

KEYWORDS

Performance/incentive/performance-based funding
Performance budgeting
Performance reporting
Accountability/institutional autonomy
Quality control/institutional quality
Educational quality/instructional effectiveness
Incentives/rewards
Critique of performance assessment approaches
Performance indicators/factors/criteria
Evaluation methods/measurement techniques
Educational/indicators/criteria/assessment
Academic achievement/educational improvement
Outcomes of education/college outcomes assessment
Accreditation/accreditation institutions
Productivity/efficiency
Self-evaluation
Educational finance/economics
Budgeting/resource allocation
State financial support
Recession/fiscal problems
Finance officers
Government-school relationship
Business-school relationship
Politics of education
State HEIs/public HEIs
Statewide planning
State agencies for higher education
State surveys
State programs/state standards
Master plan
Program development/implementation
Program effectiveness/evaluation
Program budgeting
Improvement programs
Community/two-year colleges
Policy formation/public policy/educational policy
Government-school relationship
Educational change/reforms
Finance reforms
College administration/governance
Long-range planning
Institutional perspective
State perspective

FOR THE BIBLIOGRAPHY

Tennessee Higher Education Commission
Arkansas
California
Colorado
Florida
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International perspective
OECD
Europe
Australia
Canada
Mexico
Netherlands
Sweden
United Kingdom

**Annotated Bibliography prepared by
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Academic Senate for California Community Colleges. (1998). *Performance based funding: A faculty critique and action agenda*. Sacramento: The author.

Keywords: Performance/incentive/performance-based funding; community/two-year colleges; educational finance/economics; budgeting/resource allocation; state financial support; improvement programs; productivity/efficiency; state programs/state standards; academic achievement/ educational improvement; educational change/reforms; outcomes of education/college outcomes assessment; state programs/state standards; international perspective; critique of performance assessment approaches.

ABSTRACT: This paper reviews and analyzes a 1997-98 budget proposal by the Chancellor and Board of Governors of the California Community Colleges. The proposal, entitled "Partnership for Excellence," proposes to fund a portion of the California Community College budget on a performance basis, with a differential payout mechanism for colleges based on progress on selected indicators of student achievement. This paper briefly reviews the history of performance based funding, places the proposal in the context of national and international developments, and provides a critique of this budgetary approach in public higher education. Political aspects of the program are questioned in view of pressures felt by California Community Colleges to get the state governor to re-invest in the system. Budget priorities and public impact are reviewed, and finally, the paper outlines an action plan for the Academic Senate for the California Community Colleges in responding to calls for performance based funding.

Albright, B.N. (1995, Fall). The accountability litmus test: Long-term performance improvement with contained costs. *New Directions for Higher Education*, 91: 65-76.

Keywords: Performance indicators/factors/criteria; outcomes of education/college outcomes assessment; policy formation/public policy/educational policy; state programs/ state standards; statewide planning; accountability/institutional autonomy; budgeting/ resource allocation; college administration/governance; academic achievement/educational improvement; educational/indicators/criteria/assessment; productivity/efficiency; long-range planning; evaluation methods/measurement techniques; educational quality/ instructional effectiveness; program effectiveness/ evaluation.

ABSTRACT: Budget reforms adopted at the University of Montana and by the Arkansas state higher education system illustrate a variety of strategies for long-range planning. These efforts include reform of faculty collective bargaining, funding based on productivity enhancement, and a multiyear fiscal plan encompassing both operating and capital budgets.

Albright, B.N. (1997, March/April). Of carrots and sticks and state budgets. *Trusteeship*, 5(2): 18-23.

Keywords: Performance/incentive/performance-based funding; educational finance/ economics; budgeting/resource allocation; state financial support; state HEIs/public HEIs; educational improvement; educational quality/instructional effectiveness; incentives/ rewards; quality control/institutional quality.

ABSTRACT: Some states are using rewards and incentives to entice public colleges and universities to improve quality and meet long-term state goals. Performance funding generally represents a small portion of an institution's budget but appears to substantially affect institutional performance, lessen funding fluctuations, and promote funding stability. Specific institutional strategies can be used to help ensure its effectiveness.

Albright, B.N. (1998). *The transition from business as usual to funding for results: State efforts to integrate performance measures in the higher education budgetary process.* Denver, CO: State Higher Education Executive Officers Association.

Keywords: Performance indicators/factors/criteria; budgeting/resource allocation; educational finance/economics; finance reform; government-school relationship; state financial support; outcomes of education/college outcomes assessment; state surveys; policy formation/public policy/educational policy; long-range planning; critique of performance assessment approaches.

ABSTRACT: This report describes a 1997 survey which examined performance funding in higher education and offers guidelines for states' and institutions' explorations of performance-based funding. Among highlights of the survey are: 32 states are planning or using performance measures in the state budget process; legislatively mandated initiatives are growing in number and scope; and most states report that it is too early to assess the impact of performance measures on institutional behavior. Advantages and areas of concern are also noted. Seven common processes in performance funding systems are identified: (1) determining the vision and overall purpose; (2) selecting goals and determining their relative weight; (3) adopting performance measures for institutional achievement of adopted goals; (4) collecting information about each measure; (5) allocating resources; (6) evaluating and adjusting the processes and goals; and (7) communicating performance results to various audiences. The report closes with 12 recommended principles in decisions about performance-based funding. These principles include: connecting performance funding with strategic planning, promoting collaboration, using existing data whenever possible, and using measures that reflect quality and customer focus rather than numeric counts. (An appendix compares the states on use of performance measures in the budgetary process.)

Alexander, F.K. (1998). *The endless pursuit of efficiency: The international movement to increase accountability and performance in higher education.* Paper presented at the Annual Meeting of the Association for the Study of Higher Education (23rd), Miami, FL, November 5-8.

Keywords: Accountability/institutional autonomy; international perspective; Europe; outcomes of education/college outcomes assessment; productivity/efficiency; government-school relationship; educational change/reforms; educational finance/economics; state financial support; program effectiveness/evaluation.

ABSTRACT: This paper examines the trend toward demanding increased accountability and efficiency by institutions of higher education in the United States and Europe and its implications for the relationship between government and the college or university. It notes that such factors as limited state resources, rising educational costs, and the growing demand for accessibility and equity have generated external pressures on higher education to become more accountable to its funding sources. Examples of specific reforms in the United States are mentioned, including performance-based funding, adjustments in faculty workload policies, and development of policies related to time-to-degree and faculty-per-degree ratios. Examples of reforms in Great Britain focus on the British Education Reform Act of 1988, which began the transition of power from local education authorities to the national government. Examples of the accountability trend from continental Europe are also provided. Discussion of societal demands and the accountability movement examines the effects on higher education of massification and limits on public expenditures. The paper concludes that higher education has evolved into a foundational component of national economic growth and reflects utilitarian views of higher education in which economic values are supreme and the quantification of fiscal resources are the true measure of value.

Alexander, F.K. (2000, July/August). The changing face of accountability: Monitoring and assessing institutional performance in higher education. *Journal of Higher Education*, 71(4): 411-431.

Keywords: Performance/incentive/performance-based funding; accountability/institutional autonomy/institutional autonomy; government-school relationship; educational/indicators/criteria/assessment; educational change/reforms; international perspective; educational quality/instructional effectiveness.

ABSTRACT: Discussion of trends in the accountability movement in higher education considers accountability versus autonomy, effects of massification, limitations of public expenditures, measuring institutional performance in the United States and United Kingdom, emerging performance-based reforms, and commonalities among performance-based systems. Notes governments are reflecting an increasingly utilitarian view of higher education.

Anderes, T. (1995). *Outcome based budgeting: Connecting budget development, allocation and outcomes*. Paper presented at the SHEEO Professional Development Seminar for State Higher Education Finance Officers, Charleston, SC, August 17-19.

Keywords: Accountability/institutional autonomy; performance budgeting; outcomes of education/college outcomes assessment; educational finance/economics; state HEIs/public HEIs; program budgeting; budgeting/resource allocation; policy formation/public policy/educational policy.

ABSTRACT: This plan for outcome-based budgeting (OBB) is the result of growing demands for increased fiscal accountability, measurable outcomes, strengthened assessment processes, and more meaningful performance indicators as mandated by many State and Federal legislators. OBB focuses on linking funding with outputs and outcomes. Higher education institutions must redefine budget planning and justification processes and the means of connecting those processes to financial information. OBB tracks student progress from initial matriculation through program completion and identifies significant student outcomes and their basis for funding based on defined student-career development tracks. Critical to OBB is the development of a data base that translates traditional student information into the new, outcome-oriented tracks; it must define and collect new data and establish a structure that uniformly gathers follow-up information on students once they are no longer enrolled in the institution. Building an OBB requires defining the key outcomes; creating the tracking system and maintaining the existing data in parallel; linking inputs, outcomes, and funding; and building budgets based on the outcomes. OBB yields understandable outcomes from State funding for legislators and governors which may help to secure additional funds. OBB is seen as a balanced approach to addressing legislative concerns while expanding the scope of information that institutions use for decision making purposes.

Anderson, D., Johnson, R., & Milligan, B. (1996). *Performance-based funding of universities*. Commissioned Report No 51. Canberra: Australian National Board of Employment, Education, and Training, Higher Education Council.

Keywords: International perspective; Australia; performance/incentive/performance-based funding; outcomes of education/college outcomes assessment; quality control/institutional quality; productivity/efficiency; budgeting/resource allocation; policy formation/public policy/educational policy; evaluation methods/measurement techniques; state surveys.

ABSTRACT: A government-commissioned study in Australia investigated the experiences of a number of countries with performance-based funding of universities and examined the potential for its application in Australian higher education. The study found various forms of performance-based

funding in different countries (England, Scotland, Germany, Netherlands, Sweden, Denmark, United States, Chile), which used both teaching/learning outcomes and research productivity as performance measures. The Australian form of performance-based funding for distribution of substantial research funds was examined, and it was concluded that this approach could skew faculty attention away from teaching. Considerations in establishing teaching/learning-based indicators and implementing a new performance-based funding system using them are discussed. Recommendations include making a gradual rather than sudden, transition to such a system and conducting a number of trials and pilot studies to avoid disruption of systems, services, and confidence. Substantial study-related documentation is appended.

Ashworth, K.H. (1994, November/December). Performance-based funding in higher education: The Texas case study. *Change*, 26(6): 8-15.

Keywords: State perspective; Texas; performance/incentive/performance-based funding; state financial support; politics of education; budgeting/resource allocation; state agencies for higher education; statewide planning; quality control/institutional quality; state programs/state standards.

ABSTRACT: Texas' new model for creating a performance-based system for distributing state funds to higher education is one that may be useful to other state leaders and university staff members in the near future. The performance funding approach mandated by the Texas state legislature and devised by the higher education coordinating board to appropriate resources to colleges and universities is explained, and the responses of institutions to it are discussed. Focus is on problems encountered and lessons learned. Details on how Texas spent 1991-93 developing a plan to address the legislative directive to create a performance-based system are presented.

Association of Colleges of Applied Arts and Technology of Ontario. (2002, November). *Environmental Scan, 2002-03: Governance and Accountability*. North York: Research and Policy Office. Retrieved January 27, 2004, from <http://www.acaato.on.ca/new/research/scan/2003/governance.pdf>

Keywords: Performance/incentive/performance-based funding; performance budgeting; performance reporting; international perspective; Canada; state perspective; California; New Jersey; accountability/institutional autonomy; business-school relationship; college administration/governance; community/two-year colleges.

ABSTRACT: Ontario's Colleges of Applied Arts and Technology have been governed by the Ministry of Training, Colleges, and Universities Act (MTCU) and related regulations and policies since their inception in 1965. In June 2002, the Ontario Colleges of Applied Arts and Technology Act, 2002 (OCAATA) was passed by the Ontario legislature; proclamation is anticipated in 2003. There has been a great deal of attention paid by a variety of government and private organizations to the issue of accountability, and to the measures that can be taken to improve accountability. This paper offers examples of some Canadian public and private corporations' accountability reports. In addition, the paper examines accountability as applied to community colleges in California and New Jersey, and to Ontario's Colleges of Applied Arts and Technology, as well as to colleges in British Columbia and Alberta. There are three basic accountability models that the states use to determine performance: **performance funding, performance budgeting, and performance reporting**. Performance is measured by institutional improvement over time, comparisons with peer institutions, and comparison against preset targets. In British Columbia, Ontario, and Alberta, performance indicators are tied to funding in significantly different ways. The report recommends steps that can be taken to strengthen performance and accountability in Canada's public college and university governance.

Astin, A. (1990, Fall). Can state-mandated assessment work? *Educational Record*, 71(4): 34-40.

Keywords: Performance/incentive/performance-based funding; performance indicators/factors/criteria; educational/indicators/criteria/assessment; budgeting/resource allocation; state financial support; state programs/state standards; incentives/rewards.

ABSTRACT: The best kind of performance-based funding system is that which encourages and rewards good practice. Any state incentive program should encourage colleges and universities to develop a comprehensive database, conduct more and better talent development assessments, increase student-faculty contact, and increase student involvement in learning.

Astin, A.W. (1993, September 22). College retention rates are often misleading. *The Chronicle of Higher Education*. Retrieved February 16, 2004, from <http://chronicle.com/prm/che-data/articles.dir/art-40.dir/issue-05.dir/05a04801.htm>

Keywords: Performance indicators/factors/criteria; performance reporting; productivity/efficiency; quality control/institutional quality; accountability/institutional autonomy.

Alexander Astin argues that retention rates and some other outcome measures may lead to erroneous conclusions about institutions' effectiveness. The studies by the Higher Education Research Institute at the UCLA suggest that the reporting requirement on retention rates, imposed by the Student Right to Know and Campus Security Act, is ill conceived and could have negative consequences and for both HEIs and students. Having analyzed the weaknesses of this indicator, Astin proposes developing an internal standard—the *expected retention rate*—against which the institution can judge its own performance. He concludes: "It is a shame that educational researchers continue to support (and profit from) such simplistic and naïve assessment practices, and that we continue to encourage policy makers and 'consumers' to use the questionable results generated by them. The assessment community must produce and disseminate to policy makers and parents much better tools for evaluating the quality of our colleges and universities" (p.4).

Banta, T.W. (1985, September). Use of outcomes information at the University of Tennessee, Knoxville. *New Directions for Institutional Research, Assessing Educational Outcomes*, 47: 19-32.

Keywords: Performance/incentive/performance-based funding; state perspective; Tennessee; educational/indicators/criteria/assessment; outcomes of education/college outcomes assessment; state financial support; state HEIs/public HEIs; budgeting/resource allocation; college administration/governance; statewide planning.

ABSTRACT: A statewide performance funding initiative provided a strong incentive to examine student outcomes. The result has been a systematic program of data collection and dissemination that has significantly affected both the curriculum and the university's budgeting process.

Banta, T.W. (Ed.). (1986). *Performance funding in higher education: A critical analysis of Tennessee's experience*. Boulder, CO: National Center for Higher Education Management Systems.

Keywords: Performance/incentive/performance-based funding; institutional perspective; state perspective; Tennessee; educational quality/instructional effectiveness; quality control/institutional quality; program effectiveness/evaluation; budgeting/resource allocation; state financial support; academic achievement/educational improvement; educational/indicators/criteria/assessment; educational finance/economics; policy formation/public policy/educational policy; outcomes of education/college outcomes assessment; self-evaluation; state HEIs/public HEIs; state programs/state standards.

ABSTRACT: Changes at the University of Tennessee, Knoxville (UTK), begun when the Tennessee Higher Education Commission (THEC) initiated a funding mechanism designed to promote assessment and improvement of quality, are chronicled. Implications for program evaluation, planning, and resource allocation in other state colleges and universities are also discussed in the following chapters: (1) "Development of Performance Funding Criteria by the Tennessee Higher Education Commission: A Chronology and Evaluation" (Robert A. Levy); (2) "Planning and Resource Allocation at the University of Tennessee, Knoxville: Institutional Responses to Changes in State Funding Policies" (Homer S. Fisher); (3) "Comprehensive Program Evaluation at the University of Tennessee, Knoxville: A Response to Changes in State Funding Policy" (Trudy W. Banta); (4) "Accreditation as a Performance Indicator" (C. Warren Neel); (5) "Measuring Achievement in General Education" (W. Lee Humphreys); (6) "Measuring Achievement in the Major Field" (William H. Calhoun); (7) "Measuring Perceived Program Quality" (Kent D. Van Liere and William Lyons); (8) "Assessing the Quality of Higher Education through Comprehensive Program Review" (Mary P. Richards and C. W. Minkel); and (9) "Performance Funding and Institutional Response: Lessons from the Tennessee Experience" (Peter Ewell). Copies of the following are appended: THEC standards of performance, 1970; instructional evaluation variables and standards, 1981-82; instructional evaluation variables, November 21, 1983, THEC; instructional evaluation information for College D; student satisfaction survey excerpt from report for Department A; and guidelines for self-study document.

Banta, T.W. (1988, Fall). Assessment as an instrument of state funding policy. *New Directions for Institutional Research, No 59. Implementing Outcomes Assessment: Promise and Perils*, 15(3): 81-94.

Keywords: Performance/incentive/performance-based funding; educational/indicators/criteria/assessment; policy formation/public policy/educational policy; outcomes of education/college outcomes assessment; state financial support; government-school relationship; accountability/institutional autonomy; accreditation/accreditation institutions; Tennessee Higher Education Commission.

ABSTRACT: The Tennessee Higher Education Commission's performance-funding policy rewards public institutions for undertaking comprehensive assessment programs. New policy guidelines that emphasize quantitative indicators such as test scores and alumni ratings are discussed.

Banta, T.W. (1991). Linking outcomes assessment and the freshman experience. *Journal of the Freshman Year Experience*, 3(1): 93-108.

Keywords: State perspective; Tennessee; Virginia; outcomes of education/college outcomes assessment; performance/incentive/performance-based funding; state financial support.

ABSTRACT: A review of externally mandated outcomes assessment activities and resulting innovations in freshman programs focuses on efforts in Tennessee and Virginia, in which higher education funding is linked to outcomes assessment. Areas examined include registration, advising, student-faculty contact, computer use, basic skills, staff development, student-student contact, and curriculum.

Banta, T.W. (Ed.). (1999). *Assessment update: The first ten years*. Boulder, CO: National Center for Higher Education Management Systems.

Keywords: Outcomes of education/college outcomes assessment; educational/indicators/criteria/assessment; program effectiveness/evaluation; community/two-year colleges; policy formation/public policy/educational policy; evaluation methods/ measurement techniques.

ABSTRACT: This document provides complete collections of columns from the journal "Assessment Update" for the past 10 years. By-lined columns from Trudy W. Banta, Editor, include articles on: (1) encouraging faculty involvement in assessment; (2) the growing variety of assessment methods; (3) **assessment in response to external pressures: performance funding in Tennessee**; (4) some national assessment issues; and (5) international perspectives on assessing quality in education. Thirty-one articles from Peter T. Ewell include: (1) "The Current Pattern of State Assessment Initiatives"; (2) "Mandated Assessment: A Look in the Cultural Mirror"; (3) "'Program Excellence' in Ohio: An Indirect Approach to Assessment"; (4) "So Are They Really Going Away"; and (5) "Technology Facilitates National Data Collection Strategies." Fifteen articles from Jeffrey A. Seybert include: (1) "How To Initiate an Assessment Program"; (2) "Assessment of Noncredit Continuing Education and Community Service Programs and Courses"; (5) "Assessment at Two-Year Institutions"; and (4) "A New Paradigm for Evaluating Transfer Success." The 33 "Campus Profiles", written by Peter J. Gray, present case studies that suggest that in order for assessment to be successfully institutionalized on a campus, they must be made a priority over an extended period by central and departmental leaders. Thirty-two articles by Gary R. Pike include articles on general education, critical thinking, surveys, writing assessment, major field, assessment resources, and enrollment management.

Banta, T.W., et al. (1991). Estimated student score gain on the ACT COMP exam: Valid tool for institutional assessment? *Research in Higher Education*, 27(3): 195-217.

Keywords: Outcomes of education/college outcomes assessment; evaluation methods/ measurement techniques; educational/indicators/criteria/assessment; quality control/ institutional quality.

ABSTRACT: An institution can test seniors with the ACT College Outcome Measures Project (COMP) exam, then subtract from the senior score an estimated freshman score. Studies at the University of Tennessee, Knoxville, indicate that this method is not reliable to make judgments about the quality of general education programs.

Banta, T.W., & Associates. (1993). *Making a difference: Outcomes of a decade of assessment in higher education*. San Francisco, CA: Jossey-Bass.

Keywords: Outcomes of education/college outcomes assessment; educational/indicators/criteria/assessment; educational change/reforms; educational improvement; educational quality/instructional effectiveness; quality control/institutional quality; educational quality/instructional effectiveness; program effectiveness/evaluation; state programs/state standards; statewide planning.

ABSTRACT: This five-part volume presents a comprehensive collection of 24 accounts of campus assessment practices by the individuals who developed and implemented them. Part 1 presents the stories of five institutions in which assessment has effected a marked change in the way faculty and staff do their work. Part 2 describes some of the broad approaches to assessing institutional effectiveness that have been used on a variety of campuses with a diverse array of learners. Part 3 contains chapters that describe specific methods that can be used in a variety of college settings. Part 4 presents information on some strategies that have not yet been applied broadly but show promise for increased application in the future. Part 5 demonstrates the power of external pressures to influence campus assessment practices. Paper titles and authors are: (1) "Creating a Culture Where Assessment Improves Learning" (Georgine Loacker, Marcia Mentkowski); (2) "Providing Leadership for Organizational Change" (Candace C. Young, Michael E. Knight); (3) "Using Assessment To Enhance Quality" (A. Michael Williford, Gary O. Moden); (4) "Helping a Campus in Transition" (Albert M. Katz); (5) "Assessing Outcomes of General Education" (MindaRae Amiran et al.); (6) "Demonstrating and Enhancing Community College Effectiveness" (R. Dan Walleri, Jeffrey A. Seybert); (7) "Building Assessment Programs in Large Institutions" (James H. Watt et al.); "Assessment Strategies for Adult Undergraduate Students" (Carol E. Kasworm, Catherine Marienau); (9) "Portfolio Assessment" (Lendley C. Black); (10) "Assessment Options for the College Major" (Reid Johnson et al.); (11) "Attitude and Opinion Data" (John A. Muffo, Mary Anne Bunda); (12) "Cognitive and Affective Measures of Student Development" (R. Stephen RiCharde et al.); (13) "The Community College Student Experiences Questionnaire" (Jack Friedlander et al.); (14) "Classroom Assessment" (Susan S. Obler et al.); (15) "Assessment Centers" (Robert E. Millward); (16) "Student Self-Evaluation" (Carl J. Waluconis); (17) "Coursework Cluster Analysis" (James L. Ratcliff, Elizabeth A. Jones); (18) "Total Quality Management" (Darrell W. Krueger); (19) "**Performance Funding**" (Janice Van Dyke et al.); (20) "**A Flexible Approach to Statewide Assessment**" (Barbara S. Fuhrmann, Karen M. Gentemann); (21) "**The College Outcomes Evaluation Program**" (Nina D. Jemmott, Edward A. Morante); (22) "Accountability through Assessment in Community Colleges" (Dorothy Bray, Martha J. Kanter); (23) "The Role of States and Accreditors in Shaping Assessment Practice" (Peter T. Ewell); and (24) " and Conclusion: Are We Making a Difference?" (Trudy W. Banta).

Banta, T.W., & Borden, V.M.H. (1994, Summer). Performance indicators for accountability and improvement. In V.M.H. Borden, & T.W. Banta (Ed.), *Using performance indicators to guide strategic decision making*. New Directions for Institutional Research, No 82 (95-106): San Francisco: Jossey-Bass.

Keywords: Performance indicators/factors/criteria; performance reporting; accountability/institutional autonomy; college administration/governance; evaluation methods/ measurement techniques; educational/indicators/criteria/assessment.

ABSTRACT: Five criteria for judging college or university performance indicators used to guide strategic decision making are outlined. The criteria address: purpose; alignment of performance indicators throughout the organization or system; alignment of performance indicators across inputs,

processes, and outcomes; capacity to accommodate a variety of evaluation methods; and utility in decision making.

Banta, T.W., & Fisher, H.S. (1984, December). Performance funding: Tennessee's experiment. In J. Folger (Ed.), *Financial incentives for academic quality*. New Directions for Higher Education, No 48: 29-41.

Keywords: State perspective; Tennessee; Tennessee Higher Education Commission; educational finance/economics; incentives/rewards; budgeting/resource allocation; state agencies for higher education; college administration/governance; educational quality/ instructional effectiveness; state financial support; evaluation methods/measurement techniques; outcomes of education/college outcomes assessment; program effectiveness/ evaluation; state HEIs/public HEIs.

ABSTRACT: An experiment of the Tennessee Higher Education Commission is outlined that allocated up to 5 percent of an institution's annual state funding for awarding on the basis of demonstrated accomplishment in five performance areas. A project funded by the Kellogg Foundation to increase the use of student outcome information in institutional planning is also discussed.

Banta, T.W., & Fisher, H.S. (1984). *Performance funding: Tennessee's noble experiment in promoting program quality through assessment of outcomes*. Paper presented at the American Educational Research Association, 68th, New Orleans, LA, April 23-27.

Keywords: Performance/incentive/performance-based funding; state perspective; Tennessee; Tennessee Higher Education Commission; educational/indicators/criteria/ assessment; outcomes of education/college outcomes assessment; performance indicators/ factors/criteria; budgeting/resource allocation; college administration/governance; educational quality/instructional effectiveness; evaluation methods/measurement techniques; government-school relationship; state financial support.

ABSTRACT: The Tennessee Higher Education Commission's (THEC) use of a performance criterion in funding higher education is discussed, along with the results of evaluating this initiative. Information on program quality and improvement efforts is a factor in determining the budgetary allocation for each state institution. With funding from the Kellogg Foundation, an evaluation was conducted of the use of outcome information at the University of Tennessee, Knoxville. The following student outcomes were studied: achievement in general education, achievement in the major field, and opinion measurement concerning the quality of academic programs and services. Task forces recommended that student outcome information be included in the evaluative data gathered for the university's comprehensive program review process. Changes in instruments, data collection/analysis, and interpretation of results were recommended before utilizing outcome information. The initiative has strengthened the academic program review process and stimulated increased use of outcome information in departmental decision-making as well as campus-wide strategic planning and resource allocation. Specific impacts on curriculum and instruction, student services, and institutional planning and evaluation are identified.

