for accountability. All too often, in addition to preventing campus comparisons, assessment activities did not identify the desired results of undergraduate education, develop an acceptable means of evaluating institutional performance, or demonstrate that public campuses were meeting student needs. "To date," wrote Banta and Borden in 1995, "outcomes assessment that has taken place on campuses for the purpose of demonstrating institutional accountability has produced little information that external decision makers find helpful or satisfying" (p. 96). Most campuses responded to the assessment mandates with minimal external observance and little real reform. All too often assessment concentrated on improving processes, while accountability focused on improving outcomes or results.

In assessment mandates, the new accountability seemed a concept only half fulfilled. Academics accepted decentralization as a confirmation of campus autonomy but rejected accountability as an invasion of academic freedom. They ignored the unpleasant reality that the only organizations that can claim complete autonomy were those that are fully self-reporting. Unfortunately, no public -- or even private -- college or university deserves or desires that designation. The consequence of the academy's acceptance of autonomy and avoidance of accountability now seems inevitable. When academics fail to act, the state steps in. As so often happens in public affairs, financial problems provided the catalyst.

The Financial Crisis of Higher Education

The national recession in the early 1990s produced a new urgency to state demands for campus accountability. After several decades of consistent increases, higher education between FY 1992 and 1993 suffered a historic decline in state support (Hines 1993). For the first time in the history of collecting the data, state appropriations for higher education nationally fell below the previous year. Annual budget cuts for higher education became common, as did mid-year rescissions in adopted budgets when state revenues fell below projections. If the period represented a fiscal crisis for most states, it constituted a calamity for most public colleges and universities. Gold (1995) calls higher education -- the only large discretionary item in state budgets -- the "real loser" in the budget

battles against healthcare, welfare, corrections, and public schools. Not only did state revenues fall and their budgets decline, but higher education received a diminished share of these limited funds. Although economic growth in the last half of the 1990s brought increased state funding, the share of higher education in state appropriations never returned to previous levels.

Public higher education -- once considered untouchable -- became an easy target for both budget cutters and external critics in the first half of the 1990s. Critics, mostly from government and business, complained about the quality and quantity of faculty teaching and student learning, the preoccupation with graduate studies and research and neglect of undergraduate education, the encouragement of mission creep and program sprawl, and the burgeoning of administrative positions and support staffs. Much of the criticism centered on the questionable results of undergraduate education -- of admitting too many unqualified students, of graduating too few of those admitted, of permitting them to take too long to degrees, and of allowing too many to graduate without the knowledge and skills required for successful careers in a knowledge and information society (Lively, 1992). The complaints continued about the quality and performance of undergraduate education that emerged in the 1980s, but charges of falling productivity and efficiency and rising costs and tuitions became added indictments.

Even the friends of higher education joined the fray. A Wingspread Conference of national leaders in higher education in 1993 issued a withering report. It charged the academy with failing to meet societal needs, despite the series of demographic, economic, and technological changes that increased its importance for most Americans. Instead of responding to these changes, the Report complained that higher education weeded out students and trivialized undergraduate education. These reactions aroused a public concern that signaled nothing less than a crisis in higher education. The Report insisted that colleges and universities must educate more citizens and educate them better. It called for a rigorous undergraduate education that focused more on what students learn and put students at the heart of the educational enterprise. In addition, higher education had to help create a nation of learners by engaging more thoroughly in education from kindergarten through high school through K-16, even K-20, partnerships (Wingspread Group 1993).

The combination of rising costs and criticism and curtailed resources and funding led to renewed demands for accountability from colleges and universities in the early 1990s. An article in the Chronicle of Higher Education declared:

Accountability is again a hot topic as state budgets shrink and taxpayers complain about rising costs -- particularly in tuition -- and what they see as decreases in educational quality.... Under the loose rubric of accountability, states are enacting new laws and policies that require colleges to demonstrate efficiency, quality, and sound stewardship of public money (Lively 1992).

Aims McGuinness -- then with the Education Commission of the States -- discerned a difference from earlier accountability initiatives. "What may be new in the world of accountability," he said, "are efforts to assess what results can be shown for all the time and money used to measure how well colleges are performing their jobs" (Lively, 1992). Public higher education had become too important and too costly to states to be left to its own devices. Keller (1995) stated succinctly the case for the

new accountability.

While many colleges and universities of the 1990s were run principally for the benefit of the faculty, institutions in the next century will gradually focus on providing measurable gains in student knowledge, values, and techniques. High-quality human resources will be the key to economic, cultural, and political strength for all nations, and colleges will recognize that fact by bending their structures and prerogatives to accommodate new national needs rather than catering unduly to faculty wishes... to increase institutional reputations. The reputations of colleges and universities will derive more often from the quality of their graduates and academic services than from the fame of their most prolific and research-oriented, though seldom teaching, scholars (p 61).

Accountability with Teeth

The lukewarm response to assessment mandates, inability to compare campus results, reduced state revenues, and rising costs led state after state to more directive approaches to assessing campus results. The growing demands for accountability in the early 1990s produced not one but three performance-based initiatives: performance reporting, performance budgeting, and performance funding. Until the late 1980s, state governments and coordinating boards of higher education had largely neglected two powerful levers of accountability for public colleges and universities: information and budgets. The axiom that what gets measured is what gets valued is only half-right. The value comes not so much from the measurement as from reporting or funding the results. Individuals and institutions are likely to perform better when they know their results become public and affect funding.