Banta, T.W., & Fisher, H.S. (1989). Tennessee's performance funding policy: L'Enfant Terrible of assessment at age eight. In: E.V. Johanningmeier (Ed.), *Accountability and assessment in higher education*. A Society of Professors of Education, John Dewey Society Publication.

Keywords: Performance/incentive/performance-based funding; Tennessee; state perspective; accountability/institutional autonomy; evaluation methods/measurement techniques; quality control/institutional quality; program effectiveness/evaluation; state programs/state standards; accreditation/accreditation institutions; outcomes of education/ college outcomes assessment; state surveys.

ABSTRACT: The paper addresses issues concerned with increasing state interest in encouraging public institutions of higher education to demonstrate educational quality through outcomes assessment and reports on the development and implementation of Tennessee's program of performance funding. Emphasis is on guidelines contained within a 5-year performance funding program implemented in 1983. Standards were developed for five performance funding areas, including accreditation, program field evaluation, outcomes of the general education curriculum, referent group surveys, and planning for instructional improvement. A survey of 23 Tennessee institutions during the last year of the first funding cycle identified strengths and weaknesses associated with each of the funding areas, such as percentage of programs accredited, use of peer review, and use of a comprehensive field exam in major fields. Ninety-five percent of the institutions considered the impact of performance funding to be beneficial. The most favorable reactions were related to availability of improved institution-specific information from surveys, faculty involvement in test development, and the impetus to use the data in planning for improvement. The most negative reactions were related to the weight given to exam performance and the use of accreditation as an indicator of program quality.

Banta, T.W., & Moffett, M.S. (1987, Fall). Performance funding in Tennessee: Stimulus for program improvement. *Student Outcomes Assessment: What Institutions Stand to Gain*. New Directions for Higher Education, No. 59, 15(3): 35-43.

Keywords: Performance/incentive/performance-based funding; state perspective; program effectiveness/evaluation; Tennessee; institutional perspective; state financial support; outcomes of education/college outcomes assessment; evaluation methods/measurement techniques.

ABSTRACT: All postsecondary institutions in Tennessee have the opportunity to earn an annual budget supplement for instruction from the state if certain criteria, based on educational outcomes, are obtained. A comprehensive assessment program at the University of Tennessee at Knoxville is described.

Banta, T.W., Rudolph, L.B., Van Dyke, J., & Fisher, H.S. (1996, January/February). Performance funding comes of age in Tennessee. *Journal of Higher Education*, 67(1): 23-45.

Keywords: Performance/incentive/performance-based funding; state perspective; quality control/institutional quality; Tennessee; Tennessee Higher Education Commission; accountability/institutional autonomy; educational quality/instructional effectiveness; educational/indicators/criteria/assessment; budgeting/resource allocation; state financial support; performance indicators/factors/criteria; policy formation/public policy/ educational policy.

This article is devoted to the evolution and current status of performance funding (PF) for higher education in Tennessee: it examines the evolution of PF guidelines, describes the survey of Tennessee's public institutions, summarizes the respondents' comments on the standards, and discusses a number of relevant issues. Based on the survey of twenty-three campus PF coordinators, the authors consider the question of what has contributed to the longevity of the program, which at the time of writing is midway

in a third five-year plan for implementation. As before, the fundamental issues confronting the program are the following: (1) Is it possible to measure the quality of higher education with adequate precision in order to make reliable funding decisions; and (2) Apart from external accountability, can assessment be adaptable to local purposes and help faculty use it in improving programs and services on campus? The authors note, “From the perspective of most faculty and campus administrators, performance funding is first and foremost an accountability mechanism” (p.39). However, there is a tension between the two purposes of assessment—external accountability and internal improvement of programs and services. Overall, Tennessee's PF policy has produced a number of positive outcomes on campuses: undertaking student assessment initiatives in most HEIs; using the amassed data to improve curricular, instruction, and student services; and inducing faculty attention to general education and development of generic skills. The Tennessee Higher Education Commission “has also succeeded in making performance funding a particular nutritious carrot rather than an accountability stick with which to flog institutions” (p.43). As a result, although participation is voluntary, every public HEI has elected to implement every standard.

The comments on the ten current performance standards reveal the following results. The campuses favor the peer review of unaccreditable undergraduate programs and of master's degree programs by external specialists and external accreditation as the methods of assessing quality. However, the simple pass/fail option for the undergraduate programs seems too lenient to many respondents. Although accreditation is considered the most conducive to positive changes, the following concerns are raised: first, there should be a provision for exemption from the standard; and second, some accreditors still emphasize the inputs into a program rather than its outcomes. Most respondents report that master's reviews/placement, improvement actions based on assessment findings, and student and alumni surveys have actually produced improvements in student learning. Recognizing the benefits of the Major Field Testing, faculty are often frustrated by the quality of the assessment instruments employed. Likewise, recognizing the intent behind the Mission-specific Goals standard, some respondents feel that it may lead to institutions setting goals that they may easily accomplish; and, on the other hand, it is difficult to assess the progress on some goals. In General Education Testing, student motivation has often been a major barrier to achieving its goals. Some respondents also criticize the new standards—Retention and Graduation Goals (for not considering the factors beyond the HEIs control and yearly fluctuations) and Enrollment Goals for Minorities and other groups (for treating enrollment as the outcome, not as a process and being limited by the yearly measurements). The respondents have given PF an average grade of C (2.38 on the 5-point scale) as a force for improving institutional effectiveness. At the same time, campus coordinators gave five of the ten PF standards the grade of B as measures of quality of higher education. The authors summarize a common concern, “Faculty and administrators worry particularly about the potential for misuse of assessment data to make unwarranted comparisons among institutions with different missions” (p.42). However, HEIs do not compete with each other for state funding under PF, thus interinstitutional comparison plays a limited role.

Barnetson, R.J. (1997, December). Changing definitions and off-loading responsibility in Alberta's postsecondary system. *Education Policy Analysis Archives*, 5(22).

Keywords: Performance/incentive/performance-based funding; international perspective; Canada; educational change/reforms; finance reforms; accountability/institutional autonomy; educational finance/economics.

ABSTRACT: Outlines the process by which the government of Alberta (Canada) has compelled educational institutions to accept the introduction of a performance-based funding mechanism in spite of the substantial loss of autonomy the new process entails. Implications of the change are explored, and reasons for it are suggested.

Barnetson, R.J. (1999). Academic capitalism and accountability in higher education (Doctoral dissertation, University of Calgary).

Keywords: Performance/incentive/performance-based funding; International perspective; Canada; accountability/institutional autonomy; educational finance/economics; long-range planning; government-school relationship; productivity/efficiency; policy formation/public policy/educational policy; college administration/governance; finance reforms.

ABSTRACT: This dissertation examines performance-based funding in higher education in Alberta (Canada) using a case study that examined government funding of public higher education in that province. Six hypothesized goals for performance-based funding were developed from the literature, and relevant government documents were analyzed in terms of these goals. The study concluded that: (1) While Alberta's government did seek to increase institutional accountability, it did not introduce performance-based funding to achieve this end; rather, a closely related reporting framework to increase institutional accountability was introduced; (2) Alberta's government did seek to increase institutional responsiveness to governmental goals by introducing performance-based funding; (3) Alberta's government did seek to increase institutional productivity by introducing performance-based funding, although the definition of productivity used might be inadequate to realize increased productivity; (4) Alberta's government did not introduce performance-based funding as a politically feasible way to increase government transfers to institutions; (5) Alberta's government introduced performance-based funding to facilitate the introduction of a broader policy agenda consistent with academic capitalism (i.e., aligning the activities of higher education with the needs of capitalism); and (6) it was not clear whether Alberta's government introduced performance-based funding to legitimize the introduction of a broader policy agenda.

Barnetson, R.J. (1999). *Alberta's performance-based funding mechanism*. Paper presented at the Coalition for the Advancement of Applied Education meeting, Edmonton, Alberta, Canada, March 20.

Keywords: Performance/incentive/performance-based funding; international perspective; Canada; performance indicators/factors/criteria; accountability/institutional autonomy; state financial support; government-school relationship; policy formation/public policy/ educational policy; evaluation methods/measurement techniques; performance indicators/ factors/criteria; politics of education; productivity/efficiency.

ABSTRACT: This paper provides an overview of the performance indicator-based accountability and funding mechanism implemented in the higher education system of Alberta, Canada. The paper defines the terms accountability and regulation, examines the use of performance indicators to demonstrate accountability, and explains how performance indicator-based accountability and regulatory mechanisms are used as policy instruments. The paper also discusses traditional approaches to resource allocation and recent developments in resource allocation, including performance-based funding. The paper outlines the pressures placed on governments by globalization, the right-wing political ideologies that give these pressures political voices, the resultant change in the role of government, and the development of academic capitalism. The paper notes that government policy has induced academic capitalism in Alberta's higher education system and describes Alberta's performance-based funding mechanism. The paper concludes by outlining some criticisms of the performance indicators used in Alberta's funding mechanism and discussing the implications of the performance-based funding mechanism in the province.

Barnetson, R.J. (1999, April). A review of Alberta's performance-based funding mechanism. *Quality in Higher Education*, 5(1): 37-50.

Keywords: Performance/incentive/performance-based funding; international perspective; Canada; educational finance/economics; policy formation/public policy/educational policy; budgeting/resource allocation; government-school relationship.

ABSTRACT: Alberta's 1996 introduction of performance-based funding for colleges, universities, and technical institutes is a substantial departure from previous Canadian practice. Origins and implementation of the two-year pilot project are described and several conceptual deficiencies are examined. Further research on the impact on educational quality and how successful the approach is in motivating institutions to pursue government goals is recommended.

Boberg, A., & Barnetson, B. (2000). System-wide program assessment with performance indicators: Alberta's performance funding mechanisms. *Canadian Journal of Program Evaluation*, 3-23.

Keywords: Performance/incentive/performance-based funding; international perspective; Canada; educational finance/economics; evaluation methods/measurement techniques; budgeting/resource allocation; government-school relationship.

ABSTRACT: Outlines the development and implementation of performance indicators and performance funding in the higher education system of Alberta, Canada. Explains the model of organizational functioning that underlies performance funding and explores the effectiveness of performance funding in increasing goal attainment based on the literature and researchers' experiences.

Bogue, E.G. (1976, March). *Measuring institutional performance at the state level*. Paper presented at the National Conference of the American Association for Higher Education, 31st, Chicago, IL.

Keywords: State perspective; Tennessee; accountability/institutional autonomy; quality control/institutional quality; performance indicators/factors/criteria; state financial support; state programs/state standards; community colleges/two year colleges; educational finance/economics; evaluation methods/measurement techniques; state financial support; state HEIs/public HEIs; statewide planning.

ABSTRACT: The Performance Funding Project of the State of Tennessee is discussed. The Project was instituted to explore the question of whether it is desirable and possible to allocate some portion of state funds to community colleges and universities on a performance effectiveness criterion rather than the current credit hour and enrollment criteria. Major funds would continue to be allocated on an enrollment basis. The purposes of the Project are as follows: (1) to explore ways in which the state appropriations and funding processes might promote improvements in instructional effectiveness; and (2) to examine ways in which the state appropriations and funding processes might promote institutional diversity and reinforce the unique strengths of each campus. Implementation of the Project involves the following processes: identification of statewide goals, development of institutional goals and objectives, design of institutional performance indicators, acquisition of data on performance, and selection of formula funding policies. A three-phase implementation plan that spans a three-year period is described. It is suggested that careful and prudent application of this model should insure the fundamental goals of higher education: the conservation, advancement, and application of knowledge, and the growth of students. A discussion of policy intent and impact in light of the characteristics of this funding model are included.

Bogue, E.G. (1980). *Recognizing and rewarding instructional performance with state fiscal policy*. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Washington, D.C., March 4-5.

Keywords: State perspective; Tennessee; educational/indicators/criteria/assessment; evaluation methods/measurement techniques; budgeting/resource allocation; state financial support; accountability/institutional autonomy; educational finance/economics; educational quality/instructional effectiveness; government-school relationship; quality control/institutional quality; self-evaluation; state HEIs/public HEIs; state programs/state standards.

ABSTRACT: A performance funding policy adopted in Tennessee in 1979, which recognizes and rewards instructional performance through the state funding formula, is described. The schedule permits institutions to earn an additional 2 percent of their educational and general appropriations based on an evaluation of institutional instructional performance on five performance variables. The variables are as follows: proportion of eligible academic programs accredited; performance of graduates on measures of general education and specialized field outcomes; evaluation of institutional programs by enrolled students, recent alumni, and community employer representatives; and peer evaluation of academic programs. An institution could earn a maximum of 20 points on each variable, for a total award of 100 points. In the fall of 1979, 23 public institutions submitted performance data on these five variables; the total performance scores ranged from a low of 0 to a high of 67. In adopting this instructional evaluation schedule, the Tennessee Higher Education Commission requested about \$2 million more from the state than it would have without the adoption of that schedule. The formula recommendation was approximately 95 percent funded. The performance standards for the first four variables have been improved and strengthened and the "peer evaluation variable" has been replaced with a variable emphasizing evaluation planning. Some notes on the origins of the policy and the concerns encountered in its implementation are included.

Bogue, E.G. (1982, March). Allocation of public funds on instructional performance/quality indicators. *International Journal of Institutional Management in Higher Education*, 6(1): 37-43.

Keywords: State perspective; Tennessee; accountability/institutional autonomy; state financial support; educational/indicators/criteria/assessment; outcomes of education/college outcomes assessment; budgeting/resource allocation; performance/incentive/performance-based funding.

ABSTRACT: Questions of college performance in the United States are inevitably answered in terms of numbers rather than performance. A Tennessee policy links two percent of state funding to outcomes rather than size. The policy has major implications for funding and performance in colleges and other service-oriented institutions.

Bogue, E.G., & Hall, K.B. (2003). Performance indicators and performance funding: Systems of accountability. (Chap. 9). In E.G. Bogue and K.B. Hall, *Quality and accountability in higher education: Improving policy, enhancing performance* (186-214). Westport, CT: Praeger.

Keywords: Performance/incentive/performance-based funding; state perspective; Tennessee; budgeting/resource allocation; quality control/institutional quality; accountability/institutional autonomy of HEIs; performance indicators/factors/criteria.

This chapter of the comprehensive volume on quality in HEIs specifically examines two policy systems that, among others, are used to assure quality: performance indicators (PI) and performance funding (PF). It looks at the emergence, elements, and application of these systems as well as their contributions and liabilities. In the first section, the authors describe the emergence and utilization of

performance indicator policy systems: they review the literature on the topic, discuss the multiple purposes of the system, examine PI definitions and combine them into a comprehensive one, explore the PI system applicability at different levels of interests, and offer several examples. They conclude that PI serve as the foundation for most systems of performance funding—another emerging system of higher education accountability. The second section briefly considers the PF policy systems in selected states and then thoroughly examines PF in Tennessee—its history and features, evolution of performance indicators (comparing the 1979/80 and 2000/04 cycles), and institutional points and dollars earned by campuses over twenty years. The authors underline that PF systems are intended to use fiscal policy as both incentive and reward for performance achievement and improvement. These systems have emerged as a policy instrument linking institutional budgets and educational performance. The state vignettes evince the policy “volatility”—rapid movement into and away from PF.

Tennessee was the first state to implement this policy in 1979/80, and it has adhered to the policy since then operating on a five-year-cycle basis. The policy shifts over twenty years have included changes in the nature and number of PI, changes in acceptable measures and evaluation standards for several PI, and a change in the proportion of state appropriation assigned to HEIs. Importantly, “the performance feature of the policy is embedded in an institution's appropriation recommendation and has effect or 'grip' regardless of what appropriation level is finally funded by the state” (p.200). Another feature is that HEIs compete against their own record and not against each other; thus no campus is advantaged by the poor performance of the others. Lastly, the Tennessee policy has been characterized by equity in application: it does not favor one type of institution over another. The authors offer the following analysis of the nature of PI and standards over the twenty-year policy evolution in Tennessee. First, the number of PI has grown from five to ten indicators. Second, the profile of PI moved from the initial set common to all HEIs to the set acknowledging different missions and goals of institutions. Third, the nature of the PI evaluation moved from a prescribed set of largely self-referential evaluation standards to standards encouraging performance comparison with out-of-the-state peer institutions. Fourth, the portion of state appropriations based on PF grew from 2 percent to 5.54 percent. Finally, the PI evolved to differentiate HEIs by mission and to assess campus contributions to its own strategic goals and to state strategic goals. The important liabilities to the policy include the following: first, some assessments are conducted just to satisfy the policy and maximize dollars earned by institution than to improve educational performance and, second, the policy focuses on the administrative and executive levels and does not penetrate to the department and program level in terms of using assessment data for improvement decisions. In regard to the general application of PI policy systems, the following cautions should be considered: too many PI render the system clumsy; not everything in higher education can be reduced to numbers; PI systems lend themselves to manipulation by the unscrupulous; and an extensive PI system not used for improvement decision making is of little or no value. The authors summarize that overall, “performance indicator policy systems offer an informing approach to the acquisition and presentation of intelligence reflecting activity and achievement at campus, system, state, regional, and national levels” (p.211).

Bogue, E.G., & Troutt, W.E. (1977). *Allocation of state funds on a performance criterion: Acting on the possible while awaiting perfection*. Paper presented at the Association for Institutional Research Forum.

Keywords: State perspective; Tennessee Higher Education Commission; educational finance/economics; quality control/institutional quality; performance indicators/factors/ criteria; budgeting/resource allocation; state financial support; accountability/institutional autonomy; educational/indicators/criteria/assessment; evaluation methods/measurement techniques; state agencies for higher education; state HEIs/public HEIs; state programs/state standards.

ABSTRACT: The Performance Funding Project of the Tennessee Higher Education Commission to improve the current appropriations formula in Tennessee is discussed. The major project objective is to

explore the feasibility of allocating some portion of state funds on a performance criterion, as compared to allocating funds solely on an enrollment criterion. It is assumed that funding will continue to be primarily based on enrollment, but that a complementary feature might be built into the formula to promote institutional diversity and improved instructional performance. Pilot projects were undertaken at 11 public colleges and universities. The first project year called for the development of institutional-wide instructional goals and associated indicators of performance and the second year for the acquisition of data on these performance indicators and the exploration of funding policies that might promote and reward effective performance. Some observations based on the first project year include: performance funding is a difficult concept to communicate; the possibility of statewide indicators of institutional performance was opposed by campus personnel, who also dislike campus-based indicators; faculty and administrators are concerned about the unintended outcomes of performance criteria funding like the possibility of punitive funding; arriving at goals and indicators that cut across departmental lines is difficult; faculties across Tennessee are very concerned about instructional performance; attention is being directed to what constitutes minimum competence for a college degree; and sets of goals and indicators seem to be taking on a unique character at each institution. An overview on formula funding is also included.

Bogue, E.G., & Troutt, W.E. (1977). *Case studies in performance funding: The performance funding project*. Nashville: Tennessee Higher Education Commission.

Keywords: Performance/incentive/performance-based funding; institutional perspective; Tennessee Higher Education Commission; quality control/institutional quality; state programs/state standards; performance indicators/factors/criteria; budgeting/resource allocation; state financial support; accountability/institutional autonomy; educational/indicators/criteria/assessment; educational finance/ economics; evaluation methods/ measurement techniques; state agencies for higher education; state HEIs/public HEIs; state HEIs /public HEIs.

ABSTRACT: Case studies of five Tennessee state colleges where pilot projects in performance funding were undertaken are presented. The Performance Funding Project of the Tennessee Higher Education Commission is designed to explore the feasibility of allocating some portion of state funds to institutions on a performance effectiveness criterion as compared to an enrollment criterion. The pilot projects are designed to explore the development of institutional goals related to instructional impact and to identify and test indicators related to those goals. The five colleges that are discussed are: Chandler State Community College, Harpeth College, Guyman State University, The University of New Winston, and The Two Rivers Technical Institute. Institutional setting and goals and performance indicators of each college are examined. Data are appended on performance indicators regarding student enrollment and test scores, employment of full-time and part-time faculty, faculty salaries, alumni giving, research proposals submitted/funded, instructional program developments, degrees awarded, employment of administrators, facilities, and finances.

Bogue, E.G., & Troutt, W.E. (1978). *Bridging the gap between public accountability and faculty autonomy: A campus-based approach in developing effectiveness indicators*. Paper presented to the American Educational Research Association Annual Meeting, Toronto, Ontario.

Keywords: Performance/incentive/performance-based funding; Tennessee Higher Education Commission; educational finance/economics; performance indicators/factors/ criteria; budgeting/resource allocation; state financial support; accountability/institutional autonomy; educational/indicators/criteria/assessment; evaluation methods/measurement techniques; quality control/institutional quality; state agencies for higher education; state HEIs/public HEIs; state programs/state standards.

ABSTRACT: The Performance Funding Project of the Tennessee Higher Education Commission to improve the current appropriations formula in Tennessee is discussed, and abstracts regarding pilot implementation of the project at four institutions are presented. The major project objective is to explore the feasibility of allocating some portion of state funds on a performance criterion, as compared to allocating funds solely on an enrollment criterion. It is assumed that funding will continue to be primarily based on enrollment, but that a complementary feature might be built into the formula to promote institutional diversity and improved instructional performance. During the first project year, faculties at 11 Tennessee institutions developed institutional-wide instructional goals and associated indicators for measuring performance on those goals. The second project year involved collecting data on the indicators and exploring ways in which project results might be incorporated into the allocation process. Indicator profiles are included for the following four colleges: Columbia State Community College, The University of Tennessee at Knoxville, The University of Tennessee at Martin, and The University of Tennessee at Nashville. Observations based on the pilot projects are presented. An "Evaluation Network Newsletter" article on evaluation in higher education at the departmental and program level is appended.

Bolt, J.R., & Roberts, K.J. (1997). *What are performance indicators and can they be used to manage colleges? A comparative study of similar colleges in the US and the UK*. Paper presented at the Annual Forum of the Association for Institutional Research, 37th, Orlando, FL, May 18-21.

Keywords: International perspective; United Kingdom; performance indicators/factors/ criteria; college administration/governance; outcomes of education/college outcomes assessment; state financial support; accountability/institutional autonomy; accreditation/ accreditation institutions; budgeting/resource allocation; educational/indicators/criteria/ assessment; quality control/institutional quality; politics of education.

ABSTRACT: This study examined two similar technical community colleges: the Handsworth College in Birmingham (England) and the Milwaukee Area Technical College (Wisconsin). The study compared how the colleges use performance measurement indicators and how effective the indicators are in providing "value added" to their respective communities. Both schools are located in industrial areas of large cities which have a substantial number of non-English-speaking minority group members, and both schools have large numbers of students studying across a wide curriculum area. The indicators used in the United States were the Institutional Effectiveness Measures, developed for the Wisconsin's technical college system, and the Student Outcomes Measures specified by the North Central Association; Handsworth used the Further Education Funding Council indicators. The study noted that in both schools the principal use of the indicators was to support annual budget requests. The study found other measures of both schools, to be substantially similar; graduation rates were comparable and both colleges had close involvement with and added value to their local communities. The paper includes a description of the performance indicators uses; data tables and matrices support the text.

Bottrill, K.V., & Borden, V.M.H. (1994, Summer). Appendix: Examples from the literature. In V.M.H. Borden, & T.W. Banta (Ed.), *Using performance indicators to guide strategic decision making*. New Directions for Institutional Research, No 82 (107--119): San Francisco: Jossey-Bass.

Keywords: Performance indicators/factors/criteria; performance reporting; educational/indicators/criteria/assessment.

The appendix provides the tabular of more than 250 performance indicators, which are grouped in 22 categories drawn from 14 references. The examples illustrate the different forms that performance indicators may take. Each indicator is marked as referring to the inputs, processes, or outputs of higher education. The subject areas include: admissions, advising, collaboration, community needs, completers, continuing education, curriculum, entering students, facilities, faculty, finances, financial aid, graduate education, research, service, special populations, staff, student progress, student support, student transfer, and teaching/ learning.

Boyer, C.M., & Ewell, P.T. (1988). *State-based approaches to assessment in undergraduate education: A glossary and selected references*. Denver, CO: Education Commission of the States.

Keywords: Outcomes of education/college outcomes assessment; educational/indicators/criteria/assessment; evaluation methods/measurement techniques; program development/implementation; accountability/institutional autonomy; policy formation/public policy/educational policy; educational quality/instructional effectiveness; program effectiveness/evaluation.

ABSTRACT: A glossary providing a common set of definitions for thinking and talking about assessment policy in undergraduate education is presented. Terms with more general meaning are defined only in this specific context. This glossary was developed as part of a series of Education Commission of the States case studies of state-based approaches to assessment in undergraduate education. The glossary defines terms falling under the following three general categories: (1) implementation of assessment programs (i.e. assessment plan, basic skills, college outcomes assessment, exit examinations, retention, general intellectual skills, unit record system, and value-added); (2) applications of assessment to decision making (i.e. accountability, certification, consumer protection, gatekeeping, mandatory placement, performance funding, rising junior examination, and student tracking); and (3) measurement terms relevant to assessment policy (i.e. forced-choice, free-response, indicator, norm-referenced testing, peer comparison, reliability, standardized testing, sub-score, testing, and validity).

Boyer, C.M., & McGuinness, A.C., Jr. (1986, February). State initiatives to improve undergraduate education: ECS survey highlights. American Association for Higher Education. *AAHE-Bulletin*, 3-7.

Keywords: Educational quality/instructional effectiveness; educational/indicators/criteria/assessment; government-school relationship; self-evaluation; statewide planning; state programs/state standards; incentives/rewards; educational change/reforms; outcomes of education/college outcomes assessment; state financial support; community/two-year colleges.

ABSTRACT: State efforts to improve the quality of undergraduate education were surveyed by the Education Commission of the States. All 50 states and the District of Columbia have initiatives to improve undergraduate education. The high school/college transition is perceived by state officials as an area with great potential for bringing about real change in education. Ideas considered by some states include: early assessment programs, an alternative to placement testing; and disseminating a statement

of knowledge and skills needed for success in college. Also receiving attention are articulation agreements for transfer from two- to four-year institutions, and assessment of student and institutional performance. Recent state assessment initiatives include: testing basic skills of entering freshmen, testing basic skills and competencies of college students, value-added assessment of student outcomes, and providing incentives for colleges and universities to better define and measure their objectives. Some states have established or are considering special incentive funding for undergraduate education. In addition to institutional or system-wide reviews of undergraduate education, states are conducting comprehensive studies of higher education.

Burke, J.C. (1993, July). Preserving quality while enhancing productivity. *Studies in Public Higher Education*, 4.

Keywords: Institutional perspective; evaluation methods/measurement techniques; quality control/institutional quality; productivity/efficiency; accountability/institutional autonomy; evaluation methods/measurement techniques; self-evaluation.

ABSTRACT: This report addresses the issue of "academic productivity," and the critical views of academia held by the public. The section titled "Quality Academics, Quality Productivity," posits that using new notions of productivity, with their emphasis on quality rather than quantity, will allow academia to increase its own productivity, with faculty as the key. To this end, the paper suggests that outdated quantitative approaches be discarded and calls for new performance models and better ways to measure quality. A nine-point quality agenda is proposed for the State University of New York (SUNY). In "Meeting the Productivity Challenge: System and Campus Performance Reports," the author says that the time has come for colleges and universities to present performance reports to the public, despite the challenge of reconciling autonomy and accountability within the university system. A need for flexibility, for system accountability, for setting performance indicators, and for setting systemwide macro indicators is seen as these dicta are applied to five generic "SUNY 2000" goals. Following the report, five tables detail the funding context and system and campus indicators that summarize "The Condition of SUNY."

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, State University of New York.

Keywords: Performance/incentive/performance-based funding; performance indicators/factors/criteria; outcomes of education/college outcomes assessment; community colleges/ two-year colleges; state financial support; state HEIs/public HEIs; state programs/state standards; policy formation/public policy/educational policy; outcomes of education/college outcomes assessment; politics of education.

ABSTRACT: In two separate articles, this report compared indicators of performance-funding programs for 2-year and 4-year public colleges in eight states. It examined indicators accepted or proposed in Arkansas, Colorado, Florida, Kentucky, Minnesota, Missouri, South Carolina, and Tennessee. It was found that states had as many as 37 and as few as 9 indicators for 4-year schools, and that the indicator selections for both sectors exhibited a surprising lack of common choices. Both sectors had just five indicators picked by four or more states, and only three of these measures applied to both 2- and 4-year schools: retention/graduation rates, 2- to 4-year transfers, and licensure test scores. It was found that the external concerns of state policy makers rather than the internal concerns of the academic community dominated the choice of indicators, and that both sectors showed a shift from input to output and outcome indicators and a heavy reliance on process indicators. Appendixes provide categories of

indicators and measures used or proposed for 2- and 4-year public colleges, sources for state performance indicators, and State University System of Florida outcome/output measures.

Burke, J.C. (1998, Spring). Performance funding: Arguments and answers. In J.C. Burke & A.M. Serban (Eds.), *Performance funding for public higher education: Fad or trend? New Directions for Institutional Research*, No.97, 85-90.

Keywords: Performance/incentive/performance-based funding; accountability/institutional autonomy; program effectiveness/evaluation; state HEIs/public HEIs; budgeting/resource allocation; state financial support; educational finance/economics; evaluation methods /measurement techniques; quality control/institutional quality; politics of education.

ABSTRACT: Eight common objections to performance funding of public colleges are presented and answered. The arguments focus on the complexity of higher education's goals, diversity of institution type, subjectivity of educational quality, relative power of the allocation amounts linked to performance measures, politics of resource allocation, cost of required research, and incompatibility of external accountability and institutional improvement.

Burke, J.C. (1998, Spring). Performance funding indicators: Concerns, values, and models for state colleges and universities. In J.C. Burke & A.M. Serban (Eds.), *Performance funding for public higher education: Fad or trend? New Directions for Institutional Research*, No.97: 49-60.

Keywords: Performance/incentive/performance-based funding; state perspective; program effectiveness/ evaluation; state HEIs/public HEIs; resource allocation; policy formation/ public policy/educational policy; state financial support; government-school relationship; evaluation methods/measurement techniques.

ABSTRACT: Performance indicators used for state funding, past and present, of public colleges in Arkansas, Colorado, Florida, Kentucky, Louisiana, Minnesota, Missouri, Ohio, South Carolina, Tennessee, and Washington are reviewed to explore their intent and implications and to provide information for policymakers considering introducing or revising performance-funding programs. Analysis revealed little commonality among the states' programs.

Burke, J.C. (1998, Spring). Performance funding: Present status and future prospects. In J.C. Burke & A.M. Serban (Eds.), *Performance funding for public higher education: Fad or trend? New Directions for Institutional Research*, No.97: 5-13.

Keywords: Performance/incentive/performance-based funding; state HEIs/public HEIs; budgeting/resource allocation; government-school relationship; program development/ implementation; policy formation/public policy/educational policy; state financial support.

ABSTRACT: Performance funding for public colleges is attractive to state policymakers but volatile and difficult to implement. It requires levels of collaboration, cooperation, patience, and persistence unusual in state government and a commitment to institutional goals, performance standards, and coordinated activities rare in academic governance. However, its importance to higher education suggests both states and campuses should consider it.

Burke, J.C. (1999, September/October). Fund the performance not the promise. *Trusteeship*, 7(5): 28-32.

Keywords: Performance/incentive/performance-based funding; educational finance/ economics; budgeting/resource allocation; accountability/institutional autonomy; educational finance/economics; college administration/governance; state HEIs/public HEIs.

ABSTRACT. Urges governing boards at public colleges and universities to support budgeting for performance as a means of assuring public accountability while protecting academic autonomy. Considers performance incentives, the role of performance indicators, the distinction between performance funding and performance budgeting, possible problems, and the role of trustees. Provides examples of South Carolina's performance measures.

Burke, J.C. (2001). *Accountability, reporting, and performance: Why haven't they made more difference?* New York: Ford Foundation.

Keywords: Accountability/institutional autonomy; community/two-year colleges; educational/indicators/criteria/assessment; outcomes of education/college outcomes assessment; college administration/governance; productivity/efficiency; program effectiveness/evaluation.

ABSTRACT: The 1990s brought a new notion of accountability for public colleges and universities. The goal shifted from accounting for expenditures to accounting for results. Academics, who were now expected to set goals and evaluate results while cutting costs, opposed the application of this model to academia. Public higher education had adopted Austin's Resource and Reputation Model, which states that quality comes from the quantity of campus resources, the quality of admitted students, and the reputation of faculty research. The resistance to focusing on institutional results led to criticisms by business and government, and the states stepped in. The six regional accrediting agencies made assessing student outcomes a requirement for accreditation. Performance reporting added meeting state needs to the earlier assessment practices. Reporting these results also had the tacit goal of increasing state funding, at least for campus leaders. By 2000, 30 states had performance reports; yet 49% of State Higher Education Finance Officers say that accountability reporting has had little or no effect on institutional performance. Nearly 90% of senior officers say they are familiar with performance funding programs, while over 60% of chairs report little or no familiarity, which is a possible explanation for the lack of impact of the programs.

Burke, J.C., & Associates. (2002). *Funding public colleges and universities for performance: Popularity, problems, and prospects.* Albany, NY: The Rockefeller Institute Press.

Keywords: Performance/incentive/performance-based funding; performance indicators/factors/criteria; accountability/institutional autonomy; outcomes of education/college outcomes assessment; state financial support; state HEIs/public HEIs; state programs/state standards; policy formation/public policy/educational policy; outcomes of education/college outcomes assessment; politics of education.

ABSTRACT 1: This publication is the first comprehensive study of performance funding of public colleges and universities, which directly ties some state allocations to institutional results on designated indicators. The book examines performance funding as a national phenomenon, identifying the champions and critics of the program, the arguments for and against its adoption, the most common performance measures used for funding, the characteristics that separate stable from unstable initiatives, and the inherent possibilities and problems. The authors include case studies of performance funding in Tennessee, Missouri, Florida, Ohio, and South Carolina, and explore the reasons why Arkansas,

Colorado, Kentucky, and Minnesota first adopted and later abandoned their programs. They examine problems with performance funding, such as the reluctance of the academic community to agree on reasonable goals for undergraduate education or the failure to apply performance funding to the academic departments that are mostly responsible for institutional results on many of the performance indicators. The contributors conclude that although the future of performance funding remains cloudy, one aspect is becoming clear—taxpayers are unlikely to continue to accept the proposition that performance should count in all endeavors except state funding for higher education.

ABSTRACT 2: This book explores how to forge policies that preserve the internal autonomy required for campus creativity and diversity while ensuring the external accountability demanded for campus performance and results. It attempts to separate the reality and rhetoric of performance funding. The chapters are: (1) "The New Accountability" (Burke, J.C.); (2) "Performance Funding and Budgeting: Old Differences and New Similarities" (Burke, J.C.); (3) "Performance Funding Indicators: Imperfect Necessities" (Burke, J.C.); (4) "Performance Funding: Campus Reactions" (Burke, J.C., & Lessard, T.A.); (5) "Twenty Years of Performance Funding in Tennessee: A Case Study of Policy Intent and Effectiveness" (Bogue, E.G); (6) "Integrating Budget, Assessment and Accountability Policies: Missouri's Experiment with Performance Funding" (Stein, R.); (7) "Ready, Fire, Aim: Performance Funding Policies for Public Postsecondary Education in Florida" (Wright, D.L., Dallet, P.H., & Copa, J.C.); (8) "Ohio's Challenge: A Clash of Performance Funding and Base Budgeting" (Moden, G.O., & Williford, A.M.); (9) "Performance Funding in South Carolina: From Fringe to Mainstream" (Burke, J.C.); (10) "Performance Funding: Easier To Start Than Sustain" (Burke, J.C.); (11) "Performance Funding: Assessing Program Stability" (Burke, J.C.); and (12) "Arguments about Performance Funding: Rhetoric and Reality" (Burke, J.C.). A conclusion discusses "Linking Funding to Performance: A Trend, Not a Fad" (Burke, J.C.).

Burke, J.C., & Minassians, H. (2001). *Linking state resources to campus results: From fad to trend. The Fifth Annual Survey.* Albany, NY: The Nelson A. Rockefeller Institute of Government, State University of New York.

Keywords: Performance/incentive/performance-based funding; performance budgeting; performance reporting; accountability/institutional autonomy; performance indicators/factors/criteria; state financial support; recession/fiscal problems; finance officers; educational quality/instructional effectiveness; budgeting/resource allocation.

The results of the fifth annual survey of State Higher Education Finance Officers (SHEFOs) have answered positively to the previously posed question whether funding for performance was a trend or a fad. In a surge of accountability across the country, there emerged three main methods of assuring public accountability: performance funding (PF), performance budgeting (PB), and performance reporting (PR). These programs, according to the authors, have become increasingly popular among policy makers, although not on public campuses. Like in the previous surveys, Burke and Minassians provide clear definitions to differentiate between the terms. Performance funding ties specified state funding directly to the performance of individual HEIs on individual indicators and focuses on the distribution phase of the budget process. The relationship between funding and performance is direct, tight, automatic, and formulaic; the program is certain but inflexible. In contrast, performance budgeting allows policy makers and administrators to consider campus performance as just one factor in determining allocations and focuses on budget preparation and presentation. It links state funding indirectly and loosely to results; it is flexible but uncertain and depends solely on the officials' discretion. In regard to the program initiation, the authors argue that legislative mandates and indicators prescription clearly undermine program stability because they are imposed and ignore consultation with HEI and coordinating bodies.

This year survey's results reveal an increase in PF (with new programs in Arkansas and Idaho) and slight decline in PB. Based on the historical data, the authors suppose that financial depression for higher education may favor PF and lead to its revival after abandonment in several states in 1990s. "A possible hypothesis is that the loose link of resources to results in performance budgeting is the preferred approach in good times when there is money for all, and that the tight tie of resources to results in performance funding becomes more acceptable in bad times when budgets are constrained" (p.3). In 2001, 19 states report as having PF as compared with 10 states in 1997, 13 states in 1998, 16 states in 1999, and 17 states in 2000. More stability in PF is evident through the SHEFOs assessment of likelihood of its continuation: "Highly Likely" in seven states (37 percent) and "Likely" in eleven states (58 percent). However, the authors note that newly established PF programs, although correcting the excesses of earlier programs, are generally less comprehensive and more cautious approaches than the programs of the early 1990s. The new programs usually include less funding, reduced goals, fewer indicators, incremental implementation, and more institutional choice. Because of the PF programs newness, many SHEFOs believe that it is too early to evaluate the effect of PF on institutional performance. Three states (16 percent) support each of the following categories that measure the PF impact on performance: "Considerable Extent," "Moderate Extent," and "Minimal Extent." The major flaw of PF (and PB and PR) is identified as follows: "Institutions are held responsible for their results, but not the internal departments that produce the performance" (p.16).

Burke, J.C., & Minassians, H. (2002). *Performance reporting: The preferred "No Cost" alternative accountability program. The Sixth Annual Survey. Albany, NY: The Nelson A. Rockefeller Institute of Government, State University of New York.*

Keywords: Performance/incentive/performance-based funding; performance budgeting; performance reporting; budgets/resource allocation; educational finance/economics; state HEIs/public HEIs; quality control/institutional quality; government-school relationship; state surveys.

ABSTRACT: This report presents information from the Sixth Annual Survey of State Higher Education Officers, and once again provides information on performance funding, budgeting, and reporting in all 50 states. Survey results show the triumph of performance reporting and the trials of performance budgeting and funding. The bad budgets for higher education that were revealed in the previous survey spurred the rapid advance of performance reporting and stifled the steady climb of performance budgeting and funding. Nearly 90% of states now have some form of performance reporting, an increase of nearly 50% in the past 2 years. Survey results suggest that a number of state legislators see performance reporting as a "no cost" alternative to performance funding and budgeting. The survey results this year show some slippage in support for performance budgeting and performance funding. While last year it looked as though tight budgets might encourage performance funding, this year, the state budgets for higher education became so bad that legislators balked at allocating even small sums to campus performance. In 1999 the survey included questions about the third leg of accountability for higher education, performance reporting. Performance funding, budgeting, and reporting represent the main methods of assuring state accountability for public higher education. Findings from this year's survey suggest that state policymakers increasingly view publicizing results (performance reporting) as a sufficient consequence without the need for budgeting or funding. One appendix contains a chart of state performance budgeting plans, and the other contains the survey.

Burke, J.C., & Minassians, H. (2003). *Performance reporting: “Real” accountability or accountability “Lite”*. Seventh Annual Survey 2003. Albany, NY: The Nelson A. Rockefeller Institute of Government, State University of New York.

Keywords: Accountability/institutional autonomy; performance budgeting; performance reporting; performance/incentive/performance-based funding; performance indicators/factors/criteria; state financial support; recession/fiscal problems; finance officers; quality control/ institutional quality; budgeting/resource allocation.

The seventh annual survey of State Higher Education Finance Officers (SHEFOs) demonstrates the following changes: first, performance reporting (PR) has become the most preferred approach to accountability in higher education and spread to all but four states, and second, both performance funding (PF) and performance budgeting (PB), which flourished during the 1990s, have experienced further declines due to recent recession. In the last three years, PR grew from 30 to 46 programs, while PF lost four programs (from 19 states in 2001 to 15 states in 2003) and PB slipped by six programs (from 28 states in 2000 to 21 states in 2003). Burke and Minassians identify the following reasons for the continuing triumph of performance reporting: (1) popularization of PR by the publication of *Measuring Up 2000* and *2002*; (2) erosion of support for PF and PB by continuing budget shortfalls; and (3) policy makers' view of PR as the “no cost” accountability program, an informal form of PB in the times of tight budgets. In regard to the last point, policy makers now perceive PR as a less controversial and less costly alternative. The SHEFOs believe that bad budgets and fiscal problems caused the losses in PF and PB. The authors stress again the major flaw of current accountability measures, “[B]oth performance reporting and funding become increasingly invisible on campuses below the level of vice presidents, because of the failure to apply these programs to the internal academic units on campus” (p.20).

Abandonment of the three performance funding programs this year (in Illinois, Missouri, and New Jersey) was caused by budget problems and happened in states without legislative mandates for the program initiation. In the authors' opinion, it suggests that PF is regarded as a discretionary program and it usually loses out to funding base operations. Because of the budget pressures, in 2003 four states reduced funding and four other states suspended funding. In spite of the \$102 million cut for higher education, Tennessee managed to retain the program and maintained the same level of state funding support (5.45 percent). Surprisingly, despite bleak prospects for state funding for higher education, SHEFOs in nine states (60 percent) consider the likelihood of PF continuation to be 'Highly Likely' (the best percentage in the last few years) and in three other states (20 percent), 'Likely.' Three states (20 percent) cannot predict the future of their PF programs. Four states (11 percent of those currently without PF) assess the likelihood of PF adoption as 'Likely' and one state (3 percent) as 'Highly Likely.' The three-year data (2001-2003) show a steady decline in SHEFOs perceptions of the PF impact on campus performance: the categories 'Great Extent' and 'Considerable Extent' declined while the ones of 'Moderate Extent' and 'Minimal Extent' increased. Tennessee is the only state that has consistently reported 'Considerable Extent' of PF impact on improving higher education. In general, “None of the three programs demonstrate the desirable impact on the improving performance, but performance funding shows more than budgeting or reporting” (p.21).

Burke, J.C., & Modarresi, S. (1999). *Performance funding and budgeting: Popularity and volatility*. The Third Annual Survey. Albany, NY: The Nelson A. Rockefeller Institute of Government, State University of New York.

Keywords: Performance budgeting; performance/incentive/performance-based funding; budgeting/resource allocation; performance indicators/factors/criteria; state HEIs/public HEIs; budgeting/resource allocation; state financial support; accountability/institutional autonomy; outcomes of education/college outcomes assessment; educational finance/ economics; government-school relationship; state surveys.

ABSTRACT: This report presents findings of the third annual survey of state programs that link funding to campus performance, either in the form of performance budgeting or performance funding. The survey found that 30 states now have at least one of these two types of programs, up from 26 states the previous year, although some earlier programs have been abandoned. Nine states have both performance budgeting and performance funding, an increase of one. Sixteen states have performance funding, an increase of three; the net result of six new initiatives and three dropped programs. Additionally, 23 states (up from 21) have performance budgeting, the total representing six new initiatives and four dropped programs. The mixed findings suggest that performance budgeting or funding will not replace traditional budgeting for public colleges and universities, although there is a growing belief in state capitols that performance should be related to allocation of resources to public education. Following the introduction and a description of the survey program, individual sections analyze findings on performance budgeting and performance funding, performance budgeting, performance funding, and performance reporting. These sections are followed by a discussion of future trends and a brief conclusion. The survey is appended.

Burke, J.C., & Modarresi, S. (2000, July/August). To keep or not to keep performance funding: Signals from stakeholders. *Journal of Higher Education*, 71(4): 432-453.

Keywords: Performance/incentive/performance-based funding; performance indicators/factors/criteria; outcomes of education/college outcomes assessment; educational quality/instructional effectiveness; evaluation methods/measurement techniques; program effectiveness/evaluation; state HEIs/public HEIs.

ABSTRACT: Identifies 10 characteristics of stable systems of performance funding for public colleges and universities based on a survey of state and campus policymakers in 9 of the 10 states with performance funding in 1996. Respondents agreed on the importance of careful choice of performance indicators, recognition of the difficulty of measuring higher education results, and preservation of institutional diversity.

Burke, J.C., Modarresi, S., & Serban, A.M. (1999). Performance: Shouldn't it count for something in state budgeting? *Change*, 31(6): 16-21.

Keywords: Performance/incentive/performance-based funding; state programs/state standards; state HEIs/public HEIs; budgeting/resource allocation; state financial support.

ABSTRACT: Linking budgets to performance is a hot topic in state capitols and on public college and university campuses. The authors discuss the use of performance as a factor in funding public colleges and universities, the components and challenges of performance budgeting, and the characteristics of stable programs. They conclude, "Results will continue to count more and more in the funding of public colleges and universities. The real question is, Will educators take the lead in helping to develop the

necessary approaches, or will they leave the action to outsiders and have to take what they get as a result?"

Burke, J.C., Rosen, J., Minassians, H., & Lessard, T. (2000). *Performance funding and budgeting: An emerging merger? The Fourth Annual Survey 2000*. Albany, NY: The Nelson A. Rockefeller Institute of Government, State University of New York. Retrieved January 25, 2004, from, <http://80-www.edrs.com.proxy.library.vanderbilt.edu/Webstore/Download.cfm?ID=470944>

Keywords: Performance budgeting; performance/incentive/performance-based funding; educational finance/economics; state HEIs/public HEIs; quality control/institutional quality; government-school relationship.

ABSTRACT: This report presents the results of the fourth annual survey of programs linking state budgeting to public college and university performance. A telephone survey conducted with all 50 state higher education finance officers examined the status, prospects, and impact of performance funding and performance budgeting in their state. Respondents were asked: whether legislation mandated performance funding, performance budgeting, and performance reporting, and prescribed the performance indicators; to identify primary initiators of the programs; and to assess effects of performance budgeting, performance funding, and performance reporting on improving campus performance. Results highlight the increasing popularity and continuing volatility of performance funding and performance budgeting, with 37 states now having at least one of the two programs. This year's survey notes a rapid growth in performance budgeting and slight increase in performance funding. Performance funding is becoming more flexible, collaborative, and diverse, while performance budgeting offers ways to clarify the link between funding and performance. A new development is a mixed model that borrows elements from both programs. While nearly half of the respondents said it was too early to evaluate the effect of performance funding on institutional improvement, 35 percent claimed the program improved performance to a significant extent. The survey is appended.

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, State University of New York.

Keywords: Performance/incentive/performance-based funding; budgeting/resource allocation; educational finance/economics; state HEIs/public HEIs; finance officers; accountability/institutional autonomy; college administration/governance; policy formation/public policy/educational policy; state surveys.

ABSTRACT: This study examined the attitudes of state education policymakers and campus representatives in regard to performance funding and budgeting in public higher education. A mailed survey of 916 state education policymakers, campus administrators, deans, and faculty senate chairs in nine states was conducted in December 1996, and a follow-up telephone survey of state higher education finance officers (SHEFOs) in all 50 states, Puerto Rico, and the District of Columbia, which sought to differentiate performance funding from performance budgeting, was conducted in April 1997. The former survey found a preference for state higher education budgets driven by current costs, improved results of higher education institutions, and enrollment levels; all groups except state education policymakers considered that external accountability was the main purpose of performance funding. The telephone survey found that 10 states currently had performance funding for public colleges and universities. Eighteen SHEFOs from states without performance funding indicated that it was likely that their states would adopt such a program in the next five years. Eight states reported currently having performance budgeting for public higher education, and 18 of the respondents indicated that it was likely

that their states and the District of Columbia would institute performance budgeting over the next 5 years.

Burke, J.C., & Serban, A.M. (1997, September 25). *Performance funding of public higher education: Results should count*. Albany, NY: The Nelson A. Rockefeller Institute of Government, State University of New York.

Keywords: Performance/incentive/performance-based funding; budgeting/resource allocation; educational finance/economics; state HEIs/public HEIs; finance officers; accountability/institutional autonomy; college administration/governance; policy formation/public policy/educational policy; state surveys.

ABSTRACT: This report examines performance funding and performance budgeting in public higher education, based on studies conducted by the Nelson A. Rockefeller Institute of Government (New York). A recent survey indicated that 10 states currently have performance funding for public colleges and universities, that 8 states currently use performance budgeting, and that two-thirds either have performance funding/budgeting or are planning to adopt such programs within the next five years. Existing performance funding programs in 9 states were examined, revealing the existence of from 5 to 37 performance indicators, which vary in many respects. Six of the nine states set statewide indicators for all institutions or campus types, while three allow institutions to choose at least one of their own indicators. Policy recommendations in regard to the use of performance funding and indicators are included. The report concludes by noting that although it is too soon to tell whether performance funding is a fad or trend, the desirability of performance funding, in theory, is equaled by its difficulty in practice.

Burke, J.C., & Serban, A.M. (1998). *Current status and future prospects of performance funding and performance budgeting for public higher education. The second survey*. Albany, NY: The Nelson A. Rockefeller Institute of Government, State University of New York.

Keywords: Performance budgeting; performance/incentive/performance-based funding; budgeting/resource allocation; educational finance/economics; state HEIs/public HEIs; state officials; accountability/institutional autonomy; policy formation/public policy/ educational policy; state surveys; performance indicators/factors/criteria; state agencies for higher education; state programs/state standards; state HEIs/public HEIs; statewide planning.

ABSTRACT: This study examined the attitudes of State Higher Education Finance Officers (SHEFOs) in regard to performance budgeting and performance funding of public higher education. A telephone survey of all 50 SHEFOs or alternate officers was conducted in June 1998, and the results were then compared to a similar survey conducted in April 1997. It was found that 21 states used some form of performance budgeting in public higher education in 1998, up from 16 in 1997, and that 13 states used some form of performance funding in public higher education in 1998, up from 10 in 1997. The 1998 survey indicated that half of the states employed at least one of the two funding programs, and that 11 more were considering adopting such programs in the next 5 years. Eight states had both performance budgeting and performance funding in 1998, and 14 more were considering adopting both program in the next 5 years. The report notes that performance funding is becoming less comprehensive and more circumscribed in its goals, and also that state mandates and prescriptions are declining, thus allowing coordinating boards, with campus participation, to initiate less ambitious funding programs. A copy of the survey questionnaire is included.

Burke, J.C., & Serban, A.M. (1998). *Funding public higher education for results: Fad or trend? Results from the Second Annual Survey. Rockefeller Reports. Albany, NY: The Nelson A. Rockefeller Institute of Government, State University of New York.*

Keywords: Performance budgeting; performance/incentive/performance-based funding; budgeting/resource allocation; educational finance/economics; state HEIs/public HEIs; accountability/institutional autonomy; policy formation/public policy/educational policy; state surveys; performance indicators/factors/criteria; state agencies for higher education; finance officers; state programs/state standards.