Common Program Purposes

All three programs share three avowed and one tacit purpose. Demonstrating external accountability, improving institutional performance, and responding to state needs constituted the avowed purposes. All the performance programs explicitly or implicitly endorse the two purposes of external accountability and institutional improvement. Most of them also add meeting state needs, especially in economic development. Accountability extended far beyond the old accountability for expenditures. The performance programs wanted public higher education and its colleges and universities to be responsible for improved performance in priority areas as stated in the designated indicators and for responding to the educational, economic, and social needs of the state. In addition, coordinating, system, and campus leaders though certainly not state officials -- had the tacit goal of winning increased state funding by accepting the performance programs.

Initiation Methods

Three methods exist for initiating all of the performance programs:

- 1 . **Mandated/Prescribed:** legislation mandates the program and prescribes the indicators. Governors or legislators initiate these programs.
- 2 . **Mandated/Not Prescribed:** legislation mandates the program but allows state-coordinating agencies in cooperation with campus leaders to propose the

indicators. Coordinating or system officers as well as governors or legislators could initiate these programs.

- 3 . **Not Mandated:** coordinating or system boards in collaboration with campus officials initiate and adopt the plan without legislation. Obviously, coordinating or system boards start these initiatives.

Mandated/Prescribed initiatives clearly undermine program stability, because state government imposes not only the program but prescribes the indicators. This approach ignores the importance of consultation with coordinating, system, and campus officials. No consultation means no consent in public affairs, but especially in higher education. Mandated/Prescribed policies also run counter to the dual directions of organizational decentralization and professional participation prescribed in the new accountability. According to the new management theories, government officials and company heads should decide policy directions and evaluate results, and leave the details to operational managers and professional staff. Mandated/Prescribed programs also fixed the indicators into law, which discouraged change and flexibility.

Mandates and prescriptions characterized the earliest programs of performance reporting, budgeting, and funding. Gradually, prescription of indicators became less prominent and more coordinating and system boards initiated one of the three programs without state mandates. At times, the Not-Mandated programs seem less than voluntary. They often represented preemptive strikes to avoid state mandates and adopt plans that could win campus acquiescence if not acceptance. As an Arkansas official in the Department of Higher Education declared off the record to the author about a Not-Mandated funding program: "We did it to ourselves before they could do it to us." The Not-Mandated efforts preferred self-regulation that allowed more of their input to state regulation that dictated much of the details. Voluntary adoption also earns more credibility for the academic community in state capitals, though it may not win increased funding. On the other hand, state mandates without indicator prescriptions often seems the only way to get the attention of the academic community to enhancing external accountability, improving institutional performance, and meeting state needs.

Consultation is the key to success in performance programs as in most endeavors that depend on cooperation among diverse groups. Obviously, Mandated/Prescribed programs avoid consultation by prescribing the performance indicators, which both state and campus leaders consider the most critical choice in performance programs (Serban, 1997, 21). Mandated/Not Prescribed programs ensure participation by state officials and educational leaders. State government mandates the program but leaders from coordinating, system, and campuses participate in proposing the indicators. Mandated/Not Prescribed programs assure participation by educators but can at times accent the interests of administrators and professors and slight those of governors and legislators. Mandated/Not Prescribed initiatives have the two required elements in good policymaking. They provide both a sense of inevitability, which is essential to serious change, and choice, which is crucial to consent or at least acquiescence.

Though performance reporting, budgeting, and funding have similar purposes and initiation methods, they applied different levers for performance and produced decidedly different reactions

from campus leaders. All three follow the admonition of the Greek mathematician, Archimedes, who believed you could move mountains and presumably higher education with a long enough lever put in the right place. All three programs promised what McKeown-Moat (1996) called accountability mechanisms with teeth or consequences, in contrast to campus-based assessment.

Performance Reporting

Performance reporting pushed publicity as its lever on performance. It rested on the rationale that merely publishing the collective results of higher education and those of its colleges and universities on priority state indicators would improve performance. The mandates for reporting brought a change from those for assessment. Assessment mandates provided decentralization with little direction, while performance reporting added direction as a price of decentralization. In contrast to the assessment mandates, performance reporting generally required comparability among campuses, although the reports themselves often urged comparisons only among the same types of institutions. Many of the state programs traded increased fiscal autonomy to campuses for accountability for performance results (Blumenstyk 1991). The state legislatures or the state higher education agencies, or college or university systems usually insisted on a common list of statewide indicators for all public colleges and universities (Ruppert 1998). A growing number of reporting programs also allowed campus choice of one or more mission specific indicators to encourage institutional diversity and to parry the common charge of adopting a plan of one size fits all types of institutions.

The popularity of performance reporting preceded those of performance budgeting or funding. Only one program in Maryland existed before 1990. By 1996, that number leaped to 23 states, spreading from three southern states to every region in the nation (Christal 1998). The growth of performance reporting slowed in the mid to late 1990s as the popularity of performance budgeting and funding expanded, but revived in the first years of the 21st Century. The publicity preceding and following the issuance of the Measuring Up 2000, the State-by-State Report Card on Higher Education by the National Center For Public Policy And Higher Education in late November of 2000 probably spurred the surprising increase of performance reporting in the last two years (National Center 2000).