ABSTRACT: This report presents the results of a telephone survey conducted in 1997 and 1998 of the 50 State Higher Education Finance Officers in regard to performance budgeting and performance funding of public higher education. It was found that 21 states used some form of performance budgeting in public higher education in 1998, up from 16 in 1997, and that 13 states used some form of performance funding in public higher education in 1998, up from 10 in 1997. The 1998 survey indicated that half of the states employed at least one of the two funding programs, and that 11 more were considering adopting such programs in the next 5 years. Eight states had both performance budgeting and performance funding in 1998, and 14 more were considering adopting both programs in the next 5 years. The report also notes that performance funding is becoming less comprehensive and more circumscribed in its goals, and that state mandates and prescriptions are declining, allowing coordinating boards, with campus participation, to initiate less ambitious funding program

Burke, J.C., & Serban, A.M. (1998, December/January). Performance funding: Fashionable fad or emerging trend? *Community College Journal*, 68(3): 26-29.

Keywords: Performance/incentive/performance-based funding; budgeting/resource allocation; educational finance/economics; state financial support; state HEIs/public HEIs; community/two-year colleges; educational/indicators/criteria/assessment; educational quality/instructional effectiveness; productivity/efficiency.

ABSTRACT: Describes performance funding as a relatively new approach that links tax support to institutional results from performance indicators chosen by the state. Under result-based funding, states consider efficiency and effectiveness as a basis for funding two- and four-year schools. Budgeting shifts from what states should do for their colleges toward what colleges should do for their states.

Burke, J.C., & Serban, A.M. (1998, Spring). State synopses of performance funding programs. In J.C. Burke & A.M. Serban (Eds.), *Performance funding for public higher education: Fad or trend? New Directions for Institutional Research*, No.97: 25-48.

Keywords: Performance/incentive/performance-based funding; state perspective; state HEIs/public HEIs; policy formation/public policy/educational policy; budgeting/resource allocation; state financial support; state programs/state standards; educational change/ reforms; state perspective.

ABSTRACT: Summaries of the design, planning, and implementation of performance funding programs in Arkansas, Colorado, Florida, Kentucky, Louisiana, Minnesota, Missouri, Ohio, South Carolina, Tennessee, and Washington reveal the challenges and opportunities of this reform approach. Performance measures and objectives and the history of the program in each state are included.

California State Legislature. (1992). *California faces...California's future: Education for citizenship in a multicultural democracy*. Sacramento: The author.

Keywords: State perspective; California; master plan; statewide planning; policy formation/public policy/educational policy; educational quality/instructional effectiveness; college administration/governance; performance/incentive/performance-based funding.

ABSTRACT: This report on California's higher education system and its Master Plan for Higher Education focuses on making California a fully multicultural democracy in which all are empowered to participate as equal citizens. The report is organized in nine sections the first of which is an introductory essay reviewing the background of the state's higher education achievements and the principles for the current review. The second section delineates the mission of the master plan. The third section discusses admission and transfers, including issues of access and minority participation. The fourth section outlines expansion and growth including the pressing need for greater capacity within the system. The fifth section discusses educational equity including state commitment, financial aid, equity for non-traditional students, faculty and staff diversity, and academic freedom and tenure. The seventh section, "Educational Quality," discusses cooperation with elementary schools and secondary schools; undergraduate education; graduate and professional education; quality in vocational education; adult and non-credit education; and **assessment, accountability, and incentive funding**. The eighth section explores higher education's role in California's economic and social development. A "concluding comment" urges the importance of the points presented.

California State Postsecondary Education Commission. (1988). *Beyond assessment: Enhancing the learning and development of California's changing student population*. Commission Report 88-41. Sacramento: The author.

Keywords: State perspective; California; incentives/rewards; outcomes of education/college outcomes assessment; program development/implementation; statewide planning; academic achievement/educational improvement; evaluation methods/measurement techniques; state financial support; policy formation/public policy/educational policy; state programs/state standards; state agencies for higher education.

ABSTRACT: In response to legislative mandate, the California Postsecondary Education Commission developed options for improving students' learning and development in college, including funding approaches designed to support these options. The commission's report summarizes a previous, related report and traces the origins of the current report from it, describes the three major types of state incentive funding programs presently used in American higher education, discusses current thinking regarding talent development and value-added assessment of student gains in higher education, and outlines two major priorities for incentive funding in California: achievement of broad student access and success, and the recruitment of more women and ethnic minorities in teacher training. The commission's four recommendations include: (1) establishment of a state challenge grants program to support initiatives for improving teaching and learning, including development of institutional assessment plans; (2) a state challenge grants program to support initiatives for increasing underrepresented students in teacher education in the state at all levels; (3) development of appropriate criteria and mechanisms for effective implementation, administration, and evaluation of the challenge grant programs; and (4) support for development of a statewide student information system to track individual students throughout their college experience and beyond. Related materials are appended, including a paper on higher education assessment in the United States and in California.

California State Postsecondary Education Commission. (1988). *Legislation affecting higher education enacted during the 1987-88 session. A Staff Report to the California Postsecondary Education Commission. Staff Report Series, Report 88-34. Sacramento: The author.*

Keywords: State perspective; California; educational legislation; government-school relationship; policy formation; state HEIs/public HEIs; state agencies for higher education; state programs/state standards; statewide planning; educational finance/economics; politics of education; policy formation/public policy/educational policy; state surveys.

ABSTRACT: Statutory changes affecting postsecondary education enacted during the 1987-88 California legislative session are summarized, along with legislation adopted by the legislature in 1988 and vetoed by the Governor. Some important changes include the following on financial aid, fees, public school issues, and postsecondary issues: (1) the mandatory community college statewide fee of \$50 per semester was extended; (2) the Cal Grant program was modified to include a fifth year of financial assistance for eligible applicants enrolled in teacher preparation programs; (3) recommendations for comprehensive revisions in law regarding staff development programs were implemented; and (4) the Superintendent of Public Instruction was authorized to revoke the license of a private postsecondary institution accredited by a national accrediting agency. During the 2-year legislative session, the California Postsecondary Education Commission was directed to complete five projects, including presenting options for a performance funding program for public postsecondary institutions and studying the operations and procedures of accrediting associations. Among the bills vetoed by the Governor are a proposed college savings plan (tax-free savings for a child's educational expenses) and a proposed test access pilot program to increase the number of underrepresented minority students who take preliminary college entrance exams. Appended are a report on bills signed by the Governor in 1987 and 1988 or vetoed in 1988, and a list of the membership of legislative policy and fiscal committees for higher education.

California State Postsecondary Education Commission. (2000). *Performance indicators of California higher education, 1999. The Sixth Annual Report to California's Governor, Legislature, and Citizens in Response to Assembly Bill 1808, Chap. 741, Statutes of 1991. Sacramento: The author.*

Keywords: State perspective; California; accountability/institutional autonomy; outcomes of education/college outcomes assessment; community/two-year colleges; evaluation methods/measurement techniques; state financial support; state HEIs/public HEIs.

ABSTRACT: This sixth annual report on the performance indicators of California higher education presents background information on the development and recent revision of California's performance indicators for higher education; describes the scope of the current set of indicators, highlighting recent trends; and delineates some recent developments and future plans. The performance indicators are divided into five sections: (1) population (age, racial/ethnic, educational attainment, earnings by level of educational attainment); (2) fiscal context (state general fund appropriations, student fees, student financial assistance, median family income); (3) student preparation (high school graduates by major geographic region, racial/ethnic composition of graduating class, grade point average, achievement); (4) student access (enrollment as first-time freshmen at public colleges and universities, college-going rates, racial/ethnic enrollment, community college transfers, graduate enrollment, transfer students); and (5) student outcomes (five-year persistence rates, number of students served by programs for students with disabilities; baccalaureate, master's, and doctoral degrees awarded.) Among the highlights noted are the recent release of 60 performance measures covering: student access, student success, staff composition, and fiscal conditions. Also noted are appropriations for the Partnership for Excellence program, which is intended to provide documentation of system performance in five defined outcomes in exchange for additional funding. Relevant state statutes are appended.

Campbell, L.C. (1996). Acting on the possible while awaiting perfection: The effect of general education assessment at public two-year institutions of higher education in Tennessee (Doctoral Dissertation, University of Tennessee, Knoxville).

Keywords: State perspective; Tennessee; institutional perspective; community colleges/ two-year colleges; educational/indicators/criteria/assessment; academic achievement/ educational improvement; state HEIs/public HEIs; educational finance/economics; educational quality/instructional effectiveness.

ABSTRACT: This study looks at the effects that the general education assessment undertaken for the Performance Funding Program has had on general education at the public two-year institutions of higher education in Tennessee. The purpose of the Performance Funding Project was to provide motivation, through financial incentives, to public institutions for increases in quality improvement. Since its inception, the assessment of general education has been one of the standards. Data were collected through three methods: a 21-item questionnaire, participant interviews, and document analysis. The sample consisted of selected faculty and administrators at 14 public two-year colleges whose positions required them to have specific knowledge about general education assessment. Findings from this research show that the institutions have used the results from the general education assessment to make changes in curriculum, instructional delivery strategies and methods, and student learning activities and experiences. At those institutions where the performance funding coordinator provides detailed analyses of general education assessment results in digestible terminology to the proper audiences at key intervals throughout the year, there is more complete usage of assessment results by faculty, staff, and administration. Contains 11 tables. Appended are the survey, interview protocol, interview contact sheet, and the document form.

Carnevale, A.P., Johnson, N.C., & Ruffner, A.E. (1998, April 10). Performance-based appropriations: Fad or wave of the future? *The Chronicle of Higher Education*. Retrieved February 16, 2004, from <http://chronicle.com/prm/che-data/articles.dir/art-44.dir/issue-31.dir/31b00601.htm>

Keywords: Performance/incentive/performance-based funding; state perspective; Tennessee, South Carolina, Missouri, Florida, Arkansas; state programs/state standards.

This article considers the question whether the performance-based budget will fade away or take root in higher education. It describes the general types of indicators used and problems associated with them, and discusses the peculiarities of programs in several states: Tennessee, South Carolina, Missouri, Florida, and Arkansas. Tennessee's program owes its success to the following factors: voluntary, non-competitive nature that has led to strong support from university presidents and administrators and focus on rewarding success rather than penalizing failure. The authors conclude, "The public's demand for accountability is not going away. And information-driven, market-oriented reforms such as performance-based budgets are part of the answer to that demand" (pp. 4-5).

Cave, M., et al. (1988). *The use of performance indicators in higher education: A critical analysis of developing practice*. Higher Education Policy Series 2. London, England: Jessica Kingsley Publishers.

Keywords: International perspective; United Kingdom; accountability/institutional autonomy; performance reporting; performance indicators/factors/criteria; educational/indicators/criteria/assessment; educational quality/instructional effectiveness; evaluation methods/measurement techniques; outcomes of education/college outcomes assessment.

ABSTRACT: This book gives an account of the present use and status of performance indicators in British higher education, set against the developing literature and experience of performance indicators in the United States and other countries. The book provides a critical survey of the range of devices being proposed but also points to possible patterns or strategies of use. The first chapter notes how the government of the United Kingdom has changed the assumptions upon which higher education is to be conducted and notes that the introduction of performance indicators forms part of a general shift from academic control over objectives and evaluation to control by the system and its managers. Chapter 2 reviews recent experience in the United Kingdom, the United States, and other countries. Chapters 3 and 4 offer a more technical survey of the components of performance indicators of both teaching and research. The approach relies heavily on a distinction between research and teaching outputs and costs. Chapter 5 reflects on the different models of performance indicators and their modes of application, and proposes how these models might be used by funding bodies and within institutions in the United Kingdom.

Cave, M., et al. (1991). *The use of performance indicators in higher education: A Critical analysis of developing practice*. (2nd ed.). Higher Education Policy Series, 2. Bristol, PA: Taylor and Francis Group.

Keywords: International perspective; United Kingdom; evaluation methods/measurement techniques; performance reporting; performance indicators/factors/criteria; outcomes of education/college outcomes assessment; evaluation methods/measurement techniques; quality control/institutional quality.

ABSTRACT: This book is an updated account of the present use and status of performance indicators in British higher education set against the developing literature and experience of performance indicators in the United States and other countries and in view of the major shifts in higher education policy occurring in recent years. Chapter One explores key issues in the development of performance indicators. Chapter Two takes an overview of recent experience in the United Kingdom (UK), the United States, and other countries. Chapter Three and Four attempt a closer and more technical survey of the components of performance indicators of both teaching and research using surveys of research undertaken elsewhere. The approach relies on a distinction between research and teaching outputs and thus implicitly on a division of research-related and teaching-related costs. In Chapter Five the authors reflect on the different models of performance indicators and their modes of application moving from analysis of what is now being proposed in different systems to their own proposals of how they might be used within the UK context by funding bodies and within institutions.

Cave, M., Hanney, S., Henkel, M., & Kogan, M. (1997). *The use of performance indicators in higher education: The challenge of the Quality Movement*. (3d ed.). Higher Education Policy Series 34. Bristol, PA: Taylor and Francis.

Keywords: International perspective; United Kingdom; accountability/institutional autonomy; performance reporting; performance indicators/factors/criteria; educational/indicators/criteria/assessment; educational quality/instructional effectiveness; evaluation methods/measurement techniques; policy formation/public policy/educational policy.

ABSTRACT: This book gives an updated account of the present use and status of performance indicators (PIs) in British higher education, a decade after their controversial introduction into higher education policy. The first chapter explores some key issues in the development of PIs, noting that since their introduction as a largely, externally imposed government initiative, these policies have been incorporated into many levels of the management of higher education. This chapter also defines the various categories of PIs, relating them to the measurement of inputs and outputs in higher education. Chapter 2 provides an overview of recent experience in the United Kingdom, the United States, the Netherlands, Australia, Germany, Finland, Sweden, and Norway. Chapters 3 and 4 attempt a closer and more technical survey over a range of countries of the components of PIs of both teaching and research. Chapter 5 moves from analysis of what is now being proposed in different systems to proposed models of how they might be used within the United Kingdom, both by funding bodies and within institutions. Figures and tables summarize some of the model data and performance and research indicators.

Cofer, J., & Somers, P. (2001, Spring). Performance funding: Promise or cure? *Journal of Student Financial Aid*, 31(2): 19-34.

Keywords: Performance/incentive/performance-based funding; institutional perspective; performance indicators/factors/criteria; politics of education; state financial support; quality control/institutional quality; policy formation/public policy/educational policy.

ABSTRACT: Examined performance funding, specifically one common performance measure--student persistence--at three institutions within a single state: a flagship university, a historically black university, and a regional, comprehensive institution. Sought to determine if the outcomes were those intended by policy makers. Uncovered variables that affected persistence, and concluded that this performance measure is problematic.

Colbeck, C.L. (2002, January/February). State policies to improve undergraduate teaching: administrator and faculty responses. *Journal of Higher Education*, 73(1): 3-25.

Keywords: Institutional perspective; educational quality/instructional effectiveness; accountability/institutional autonomy; academic achievement/educational improvement; government-school relationship; policy formation/public policy/educational policy.

ABSTRACT: Compared faculty and administrator responses at Ohio State University and Youngstown State University versus the University of Tennessee, Knoxville and Tennessee Technological University to their states' policies to improve undergraduate instruction. Found that responses to Ohio's faculty workload mandate versus Tennessee's performance funding initiative reflected differences in institutional contexts, time lapsed since policy enactment, and conflicting state policies.

Colorado Commission on Higher Education. (1997). *Postsecondary education's policy role in Colorado's implementation of School-to-Career*. Denver: The author.

Keywords: State perspective; Colorado; policy formation/public policy/educational policy; state HEIs/public HEIs; community/two-year colleges.

ABSTRACT: Community colleges and baccalaureate and graduate degree granting institutions are active in school-to-career efforts in Colorado in a variety of ways. This document describes some School-to-Career initiatives at Colorado colleges, grouped according to three major educational objectives. The first is to infuse School-to-Career competencies and skills into the curricula at postsecondary institutions. Curriculum development efforts of the University of Colorado at Colorado Springs, Colorado State University, and the University of Colorado at Denver, as well as programs implemented by two colleges under a grant from the Education Commission of the States are described. The second objective is to ease the transition to, through, and from postsecondary education. Some of the programs that foster this objective are a pilot study on competency based admission, the availability of college courses for high school students, transfer policies, local partnership committees, and **a study of performance indicators for use in funding systems**. The third goal is to encourage modifications in teacher education programs to include School-to-Career content and pedagogy. Two examples are given of work in this area.

Colorado Commission on Higher Education. (2001). *Quality indicators/performance measures, institutional performance, points, scoring, and governing board performance funding percentages for FY 2001-02*. Denver: The author.

Keywords: State perspective; Colorado; outcomes of education/college outcomes assessment; state HEIs/public HEIs; quality control/institutional quality.

ABSTRACT: This report presents tables of results on 10 overall quality indicators/performance measures of institutions of higher education in Colorado. The 10 indicators are: (1) graduation rates; (2) faculty teaching workload; (3) freshman retention in the same institution; (4) performance of recent graduates; (5) institutional support expenditures per FTE student; (6) availability during AY 1999-2000 of general education program lower division core courses required of freshmen; (7) support and success of minority students; and (8) number of credits required for degree. The ninth and tenth indicators were selected by each institution with approval of the Governing Board. The report also contains tables of Governing Board performance funding percentages for FY 2001-2002 for each institution.

Connolly, R.H. (Ed.). (2001). *A closer look at public higher education in South Carolina: Institutional effectiveness, accountability, and performance*. Columbia: South Carolina Commission on Higher Education.

Keywords: Performance/incentive/performance-based funding; state perspective; South Carolina; accountability/institutional autonomy; quality control/institutional quality; outcomes of education/college outcomes assessment; state HEIs/public HEIs; academic achievement; performance indicators/factors/criteria.

ABSTRACT: This publication focuses on data reported annually by South Carolina's public institutions of higher education as part of institutional effectiveness reporting and part of the process of performance funding. Data related to the funding process reflect the 1999-2000 performance year (institutional ratings of spring 2000), and historical performance data are displayed if available. Data are displayed on the 33 public institutions of higher education within groupings of institutions or sectors that have common missions as identified in South Carolina Act 359 of 1996. For some data tables, sector

standards are shown to designate the level beyond which institutions were not expected to improve. Eleven sections highlight the various aspects of higher education. Sections 1 through 9 reflect the nine critical success factors identified by the General Assembly for South Carolina's public colleges and universities. The sections are: (1) Mission Focus; (2) Quality of Faculty; (3) Classroom Quality; (4) Institutional Cooperation and Collaboration; (5) Administrative Efficiency; (6) Entrance Requirements; (7) Graduates Achievements; (8) User-Friendliness of the Institution; (9) Research Funding; (10) Campus-Based Assessment; and (11) Institutional Performance Rating Process.

Cook, P., Johnson, R., Moore, P., Myers, P., Pauly, S., Pendarvis, et al. (1996). *Critical thinking assessment: Measuring a moving target. Report and Recommendations of the South Carolina Higher Education Assessment Network Critical Thinking Task Force. Rock Hill: South Carolina Higher Education Assessment Network.*

Keywords: Performance/incentive/performance-based funding; state perspective; South Carolina; performance indicators/factors/criteria; accountability/institutional autonomy; outcomes of education/college outcomes assessment; evaluation methods/measurement techniques; educational change/reforms; state financial support.

ABSTRACT: This report is part of South Carolina's effort to move toward "100 percent performance funding" for the state's public colleges and universities and results from a task force's investigation of ways to assess critical thinking. The following eight major findings are reported: (1) policy makers must determine priorities; (2) critical thinking lacks a common definition; (3) faculty involvement positively impacts change; (4) high test validity correlates with low test feasibility; (5) performance tests are favored over objective, multiple-choice tests; (6) performance tests, however, have significant feasibility limitations; (7) external factors affect test scores; and (8) collaboration, not competition, is essential. The task force was unable to recommend a single test as ranking high on both validity and feasibility, but did recommend the development of a test or series of tests to better measure critical thinking. Specific recommendations are offered to the Educational Board. The bulk of the report consists of seven appendixes which include a literature review, a copy of the survey used and survey results, the criteria used for evaluating measures, reviews of nine specific tests, guidelines for choosing commercial tests, suggestions for future test development, and charts of data on commercial tests.

Coordinating Board of Texas College and University System. (1987). *Report of the Select Committee on Higher Education. Austin: The author.*

Keywords: State perspective; Texas; college administration/governance; government-school relationship; state HEIs/public HEIs; statewide planning; policy formation/public policy/educational policy; state financial support.

ABSTRACT: A report of a study of issues in public higher education in Texas is presented, along with recommendations of the Select Committee on Higher Education to improve access, quality, and management. Attention is directed to: institutional role and mission statements, general funding policies, research and technology funding, faculty compensation, student financial assistance, and management techniques. Also considered are roles and responsibilities of the state legislature, the Texas Higher Education Coordinating Board, governing boards, system administrations, and colleges and universities. Additional topics include: doctoral degree programs, technical-vocational higher education, testing and remediation, assessment of educational outcomes, teacher education, admission standards, board and system alignments, base funding, **incentive funding**, special initiative funding, human resources management, physical plant management, accounting and financial reporting procedures, and statewide higher education telecommunications networks. Appended are Texas House Concurrent Resolution Number 105, passed by the 69th Legislature. Mission statements for 39 institutions are included.

Creech, J.D. (2000). *Linking higher education performance indicators to goals*. Educational Benchmarks 2000 Series. Atlanta, GA: Southern Regional Education Board.

Keywords: Performance reporting; performance indicators/factors/criteria; accountability/institutional autonomy; academic achievement/educational improvement; policy formation/ public policy/educational policy.

ABSTRACT: This report tells what has been learned about reporting on higher education performance in the last 10 years and describes the kinds of information being used to inform policymakers and the public about higher education in the member states of the Southern Regional Education Board. The report provides examples of how the information is linked to states' goals for higher education and is being reported, and it illustrates how the information can help develop state and institutional policies and practices that are likely to achieve goals for higher education. There is more and better information available for making judgments about higher education now than there was 10 years ago. There are several reasons why it is important that the public know more about higher education performance and the return on investment from higher education. For one thing, the public increasingly insists on accountability for all of state government. In addition, competition for funding forces colleges and universities to show their efficiency and effectiveness. Higher education must also demonstrate its value to students, business and industry, and the public to gain the support it needs. Higher education performance indicators and report cards are most valuable when the information results in improvements in campus operations and student learning and the information contributes to public understanding and better policymaking at the state level.

Darling, A.L., et al. (1989). *Autonomy and control: A university funding formula as an instrument of public policy*. *Higher Education*, 18(5): 559-583.

Keywords: International perspective; Ontario; educational finance/economics; policy formation/public policy/educational policy; accountability/institutional autonomy; government-school relationship.

ABSTRACT: Formula funding in Ontario is used as a case study to evaluate how effective formula-funding has been in encouraging autonomous universities to work towards the attainment of public policy objectives. The analysis shows that four mechanisms have been used in Canada--formula funding, designated extra-formula grants, **incentive funding**, and controls.

Dumont, R.G. (1978). *Final report for the THEC performance funding project at Tennessee Technological University*. Cookeville: Tennessee Technological University.

Keywords: State perspective; Tennessee; Tennessee Higher Education Commission; institutional perspective; educational quality/ instructional effectiveness; performance indicators/factors/criteria; state financial support; state agencies for higher education; state programs/state standards; educational finance/economics; evaluation methods/ measurement techniques.

ABSTRACT: The activities and accomplishments of the second year of the Tennessee Higher Education Commission's Performance Funding Project at Tennessee Technological University are reported. The purpose of the Project was to explore the feasibility of allocating some portion of state funds to colleges and universities based on a performance criterion with performance centered on the instructional mission. The report is organized into four sections: Descriptions of Project Activities, Evaluation and Recommendation, Abstract of Goals and Indicators, and the Appendix. Institutional goals and performance indicators were chosen and alumni and students were surveyed to assess the

appropriateness of the goals. Writing skills, speaking skills, mathematical abilities, critical thinking and problem-solving abilities, and reading ability were assessed for Tennessee Technological University students as well as their understanding of history, social sciences, economics, behavioral sciences, and science and technology. Survey results for each category are presented and the survey instrument is included.

Dumont, R.G. (1978). *Report on a pilot project in performance funding*. Paper presented at the Annual Association for Institutional Research Forum, 18th, Houston, Texas, May 21-25.

Keywords: State perspective; Tennessee; Tennessee Higher Education Commission; institutional perspective; accountability/institutional autonomy; community/two-year colleges; educational/indicators/criteria/assessment; academic achievement/educational improvement; state financial support; evaluation methods/measurement techniques; program development/implementation; budgeting/resource allocation; state programs/state standards; state HEIs/public HEIs.

ABSTRACT: Reported are the execution and outcomes of the Tennessee Higher Education Commission (THEC) Performance Funding Project at Tennessee Technological University, a pilot project seeking to explore the question of whether it is desirable and possible to allocate state funds to community colleges and universities on a performance effectiveness criterion (how good) as compared to the current credit hour and enrollment criteria (how much). The University project is part of a larger state-wide effort sponsored by the THEC and funded by grants from several sources. This case study presentation is organized according to the following topics: First, the background for the state-level project is discussed as part of the national trend of concern about accountability. Second, the rationale for and objectives of the state-level project are considered. Third, the experiences at Tennessee Technological University are presented, with attention to the participants and to the events and procedures involved in its execution. The first year was dedicated to the development of instructional goals and performance indicators; the second year, with the acquisition of data on these indicators and the development of ways in which performance might be incorporated into the funding project. Positive outcomes are cited and some explanations for the relative degree of success to date are offered. Attention is also given to remaining challenges and problems.

Dumont, R.G. (1980). *State-wide goals and the university: A pilot project in performance funding*. Paper presented to the Annual Meeting of the Association for the Study of Higher Education, Washington, D.C., March 4-5.