Our 1999 survey of State Higher Education Finance Officers (SHEFO) showed only 28 states with performance Reporting. By 2001, this number had climbed to 40 (Burke and Modarresi 1999; Burke and Minassians 2001). In 2000, Mark Musick, the President of the Southern Regional Education Board marveled: "Ten years ago, no SREB State provided information directly related to the state s goals for higher education. Today, most SREB states do"(Southern Regional Education Board 2000, 5). In little more than a decade, performance reporting spread from one to 40 states. The latest survey suggests that performance reporting is here to stay. The SHEFO say that 38 of those programs are likely to continue and that four more states are likely to adopt performance reporting in the next five years. Clearly, performance reporting has become the preferred program for achieving the purposes demonstrating accountability, improving performance, and meeting state needs.

States with Performance Reporting

2001	40 States	Alabama, Alaska, Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Illinois, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming
------	-----------	--

All too often, state and campus policy makers ignore the performance reports, since they have no fiscal consequences. Money matters in state government and higher education no less than in private industry. If what is publicized is what gets valued, what gets funded is even more prized. Performance reporting seems to set the stage for the move to performance budgeting. It is hard to imagine that state and system officials would have reports on the accomplishments of colleges and universities and then totally ignore them when allocating scarce resources. Logically, performance reporting seems the first step toward performance funding or budgeting. Seventy-two percent of the states with performance funding and 69 percent of those with performance budgeting also have performance reporting. Just half of the states with neither of these programs have performance reporting. Up to the mid 1990s, performance reporting seemed but halfway house on the road to performance budgeting or funding.

Performance Budgeting and Performance Funding

Progressing from reporting to funding may seem a short step to state policy makers but it represents a momentous move to campus leaders. Indeed, the attractiveness of performance programs on campus seems in direct proportion to their distance from funding. On the other hand, the strongest advocates for performance at the state level see the connection of funding to results as the best way to demonstrate accountability, improve performance and respond to state needs. Not surprisingly in corporate boardrooms and state capitals, it seems the American way to reward desired results with increased funding.

Performance funding and budgeting add institutional performance to the traditional budget considerations of current costs, student enrollments, and inflationary increases. States had previously provided front-end funding to encourage desired campus activities, such as new programs in instruction, research, and service. Performance funding and budgeting depart from these earlier efforts by allocating resources for achieved rather than promised results. This practice shifts somewhat the budget question from what states should do for their campuses toward what campuses should do for their states and their students. In reality, the shifts are small in most states, since both performance budgeting and funding generally involve relatively small sums. States still base the budgets of public colleges and universities based largely on the traditional factors of costs, enrollments, and inflation (Burke and Associates 2002; Burke and Serban 1998).

Performance funding ties specified state funding directly and tightly to the performance of public campuses on individual indicators. It focuses on the distribution rather than the preparation and presentation phases of the budget process. In performance budgeting, governors, legislators, and coordinating or system boards consider campus achievement on performance indicators as just one

factor in determining campus allocations. Performance budgeting concentrates on budget preparation and presentation, and often neglects, or even ignores, the distribution phase. In performance funding, the relationship between funding and performance is tight, automatic and formulaic. If a campus achieves a prescribed target or an improvement level on defined indicators, it receives a designated amount or percent of state funding. In performance budgeting, the possibility of additional funding -- due to good or improved performance -- depends solely on the judgment and discretion of state, coordinating, or system officials. Performance budgeting is flexible but uncertain. Performance funding is certain but inflexible (Burke and Serban, 1998).

Performance budgeting offers political advantages to policymakers, which may explain its preference in state capitals over performance funding. Performance funding achieves fiscal consequences at the cost of campus controversies. Leaders of public colleges and universities usually oppose state allocations based on campus performance. They desire the stability of base budgets, with increased allocations for inflation, enrollment, and new initiatives. State legislators may champion, in theory, altering campus budgets based on institutional performance, but they often resist, in practice, programs that may result in budget losses to colleges or universities in their home districts. Performance budgeting offers a political resolution of this troublesome dilemma. Policymakers can take credit for saying they consider performance in budgeting without provoking controversy by actually altering campus allocations.

Responses from State Higher Education Finance Officers (SHEFOs) to our survey in 2000 suggest that performance budgeting has only a limited effect on state allocations. Out of the 28 programs in place at the time, SHEFOs said only one had a great and just five a considerable effect on state funding. Fifteen indicated little and four no effect. Three of the finance officers could not judge the effect (Burke, Rosen, Minassians, and Lessard 2000). Unlike performance funding, performance budgeting also retains a prized possession of legislators -- control and discretion over state budgets. Performance budgeting and especially performance funding tend to become less acceptable to state policy makers when revenues fall and budgets are tight.

Performance Budgeting

Performance budgeting increased dramatically from 1997 to 2001 (Table). States with the program climbed from 16 to 27 -- a 41 percent increase in just five years. (One state had dropped the program since the previous year.) Over the years, the growing movement to mandate performance budgeting for all or some state agencies has probably spurred its increases in higher education. Half of the states now have performance budgeting for some or all of their agencies or state funded programs. Over 70 percent of the performance budgeting efforts for higher education are in states with this policy for government agencies. By 2001, only six states with performance budgeting for state agencies are without a program for higher education, which may limit the future growth of this accountability approach. State Higher Education Finance Officers consider only one state as highly likely and two as likely to adopt the program in the future, the lowest number during the five years of this survey. Conversely, respondents consider four states highly unlikely and four unlikely to start initiatives.

States with Performance Budgeting

Surveys	Number (Percentage)	States
First 1997	16 states (32%)	Colorado, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Mississippi, Nebraska, North Carolina, Oklahoma, Rhode Island, Texas, West Virginia
Fifth 2001	27 states (54%)	Alabama, California, Connecticut, Florida, Georgia, Hawaii, Idaho, Illinois*, Iowa, Kansas, Louisiana, Maine, Maryland, Michigan, Mississippi, Missouri, Nebraska, Nevada, New Mexico, North Carolina, Oklahoma, Oregon, Texas, Utah, Virginia, Washington, Wisconsin.

* 2-year colleges only

Performance Funding

Performance funding exhibits the characteristics of both popularity and instability. Clearly, it is easier to start than to sustain. The number of programs has nearly doubled since 1997, growing from 10 to 19, in just five years. On the other hand, Arkansas, Colorado, Kentucky, Minnesota, and Washington have abandoned programs in place since 1996. As an added note of instability, Arkansas and Colorado have now readopted performance funding and Kentucky's Postsecondary Education Commission has talked about implementing a new effort. The desirability of performance funding in theory is matched by its difficulty in practice. The direct and automatic connection to funding makes performance funding highly controversial in education circles and on college campuses. The 2001 Survey results suggest that performance funding may become more stable than in past years. SHEFOs see all but one state as likely to continue the program. They also consider future adoption as highly likely in three and likely in four states (Burke and Minassians 2001). On the other hand, the recent national recession which restricts or even reduces state funding will put pressure on performance funding, which usually involves added appropriations, since discretionary items are the first to go during bad budget times.

Although the results of the latest survey reveal some resurgence in performance funding, the newer initiatives have reduced expectations. The latest efforts have retreated from the radical goals of reforming higher education found in the early programs. Instead, they pursue the less ambitious objectives of improving institutional performance in specific areas, such as increasing student access, graduation rates, job placements, and sponsored research. These programs also include less funding, reduced goals, and fewer indicators, with more institutional choice to encourage campus diversity. Despite these reduced aspirations in response to campus resistance, performance funding remains by far the most controversial of the three performance based programs. There is clearly nothing like funding to fuel both desire and fear on campus.

States with Performance Funding

Surveys	Number (Percentage)	States
First 1997	10 states (20%)	Colorado, Connecticut, Florida, Kentucky, Minnesota, Missouri, Ohio, South Carolina, Tennessee, Washington
Fifth 2001	19 states (38%)	Arkansas, California*, Colorado, Connecticut, Florida, Idaho, Illinois*, Kansas, Louisiana, Missouri, New Jersey, New York**, Ohio, Oregon, Pennsylvania***, South Carolina, South Dakota, Tennessee, Texas

* 2-year colleges only

** State University of New York System Only- *** Pennsylvania public and private

Performance Indicators

State programs in both performance reporting and funding share few common indicators. Our study of 29 performance reports found that only nine indicators appeared in at least half of the performance reports (Burke and Minassians forthcoming). Our study of performance funding in 11 states found that only seven indicators appeared in at least four programs. Experts in higher education would anticipate nearly all of the most common indicators. The most popular indicators in both programs are graduation/retention rates, student transfers from two-to four-year campuses, job placements, and licensure test scores. Performance reporting put more emphasis on access, affordability, and degree attainment, with measures on tuition and fees, financial aid, degrees awarded, and enrollment levels. Performance funding has more productivity measures, such as faculty workload and time-to-degree.

Performance Reporting: the Preferred Accountability Policy

Performance reporting has become the preferred approach to accountability. Forty states now have performance reporting. Nearly all college or University Systems also publish performance reports. Almost every individual institution issues its own report. Finally, in November of 2000, the National Center for Public Policy and Higher Education circulated *Measuring Up 2000* the first in an intended series of state-by-state reports. *Measuring Up* graded the 50 States in the performance categories of Preparation, Participation, Affordability, Completion, and Benefits. It gave incomplete grades to all the states on the Category of Student Learning, since no available national data exists that allows comparisons among the states in the knowledge and skills acquired by college graduates. The grades were not good for many regions and states, with many Ds and mostly Cs.

The grades on *Measuring Up 2000* raise an intriguing question. How can so much reporting at the state, system, and institutional level produce so limited effect? The answer is surprisingly simple. The first flaw is that performance reports at all levels are treated as separate and segregated activities, which lack the systemic effort required for synergistic effect. The performance reports at the state, system, and campus levels lack a limited set of common indicators that supply the “missing link,” which would allow policy makers to measure down as well as up the performance chain a vertical integration of performance measures from states, to systems, to campuses. These common measures could permit state leaders to locate the sources of successes as well as shortcomings on access and attainment and other policy goals in higher education.