Keywords: State perspective; Tennessee; Tennessee Higher Education Commission; institutional perspective; accountability/institutional autonomy; educational/indicators/ criteria/assessment; educational finance/economics; budgeting/resource allocation; state financial support; state HEIs/public HEIs; educational quality/instructional effectiveness; evaluation methods/measurement techniques; government-school relationship; quality control/institutional quality; state programs/state standards.

ABSTRACT: A pilot project in performance funding at Tennessee Tech University is described. The pilot project was part of a statewide "Performance Funding Project" sponsored by the Tennessee Higher Education Commission (THEC). The Performance Funding Project was designed to improve the formula appropriations process by determining the feasibility of allocating some portion of state funds to community colleges and universities on a performance effectiveness criterion as compared to the current credit hour and enrollment criteria. The focus was upon instructional goals only with concern with institution-wide goals, rather than with the instructional goals of particular programs, departments, or colleges. Performance contracts between the university and the THEC itemized institutional obligations

to identify/develop goals and associated performance indicators provide evidence of representative faculty involvement in developing goals and indicators, gather and report data on the indicators, and the like. A chronologically organized of the execution of the pilot project at Tennessee Tech University is presented. A discussion of some of the factors responsible for the degree of success achieved is included.

Dumont, R.G., & Troelstrup, R.L. (1979). *Exploring relationships between objective and subjective measures of instructional outcomes*. Paper presented at the Annual Forum of the Association for Institutional Research, 19th, San Diego, California, May 13-17.

Keywords: State perspective; Tennessee; Tennessee Higher Education Commission; institutional perspective; outcomes of education/college outcomes assessment; educational quality/instructional effectiveness; college administration/governance.

ABSTRACT: A pilot project in performance funding was conducted at Tennessee Technological University. A random sample of 112 seniors participated in a special assessment exercise involving the American College Testing (ACT) Battery and the ACT College Outcome Measures Project. The participants also completed a questionnaire designed to elicit self-reports of progress toward the realization of a set of institution-wide or general education goals. Factor analyses and item analyses were performed on self-report responses and two separate two-item indices were obtained. The relationships between the "objective," or test performance, and the "subjective," or student testimony, instructional outcomes measures were examined. The findings support the concurrent validity of the student testimony data, but the magnitude of the correlation coefficients seem to suggest that a substantial proportion of the variance in self-reported progress scores is not explained by the test performance results. The implications of the study results for the better-informed selection, implementation, and interpretation of instructional outcomes measures are discussed. Statistical data and a bibliography are included.

Dumont, R.G., & Troelstrup, R.L. (1980). *Exploring relationships between objective and subjective measures of instructional outcomes*. *Research in Higher Education*, 12(1): 37-51.

Keywords: Performance/incentive/performance-based funding; outcomes of education/ college outcomes assessment; evaluation methods/measurement techniques; self-evaluation.

ABSTRACT: The study reports on a pilot project in performance funding. Explored are the relationships between test performance and student testimony on instructional outcomes measures. The implications for better informed selection, implementation, and interpretation of outcomes measures are discussed.

Eicher, J.C., & Chevallier, T. (2002). *Higher education funding: A decade of changes*. *Higher Education in Europe*, 27(1-2): 89-99.

Keywords: International perspective; Europe; educational finance/economics.

ABSTRACT: Reflects on a previous article on financing European higher education, concluding that funding has indeed become increasingly based on mixed sources with students required to pay a greater share. Also concludes that determination of actual costs and equitable cost sharing have become more refined and accurate, with funding increasingly taking into account various performance indicators.

El-Khawas, E. (1998, September). Strong state action but limited results: Perspectives on university resistance. *European Journal of Education*, 33(3): 317-330.

Keywords: State perspective; Tennessee; government-school relationship; quality control/institutional quality; self-evaluation; critique of performance assessment approaches; state financial support; college administration/governance; accountability/institutional autonomy; educational change/reforms.

ABSTRACT: Analyzes nature and effects of public-management evaluation concepts on institutions of higher education, using as an example Tennessee's policy of monitoring performance of its institutions by linking performance indicators to public funding. Concludes that while policy has been successful overall, allowing a "firewall" between government scrutiny and academic matters, some problems remain.

Epper, R.M. (Ed.). (1994). *Focus on the budget: Rethinking current practice: State policy and college learning*. Denver, CO: Education Commission of the States, State Higher Education Executive Officers Association.

Keywords: Budgeting/resource allocation; educational finance/economics; academic achievement/educational improvement; policy formation/public policy/educational policy; educational quality/instructional effectiveness; government-school relationship.

ABSTRACT: The four papers presented here were chosen for presentation at the 1993 annual meeting of the State Higher Education Finance Officers. "A Clean Slate: Principles for Moving To a Value-Driven Higher Education Funding Model," by Brenda Norman Albright and Diane Suitt Gilleland, outlines principles for moving from an accounting-driven funding model, emphasizing input factors, to a value-driven funding model, emphasizing state higher education needs and financial incentives that will meet needs more effectively. It suggests shifting to a new funding philosophy and offers a customized campus sketch of clean-slate funding. "Linking Budgeting to Academic Planning: The Wisconsin Case" (Kathleen R. Sell) presents five policy tools used by the University of Wisconsin System to combine budget and academic planning to improve instructional quality. "An Attempt To Implement Performance-Based Funding in Texas Higher Education: A Case Study" (Mark Bateman and Roger W. Elliott) chronicles a failed attempt to establish performance-based funding in Texas and suggests lessons learned. "Important Safeguards in Funding Processes for Public Higher Education" (J. Kent Caruthers and others) notes that objectives of funding processes have changed focus over time and warns of potential pitfalls in adapting funding processes to meet changing policy objectives in the 1990s.

Epper, R.M. (1999). *State policies for distance education: A survey of the states*. Denver, CO: State Higher Education Executive Officers Association.

Keywords: State perspective; policy formation/public policy/educational policy; state programs/state standards; educational technology; educational change/reforms; program development/implementation; state financial support; state surveys; statewide planning.

ABSTRACT: This paper analyzes data from a 1998 survey of state academic officers that covered state policies related to distance education technology. Concerning general planning issues, the survey found most respondents rated "overall coordination and planning" as highly important, and that 22 states have a formal technology plan in place (Web links for plans are listed). Concerning academic policy, the survey found that 12 states have eliminated geographic service areas for programs using distance education technology; only 6 states have separate policies for approving new degree programs offered through distance education; 16 encourage institutions to use coursework offered by other institutions; 33 are involved in a "virtual university" network; and almost all states offer expanded inter-library and

electronic library services. Concerning funding policy, most states do not set policy regarding tuition and fees for distance education students or mandate how revenue is shared between sending and receiving institutions; 13 states have policies regarding student technology fees; and 25 have passed legislative funding initiatives to support distance education technology. Concerning data issues, 30 states collect data on students in distance education programs, and 8 have or are developing measures or performance indicators for distance education programs. The survey and a list of respondents are appended.

Erwin, T.D. (2003, March/April). The ABC's of assessment. *Trusteeship*, 11(2): 18-23.

Keywords: Performance/incentive/performance-based funding; accountability/institutional autonomy; educational/indicators/criteria/assessment; state financial support; quality control/institutional quality.

ABSTRACT: Offers perspective on the drive for performance-based funding in higher education and describes results of new research in this field being conducted at James Madison University.

Ewell, P.T. (1985). *The legislative role in improving postsecondary education*. Paper collected as part of the American Association for Higher Education Assessment Forum. Boulder, CO: National Center for Higher Education Management Systems.

Keywords: Educational quality/instructional effectiveness; incentives/rewards; quality control/institutional quality; government-school relationship; outcomes of education/ college outcomes assessment; accountability/institutional autonomy; budgeting/resource allocation; academic achievement/educational improvement.

ABSTRACT: The importance of legislative initiatives to improve postsecondary education is discussed, along with mechanisms that legislatures have used to induce change in higher education, and guidelines for action. Structural obstacles to improvements that have confronted most public colleges include lack of clear priorities, fragmented responsibilities, lack of incentives for improvement, and lack of information about effectiveness. In attempting to promote improvement in higher education, state legislatures have two main tools: (1) changing the budgetary allocation process to provide special funds for needed improvements, or to reward and encourage successful performance; and (2) exerting control over college behavior directly through regulation or statute. Budget-based approaches include modifying enrollment-driven formulas; linking a portion of total dollar allocation to each college, based on demonstrated effectiveness (performance funding); and special-purpose funds. Regulatory approaches include testing as a condition for advancement, testing as part of instructional evaluation, curricular requirements, use of existing audit and review procedures, and reporting and data collection requirements.

Ewell, P.T. (1994, November/December). A Matter of integrity: Accountability and the future of self-regulation. *Change*, 26(6): 24-29.

Keywords: Accountability/institutional autonomy; accreditation/accreditation institutions; self-evaluation.

ABSTRACT: Accountability of higher education institutions is discussed in the context of recent criticism of the institutional accreditation system. It is suggested that institutions reevaluate their responsibilities and reaffirm appropriate core values; however, application of those values will be influenced by the principal clients: students, employers, and society's representatives.

Ewell, P.T. (1999, November). Linking performance measures to resource allocation: Exploring unmapped terrain. *Quality in Higher Education*, 5(3): 191-209.

Keywords: Performance/incentive/performance-based funding; performance indicators/factors/criteria; outcomes of education/college outcomes assessment; budgeting/resource allocation; program effectiveness/evaluation.

ABSTRACT: Examination of how (and whether) particular types of institutional performance measures can be beneficially used in making resource allocation decisions finds that only easily verifiable "hard" statistics should be used in classic performance funding approaches, although surveys and the use of good practices by institutions may indirectly inform longer-term resource investments.

Ewell, P.T., & Kent, R. (1995). *Policy approaches to evaluation and incentive funding in U.S. and Mexican higher education. "Understanding the Differences": A Working Paper Series on Higher Education in the U.S. and Mexico. Working Paper #1. Boulder, CO: Western Interstate Commission for Higher Education.*

Keywords: International perspective; Mexico; state perspective; educational finance/ economics; policy formation/public policy/educational policy; government-school relationship; evaluation methods/measurement techniques; budgeting/resource-allocation.

ABSTRACT: This paper explores efforts of Mexico and the United States to obtain a significant return on their investment in postsecondary education. The authors establish a context for comparison between Mexico and the United States and discuss the challenges and central policy dilemmas that each country faces in implementing the policy tools of evaluation and incentive funding. Compared to the United States, Mexico's system of higher education is less developed both administratively and academically. Following a 20-year period of enormous growth and a decade of fiscal and political neglect, the Salinas administration initiated a strong proactive set of policies in the 1990s that were novel and in contrast to prevailing academic culture in Mexico. In the United States, while similar trends were experienced, these occurred in a large and decentralized system with much experience in institutional planning and evaluation and the changes occurred over a longer time period. The growth of performance assessment and conditional or incentive funding as policy instruments in both countries results from the use of these approaches as tools for government to direct or steer higher education. This paper explores how implementation has varied in the two countries and experiences and future directions for accountability and categorical funding mechanisms are explored.

Eyler, J. (1984, December). The politics of quality in higher education. In J. Folger (Ed.), *Financial incentives for academic quality. New Directions for Higher Education*, No 48: 57-73.

Keywords: Educational finance/economics; educational quality/instructional effectiveness; politics of education; budgeting/resource allocation; educational objectives; state financial support; government-school relationship; accountability/institutional autonomy; policy formation/public policy/educational policy.

ABSTRACT: Political factors that will affect whether quality issues can continue as part of the active policy agenda are examined, including the politics of comparative standards, quality improvement, institutional control, and specific quality incentives (admissions standards, performance funding, innovation, and targeted grants for institutional and state goals).

Florida State Postsecondary Education Planning Commission. (1994). *Accountability Review: Progress Report 1. Report and Conclusions*. Tallahassee: The author.

Keywords: State perspective; Florida; accountability/institutional autonomy; evaluation methods/measurement techniques; government-school relationship; state HEIs/public HEIs; statewide-planning; politics of education.

ABSTRACT: In response to Florida legislative mandate, this document reports on accountability measures and an accountability process for independent institutions of higher education that participate in the Florida resident access grant program and on the design and implementation of the accountability processes of the state postsecondary institutions. After an introductory chapter, chapter 2 suggests a two-tier approach for conducting accountability reviews: an annual review of accountability information from public system reports and from public and private institution reports, and a cumulative review every 5 years. Annual reviews of public institutions would include a representative sample of 10 institutions (7 community colleges and 3 universities). Chapter 3 describes an accountability process and measures for independent institutions and provides a benefits and cost effectiveness analysis of the Florida Resident Access Grant program. Chapter 4 summarizes findings and conclusions and proposes: (1) annual Commission review of accountability processes and reports for public and private systems; (2) annual review of public institutional reports and plans; (3) performance indicators for independent institutions; (4) annual accountability reports from the Independent Colleges and Universities of Florida (ICUF); and (5) new reporting dates for improved quality of data. Also included are recommendations for summative evaluation and incentive funding. Extensive appendixes contain statutory language, evaluation questions, lists of ICUF member institutions and resource group members, tables, and results of a survey of Access Grant recipients, Fall 1994.

Florida State Postsecondary Education Planning Commission. (1998). *Challenges and choices: The master plan for Florida postsecondary education*. Report and Recommendations by the Florida Postsecondary Education Planning Commission. Tallahassee: The author.

Keywords: State perspective; Florida; long-range planning; accountability/institutional autonomy; outcomes of education/college outcomes assessment; state financial support; master plan; business-school relationship; statewide planning.

ABSTRACT: This document presents the master plan for Florida postsecondary education, with recommendations in the areas of access, interdependence, outcomes, and funding. An introduction offers a vision statement for postsecondary education in the state, reviews the planning process, identifies underlying principles, and explains the planning context. The section on access presents 20 recommendations concerning access, productivity, and technology. Next, the section on interdependence offers 17 recommendations which address preparation for postsecondary education, educational partnerships, and the preparation of teachers. The 14 recommendations in the section about postsecondary education outcomes focus on workforce preparation and economic development. The section on funding proposes 14 recommendations addressing the following areas: accountability/performance funding, funding for instruction and research, public education capital outlay, tuition and financial aid, and support for the independent sector. The concluding section reviews 10 broad goals. Appended materials include a list of planning commission members and staff, and exhibits which present further detail in support of each of the document's main sections.

Folger, J. (1984). *Budget reform to improve higher education quality*. Paper presented at the Annual Meeting of the American Educational Research Association, 68th, New Orleans, LA, April 23-27.

Keywords: Budgeting/resource allocation; educational quality/instructional effectiveness; educational finance/economics; state financial support; government-school relationship; educational change/reforms; academic achievement/educational improvement.

ABSTRACT: A national project designed to examine issues of budget reform and quality improvement in higher education is described. The focus is state-level budget practices and their impact on institutions. Most of the funding for quality improvement has been categorical: a small percent of the budget is set aside to achieve particular quality or improvement objectives. Some examples are: special additions to the budget to support engineering, computer science, or other fields that are important to state economic development; budget additions to support "Centers of Excellence" or "Programs of Distinction;" incentive funding to achieve specified goals; and raising funds from private sources by matching funds. Budget allocation to satisfy various interest groups often leads to incremental funding and preserving the status quo. These conservative tendencies are enhanced by inflation and fiscal shortages. It is suggested that the budget can emphasize quality by: linking budget decisions to an academic evaluation process; practicing strategic planning; giving institutions more flexibility and more incentives for effective resource use; and implementing categorical programs, which can focus attention on the importance of quality objectives and their achievement.

Folger, J., & Jones, D.P. (1993). *Using fiscal policy to achieve state education goals. State policy and college learning*. Denver, CO: Education Commission of the States.

Keywords: Educational finance/economics; government-school relationship; statewide planning; accountability/institutional autonomy; budgeting/resource allocation; state financial support; state HEIs/public HEIs; state perspective; New Jersey; Ohio; Tennessee.

ABSTRACT: In view of increasing financial pressures, this paper argues that a new approach to fiscal policy and to the structure of the financial relationship between state government and institutions of higher education is needed. A proposed three-part budget would include the following: (1) a base or core lump-sum budget managed by higher education institutions, subject to accountability through regular assessment of progress toward institutional goals; (2) a capital budget to cover new buildings and other major asset acquisition; (3) a special-purpose component of 5 to 10 percent of the base allocated to further the state's higher education agenda. This special-purpose budget would be connected to state objectives, and an assessment of progress toward objectives would be built into the process. Such a special-purpose component could take the form of block grants with guidelines; of initiative funding in a competitive peer-reviewed process; of incentive funding as a grant awarded based on demonstrated progress toward a state goal; or of student funding through scholarship and work-study grants. The report reviews strengths and weaknesses of each funding mechanism in relation to the kinds of activities the state seeks in colleges and universities. The paper also describes typical institutional and state-level responses and argues that these are often deleterious to state priorities for higher education. It proposes an alternative approach which would ensure that the state's interests and educational priorities are reflected in the resource allocation process. Appendixes describe programs in New Jersey, Ohio, and Tennessee.

Forsythe, D.W. (Ed.). (2001). *Quicker, better, cheaper? Managing performance in American government*. Albany, NY: State University of New York, Nelson A. Rockefeller Institute of Government.

Keywords: Accountability/institutional autonomy; budgeting/resource allocation; state programs/state standards; performance indicators/factors/criteria.

ABSTRACT: These case studies and analytic essays are intended to give the reader a richer understanding of when and how top managers succeed or fail in their efforts to use performance management (PM) systems to improve the functioning of federal, state, and local government in the United States (U.S.). The question mark in the title is intended to remind the reader that the efficacy of PM in U.S. government is a question for discussion, not a settled issue. Dissenting voices on the topic are heard, and case studies explore problems in PM as well as success stories. "Introduction" (Richard P. Nathan) gives some background and briefly describes the cases studies and essays. "What Types of Performance Information Should Be Tracked?" (Harry P. Hatry) discusses various performance indicators. Section II, PM and the Federal Government, begins with two chapters by skeptics followed by three by enthusiasts: "Getting Performance Measures to Measure Up" (Allen Schick); "The Economics of Performance Incentives in Government with Evidence from a Federal Job Training Program" (Gerald Marschke); "Implementing Government Performance and Results Act (GPRA): Progress and Challenges" (J. Christopher Mihm); "Restoring Government Integrity Through Performance, Results, and Accountability" (Virginia L. Thomas); and "The Social Security Administration and PM" (Walter D. Broadnax, Kevin J. Conway). Section III, PM and the Federalism Challenge, consists of these four chapters: "PM: Does It Matter in the New World of Welfare?" (L. Kate Boyer et al.); "Federalism and PM: Health Insurance, Food Stamps, and the Take-Up Challenge" (James Fossett et al.); "Empowerment Zones and the Promise of Accountability" (David J. Wright); and "Intergovernmental Relationships and the Federal Performance Movement" (Beryl A. Radin). The five chapters in Section IV, PM in States and Local Government" are "Beyond Measurement: Managing for Results in State Government" (Patricia W. Ingraham, Donald P. Moynihan); "Performance Budgeting in the States" (Katherine G. Willoughby, Julia E. Melkers); "Getting to Results in Florida" (Robert B. Bradley, Geraldo Flowers); "**Paying for Performance in Public Higher Education**" (Joseph C. Burke); and "PM in New York City: Compstat and the Revolution in Police Management" (Dennis C. Smith, William J. Bratton). Section V, Summing Up, concludes the volume concludes with "Is the New Obsession with PM Masking the Truth About Social Programs?" (Ann B. Blalock and Burt S. Barnow) and "Pitfalls in Designing and Implementing PM Systems" (Dall W. Forsythe).

Freeman, M.S. (2000). *The experience of performance funding on higher education at the campus level in the past twenty years (Doctoral dissertation, University of Tennessee)*.

Keywords: Performance/incentive/performance-based funding; state financial support; state programs/state standards; institutional perspective; community/two-year colleges; educational finance/economics; policy formation/public policy/educational policy; performance indicators/factors/criteria.

ABSTRACT: The purpose of this study was to examine the experience a single community college in Tennessee has had with the state's twenty-year-old performance funding policy, which makes state appropriations to colleges and universities contingent upon their performance on several educational performance indicators. Volunteer State Community College's experience was examined through a case study that incorporated the use of interviews, document analysis, and observations. Twenty-three faculty members and administrators at the college were asked to respond to seven interview questions. Several themes emerged from their answers, including: (1) many participants indicated that the enthusiasm for the policy was not there, as it was in the beginning; (2) although the majority of the interviewees

believed that the idea behind the policy was good, very few were excited about its implementation on their campus; (3) executive administrators seemed more content with the policy than did other members of the college—some administrators appeared to "preside" over the policy rather than ensuring that it permeated through all levels of the institution and that its details were communicated to everyone; and (4) some respondents indicated that the policy has simply become a means to get more funding rather than truly emphasizing quality improvement. Ethical considerations, data collection, and resource allocation are discussed, and recommendations for future research are offered. Letters, an interview guide, an interview note form, a consent form, a confidentiality statement, and the author's vita are appended.

Fry, J.W. (1977). *Quality or Quantity? A discussion of a pilot project in designing state funding formulas based on performance quality rather than activity quantity*. Gallatin, TN: Volunteer State Community College.

Keywords: State perspective; Tennessee; institutional perspective; performance indicators/factors/criteria; state financial support; educational finance/economics; community/two-year colleges; policy formation/public policy/educational policy.

ABSTRACT: A three-year study of Performance Funding in Tennessee was begun in 1975-76 to investigate the possibility of allocating some portion of state funds for higher education on performance criteria as compared to the current allocation of funds on an enrollment or organizational unit criterion. During the first year, the postsecondary institutions participating in the project were to develop institutional performance indicators that reflect institutional uniqueness and instructional effectiveness. During the second year, data on performance indicators would be collected. Volunteer State Community College is one of 11 colleges and universities participating in Pilot Projects throughout the state. During fall and winter 1976-77, meetings involving members of various disciplines and several divisions were held for the college's faculty to determine what competencies and skills students should have and how competencies and skills could be measured when students exit from specific courses, finish work in a particular discipline, or earn associate degrees and certificates. After skills and competencies were identified, a tentative list of institutional objectives and performance indicators was developed. The college's Performance Funding contract for 1977-78, approved by the Tennessee Higher Education Commission, is appended.

Fulks, J. (2001). *Performance funding in California: Performance on demand—payment unavailable: Law, politics and economics of higher education*. Course paper presented to Nova Southern University (Florida) for Ph.D.

Keywords: State perspective; California; community/two-year colleges; budgeting /resource allocation; accountability/institutional autonomy; outcomes of education/college outcomes assessment; state financial support; quality control/institutional quality; program effectiveness/evaluation; program development/implementation; quality control/ institutional quality.

ABSTRACT: No one could have anticipated the devastating results of the political, legal, and economic events occurring in California after the year 2000 and producing stiff competition for education dollars. Community colleges were among the hardest hit by state budget deficits, with over \$100 million cut from an already conservative budget. Since expectations and outcomes are not reduced or eliminated from the formula when funding is reduced, community colleges are further challenged. The author asserts that performance-based funding is a trend with both positive and negative impacts. California's community colleges have been funded at almost \$2000 beneath the national average per full-time-equivalent (FTE) student for the last five fiscal years. The chancellors office allocates \$3,554 per FTE student, compared with a national average of \$6,025 in 1995. Adjusted for inflation, FTE student

funding in 1995 was actually 6% less than in 1975. Partnership for Excellence was developed in conjunction with legislators and the CCC Chancellors Office in an attempt to make up the funding shortfall. In 2001, the state chancellor was asked to make the initial performance outcomes more rigorous. However, the promised yearly augmentation for Partnership for Excellence still has not occurred, resulting in an inability to make long-term future plans to address the outcomes. Notes in particular the effects on the Kern County Community College District and Bakersfield College.

Gaither, G. (Guest Ed.). (1997, January/February). *Assessment update: Progress, trends, and practices in higher education*, 9(1).

This issue contains the following articles on performance indicators: (1) Performance indicator systems as instruments for accountability and assessment (Gaither, G.H.); (2) Performance indicators at SUNY and in New York: Where have we been? Where are we going? (Burke, J.C., & Freeman, T.M.); (3) University of Wisconsin system's use of performance indicators as instruments of accountability (Sanders, K., Layzell, D., & Boatright, K.); (4) The Texas A&M University system model: One size does not fit all (Deweese, V., & Gaither, G.); (5) Performance indicators for multiple audiences: The Colorado experience (Cunningham, S.); (6) Missouri's performance funding program: Funding for results (Stein, R.B.); and (7) From the states (Ewell, P.T.).

Gaither, G., Nedwek, B.P., & Neal, J.E. (1994). *Measuring up: The promises and pitfalls of performance indicators in higher education*. ASHE-ERIC Higher Education Report No 5. Washington, D.C.: The George Washington University.

Keywords: Performance indicators/factors/criteria; performance reporting; outcomes of education/college outcomes assessment; accountability/institutional autonomy; quality control/institutional quality; evaluation methods/measurement techniques; government-school relationship; educational/indicators/criteria/assessment productivity/efficiency; internationals perspective.

ABSTRACT: This report examines the development and implementation of performance indicators in higher education, focusing on the factors driving increased demand for accountability in higher education and the use of performance indicators in the United States and other countries. It discusses the public and political concern for increased productivity, accountability, and quality assessment at colleges and universities in the United States and other countries, in light of educational retrenchment and budgetary constraints. It then reviews the use of performance indicators and outcomes measures in the United States, focusing on the National Association of College and University Business Officers (NACUBO) benchmarking project, the Peterson's/AGB (Association of Governing Boards of Universities and Colleges) strategic indicators survey, the National Center for Higher Education Management Systems (NCHEMS) indicators of good practice project, and the Education Commission of the States (ECS) project. It then examines the use of performance indicators in Great Britain, Canada, Australia, The Netherlands, Finland, Sweden, and Denmark. The report concludes by discussing possible future trends in the use of performance indicators by governments and institutions to promote productivity, accountability, and quality in higher education. A list of related publications is included.

Harbour, C.P. (2002, Spring). The legislative evolution of performance funding in the North Carolina community college system. *Community College Review*, 29(4): 28-49.

Keywords: State perspective; North Carolina; community/two-year colleges; educational finance/economics; outcomes of education/college outcomes assessment; budgeting/resource allocation state financial support; performance/incentive/performance-based funding.