We compared the scores on Measuring Up of states with performance reporting to those without this policy. To our surprise, those with reports did no better than those without them. The reason is that the reports and the report card lack a set of common indicators. Without such shared measures, the reports identify problems of say access, affordability, or degree attainment. But does the responsibility lie at the state, the system, or the campus level.

A second flaw is that all of the performance reports fail to measure results where it really counts, at the academic departments. Our studies of performance reporting and performance funding show that these accountability policies become increasingly invisible at the level of academic deans and department chairs. In our recent survey of two- and four-year campuses from five states, 45 percent of the Directors of Institution Research, who responded, say that academic deans on their campus have little or no familiarity with performance reporting. Even more disturbing, over 70 percent of the Directors claim that department chairs at their institution also have little or no familiarity with the reports (Burke and Associates 2002; Burke and Minassians forthcoming).

Closing the Accountability Gap

Closing the accountability gap demands development of a limited list of common indicators. It also requires internal institutional performance programs that push reporting on some common indicators down to the academic departments, which are responsible for the most important part of higher education performance. What follows is a tentative list of common core indicators

Funding

- 1 . State operating appropriations for public higher education, systems, and public campuses per FTE (input);

Affordability

- 2 . Tuition and fees for states, systems, and two- and four- year public campuses, minus financial aid, as a percent of median family income (input);

Participation

- 3 . Higher education going rate or percent of system or institutional enrollment -- of high school graduates (input);
- 4 . Higher Education or system or institutional -- participation rates of 18-24 year olds (input);
- 5 . 25-44 year olds enrolled part-time in post-secondary education or systems or institutions (input)

Articulation

- 6 . Transfer rates between two- and four-year institutions at the state, system, or campus level (output/input);

Completion

- 7 . Completion rates for two-year (3 yrs) and four-year colleges and universities at the state, system, and campus levels (6 yrs) (output);

Degree Attainment

- 8 . Degree attainment as a percent of population or degrees awarded by systems and campuses (associate, bachelors, and graduate) (output);
- 9 . Degree attainment or degrees awarded by systems and campuses in critical fields, i.e., science, engineering, information technology, and shortage fields in teacher education (output);

Job Placements

- 10 . Job placement rates for college and university graduates (outcome);

College/School Collaboration

- 11 . Pass rates on teacher certification exams (outcome);
- 12 . Percent of baccalaureate freshmen with a college preparatory curriculum in high school (input);

Sponsored Research

- 13 . Dollar volume of externally sponsored research (output);

Student Development

- 14 . Alumni survey on the knowledge and skills developed in college (Outcome).

Where data is available, reports at the state, system, and campus levels would track performance trends on these common indicators over time. Trends would stress improvement at every level over competition among unequal entities.

This limited list resists the pressure common in academia to add a measure to suit every circumstance or clientele. The hard lesson learned in choosing performance indicators, is that too many measures means no real priorities. Every interesting bit of data does not have an inalienable right to become an indicator.

Characteristics of Effective Performance Reports

State and campus respondents to our surveys say overwhelmingly that performance reporting is likely to continue. Despite this prediction, performance reporting can never achieve its promised possibilities without addressing its problems. Our study suggests some characteristics for effective performance reporting based on detailed studies of 29 performance reports.

1 . Avoid Mandated/Prescribed Programs

Effective performance reports avoid Mandate/Prescribed Programs, where legislation not only mandates the policy but also prescribes the indicators in practice. Policies for public higher education must earn approval or at least acceptance -- from governors, legislators, coordinating and system officers, and campus leaders in state government. Mandated programs that prescribe the indicators in legislation without consultation with coordinating, system, and campus leaders are unlikely to gain acceptance from the academic community.

2 . Adopt neither too many nor too few performance targets

Too many indicators mean too many priorities that result in a loss of focus. On the other hand, two

few indicators automatically eliminates many of the major contributions of higher education to students, states, and society. Although states and their system of higher education differ widely, the appropriate range of indicators should run from no less than 10 and to no more than 25. Performance reporting can afford to have more indicators than performance funding, since the latter program must allocate money for each indicator. The generic indicators included in the 29 Reports show that too many measures are more of a problem than too few. Over half of the Reports have more than 25 indicators, while just one has below 10.

3 . Allow campus choice of mission specific indicators

Critics complain correctly that indicator systems often use a rigid set of indicators that treat higher education as a monolithic system and discourage the mix of institutional types and missions from two-year technical and community colleges, to comprehensive institutions and specialized colleges, and graduate research universities. Reporting programs should allow colleges and universities to choose two or three institution specific indicators that represent and encourage special emphases in their campus missions, whether research specialties, technical training, or adult learning. Currently, just four of the 29 reports allow such campus choices, which could become a staple in performance reporting.

4 . Use a limited list of core indicators for all reporting levels

A limited list core indicators should reflect top state priorities and policy issues. Such a list like the one suggested above -- allow the tracking of performance from institutions, through college and university systems and two- and four-year sectors, to state levels. This approach would not only give state policy makers a sense of the overall performance of higher education on critical indicators but also afford an assessment of the contribution of every level in the performance chain.

5 . Include state goals, trend data, and peer comparisons, performance targets

The key to meeting state needs through performance reporting is including a statement of state goals. Clear state priorities are critical to relevant performance indicators and useful report results. Currently, less than 40 percent of the 29 Reports include state goals. Trend data allows the tracking of performance levels over time and adds the element of improvement to the level of performance. More emphasis on this trend data could focus attention on institutional improvement rather than on competition at a time when states are urging their colleges to cooperate rather than compete. Almost 70 of the Reports include performance trends. Conversely, comparisons of results among similar types of institutions add an external standard of performance. Just 41 percent of the Reports in this study use peer comparisons. Although performance targets set needed benchmarks for performance improvement or maintenance, just 24 percent of the Study Reports include them.

6 . Incorporate Institutional data

Nearly thirty percent of the performance reports include only results for state, college or university systems, and averages for the two- and four-year sector results, but not institutional data. State, system, and sector results are merely cumulative totals of campus performances. Only the inclusion of institutional data can show the source of successes and difficulties. States, systems, and sectors do not enroll and educate graduates or produce research and service. Colleges and

universities perform these functions. Without institutional data, it is impossible to trace performance successes and shortcomings to their source.

7 . Urge institutions to implement internal performance reporting

Institutions should implement a system of internal reports from schools, divisions, and departments. Although the results of these internal reports would not appear in the state reports, no single step could do more to improve the performance of higher education on most of the designated indicators. The internal institutional reports would bring the accountability of performance reporting to the units most involved in producing the results on many of the indicators. If Deans and Chairs are unaware of state goals and designated indicators in performance reports, it is not surprising that they fail to make their pursuit a top priority.

8 . Describe how results have been used to improve policies and performance

Only the perception that performance reporting is improving policymaking and performance can justify the time and effort put into its production. Information for information sake is acceptable in higher education but not in public policy. Replies from all groups to our Survey show on average that the performance reports get moderate use in state and campus studies, planning, and budgeting. It comes as no surprise that the Survey responses also reveal that the reports have only a modest impact on improving policymaking at the state or campus levels. To remedy this defect, the indicators should require officials of coordinating agencies, colleges or university systems, and colleges and universities to describe how they have used report results to improve policies and performance.

9 . Require responses from state officials and board of trustees

Silence is not deafening, but it is discouraging. All too often, coordinating agencies, system boards, public campuses submit performance reports to governors and legislatures without getting a response. The silence is especially disturbing, since legislators passed and governors signed mandates requiring performance reporting in over half of the reporting programs in this Study. Governor s offices and chairs of education committees should respond to the reports with more than acknowledgement of receipt. Surely, some comment on higher education performance on critical state priorities seems warranted. It would help immensely the visibility of performance report if state officials indicated how they intended to use the results. Preparing such responses could suggest shifting state priorities, spark new state policies, spur special studies of particular problems, or even shape budgeting allocations. Most important, it would provide the required feedback from state policy makers to higher education leaders.

Coordinating, system, and institutional boards of trustees or regents are also prime recipients of performance reports. Responses from these groups would elevate the visibility and might even increase the use report results. Trustees and regents are deluged with endless stacks of reports, far too many to read or comprehend. Summaries of the performance reports for their state, system, or campus would give them a synopsis of what they want to know most. How is my state, system, or campus doing in meeting state needs; and how do we compare to our competitors? Surely, trustees or regents should discuss and respond to these performance reports and use their results in planning

and policymaking.

10 . Review periodically state priorities and performance indicators

State goals and performance indicators should reflect long-term state policy issues. Study of the 29 performance reports shows a policy lag between issues and indicators. Current indicators do address the policy issues of access and affordability but slight teacher training and K-16 collaboration and workforce and economic. Performance Reporting could benefit from regular scheduled reviews and if necessary revisions -- of state priorities and the performance indicators.

The regular reviews would serve two useful purposes. First, they would help prevent swift changes in state priorities for higher education to meet a momentary demand. Second, periodic review would ensure that reporting indicators stayed in step with critical issues. The Tennessee plan for performance funding and reporting calls for such reviews in five-year cycles. The term is long enough to avoid momentary fads, yet short enough to address emerging issues. It also runs beyond the four-years between gubernatorial elections and the typical two terms of legislators.

11 . Include performance reports in regional accreditation reviews

At least one outside action could strength systemic impact of performance reporting. One of the purposes of public colleges and universities is to meet state needs. Since serving state needs is part of the mission of public institutions, why not include a review of campus results on the performance reports in accreditation reports. The performance reports identify state priorities and often detail institutional performance on related indicators. The six regional accrediting agencies should consider these state priorities and institutional results in their evaluation of public colleges and universities.

Linking accreditation and reporting could prove mutually beneficial. These performance reports represent critical information on institutional performance that could improve the effectiveness of the accreditation process. In turn, their use in accreditation could improve the effectiveness of performance reporting. Incorporating the reports in the accreditation process would also raise the visibility of performance reporting on campuses, particularly at the levels of schools and departments. It could also lend more credibility to accreditation, which is often seen by outsiders as too uncritical in its evaluations of colleges and universities.