ABSTRACT: Discusses the impact of the 1999 North Carolina General Assembly House Bill 168, which mandated the implementation of performance-based funding for the state's 58 community colleges. States that a college's performance on six of the 12 measures determines its eligibility for supplemental allocation. Questions whether the new standards will affect student access and undermine the community college mission.

Hayes, C.R. (1995, Fall). Development of evaluation indicators: Three universities of the Texas A&M System. In G.H. Gaither (Ed.), *Assessing performance in an age of accountability: Case studies*. New Directions for Higher Education, No 91 (91-96). San Francisco: Jossey-Bass.

Keywords: Institutional perspective; Texas; performance indicators/factors/criteria; outcomes of education/college outcomes assessment; educational/indicators/criteria/ assessment; evaluation methods/measurement techniques; accountability/institutional autonomy; college administration/governance; statewide planning.

ABSTRACT: To develop a set of effective performance indicators, three campuses of Texas A&M University collaborated: a large research university, a historically black institution, and an urban campus undergoing major changes. Evolution of the project and the strategies used to develop core indicators while addressing the different institutional missions are discussed. The project focuses on the difficulties in developing a set of core indicators for all institutions while developing performance indicators for institutions with different missions.

Higher Education Funding Council for England. (2000). *Consultation on performance indicators*. Bristol: The author.

Keywords: International perspective; United Kingdom; performance indicators/factors/ criteria; performance reporting; evaluation methods/measurement techniques; outcomes of education/college outcomes assessment.

ABSTRACT: This document offers the second set of annual performance indicators relating to publicly funded higher education institutions in the United Kingdom. The document has the additional purpose of allowing each institution to check its own indicators based on the information supplied in this paper; of allowing the Higher Education Funding Council for England (HEFCE) to pose specific questions related to the indicators, for which they request answers; and to allow the institutions to comment on various aspects of the indicators and questions which they raise. The document provides some background about the information included, including follow-up procedures and a timetable, and discusses and defines new and existing indicators. Appended are technical notes and field definitions for the data files (unique student identifiers, fields of study, age groups and demographic information, as well as data relating to characteristics of the various institutions). Eight charts provide graphic displays of the various indicators. A final set of tables aligns units of assessment, i.e., courses of study, with cost centers (e.g., the courses in Classics and Ancient History are included in the Humanities group.)

Higher Education Funding Council for England. (2000). *Performance indicators in higher education in the UK, 1997-98, 1998-99*. Report. Bristol: The author.

Keywords: International perspective; United Kingdom; performance reporting; performance indicators/factors/criteria; quality control/institutional quality; outcomes of education/college outcomes assessment.

ABSTRACT: This is the second publication in an annual series providing performance indicators relating to higher education in the United Kingdom. The report is based on data from the academic years 1997-98 and 1998-99. The indicators are provided for the 169 publicly funded institutions of higher education in the UK and are presented in 7 tables. Indicators address: access, low-participation neighborhoods, non-continuation rates, projected outcomes and efficiencies, module completion rates, and research outputs. The report consists of an introduction, description of changes since last year, description of the indicators, of results by sector, and tables containing the performance indicators and instructions on how to use them. Several appendices provide definitions and technical information.

Higher Education Funding Council for England. (2001). *Indicators of employment*. Report. Bristol: The author.

Keywords: International perspective; United Kingdom; performance reporting; performance indicators/factors/criteria; evaluation methods/measurement techniques; outcomes of education/college outcomes assessment.

ABSTRACT: This document contains the first set of performance indicators about the employment outcomes of higher education in England. Indicators for other areas had previously been developed, and the Chancellor of the Exchequer requested that indicators showing performance outcomes be developed. The only data available for such an indicator were found to be unsuitable, and it was agreed that the survey used, the First Destination Return, should be amended. Amendments were made for the survey of students graduating in the 1999-2000 academic year, and it is this information that has been used to provide the indicators in this document. This initial publication only covers graduates qualifying with first degrees who have studied full-time. Two indicators of employment outcomes have been produced. The first expresses the number of graduates who say they are in employment or in further study or training as a percentage of all those who are employed, studying, or unemployed. The second indicator only includes graduates who say they are employed or seeking employment. The indicator is the percentage of this group who are in employment. These indicators and their benchmarks are designed to show how successful graduates from an institution are at obtaining employment or further study within 6 months of graduation, compared with similar graduates across the sector. In 1999-2000, the final number of 168,756 gave a response rate of 81% on which the indicators were based. Three annexes contain discussions of the First Destination Return survey and the benchmarks for the employment indicator and definitions of the terms used in the indicators.

Higher Education Funding Council for England. (2001). *Performance indicators in higher education in the UK: 1998-99, 1999-2000*. Report. Bristol: The author.

Keywords: International perspective; United Kingdom; evaluation methods/measurement techniques; performance reporting; performance indicators/factors/criteria; quality control/institutional quality; outcomes of education/college outcomes assessment.

ABSTRACT: This is the third report in an annual series providing performance indicators relating to higher education in the United Kingdom. The report is based on data from the academic years 1998-1999 and 1999-2000. Indicators are given for the 169 publicly funded institutions of higher education in the United Kingdom. Indicators, presented in seven major tables, address: (1) participation of under-

represented groups in higher education, young full-time undergraduate entrants; (2) participation of under-represented groups, mature full-time undergraduates and part-time students; (3) non-continuation following first year of entry into institution; (4) resumption of study after a year out of higher education; (5) projected learning outcomes and efficiencies; (6) module completion rates; and (7) share of research output per share of research input, weighted by cost center. Four appendixes contain: a geo-demographic analysis; adjusted sector benchmarks; technical notes on protected outcomes and efficiencies; and notes on research indicators.

Herbert, E., & Thorn, D. (1993, Winter). Accreditation as a tool of accountability and incentive. *Journalism Educator*, 47(4): 55-62.

Keywords: State perspective; Louisiana; Tennessee; accreditation/accreditation institutions; quality control/institutional quality; state programs/state standards; government-school relationship; incentives/rewards; state agencies for higher education.

ABSTRACT: Describes Louisiana's "accreditation as incentive" program and Tennessee's program of Performance Funding. Discusses voices of dissent to these programs. Concludes that these two programs are not used as an arbitrary or capricious club but rather as an inducement to maintain program quality in the face of higher education budget cuts.

Hoachlander, E.G., et al. (1989). *Performance-based policies options for postsecondary vocational education: A feasibility study*. Berkeley, CA: MPR Associates.

Keywords: Accountability/institutional autonomy; educational finance/economics; outcomes of education/college outcomes assessment; budgeting/resource allocation; policy formation/public policy/educational policy; state financial support; community/two-year colleges; vocational education.

ABSTRACT: This document explores how well the four conditions necessary for implementation of performance-based policies in **vocational education** can be met in postsecondary education. The four conditions require that: (1) it must be possible to specify the desired outcomes precisely and unambiguously; (2) these outcomes must be easily, accurately, and fairly measured; (3) performance must be tied directly to funding so that success is rewarded or failure penalized; and (4) information on outcomes must be disclosed to consumers and policy makers to improve choices and decision making. The first of the report's five chapters explains why performance-based policy seems desirable at this time. The second chapter addresses issues surrounding definition and measurement of performance in postsecondary vocational education, covering labor market outcomes, learning outcomes, and access to education outcomes. Chapter 3 concerns how performance can be linked to funding, discussing performance contracting, performance-based funds allocation formulas, and performance-based student financial aid, and offering guidelines for federal vocational education policy. Chapter 4 explains information disclosure for potential consumers of postsecondary education, including the benefits and costs of disclosing more information, the necessary conditions for effective disclosure, and Arizona's experience with disclosure. Chapter 5 considers how to introduce performance funding into the Carl D. Perkins Vocational Education Act and discusses several objections that proponents of the changes are likely to confront.

Holland, B. (1990, Spring). State incentive funding: Leveraging quality. National Center for Postsecondary Governance and Finance. *Briefings: Newsletter of the Forum for College and University Governance*.

Keywords: Educational finance/economics; program budgeting; budgeting/resource allocation; state financial support; educational change/reforms; program effectiveness/ evaluation; program development/implementation; state programs/state standards.

ABSTRACT: This newsletter summarizes the debate on the use of state-level initiatives as levers to effect fundamental changes in higher education. It provides several perspectives on the use of incentive/enhancement programs to achieve state higher education goals. The concept of budgetary leverage is outlined, and the growth in enhancement programs nationally is cited. Three main areas of enhancement funding programs are listed: categorical programs (funds are legislatively earmarked for specific purposes), competitive programs (institutions compete for funds according to program criteria), and incentive programs (matching funds or special funds are offered in return for achieving specific goals). Concerns about the process used to develop incentive program goals are discussed, including the lack of attention to fundamental budgetary needs, the need for faculty cooperation in program development, and the distribution and direction of the funds. Advantages and disadvantages of enhancement programs are noted, and four ingredients for a successful incentive program are identified. Tables present data on numbers of enhancement programs by major purpose and by state, and present data on state appropriations.

Holland, B.A., & Berdahl, R.O. (1990). *Green carrots: A survey of state use of fiscal incentives for academic quality*. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Portland, OR, November 1-4.

Keywords: Educational finance/economics; incentives/rewards; program development/ implementation; state programs/state standards; policy formation/public policy/ educational policy; finance officers.

ABSTRACT: This paper presents data from a 1989 survey of 48 state higher education executive officers regarding the use of fiscal enhancement programs as a strategy to influence higher education performance. The paper reports on the purposes and objectives most often funded through specific incentives, and on the key advantages and disadvantages of this budget tool. Guidelines for structuring or evaluating such programs are suggested. It was found that 32 states had established enhancement programs which could be classified as categorical programs, competitive programs, or incentive programs. While overall budget conditions have led to reduced dollars being channeled to campuses through enhancement programs, the number of programs and the degree of commitment on the part of states to use enhancement funding techniques is increasing. The purposes most often served by incentive programs were economic growth, technology transfer, and applied research. Advantages of the use of enhancement programs are that they make state policy concrete through the mechanism of the budget, are based on performance indicators, reward and encourage meaningful institutional differentiation, and work as change strategies. Among disadvantages are that these programs emphasize short-term goals over long-term planning and distract public attention away from the necessity to adequately fund the base budget. A postscript discusses the formative and summative uses of incentive program results.

Hollander, T.E. (1991, Spring). States and college reform: New Jersey's experiment. *Planning for Higher Education*, 19(3): 25-31.

Keywords: Performance/incentive/performance-based funding; state perspective; New Jersey; educational change/reforms; budgeting/resource allocation; statewide planning; incentives/rewards; state financial support; state HEIs/public HEIs.

ABSTRACT: New Jersey abandoned formula funding of higher education in favor of incentive funding combined with base budgeting. State institutions receive basic operating funds and compete for extra monies by planning initiatives for problems on which state leaders want more action. Incentive funding has cost little and improved quality noticeably.

Hoyt, J.F. (2001). Performance funding in higher education: The effects of student motivation on the use of outcomes tests to measure institutional effectiveness. *Research in Higher Education*, 42(1): 71-85.

Keywords: Performance/incentive/performance-based funding; performance indicators/factors/criteria; outcomes of education/college outcomes assessment; educational/indicators/criteria/assessment; testing.

ABSTRACT: This study obtained data from 1,633 students who took the Collegiate Assessment of Academic Proficiency (CAAP) to evaluate whether the English, math, and critical thinking exams should be used as performance funding measures in Utah. Analysis of Covariance was utilized to demonstrate that the use of the exams was problematic because students failed to give the assessment their best effort. Other variables in the analysis included level of English and math completed, grade point averages for English and math, cumulative grade point averages, and student characteristics. Policy implications for performance funding are also addressed in the study. The author concludes: "The goal of rewarding institutions for actual student learning is not achievable when students fail to try on assessments. It is replaced with rewards for institutions that have more motivated or compliant students" (p.82). A closer study of indicators is needed to evaluate whether they truly provide the benefits envisioned by legislators or waste resources.

Jensen, R., et al. (1988, April 28-29). *Developing criteria for institutional effectiveness: A statewide workshop*. Proceedings. Santa Ana, Ca: Rancho Santiago Community College.

Keywords: Evaluation methods/measurement techniques; outcomes of education/college outcomes assessment; quality control/institutional quality; community/two-year colleges; educational/indicators/criteria/assessment; educational quality/instructional effectiveness; program effectiveness/evaluation.

ABSTRACT: This workshop proceedings presents summaries of the presentations of four speakers and recommends criteria and measures for determining institutional effectiveness. After introductory comments on the sponsorship and format of the workshop, the paper highlights the major points made by Carol Boyer, who reviewed recent research and other efforts concerning the assessment of effectiveness; Peter Consacro, who spoke about the performance-based funding procedure for higher education used in Tennessee; Edward Morante, who described the background, implementation, and results of New Jersey's state outcomes program; and James Rogers, who addressed accreditation by the Southern Association of Colleges and Schools. Next, general criteria for measuring institutional effectiveness are presented for general, transfer, and vocational education; basic skills; student support services; community needs and involvement; and cultural awareness. The final sections recommend quantitative measures of: (1) the adequacy of equipment, facilities, and grounds; (2) the degree to which

community needs for cultural, global, and political awareness are met by courses, counseling, and outreach; (3) student understanding of the liberal arts, sciences, and vocations through general education; (4) program sensitivity to cultural differences and student cultural awareness; (5) the adequacy of English as a Second Language and high school equivalency offerings; (6) the effectiveness of transfer programs; (7) the provision of access to education; (8) the quality of vocational programs; (9) the relevance of community services to district needs; and (10) the ability of the college to financially support the programs and services it offers. A list of participants is attached.

Jones, D.P. (1984). *Higher education budgeting at the state level: Concepts and principles*. Boulder, CO: National Center for Higher Education Management Systems.

Keywords: Budgeting/resource allocation; accountability/institutional autonomy; state financial support; government-school relationship; educational finance/economics.

ABSTRACT: New approaches to allocating state resources to colleges are discussed. Budgeting and resource allocation principles are considered that: (1) reflect the unique context of higher education; (2) are consistent with sound budgeting and management principles; and (3) represent institutional mechanisms applied at the state level rather than approaches developed expressly to reflect state priorities. To form the basis for a set of first principles for state-level resource allocation, the following concepts are addressed: the link between budgeting, planning, and accountability; governance relationships; production functions in higher education; and key structural components of the budget. The following customary approaches to resource allocation are evaluated in light of these principles and guidelines: incremental budgeting, formula budgeting, base-plus-increment approaches, and categorical or competitive approaches. The changing environment affecting resource allocation and actual and potential responses to the problems involved are also considered, including buffering and decoupling, marginal costing, and using fixed and variable costs. Finally, key recommendations are summarized, and areas where reform of resource allocation may further the aims of schools and state government are identified.

Jongbloed, B. (2001). *Performance-based funding in higher education: An international survey*. Working Paper. Clayton, Victoria (Australia): Monash University, Centre for the Economics of Education and Training.

Keywords: International perspective; OECD; performance/incentive/performance-based funding.

ABSTRACT: This paper presents an overview of government policies for funding higher education in 11 Organization for Economic Cooperation and Development (OECD) countries. In particular, it describes the mechanisms for funding the university sector and the extent to which the grants to universities are oriented on performance. The discussion focuses on whether universities are funded on the basis of what they produce in terms of graduates and research outputs and on the share of public funding provided through research councils. While in recent decades the attention paid to issues of efficiency, effectiveness, and quality has increased, there are only a few governments that explicitly link the universities' resources to the universities' results in the areas of teaching and research. This is illustrated by means of a graph. A number of tentative reasons for the popularity of enrollments-based funding approaches are presented in the final section of the paper.

Jongbloed, B., & Vossensteyn, H. (2001, November). Keeping up performances: An international survey of performance-based funding in higher education. *Journal of Higher Education Policy and Management*, 23(2): 127-145.

Keywords: International perspective; OECD; performance/incentive/performance-based funding; government-school relationship; policy formation/public policy/educational policy; accountability/institutional autonomy; educational finance/economics; quality control/institutional quality.

ABSTRACT: Explores government policies for funding higher education in 11 Organization for Economic Cooperation and Development (OECD) countries. Describes mechanisms for funding the university sector and the extent to which grants are oriented on performance. Illustrates that only a few governments explicitly link funding to results of teaching and research, and proposes reasons for the popularity of enrollment-based funding approaches.

Kells, H.R. (Ed.) (1990). *The development of performance indicators for higher education: A compendium for eleven countries. Programme on Institutional Management in Higher Education. Paris: Organisation for Economic Cooperation and Development*

Keywords: International perspective; OECD; performance indicators/factors/criteria; performance reporting; outcomes of education/college outcomes assessment; evaluation methods/measurement techniques; long-range planning.

ABSTRACT: The report examines the development and implementation of performance indicators at institutions of higher education, through presentation of position statements on 11 countries: Australia, Austria, Canada, Denmark, Finland, France, Greece, Netherlands, Norway, Sweden, and United Kingdom. General conclusions are summarized in an introductory section and include the following observations: (1) there has been substantial development in the area of performance indicators over the past 2 years; (2) developments clearly reflect the importance of national and cultural settings, and the political agendas of governments figure strongly in performance indicator development; (3) the emerging relationship between performance indicators and funding mechanisms is of importance; (4) institutional self-regulation within well-defined institutional and systemic goals is desirable; (5) some governments are requesting that institutions prepare 3-5 year development plans; (6) there is concern as to the adequacy of the management information systems needed to sustain performance indicators; (7) while there is some satisfaction with progress made on indicators relating to research, much work remains in the domains of teaching, finance, and public service; and (8) of greatest concern is the problem of publication of indicators on a comparative basis across.

Krech, A.S. (1994). *Accountability and the movement to performance indicators: The South Carolina experience [and] guidelines for institutional effectiveness. Materials from a presentation at the Summer Data Conference of the National Center for Education Statistics, Arlington, VA, July 17-20.*

Keywords: State perspective; South Carolina; accountability/institutional autonomy; quality control/institutional quality; performance indicators/factors/criteria; academic achievement; community/two-year colleges; educational/indicators/criteria/ assessment; evaluation research; outcomes of education/college outcomes assessment.

ABSTRACT: Providing information on assessment and institutional effectiveness programs in South Carolina, this two-part document describes the use of performance indicators (PI's) and presents state guidelines for institutional effectiveness. The first part discusses assessment in South Carolina,

indicating that institutions are required to develop measure to assess their effectiveness and prepare annual reports on specific PI's. This part also presents the following principles for using PI's: (1) the factor addressed and its relation to an appropriate goal must be clear; (2) a context should be provided for the PI; (3) diagnostic information should accompany the PI; (4) PI's are most useful when considered in groups; (5) while indicators are increasingly being used to determine institutional funding, the processes may not be sufficiently sophisticated or depoliticized to work; and (6) PI's will not lead to improvements if they are simply used for institutional ranking. The second part provides guidelines for institutional effectiveness assessments developed by the South Carolina Commission on Higher Education, indicating that assessment is required with respect to general education; student knowledge of their disciplines or majors; performance of graduates on licensing and certification exams; program changes due to external program evaluations; alumni follow-up studies; remedial programs; achievement of transfer students; undergraduate retention and attrition; minority student and faculty access and equity; academic performance of student athletes; library usage; administrative and financial performance; facilities usage; public service; and research. Appendixes to this section include an assessment schedule from 1988-1992, goals for quality assessment, and the state legislation authorizing the assessment programs.

Layzell, D.T. (1996). Developments in state funding for higher education. In J.C. Smart (Ed.), *Higher education: Handbook of theory and research*. (Vol. XI). New York: Agathon Press.

Keywords: State financial support; budgeting/resource allocation; performance/incentive/performance-based funding; performance indicators/factors/criteria; performance budgeting; accountability/institutional autonomy; productivity/efficiency.

Daniel Layzell discusses the framework for state fund allocation, examines trends in state funding over time from four perspectives, outlines the current major policy issues regarding state funding, and suggests future areas of research on state funding for higher education. States allocate funds for higher education in three primary ways: through funding formulas, incrementally, and through "rational" allocation techniques such as performance budgeting. These methods are the means of achieving state goals in higher education. Currently, the following three major policy issues are at the forefront of discussion: accountability, productivity, and affordability. "Performance-based funding is the logical extension of a system of performance indicators, and it directly ties together accountability, performance, and funding levels" (p.163). The author foresees no broad-scale directional change in state funding of higher education in the future.

Layzell, D.T. (1998, March). Linking performance to funding outcomes for public institutions of higher education: The US experience. *European Journal of Education*, 33(1): 103-11.

Keywords: Performance indicators/factors/criteria; educational finance/economics; quality control/institutional quality; state HEIs/public HEIs; budgeting/resource allocation; state financial support; evaluation methods/measurement techniques; state HEIs/public HEIs.

ABSTRACT: Discussion of funding for public colleges and universities in the United States looks at different mechanisms for measuring institutional performance, recent experiences with performance indicators for purposes of funding and the pitfalls and limitations of their use, the current status of performance-based funding in public colleges, and implications for its continued use.

Layzell, D.T. (1999, April). Linking performance to funding outcomes at the state level for public institutions of higher education: Past, present, and future. *Research in Higher Education*, 40(2): 233-246.

Keywords: Performance indicators/factors/criteria; outcomes of education/college outcomes assessment; state financial support; state HEIs/public HEIs; statewide planning.

ABSTRACT: A discussion of the use of performance indicators and performance-based funding in state colleges and universities looks at the types of mechanisms used for measuring institutional performance, state experiences with performance indicators, their pitfalls and limitations, the current status of performance-based funding applications, difficulties in implementation, and future prospects

Layzell, D.T., & Caruthers, J.K. (1995). *Performance funding at the state level: Trends and prospects*. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, 20th, Orlando, FL, November 2-5.

Keywords: Performance/incentive/performance-based funding; state surveys; state financial support; performance indicators/factors/criteria; state programs/state standards; accountability/institutional autonomy; budgeting/resource allocation; policy formation/ public policy/educational policy; program effectiveness; state agencies for higher education; government-school relationship.

ABSTRACT: This paper reviews the concept of performance funding (PF) in governmental and higher education budgeting at the state level, reports the results of a recent national study of state-level PF for higher education, and assesses the likelihood that PF will become a permanent fixture in most states' approaches to budgeting for higher education. The study is based on a mail survey of 40 state higher education finance officers, which sought information on the status of PF in the respondents' states, the breadth of PF programs, program objectives, program history, program mechanics, performance measures and evaluation, and the respondents' observations on the effectiveness and future outlook for PF. It found that, despite the rhetoric from governors and state legislatures about the need for increased accountability for higher education, only eight of the states surveyed (20 percent) had PF in place, and that the majority had no current plans to implement PF for higher education. The survey did find that policy-makers were generally perceived by the respondents as viewing PF as an effective management tool. A copy of the survey form is included.

Lehmann, T., & Holtan, J.M. (1988, December). *Accounting for quality through assessment*. Proceedings of the Norstar Conference on Excellence in Education. Albany, NY: Rockefeller Foundation.

Keywords: Accountability/institutional autonomy; state HEIs/public HEIs; educational/ indicators/criteria/assessment; educational change/reforms; educational finance/economics; educational quality/instructional effectiveness; state agencies for higher education; state financial support; performance/incentive/performance-based funding.

ABSTRACT: Nine papers and associated remarks constituting the proceedings of the 1988 Norstar Conference concerning the assessment of performance in higher education, and two prefatory papers are presented. The prefatory papers are: (1) "A Context for Change: The Reform Movement in Higher Education" (Judith M. Holtan); and (2) "Models of Excellence and Approaches to Assessment" (Timothy Lehmann). The conference proceedings, under the rubric "Assessing Performance in Higher Education", include the following papers: (1) "Opening Remarks" (James W. Hall); (2) "Accountability for New York State Agencies" (Thea Hoeth); (3) "Academic Assessment: The Right Thing for the Right

Reason" (Joseph C. Burke); (4) "National Perspectives on Assessment" (Carol M. Boyer); (5) "Public Perceptions of Higher Education" (Edward B. Fiske); (6) "**The Tennessee Experience: Performance Funding**" (Homer S. Fisher); (7) "**The Tennessee Experience: The View from a Campus**" (Trudy W. Banta); (8) "The King's College Experience" (D. W. Farmer); and (9) "Accountability and the Recognition of Education as a Collective Value" (E. Thomas Moran).

Levin, B.H. (1998). *Community college mission: A '60s mission looking at a Y2K world*. Paper presented at the Annual Conference of the Southeastern Association for Community College Research, 27th, Pine Mountain, GA, August 2-5.

Keywords: Accountability/institutional autonomy; college administration/governance; long-range planning; community/two-year colleges; government-school relationship; politics of education.

ABSTRACT: Although the world has changed considerably in the past three decades, community colleges and their guiding missions have largely not adapted to changing conditions. College mission statements tend to be unfocused documents that provide overly broad goals. In the business world, the mission statements of effective companies are brief, crisp, and clear, while even governmental and religious agencies manage to develop mission statements that are more focused and succinct than those of community colleges. The questions for college officials, then, are why their mission statements are so unfocused and what benefits would occur if they were fixed. If vague mission statements are not seen as a significant problem, the use of the statement as a guide to college action is seriously called into question. Another question to address is why current college missions overlap so much with those of the 1960's, when so much has changed since then. Finally, college officials should consider the effects an unfocused mission statement might have on state officials seeking to implement stricter outcomes assessment and performance-based funding. An appendix provides a general education survey developed by the State Council of Higher Education for Virginia, illustrating the increasing emphasis of state officials on the rationale and structure of college programs.

Lindsay, A. (1994). *The impact of the Australian government's quality assurance program on institutional roles and management processes*. Paper presented at the Annual Forum of the Association for Institutional Research, 34th, New Orleans, LA, May 29-June 1.

Keywords: International perspective; Australia; outcomes of education/college outcomes assessment; educational finance/economics; government-school relationship; quality control/institutional quality; college administration/governance; program effectiveness/evaluation; incentives/rewards.