The Fatal Flaw: Assessing Quality in Undergraduate Education

Performance reporting, like the other accountability programs of performance funding and outcomes assessment, suffers from a fatal flaw. The academic community has never developed an acceptable and comparable method of assessing the learning outcomes of undergraduate education. Despite nearly twenty years of the assessment movement, the authors of Measuring UP 2000 had to give an incomplete grade for student learning because of the lack of acceptable and comparable data for assessing student learning among the states. Assessment has undoubtedly helped many colleges and universities improve their performance, but the absence of indicators of the quality of undergraduate education that allow comparisons among institutions has left higher education without acceptable accountability measures of quality.

The problem is not to devise more measures of undergraduate quality. Over 30 percent of the reporting indicators in the 29 state reports are quality measures. The problem is the quality not

quantity of these indicators. What higher education needs to paraphrase the call of the US Marine Corp is “a few good measures” of the quality of undergraduate education. The academic community should quit quarreling about inadequate indicators of student learning and devise collectively a few valid and reliable measures that can win acceptance on college campuses and in state capitals.

Conclusion

Information is important in policy making only if it is known and used. So far performance reporting has failed the tests of being known and used by policy makers. Forty states now have reports on the performance, but our Survey of state and campus policy makers suggest that the results are increasing unknown below the vice president level and only moderately used for budgeting, planning, and policy studies. The proposed Characteristics of Effective Performance Programs address these problems. Implementation of internal performance reporting for colleges and universities could make the program better known at the school and department level and could help to improve their performance in critical areas. Requiring responses from State Officials and Coordinating and Governing Boards should also raise the awareness and the use of performance results. The proposal for a limited set of common indicators could provide the missing link of fixing accountability for performance. These common indicators would allow policy makers to trace the sources of performance successes and shortcomings every level.

Still, two questions remain about performance reporting. First, can publicizing, as opposed to funding, results attract and retain the attention of state and campus leaders and affect their policies and decisions? Second, can the academic community agree on a plan for assessing the quality of undergraduate education that is also acceptable state policymakers? The answer to the first question remains doubtful. Performance reporting may appear as just another unwanted, unfunded, mandate on public campuses. It may also seem as just another side issue outside the budget queue in state capitals. Answers to the second question are also problematic. The failure of the assessment movement to promote methods for assessing undergraduate learning acceptable to academics much less outsiders -- raises real doubts about the academy agreeing on a comparable method of evaluating undergraduate education.

Despite these doubts, two conclusions seem clear. First, academic leaders may convince state policy makers that only educators can assess the quality of undergraduate education, but governors and legislators will never accept the answer that it cannot be done. Second, the taxpaying public is unlikely to accept forever the proposition that performance should count in all endeavors except higher education. Performance will count in public higher education. The real question is whether academics will act to define what is quality in undergraduate education or leave the action to outsiders.

References

Association of American Colleges. Integrity in the College Curriculum: A Report to the Academic Community. The Findings and Recommendations of the Project on Redefining the Meaning and Purpose of Baccalaureate Degrees. Washington, DC.: Association of American Colleges, 1985

Astin, A. W. Achieving Educational Excellence. San Francisco, CA.: Jossey-Bass, 1985.

Banta, T. W. and Borden, V. M. H. "Performance Indicators for Accountability and Improvement.," in Using Performance Indicators to Guide Strategic Decision Making. New Directions for Institutional Research, no 82. San Francisco, CA.: Jossey-Bass, 1994.

Bennett, W. To Reclaim a Legacy: A Report on the Humanities in Higher Education. Washington, DC.: National Endowment for Humanities in Higher Education, 1986.

Birnbaum, R. (ed.). ASHE Reader in Organization and Governance in Higher Education, Revised Edition. Lexington, MA.:Ginn Custom Publishing, 1984.

Birnbaum, R. Management Fads in Higher Education: Where They Come From What They Do, Why They Fail. San Francisco, CA.: Jossey-Bass, 2000.

Bloom, A. The Closing of the American Mind. New York, NY: Simon and Schuster, 1987.

Blumenstyk, G. "Florida Bill Offers Campuses Fiscal Autonomy in Return for Accountability," The Chronicle of Higher education 37 no. 32 (April 24, 1991): A-22-23.

Boyer, C. Assessment and Outcomes Measurement- A View from the States: Highlights of a New ECS Survey and Individual State Profiles. Education Commission of the States. Boulder, CO: ECS, 1987.

Burke, J. C. and Minassians, H. Reporting Higher Education Results: Missing Links in the Performance Chain. Forthcoming. New Directions For Institutional Research. San Francisco CA: Jossey Bass.

Burke, J. C. and Associates. Funding Public Higher Education For Performance: Popularity, Problems, and Prospects. Albany, NY.: The Rockefeller Institute, 2002.

Burke, J. C. and Minassians, H. Linking State Resources to Campus Results: From Fad to Trend. The Fifth Annual Survey (2001). Albany, NY.: The Rockefeller Institute, 2001.

Burke, J. C., Rosen, J., Minassians, H., and Lessard, T. Performance Funding and Budgeting: An Emerging Merger? The Fourth Annual Survey (2000) Albany, NY.: The Rockefeller Institute, 2000.

Burke, J. C. and Modarresi, S. Performance Funding and Budgeting: Popularity and Volatility The Third Annual Survey. Albany, NY: Rockefeller Institute, 1999.

Burke, J. C. "The Assessment Anomaly: If Everyone's Doing It, Why Isn't More Getting Done," Assessment Update July-August 1999, 11 (3), 3, 14-15.