ABSTRACT: In Australia the Federal Government plays a dominant role in higher education funding. Changes to the role and structure of the higher education system in 1988 aligned the universities more closely with national economic goals and sent the message to institutions that they were expected to adopt a more managerial mode of operation in order to contribute to achievement of the goals. In 1991, a system-wide quality assurance program was developed in which a national committee makes judgments about the outcomes and quality assurance processes of universities and places them in "quality" groupings which attract various levels of "reward" funding. Analysis of the impact of this program on institutional governance and on institutional roles and relationships with government reveals that several factors have strengthened central managerial power at the expense of disciplinary and collegial power. These factors include the wide scope of the evaluation program, the strong institutional-level focus, the limited timescale of the process, and the importance of performance indicators and of external stakeholder judgments. Power has also shifted from institutions to the Federal government, as institutions are pressured to conform to the government's vision of higher education's role in order to receive good assessments and subsequent funding rewards.

Linke, R.D. (1992, July). Some principles for application of performance indicators in higher education. *Higher Education Management*, 4(2): 194-203.

Keywords: International perspective; Australia; performance indicators/factors/criteria; college administration/governance; evaluation methods/measurement techniques; quality control/institutional quality; budgeting/resource allocation; incentives/rewards.

ABSTRACT: Australia's recent experience with performance indicators for evaluation and funding of higher education institutions suggests principles concerning: selecting appropriate, relevant, and reliable indicators; providing expert judgment in interpretation of indicators; considering institutional context and priorities; providing incentives for good performance; and limiting funding adjustment to give opportunity for improvement.

Lucier, P. (1992, July). Performance indicators in higher education: Lowering the tension of the debate. *Higher Education Management*, 4(2): 204-214.

Keywords: International perspective; Canada; performance indicators/factors/criteria; college administration/governance; evaluation methods/measurement techniques; quality control/institutional quality; budgeting/resource allocation.

ABSTRACT: A Canadian public higher education official comments on the use of performance indicators for evaluating and funding higher education institutions. Focus is on putting the controversy over their use into perspective by narrowing the issues and arguments, clarifying them, and acknowledging inherent limitations of performance indicators.

Marcus, L.R., et al. (1983). *The path to excellence: Quality assurance in higher education*. ASHE-ERIC Higher Education Research Reports, No 1. FYI Executive .

Keywords: Accountability/institutional autonomy; educational quality/instructional effectiveness; government-school relationship; quality control/institutional quality; self-evaluation; accreditation/accreditation institutions; educational/indicators/criteria/ assessment; evaluation methods/measurement techniques; state financial support.

ABSTRACT: There is an increasing interest by government in accountability for higher education. Efforts such as performance budgeting, performance auditing, and state review of academic programs are becoming more common. Opponents of government involvement assert that regional accreditation reviews are sufficient to maintain quality standards. However, critics of the current accreditation process contend that it is an ingrown process in which denial of accreditation is virtually impossible. Some observers feel that the best way to guard against an increased state role in higher education is for the institutions themselves to strengthen their own evaluation activities. Self-evaluations should be comprehensive, include broad participation, and be designed to enhance program quality. Both quantitative and qualitative data should be included. The findings should be submitted to an external consultant for review. Conclusions should be made public so that the community can see that the institution is concerned about quality, that its efforts are worthy of public funding, and that state evaluators are unnecessary. This document includes a 17-item bibliography and an order form for related research reports available from the Association for Study of Higher Education including the full report upon which this is based.

Marcus, D., Cobb, E.B., & Shoenberg, R.E. (2000). *Lessons Learned from FIPSE Projects IV*. Washington, D.C.: Fund for the Improvement of Postsecondary Education.

Keywords: Academic achievement/educational improvement; performance/incentive/performance-based funding; program effectiveness/evaluation; state HEIs/public HEIs.

ABSTRACT: This volume summarizes projects funded by the Fund for the Improvement of Postsecondary Education, examining the various lessons learned. The 39 reports are organized in nine sections titled: (1) "Preface"; (2) "Access and Retention"; (3) "Improving Teaching and Learning"; (4) "Curriculum and Instruction"; (5) "General Education"; (6) "International Education"; (7) "Teacher Education"; (8) "**Performance Funding and Reporting in Colleges and Universities**"; and (9) "Disseminating Proven Reforms." Each project report describes its purpose, innovative features, evaluation and project impact, lessons learned, project continuation and dissemination, and contacts for further information. Overall, most projects were deemed successful. Lessons gleaned from the projects include the fact that holding students to high standards works; passionate, creative teaching is crucial; difficulties will arise and can be surmounted; and excellent work eventually brings recognition and reward.

Maryland State Higher Education Commission. (1998). *Performance accountability report: Maryland public colleges and universities, 1998*. Annapolis: The author.

Keywords: State perspective; Maryland; performance indicators/factors/criteria; accountability/institutional autonomy; state HEIs/public HEIs; budgeting/resource allocation; outcomes of education/college outcomes assessment; community/two-year colleges; long-range planning; self-evaluation; state agencies for higher education.

ABSTRACT: This report presents the mandated annual performance accountability reports of the 31 public colleges and universities in Maryland, as well as an overall analysis and recommendations of the Maryland Higher Education Commission. The reports are organized according to five categories of key performance indicators: quality, effectiveness, access, diversity, and efficiency/allocation of resources. Components of the report include: (1) an overview of the history and major features of the accountability process; (2) trend analyses of how well higher education is serving the needs of Maryland and how well the state is funding its public colleges and universities; (3) the assessment and recommendations of the Commission regarding the outcome of the year's accountability effort by the public campuses; (4) a short description prepared by each public institution on its progress toward meeting its benchmarks for the various indicators; and (5) the trend data and benchmarks for each indicator and each institution. Overall conclusions of the report were positive concerning efforts of institutions toward meeting benchmark indicators. The report offers two major recommendations: first, that the General Assembly hold hearings to identify areas of performance that are of concern; and, second, that the Commission be authorized to create a performance funding grant during the budget process. (Appendices contain: a list of indicators and definitions; guidelines for benchmarks; and an institutional performance accountability report format.)

Mayes, L.D. (1995, Summer). *Measuring community college effectiveness: The Tennessee model. Community College Review, 23(1): 13-21*

Keywords: State Perspective; Tennessee; institutional perspective; finance officers; performance/incentive/performance-based funding; community/two-year colleges; educational finance/economics; budgeting/resource allocation; program effectiveness/ evaluation; self-evaluation; outcomes of education/college outcomes assessment.

ABSTRACT: Presents an overview of the 10 standards currently assessed under Tennessee's performance funding model for 2-year colleges. Provides findings from a study of performance funding coordinators' perceptions of the standards at 14 public 2-year institutions. Indicates that coordinators generally believed that the current model provides good measures of the educational outcomes.

McKeown-Moak, M.P. (1999). *Financing higher education: An annual report from the states, 1999*. Tallahassee, FL: State Higher Education Executive Officers Association, MGT of America, Inc.

Keywords: Performance budgeting; educational finance/economics; state financial support; community/two-year colleges; state surveys; state HEIs/public HEIs.

ABSTRACT: This report summarizes trends in financing higher education in the United States and is based on various reports of state appropriations and a survey of state higher education finance officers. Among the highlights noted are: state appropriations to higher education reached \$52.8 billion in fiscal year 99, an increase of 6.5 percent over the previous year; higher education's share of state general fund budgets increased for the first time in over a decade; appropriations per student have recovered since 1993 and have returned to their 1978 levels (in constant dollars); undergraduate resident tuition and fees at public universities and community colleges rose 4.2 percent in 1998-99; in academic year 1998, an estimated total of \$60.5 billion in student financial aid was provided, an increase of 6 percent over 1997; 12 states have adopted some form of merit-based scholarship program; and 34 states have adopted some form of performance budgeting or performance funding. The report provides narrative analysis and data tables in the following areas: state appropriations, enrollment trends, pricing and financial aid trends, governance changes and performance funding, and emerging issues in 1999 legislative sessions.

McKeown-Moak, M.P. (2000). *Financing Higher Education in the New Century: The Second Annual Report from the States*. Tallahassee, FL: State Higher Education Executive Officers Association.

Keywords: Educational finance/economics; performance reporting; politics of education; state financial support; budgeting/resource allocation; policy formation/public policy/educational policy; government-school relationship.

ABSTRACT: This is the second in an annual series of reports that summarize financing trends affecting higher education. The report notes that state appropriations to higher education reached \$56.7 billion in fiscal year (FY) 2000, an increase of 7 percent over FY 1999, and the largest ever appropriated by states for higher education. The 1999 legislative sessions were marked by limitations on tuition increases and increases in the use of performance measures and other accountability requirements. Average levels of student indebtedness continued to increase, with loans comprising almost 60 percent of all student financial aid. Affordability, workforce preparation and accountability, **performance-based funding**, and reform of teacher preparation programs were the most important issues on state legislative agendas for 2000. The report details state appropriations trends at both the state and national levels, examines some regional changes, notes trends in pricing and student financial aid, and examines some other

issues, including changes in governance structures, performance-based budgeting, technology and distance education, and projected funding for FY 2001.

McKeown-Moak, M.P. (2001). *Financing higher education in the new century: The third annual report from the states*. Tallahassee, FL: State Higher Education Executive Officers Association.

Keywords: Educational finance/economics; state financial support; budgeting/resource allocation; accountability/institutional autonomy; government-school relationship.

ABSTRACT: This is the third in a series of annual reports that summarize financial trends affecting higher education. State appropriations to higher education reached \$60.6 billion in fiscal year (FY) 2001, an increase of 7.0% over FY 2000 in current funds, and a 5.0 constant dollar increase. However, total state general fund appropriations for all government sectors increased by 7.2% over FY 2000, marking the end of the era in which higher education appropriations outpaced the increase in total state general fund appropriations. Recent indications are that the economy is reaching a watershed, and that increased competition for state funds is likely in FY 2002. Total state appropriations to higher education declined to 12.8% of state budgets in FY 2001, after 2 years in a row of increases in higher education's share of state general fund budgets. A mix of issues was addresses in the 2000 legislative sessions. These included an increase in the use of performance measures and other accountability requirements and an interest in non-need-based financial aid programs. On the student aid front, average levels of student indebtedness at graduation continued to increase alarmingly, with loans comprising more than 60% of all student financial aid. Workforce preparation, accountability, performance-based funding, affordability, and reform of teacher preparation programs are the top issues facing higher education on state legislative agendas in 2001. These issues and increasing competition for state resources mean that 2001 will be a challenging legislative year for higher education officials.

Meyerson, J.W., & Massy, W.F. (Ed.). (1994). *Measuring institutional performance in higher education*. The Stanford Forum for Higher Education Futures. Princeton, NJ: Peterson's.

Keywords: Accountability/institutional autonomy; college administration/governance; quality control/institutional quality; performance indicators/factors/criteria; educational finance/economics; educational quality/instructional effectiveness; evaluation methods/measurement techniques; self-evaluation Total Quality Management.

ABSTRACT: This collection of seven essays from the Stanford Forum for Higher Education Futures focuses on how downsizing, quality management, and reengineering have are affecting higher education. An introductory paper, "Introduction: Change in Higher Education: Its Effect on Institutional Performance," (Joel W. Meyerson and Sandra L. Johnson) notes that measuring institutional performance involves new approaches to assessment, accountability, cost-effectiveness, and institutional adaptability. "Measuring Performance in Higher Education" (Robert H. Scott), stresses the need for measurement to be an integral part of the goal-setting process of any institution. "Measuring Performance: How Colleges and Universities Can Set Meaningful Goals and Be Accountable" (William F. Massy) offers ideas for evaluating quality and analyzing quantitative benchmark data to enhance accountability. Next, "The Self-Transformation of Corporations: A Lesson from Industry?" (Francis J. Guillard) looks at three objectives of business transformation: reframing of corporate issues, company restructuring, and organizational revitalization. The following paper "New Dangers in Old Traditions: The Reporting of Economic Performance in Colleges and Universities" (Gordon C. Winston) suggests that colleges and universities add global accounting to traditional fund accounting for increased clarity and completeness. "Benchmarking--How Good Is Good?" (Sean C. Rush) offers principles and guidelines for using benchmarking in higher education. The last paper, "New College Leaders: Strategic

Shortcuts for Short-Term Success," (Nancy J. Dunn and Linda S. Wilson) describes strategic actions and short-term changes made at Radcliffe College (Massachusetts).

Missouri Coordinating Board for Higher Education. (1998). *Blueprint for Missouri higher Education: 1998 Report on Progress Toward the Statewide Public Policy Initiatives and Goals for Missouri Higher Education*. Jefferson City: The author.

Keywords: State perspective; Missouri; academic achievement/educational improvement; outcomes of education/college outcomes assessment; accountability/institutional autonomy; state agencies for higher education; college administration/governance; program effectiveness/evaluation.

ABSTRACT: In 1992, Missouri's Coordinating Board for Higher Education (CBHE) adopted 24 higher education goals that would fulfill its vision statement and address needs identified in its task force report. Baseline data for these goals were gathered in 1993, and annual data have been collected through state and federal surveys completed by the state's public and independent colleges and universities. This report provides an update on the progress the state is making toward these goals, which include initiatives in the following areas: high school core curriculum, advanced placement opportunities; underrepresented groups and minority student participation and success; prospective school teachers; remedial education; enrollment at public four-year colleges and universities; admission categories; success rates of entering freshmen; geographic access to postsecondary technical education; student transfers; minority employment in Missouri higher education; degree program assessment; assessment in the major field of study; national recognition of graduate and professional programs; changes in funded positions by employment category; faculty workload; student financial aid; performance-based funding; instructional and research equipment facilities; accountability reporting; operating and capital funding; and governance. Appendices include a status on a state plan for a postsecondary instructional television network; and a review of academic programs by campus.

Missouri Coordinating Board for Higher Education. (1999). *Blueprint for Missouri higher education: 1999 report on progress toward the statewide public policy initiatives and goals for Missouri Higher education*. Jefferson City: The author.

Keywords: State perspective; Missouri; policy formation/public policy/educational policy; long-range planning; statewide planning; state HEIs/public HEIs.

ABSTRACT: This report updates progress made by the Missouri state's system of higher education toward the attainment of 24 goals established in 1992 and reaffirmed in 1996. Each goal statement includes an indication of its associated value (access, quality, efficiency) and notes if it is related to the Funding for Results initiative. Also provided for each goal is a brief history and analysis of its current status, often including charts and tables. The 24 goals address the following concerns: the recommended high school curriculum, advanced placement opportunities, underrepresented groups and minority student participation and success, prospective school teachers, remedial education, enrollment at public four-year colleges and universities, admissions recommendations by admission category, success rates of entering freshmen, geographic access to postsecondary technical education, student transfer, employment of minorities in Missouri higher education, degree program assessment, graduation rates, degree productivity from selected disciplines, assessment in the major field of study, national recognition of graduate and professional programs, changes in funded positions by employment category, faculty workload, student financial aid, performance-based funding recommendations, instructional and research equipment and facilities, accountability reports, operating and capital funding recommendations, and governance. Several appendices further amplify the report and an attachment summarizes campus teaching/learning improvement projects.

Missouri State Department of Higher Education. (2001). *Building one system: 2000 annual report*. Jefferson City: The author.

Keywords: State perspective; Missouri; educational finance/economics; performance/incentive/performance-based funding; state agencies for higher education.

ABSTRACT: This annual report describes the actions of the Missouri Coordinating Board for Higher Education and the activities of the Missouri higher education community. The "Blueprint" of the Coordinating Board has guided statewide planning for Missouri higher education. This report takes a final look at the Blueprint as Missouri moves into its new Continued Plan for Higher Education, a new strategic plan that will continue some of the initiatives of the Blueprint as it sets the proprieties for higher education in Missouri for the next several years. The strategic initiatives undertaken under the Blueprint examined in this report include: (1) the institutional review and enhancement process at individual institutions; (2) MOSTARS, which provides resources and assistance for postsecondary education to Missouri families, including administering financial aid programs; (3) technology-based delivery systems; (4) postsecondary technical education; (5) the Funding for Results initiative that is a results-oriented performance funding strategy; and (6) efforts to look to the future by the Missouri Commission on the Affordability of Higher Education, the Missouri K-16 Coalition, and the Knight Higher Education Collaborative/College and University Presidents Roundtables. Six appendixes discuss academic affairs, funding, legislation, statistics, statewide planning, and the proprietary school certification program. The report also lists public and independent colleges and universities in Missouri.

Mize, R.M. (1999). *Accountability measures: A comparison by type and state*. Sacramento: Community College League of California.

Keywords: Performance/incentive/performance-based funding; accountability/institutional autonomy; educational finance/economics; budgeting/resource allocation; community/two-year colleges; evaluation methods/measurement techniques; productivity/ efficiency; state financial support.

ABSTRACT: This paper provides a survey of accountability-related activities in states outside of California, summarizes the variables used, provides information on the advantages and disadvantages of various accountability systems, and suggests some policy recommendations that have been made in other states implementing performance-based funding. This report is based on the increasing focus on accountability within businesses and industries. Following a history of performance funding trends, the report differentiates between performance funding (or performance-based funding), which uses a formula to tie funding directly to specified indicators, and performance budgeting, which is more subjective and flexible in that it takes into account various areas of performance in determining an institution's overall appropriation. Four categories of performance funding indicators are presented: input indicators, process indicators, outputs, and outcomes. A list of the 10 most common performance measures for accountability is provided. These measures are: graduation rates, transfer rates, faculty workload/productivity, follow-up satisfaction surveys, amount of external or research funds received, remediation, pass rates on professional licensure exams, degrees awarded, placement data on graduates, total student credit hours, and number and percent of accredited programs. The report elaborates on the advantages and problems of performance-based funding. Finally, this paper provides several recommendations for implementing program budgeting.

Nedwek, B.P. (1996). Public policy and public trust: The use and misuse of performance indicators in higher education. In J.C. Smart (Ed.), *Higher education: Handbook of theory and research*. (Vol. XI). New York: Agathon Press.

Keywords: Performance indicators/factors/criteria; accountability/institutional autonomy; productivity/efficiency; quality control/institutional quality; educational/indicators/criteria/assessment; international perspective; policy formation/public policy/educational policy.

: This chapter explores the development and use of performance indicators, compares alternative designs, and analyzes policy and research implications. The author finds that the dominant taxonomy of indicators reflects a classic mechanistic view of organizations and that the linkage between inputs or resources and outcomes is little understood. The research literature provides the conceptual base for the following nine criteria: locus of control; degree of government involvement; focus of performance indicators; sources of quality variation; data selection; intended audiences, emphasis of use, impact on student learning; and relationship to mission. Nedwek describes six models to demonstrate a sample of performance indicator application in different contexts: the United Kingdom, Missouri, the State University of New York, Canada, Australia, and Netherlands. He concludes that performance indicators represent the latest tool in connecting quality with accountability.

Newman, F. (1987). *Choosing quality: Reducing conflict between the state and the university*. Denver, CO: Education Commission of the States.

Keywords: Policy formation/public policy/educational policy; government-school relationship; politics of education; state financial support; college administration/ governance; educational quality/instructional effectiveness; incentives/rewards; state HEIs/public HEIs.

ABSTRACT: This discussion of the state/university relationship addresses the ways in which states and universities can achieve relationships that are constructive for both parties. The following chapters are presented: (1) "Choosing Quality" (includes policy, interest in quality, university role, trends in state/university relationships, and resources); (2) "The Nature of Appropriate Policy Versus Inappropriate Intrusion" (includes bureaucratic, ideological and political intrusion and the functioning of the university); (3) "The Causes of Inappropriate Intrusion" (includes growth of state involvement and of higher education, quality mandates, missions, prestige and power, geography, politics, governing boards, and multicampus systems); (4) "Creating a Positive Climate" (includes cutting back bureaucracy, incentive funding, trust and the governance structure); and (5) "What Is It That Matters?" (includes aspiration, tradition, leadership, and university, board, system and state roles and responsibilities). Appendices provide information on the state universities included in the study, recommendations to improve trustee selection, and two views of state university governance.

New Mexico Commission on Higher Education..(1997). *Higher education funding recommendations. 1989-99*. Santa Fe, NM: The author.

Keywords: State perspective; New Mexico; budgeting/resource allocation; educational finance/economics; state HEIs/public HEIs; statewide planning; accountability/institutional autonomy; outcomes of education/college outcomes assessment; community/two-year colleges; educational improvement; long-range planning.

ABSTRACT: This report presents the recommendations of the New Mexico Commission on Higher Education for funding public institutions of higher education in fiscal year 1998-99. An executive notes the recommendations' four key components: (1) a \$28.7 million overall increase in higher education funding; (2) a commitment by institutions and the Commission to implement clear accountability

measures; (3) a commitment by the institutions and the Commission to implement performance-based funding measures and to aggressively address deficiencies in retention rates, graduation rates, and quality assessments; and (4) a commitment by the institutions and the Commission to work through an Excellence in Higher Education Investment Fund to respond rapidly to specific state-level issues. The report presents six specific funding recommendations in order of priority, including base funding, compensation increases, and equipment replacement. An additional 14 recommendations that answer other needs are also listed. After an overview of the recommendations, tables present detailed financial data for instructional and general funding presented separately for four-year and two-year institutions, for the equipment replacement formula, and for the building renewal and replacement formula. Tables also detail financial recommendations for special schools: medical, military, and for the deaf and visually handicapped.

Niklasson, L. (1996, October). Game-like regulation of universities: Will the new regulatory framework for higher education in Sweden work? *Higher Education*, 32(3): 267-282.

Keywords: International perspective; Sweden; performance/incentive/performance-based funding; government-school relationship; policy formation/public policy/educational policy; educational change/reforms; budgeting/resource allocation.

ABSTRACT: Sweden's newly deregulated university system, characterized by increased privatization and performance-based funding, is compared with a model of "responsive regulation" characterized by a cooperative regulatory relationship. Developments and actions during the first few years of reform are also analyzed in this context. Suggestions for improvement of the new system are made.

Ohio Board of Regents. (1994). *The high performance campus—Building the campus of the 21st Century: A new funding model for institutional stability, performance and change for the future.* Columbus: The author.

Keywords: State perspective; Ohio; budgeting/resource allocation; educational finance/economics; state financial support; statewide planning; community/two-year colleges; state HEIs/public HEIs.

ABSTRACT: In an effort to improve the effectiveness of the state's two-year colleges and universities, the Ohio Board of Regents has proposed the establishment of a three-part funding system. The first element would be a foundation of state support based on campus enrollments and costs to provide basic budgetary stability. The second element would link a significant part of new state support to improved campus performance to ensure greater accountability for each school's achievement of its individual mission. The final element would provide incentives for change through new funding for innovation and technology. The first step in implementing this plan is to ensure that each campus has an agreed-upon functional mission statement, while the next step is to link performance to subsidy funding. If the funding pool is set at 2.5% of the instructional subsidy appropriation, then each campus would be eligible to receive additional performance-related funding equal to as much as 5% of its instructional subsidy. For example, if a university campus has 3 goals, and at the end of 2 years performance indicators show substantial progress in achieving 2 of the goals, the campus might be permitted to earn 67% of the total pool of performance funds available. The Regents' plan does not seek a restoration of funding simply to support past levels of spending, but explicitly ties funding to performance and innovation to achieve the concept of the high performance campus.

Patrick, W.J., & Stanley, E.C. (1998, February). Teaching and research quality indicators and the shaping of higher education. *Research in Higher Education*, 39(1): 19-41.

Keywords: International perspective; United Kingdom; performance indicators/factors/ criteria; educational quality/instructional effectiveness; evaluation methods/measurement techniques; quality control/institutional quality; policy formation/public policy/educational policy; budgeting/resource allocation; educational quality/instructional effectiveness.

ABSTRACT: Research and teaching quality ratings have become established in the United Kingdom, influencing the level of government funding provided to higher education institutions. The correlation between the two indicators, and possible consequences of policies that reshape the higher education sector by concentrating research resources in a limited number of institutions, are considered. Comparisons are made with the United States.

Peterson, M.W., et al. (1997, Winter). *State-level performance budgeting*. *New Directions for Institutional Research*, No 16, *Increasing the Public Accountability of Higher Education*, 4(4): 1-34.

Keywords: State perspective; performance budgeting; budgeting/resource allocation; accountability/institutional autonomy; performance indicators/factors/criteria; college administration/governance; community/two-year colleges; educational finance/economics; institutional research; outcomes of education/college outcomes assessment; program budgeting.

ABSTRACT: The case studies of performance budgeting for higher education by Hawaii and Washington illustrate the issues and obstacles involved in new approaches to accountability. Issues covered: development of performance measures, aggregation and analysis, quantitative v qualitative measures, performance measures and responsibility accounting, and legislative acceptance.

Pfeiffer, J.J. (1998, Winter). From performance reporting to performance-based funding: Florida's experiences in workforce development performance measurement. *New Directions for Community Colleges*, 104: 17-28.

Keywords: State perspective; Florida; educational/indicators/criteria/assessment; educational finance/economics; performance indicators/factors/criteria; state financial support; accountability/institutional autonomy; community/two-year colleges; policy formation/public policy/educational policy; outcomes of education/college outcomes assessment.

ABSTRACT: Discusses accountability in Florida colleges, specifically the movement toward providing state funds to public higher education institutions based on student outputs and outcome--including post-graduation earnings--instead of full-time equivalency enrollment data. Describes several related legislative policies, including the Workforce Florida Act (1996), Performance-Based Incentive Funding, and S.B. 1688 Workforce Education Program Fund.

Pickens, W.H. (1982, December). *Performance funding in higher education: Panacea or peril?* Paper presented at a Conference on Survival in the 1980's: Quality, Mission and Financing Options, Tucson, AZ.

Keywords: State perspective; Tennessee; performance budgeting; budgeting/resource allocation; educational/indicators/criteria/assessment; state financial support; outcomes of education/college outcomes assessment; educational finance/economics; evaluation methods/measurement techniques; educational quality/instructional effectiveness.

ABSTRACT: The use of performance funding, which provides institutions with income for educational results, was tested in Tennessee. Traditionally, the budget has been separated from performance evaluation, and state formulas have evolved from the need for funding to be objective, comparable, and predictable. The Performance Funding Project in Tennessee, which was started in 1974 by the Tennessee Higher Education Commission, was designed to accomplish the following: to sharpen institutional mission, to complement the enrollment-based formula, to objectively measure educational outcomes, to measure the educational "value added" by each institution, and to promote institutional excellence without competition. After establishing pilot projects and developing assessment measures, the Tennessee Commission established the performance concept within the state's budget formulas. To provide a profile for funding, an Instructional Evaluation Schedule was developed based on the following variables: program accreditation; program field evaluation, institution-wide education outcomes (general education outcomes, placements in vocational fields); instructional improvement based on referent group surveys (students, alumni, community leaders); and planning for instructional program improvement.