Burke, J. C. Managing Budgets in Trying Times: Did Practices Follow Principles? Albany, NY.: The Rockefeller Institute of Government, 1998.

Burke, J. C. and Serban, A. M. Performance Funding for Public Higher Education Fad or Trend? New Directions For Institutional Research, No 97. San Francisco, CA.: Jossey-Bass, 1998.

Cheney, L. Humanities in America: A Report to the President, the Congress, and the American People. Washington, DC.: National Endowment for the Humanities, 1988.

Christal, M. E. State Survey on Performance Measures: 1996-97. Denver, CO.: State Higher Education Officers, 1998.

Cohen, M. and March, J. D. Leadership and Ambiguity. New York, NY.: McGraw-Hill, 1974.

El-Khawas, E. Campus Trends Survey. Washington, DC.: American Council on Education, June 1995.

El-Khawas, E. Campus Trends Survey. Washington, DC.: American Council on Education, June 1991.

Ewell, P. Information on Student Outcomes: How to Get It and How to Use It. Boulder. Boulder, CO.: National Center for Higher Education Management Systems, 1983.

Gold, S. D. The Fiscal Crisis of the States: Lessons for the Future. Washington, DC.: Georgetown University Press, 1995.

Hammer, M. and Champy, J. Reengineering the Corporation: A Manifesto For Business Revolution. New York, NY.: HarperCollins, 1993.

Hines, E. R. State Higher Education Appropriations 1992-93. Denver, CO.: State Higher Education Executive Officers, 1993.

Keller, G. "Managing in Tomorrow s Academic Environment," in Timothy R. Sanford, Preparing for the Information Needs of the Twenty-First Century. No 85, San Francisco, CA.: Jossey-Bass, 1995: 59-64.

Keller, G. "Managing in Tomorrow s Academic Environment," in Timothy R. Sanford, (ed.), Preparing for the Information Needs of the Twenty-First Century. No 85, San Francisco, CA: Jossey Bass, 1995

Kingdon, J. W. Agendas, Alternatives, and Public Policies. New York, NY.: Harper Collins, 1995.

Layzell, D. T. and Caruthers, J. K. Performance Funding at the State Level: Trends and Prospects. Paper presented to the 1995 Annual Meeting of the Association for the Study of Higher Education, Orlando, FL, November 2, 1995.

Lenth, C. "The Context and Policy Requisites of National Postsecondary Assessment," Journal of General Education, 1993, 42, no.1, 9-32.

Lively, K. "Accountability of Colleges Gets Renewed Scrutiny From State Officials," Chronicle of Higher Education, September 2, 1992.

McGuinness, A. C. "Prospects for State-Higher Education Relations: A Decade of Grinding

Tensions,” in Timothy R. Sanford (ed.), *Preparing for the Information Needs of the Twenty-First Century*. New Directions for Institutional Research, No 85. San Francisco, CA.: Jossey-Bass, 1995, 33-45.

McKeown-Moat, M. P. *State Funding Formulas for Public Four-Year Institutions*. Denver, CO.: State Higher Education Executive Officers, 1996.

The National Center for Public Policy and Higher Education. *Measuring Up 2000: A State-by-State Report Card on Higher Education*. San Jose, CA.: The National Center for Public Policy and Higher Education, 2000.

National Commission on Excellence in Education. *A Nation at Risk: The Imperative for Educational Reform*. Washington, D.C.: U.S. Department of Education, 1983.

Nettles, M. T. Cole, J. J. and Sharp, S. *Benchmarking Assessment: Assessment of Teaching and Learning*. Ann Arbor, MI, National Center for Postsecondary Improvement, May, 1997.

North Dakota University System. *Creating a University System for the 21st Century: 1st Annual Accountability Measures Report*. December 2001, p. 1.

Osborne, D. and Gaebler, T. *Reinventing Government: How the Entrepreneurial Spirit Is Transforming The Public Sector*. Reading, MA.: Addison-Wesley, 1992.

Ponton, M. K. *Birnbaum's Model of the Collegial Institution*. Washington, DC.: Virginia, 1996. (ED 422 786).

Ruppert, S. S. *Focus on the Customer: A New Approach To State-Level Accountability Reporting And Processes for Higher Education*. Denver, CO.: State Higher Education Executive Officers, 1998.

Serban, A. M. “Performance Funding for Public Higher Education: Views of Stakeholders,” in Burke, Joseph C. and Serban, Andreea M., *Performance Funding and Budgeting for Public Higher Education: Current Status and Future Prospects*. Albany, NY: The Rockefeller Institute, 1997.

Southern Regional Education Board. *Linking Higher Education Performance Indicators to Goals*. Atlanta GA: SREB, 2000.

Study Group on the Conditions of Excellence in Higher Education. *Involvement in Learning: Realizing the Potential of American Higher Education*. Washington, D.C.; National Institute of Higher Education, 1994.

Weick, K. E. “Educational Organizations as Loosely Coupled Systems,” *Administrative Science Quarterly*, March 1976, 21, 1, 1-19.

Wingspread Group. *An American Imperative: Higher Expectation for Higher Education. An Open Letter to those Concerned about the American Future*. Racine, WI: Wingspread Group on Higher Education, 1993.