Pike, G.R. (1988). *A comparison of the College Outcome Measures Program (COMP) exam and the ETS Academic Profile*. Knoxville: Tennessee University, Learning Research Center.

Keywords: Outcomes of education/college outcomes assessment; academic achievement/educational improvement; educational/indicators/criteria/assessment; outcomes of education/college outcomes assessment.

ABSTRACT: Two of the most popular assessment instruments for measuring college student educational outcomes are the College Outcome Measures Program (COMP) of the American College Testing Program (1987) and the Academic Profile of the Educational Testing Service (ETS). Characteristics of these tests were compared, and the sensitivity of each test to students' educational experiences was evaluated. In the fall and winter quarters of the 1987-88 school year, seniors at the University of Tennessee (Knoxville) took one of these tests. Overall, more seniors took the COMP (n=1,261) than the Academic Profile (n=810). Thirty-eight seniors took both examinations. The results indicate that both tests are unidimensional measures that are not particularly sensitive to students' general education experiences. Both tests represented measures of individual differences and were powerful measures of academic ability. Because of their sensitivity to individual differences, both the COMP and the Academic Profile are not considered appropriate for evaluating the impact of general education programs. Institutions would not be well-advised to use the subscales of either examination to evaluate the components of a curriculum. Six tables give study results.

Rabineau, L. (1978). *The importance of leadership for regionalism: Some suggestions for action.* Denver, CO: State Higher Education Executive Officers Association. Paper presented at a Seminar for State Leaders in Postsecondary Education, Washington, DC, June 1978.

Keywords: Performance/incentive/performance-based funding; college administration/governance; state agencies for higher education.

ABSTRACT: The connections between regional organization and regional leadership in postsecondary education are considered. The role of leadership, various styles of leadership, and strategies for implementing the development of leadership are discussed. Leadership qualities demanded by regionalism that are different from leadership qualities needed in other areas of higher education and in other fields are also considered. In the report "Regionalism in American Postsecondary Education: Concepts and Practices," S. V. Martorana and Lawrence A. Nespoli suggest three strategies for organizations: the authoritative/coercive tactic, **the incentive funding tactic**, and the programmatic/opportunistic tactic (a combination of the first two). In the third model where decisive authority is used in circumstances meriting action and incentives are used when less aggression is required, flexibility and good judgment are required of the leader. Harry Levinson's "The Exceptional Executive" identifies the specific types of leaders: shaman, who uses personal powers; priest, who claims power through the office; elected leader, who goes through some time of preparation to achieve the position; missionary, whose mission involves a utopian view of the future and a program to achieve reforms; and mystic healer, an altruist and creator who seeks to find causes. Three areas of knowledge that are needed to accomplish the important mission of achieving regionalism are as follows: knowledge of higher education, knowledge of government, and knowledge of human relations. Other qualities that are necessary are flexibility of character, facility for negotiation, and the ability to look to the future. Strategies for developing leadership include special institute programs run by universities or agencies.

Rabuzzi, D.A., & Carson, R. (2001). *Postsecondary education reform in Kentucky. Issue Brief.* Frankfort: Kentucky Council on Postsecondary Education.

Keywords: State perspective; Kentucky; educational change/reforms; policy formation/ public policy/educational policy.

ABSTRACT: As governors and states seek to improve the responsiveness of postsecondary education, Kentucky's experience provides a powerful example of a systemic reform strategy. In 1997, Kentucky's governor proposed, and the General Assembly approved, the Postsecondary Education Improvement Act (House Bill 1), which reshaped the state system of public postsecondary education. Kentucky's example represents a promising practice for states looking for ways to improve the responsiveness and performance of their postsecondary education systems. The Kentucky reform effort created and reconstituted postsecondary education structures that are more amenable to change and focused on customers, the state's students, families, employers, and citizens. The reform sets goals and provides incentive funding for institutions that collectively improve state prosperity. One element of the reform is sustained gubernatorial and legislative support for a long-term change agenda. The reform Act also has established a virtual university and library to help meet statewide educational goals.

Reindl, T. (1998). *State issues digest. First Edition.* Washington, DC: American Association of State Colleges and Universities.

Keywords: Policy formation/public policy/educational policy; state financial support; state HEIs/public HEIs; government-school relationship; performance/incentive/performance-based funding; performance budgeting.

ABSTRACT: This report is intended to provide current information and integrated analysis of state-level higher education policy developments. Part 1 considers state funding support in the following categories: changing rules, effects of changing rules, survival in a changing game, and the growth industry of higher education. Part 2 examines issues concerned with college costs, including the existence of an affordability crisis, internal cost factors for colleges and universities, external cost factors for colleges and universities, impact on students and the federal role, strategies for cost containment, and real issues such as who should pay for public higher education and what are the responsibilities of higher education's stakeholders regarding affordability. Part 3 examines issues related to students, including the changing American college student; challenges of change; and policy implications, such as accountability reporting and **performance-based funding and budgeting**. Data are presented in 20 tables and charts. A list of related Internet resources is attached.

Ruppert, S.S. (1995, Fall). Roots and realities of state-level performance indicators systems. In G.H. Gaither (Ed.), *Assessing performance in an age of accountability: Case studies.* New Directions for Higher Education, No 91 (11-23). San Francisco: Jossey-Bass.

Keywords: State perspective; performance indicators/factors/criteria; state programs/state standards; program effectiveness/evaluation; accountability/institutional autonomy; policy formation/public policy/educational policy; educational quality/instructional effectiveness; college administration/governance.

ABSTRACT: The state policy implications of using higher education performance indicators for accountability purposes are examined, based on the experiences of 10 case study states (Colorado, Florida, Illinois, Kentucky, New York, South Carolina, Tennessee, Texas, Virginia, Wisconsin) and others that have initiated such efforts. Specific issues that must be addressed are identified. The study reveals commonalities and differences in state efforts to systematically assess performance.

Russell, A.B. (1998). *Statewide college admissions, student preparation, and remediation policies and programs.* of a 1997 SHEEO Survey. Iowa City, IA: State Higher Education Executive Officers Association.; American Coll. Testing Program.

Keywords: Policy formation/public policy/educational policy; state programs/state standards; state surveys; program effectiveness/evaluation; program development/ implementation; state programs/state standards.

ABSTRACT: This report presents findings of a nationwide study of student transitions from secondary to postsecondary education that is based on a survey of state higher education agencies and site visits to six states. The report finds a growing role for state higher education agencies in setting minimum college admissions requirements, coexistence of traditional admissions criteria with newer competency-based requirements, and expanding collaboration between postsecondary systems and the K-12 sector in program development. After an introduction, statewide admissions policies are addressed, including types of statewide admissions requirements; their perceived success; competency-based admissions; and open-door, conditional, and other admissions policies. The following section summarizes data on types of student preparation programs and their perceived success. Next, statewide remediation policies are

analyzed in terms of types of policies and their perceived success. The final section identifies other state-level student transition issues, such as use of incentive funding and competitive grants. Among eight appendices are: the survey instrument and summaries of statewide college admissions policies; and state data on open door, conditional, and other admissions policies; on programs to improve student preparation and remediation projects; **on use of incentive funding to promote institutional change**; and on collection and research efforts.

Schmidt, P. (1998, July 24). States increasingly link budgets to performance: Study finds that lawmakers view such policies as key to insuring that colleges meet public needs. *The Chronicle of Higher Education*. Retrieved February 16, 2004, from <http://chronicle.com/prm/che-data/articles.dir/art-44.dir/issue-46.dir/46a02601.htm>

Keywords: Performance/incentive/performance-based funding; performance budgeting; state surveys; statewide planning; state financial support; state programs/state standards.

This article summarizes the findings of the recent survey conducted by the Public Higher Education Program at the Rockefeller Institute of Government, in Albany, N.Y. Its report says the results "show that coordinating boards and state officials are increasingly accepting the concept that results should somehow count when allocating resources to public colleges and universities." However, it is still too soon to tell whether funding for results is a fad or a trend. The report predicts that most future programs will involve some combination of the two spending approaches: performance funding and performance budgeting.

Schmidt, P. (1999, July 2). A state transforms colleges with "performance funding." *Chronicle of Higher Education*, 45(43): A26-A28.

Keywords: Performance/incentive/performance-based funding; state perspective; South Carolina; quality control/institutional quality; state HEIs/public HEIs; policy formation/ public policy/educational policy; budgeting/resource allocation; state financial support; accountability/institutional autonomy; educational quality/instructional effectiveness.

ABSTRACT: South Carolina has instituted a system of accountability linked to funding for its public colleges; it includes six measures of faculty, six measures of graduate preparedness to succeed, and five measures of instructional quality. The practice has transformed the way the institution operates, but some educators question the fairness and objectivity of the new system.

Schmidt, P. (2002, February 22). Missouri's financing system is praised, but more for longevity than for results. *The Chronicle of Higher Education*. Retrieved February 16, 2004, from <http://chronicle.com/prm/weekly/v48/i24/24a02101.htm>

Keywords: State perspective; Missouri; state programs/state standards; performance indicators/factors/criteria; academic achievement/educational improvement.

Peter Schmidt argues that the performance-based funding program in Missouri, called Funding for Results, is widely regarded as a model, but not because it has produced any demonstrable improvements. Unlike many other states, Missouri's system was developed by the Coordinating Board, in consultation with HEIs administrators. The author describes the indicators used and funding scheme employed in the state. He states that the program has inspired HEIs to monitor the quality and progress of students; however, in many areas HEIs have made only marginal improvement or even lost ground. Moreover, it is difficult to attribute the improvements to the existence of performance incentives.

Schmidt, P. (2002, February 22). Most states tie aid to performance, despite little proof that it works. *The Chronicle of Higher Education*. Retrieved February 16, 2004, from <http://chronicle.com/prm/weekly/v48/i24/24a02001.htm>

Keywords: Performance/incentive/performance-based funding; critique of performance assessment approaches;

This article summarizes the arguments of the opponents and proponents of performance-based financing that were aired at a national conference on the subject. The author offers the following critical points. First, few of the programs have led to the promised salient improvements in education and in increase in state support for the well-performing HEIs. Second, most of the systems have created additional levels of bureaucracy. Third, state agencies found it difficult to devise policies and procedures for measuring and tracking institutional performance. Fourth, performance-based systems are imposed on campuses, regardless of their attitudes. In spite of the above, such financing systems are going to remain part of the educational landscape. Referring to some speakers' views, Schmidt summarizes, "The true power of performance-based financing systems may not lie in the impact on campus budgets. Instead, it is the threat of bad publicity and embarrassment associated with poor reviews that appears to motivate college presidents and other campus leaders" (p.4). Also, performance-based financing systems have had no impact on how public colleges distribute funds internally and they tend to be invisible below the level of senior administrators. According to one participant, performance-based financing is imbued with the air of science and precision that is not justified.

Segers, M., & Dochy, F. (1996). Quality assurance in higher education: Theoretical considerations and empirical evidence. *Studies in Educational Evaluation*, 22(2): 115-137.

Keywords: Performance indicators/factors/criteria; international perspective; Netherlands; Quality control/institutional quality; program effectiveness/evaluation.

ABSTRACT: A study on the use of performance indicators within a quality assurance system in higher education in the Netherlands is reported. The case study of seven departments of economics shows the attention paid to structural aspects of the curriculum instead of the declared object of the program evaluation.

Serban, A.M. (1998, Spring). Opinions and attitudes of states and campus policymakers. In J.C. Burke & A.M. Serban (Eds.), *Performance funding for public higher education: Fad or trend? New Directions for Institutional Research*, No.97: 69-84.

Keywords: Performance/incentive/performance-based funding; state perspective; state HEIs/public HEIs; policy formation/public policy/educational policy; budgeting/resource allocation; state financial support; state surveys; finance officers; government-school relationship.

ABSTRACT: A 1996 survey of state policymakers and public college representatives in states with performance funding (Arkansas, Colorado, Florida, Kentucky, Minnesota, Missouri, Ohio, South Carolina, Tennessee) is presented. Although differences exist across states in a number of areas, findings challenge the assumption of an irreconcilable gap between policymakers and campus leaders regarding statewide policy addressing higher education quality and accountability.

Serban, A.M. (1998, Spring). Performance funding criteria, levels, and methods. In J.C. Burke & A.M. Serban (Eds.), *Performance funding for public higher education: Fad or trend?* New Directions for Institutional Research, No.97: 61-67.

Keywords: Performance/incentive/performance-based funding; policy formation/public policy/educational policy; quality control/institutional quality; state HEIs/public HEIs; budgeting/resource allocation; state financial support; evaluation methods/measurement techniques; program development/implementation.

ABSTRACT: Although selecting goals and indicators is the most challenging task of performance funding, implementation requires development of other critical elements: success criteria to measure institutional performance; indicator weights for percent of funding allocated to each indicator; an allocation method for setting the relationship between performance funding and state and institutional budgets; funding levels for amounts allocated for performance.

Serban, A.M. (1998, Spring). Precursors of performance funding. In J.C. Burke & A.M. Serban (Eds.), *Performance funding for public higher education: Fad or trend?* New Directions for Institutional Research, No.97: 15-24.

Keywords: Performance/incentive/performance-based funding; accountability/institutional autonomy; budgeting/resource allocation; state HEIs/public HEIs; educational change/ reforms; policy formation/public policy/educational policy; state financial support.

ABSTRACT: Performance funding reemerged in the 1990s as a state budgetary method for complementing or replacing other funding strategies for public colleges to better promote and respond to specific policy concerns. It has the potential to correct some of the apparent flaws in traditional budgeting but is easier to define than to put into operation.

Serban, A.M. (2000, May 21-24). *Newcomers to performance funding: A comparison of California's Partnership for Excellence to other performance funding programs.* Paper presented at the Annual Forum of the Association for Institutional Research, 40th, Cincinnati, OH.

Keywords: Performance/incentive/performance-based funding; state perspective; performance indicators/factors/criteria; educational finance/economics; community/two-year colleges; budgeting/resource allocation; state HEIs/public HEIs; accountability/ institutional autonomy; educational/indicators/criteria/assessment.

ABSTRACT: This study provides a brief overview of the current status of performance funding programs around the country, and compares California's Partnership for Excellence for Community Colleges with programs applicable to two-year institutions in five other states: Florida, Illinois, Missouri, South Carolina, and Tennessee. The comparative analysis follows the critical components of any performance funding program: purpose(s) of the program, performance indicators, indicator weights, funding levels, allocation methods, and success criteria. It also discusses the advantages and disadvantages of Partnership for Excellence as compared with the other five programs. The use of performance as a factor in funding public higher education institutions takes one of two forms: performance funding ties specific dollar amounts to measured institutional results on each of the designated indicators; performance budgeting allows governors and legislators to "consider" campus performance as one factor in determining the total allocation for an institution. In 1999, 30 states were using either one or both of these approaches. California's Partnership for Excellence (PFE) program includes five major goals: degrees, transfers, course completion, remedial education, and workforce development. For each indicator under the five goals, the state considers the 1995-96 data as baseline

and provides targets to be achieved by the 107 community colleges by 2005-2006. Appended are the performance funding categories for two-year institutions in California, Florida, Illinois, Missouri, South Carolina, and Tennessee.

Seppanen, L. (1998). *Performance funding on the bleeding edge: No improvement, no funding.* Paper presented at the Annual Forum of the Association for Institutional Research, 38th, Minneapolis, MN, May 17-20.

Keywords: Performance/incentive/performance-based funding; state perspective; Washington; educational finance/economics; performance indicators/factors/criteria; community/two-year colleges; evaluation methods/measurement techniques; policy formation/public policy/educational policy; state financial support; state HEIs/public HEIs.

ABSTRACT: This paper discusses policy issues faced by two-year colleges in the state of Washington during the first year of implementation of performance funding. Four key policy questions were reviewed: (1) the reward versus entitlement paradigm shift, which forces educators to alter expectations about "entitlement" to higher education funding and accept allocation based on performance; (2) state versus local priorities that can cause conflicts between state-level approaches to performance and autonomy at the college or district level; (3) whether performance funding motivates colleges to improve performance; and (4) what happens when performance funding results in reallocation of resources away from non-performing institutions. In Washington state several practical difficulties were encountered in designing the performance funding system for the state's community and technical colleges. They included complexity, timeliness problems, and the problems inherent in a funding system based on unstable, quantitative indicators. Despite these problems, the first year of performance funding resulted in new understandings of student development and highlighted areas of the system that needed improvement. An excerpt from a report on performance-based funding by Brenda Norman Albright focusing on strategies for using performance measures and outlining key principles is appended.

Shaw, T.A. (2000). *An evaluation of Tennessee's performance funding policy at Walters State Community College (Doctoral Dissertation, University of Tennessee).*

Keywords: Performance/incentive/performance-based funding; state perspective; Tennessee; institutional perspective; educational finance/ economics; accountability/ institutional autonomy; budgeting/resource allocation; community/two-year colleges; state financial support; state programs/state standards.

ABSTRACT: Walters State Community College (WSCC) (Tennessee), founded in 1970, began participating in Tennessee's Performance Funding Project in 1979. Changes made in the state funding formula in 1979 were intended to provide an impetus for improving the quality of education on Tennessee's college campuses. The Tennessee Higher Education Commission (THEC) developed the program in order to explore the feasibility of allocating a portion of the state budget for public institutions, based on evidence that faculty and administrators were collecting information about student performance and using that information to improve programs and services. Because the funding policy emerged early in the history of WSCC, it has been an active part of the college's development. This study shows the effects of the funding over the past 20 years at WSCC. The author employed the case study method because of its value in exploring the WSCC culture. Sources of information include documents, interviews, and observations. Of the 31 study participants, the author found that slightly over 30% (11) would continue funding policies without changes; an equal number would continue funding policies, but with modifications; one respondent would discontinue the program; and eight respondents did not answer this question or were not sure. Research instruments appended.

Sizer, J. (1992, July). Performance indicators in government-higher institutions relationships: Lessons for government. *Higher Education Management*, 4(2): 156-163.

Keywords: Performance indicators/factors/criteria; performance reporting; international perspective; international education; Europe; college administration/governance; evaluation methods/measurement techniques; government-school relationship; quality control/institutional quality; budgeting/resource allocation.

ABSTRACT: A discussion of the use of performance indicators for evaluation and funding of higher education institutions by governments offers 10 lessons for governments and funding agencies, drawn from a study of the role played by performance indicators in the systems of Denmark, the United Kingdom, the Netherlands, Norway, and Sweden.

Sizer, J., Spee, A., & Bormans, R. (1992, Sep). The role of performance indicators in higher education. *Higher Education*, 24(2): 133-155.

Keywords: Performance indicators/factors/criteria; performance reporting; international perspective; Europe; evaluation methods/measurement techniques; government-school relationship; quality control/institutional quality; politics of education; budgeting/resource allocation; outcomes of education/college outcomes assessment; program effectiveness/ evaluation; educational finance/economics.

ABSTRACT: Discussion of performance indicators' use in government-institutional relationships and funding decisions for higher education institutions draws on experiences of five countries (Denmark, Netherlands, Norway, Sweden, United Kingdom). Roles of political culture, educational funding system, and quality assessment procedures used for resource allocation are considered. Ten principles for funding agencies are offered.

South Carolina Commission on Higher Education. (1997). *Performance funding: A report of the commission on higher education to the General Assembly*. Special Report No 4. Columbia: The author.

Keywords: State perspective; South Carolina; performance indicators/factors/criteria; state financial support; accountability/institutional autonomy; outcomes of education/ college outcomes assessment; educational/indicators/ criteria/assessment; evaluation methods/measurement techniques; performance-based assessment; program effectiveness/ evaluation; state programs/state standards.

ABSTRACT: This progress report, as required by Act 359 of the South Carolina General Assembly, describes activities of a consortium of business and academic leaders toward development of a performance-based funding plan based on 37 performance indicators for public institutions of higher education in the state. Briefly summarized are the status of: measures and definitions, indicators, development of performance funding methodology, submission of regulations under the Administrative Procedures Act, and annual review and reporting to the General Assembly. In the first phase three task forces developed measures, definitions, and methods of reporting for the indicators. Attachments to the report include: a list of the Commission on Higher Education task force members; a list of sector committee members; and the measures and definitions of each of the 37 performance factors developed, including dates on which measurement data will be available. These indicators address the broad areas of: (1) mission focus, (2) quality of faculty, (3) instructional quality, (4) institutional cooperation and collaboration, (5) administrative efficiency, (6) entrance requirements, (7) graduates' achievements, (8) user-friendliness of institution, and (9) research funding.

Spee, A., & Bormans, R. (1992, July). Performance indicators in government-institutional relations: The conceptual framework. *Higher Education Management*, 4(2): 139-155.

Keywords: Performance indicators/factors/criteria; outcomes of education/college outcomes assessment; evaluation methods/measurement techniques; government-school relationship; quality control/institutional quality; international perspective; international education; evaluation methods/measurement techniques; budgeting/resource allocation.

ABSTRACT: Discussion of performance indicators, used for evaluation and funding of higher education institutions by some governments, looks at what is meant by the term and their role in government-institutional relations. A series of propositions for their definition and use are offered, with supporting information drawn from the experiences of different countries

Spinetta, K. (Ed.) (1997). *Parameters: Newsletter of the National Council for Research and Planning, 1997*. Washington, D.C.: American Association of Community and Junior Colleges, National Council for Research and Planning. Available at <http://www.nmsu.edu/~NCRP/epar.htm>

Keywords: Performance/incentive/performance-based funding; community/two-year colleges; educational finance/economics; educational quality/instructional effectiveness.

ABSTRACT: These two newsletters for 1997 highlight the following topics and issues. The July issue reports that community and technical colleges are moving to performance funding as a result of the 1997 Washington state legislature including a performance evaluation proviso for all public higher education institutions. Another article is featured on data mining, a process of extracting unknown and comprehensible information from large databases in order to make decisions, is of increasing interest to the educational community. Other topics on empowering research and distance education in Oregon are also covered. In the November issue, the front-page article discusses the learning revolution by which the learner and goals of learning are placed first. The article is followed by procedural recommendations and discussion questions. Information on workforce training is also mentioned and advertised as a sound and worthwhile investment. The Association for Institutional Research's (AIR) 1998 Grant Program is announced and detailed. Both newsletters also highlight regional news and messages from the president.

Stanley, E.C., & Patrick, W.J. (1997). *Teaching and research quality indicators and the shaping of higher education*. Paper presented at the Annual Forum of the Association for Institutional Research, 37th, Orlando, FL, May 18-21.

Keywords: International perspective; United-Kingdom; accreditation/accreditation institutions; educational quality/instructional effectiveness; academic achievement/ educational improvement; outcomes of education/college outcomes assessment; quality control/institutional quality; government-school relationship.

ABSTRACT: Two important sets of performance indicators for institutions of higher education have become established in the United Kingdom: research quality ratings and teaching quality ratings. The research quality ratings and, to a lesser extent, the teaching quality ratings influence the level of government funding provided to higher education institutions. This paper considers the correlations between the two ratings and the possible consequences of policies which reshape the higher education sector by concentrating research resources in a limited number of institutions. Comparisons are made between quality assurance/assessment approaches in the United Kingdom and the United States, finding that U.S. higher education is much larger, more heterogeneous and has less government control than U.K. higher education. While the U.S. system of colleges and universities is generally unranked (by those responsible for accreditation), the UK system includes rankings. Use of various analytical

approaches to compare teaching and research ratings for both systems concluded that it remains unclear whether the measurement standards will lead to improvements in teaching and research.

Stein, R.B., & Fajen, A.L. (1995, Fall). Missouri's funding for results initiative. *New Directions for Higher Education*, 91: 77-90.

Keywords: State perspective; Missouri; performance indicators/factors/criteria; outcomes of education/college outcomes assessment; program effectiveness/evaluation; evaluation methods/measurement techniques accountability/institutional autonomy; policy formation/ public policy/ educational policy; state programs/state standards; statewide planning.

ABSTRACT: Missouri's two-tiered higher education funding program addresses state-level accountability demands while rewarding campus-level improvements in teaching and learning. The context and evolution of the program are described, characteristics of the state-level and campus-level planning efforts are outlined, and issues in implementation and future planning are discussed.

Tennessee Higher Education Commission. (1977). *Allocation of state funds on a performance criterion: The performance funding project. Status Report.* Nashville: The author.

Keywords: State perspective; Tennessee; Tennessee Higher Education Commission; performance/incentive/performance-based funding; accountability/institutional autonomy; performance indicators/factors/criteria; state financial support; state HEIs/public HEIs; statewide planning; educational finance/economics; state agencies for higher education.

ABSTRACT: Sponsored by the Tennessee Higher Education Commission (THEC), a statewide coordinating agency for higher education, the Performance Funding Project is a developmental effort now in its fourth year. The purpose of the project is to explore the feasibility of allocating some portion of state funds to public colleges and universities on a performance criterion as compared to an enrollment criterion. Grants from four foundations provide a \$555,000 budget for the project. This is a statewide partnership effort involving not only the Commission but the two governing boards and 11 of their campuses. Campus-based pilot projects at 11 institutions have agreed to identify goals reflective of their instructional mission, to identify performance indicators that might associate with those goals, and to acquire data on those indicators. This report describes the project's procedures and its proposed outcome of bridging the gap between public accountability and institutional autonomy. Appended are: a description of the THEC funding formula; lists of national and state advisory panel members; the pilot project contract; pilot project report abstracts; project brochure; and letters from project evaluators.

Tennessee Higher Education Commission. (1987). *The future of Tennessee: Higher education 1987-1993.* Nashville: The author.

Keywords: State perspective; Tennessee; Tennessee Higher Education Commission; policy formation/public policy/educational policy; master plan; statewide planning; educational finance/economics; educational quality/instructional effectiveness; budgeting/resource allocation; long-range planning; school-business relationship; state HEIs/public HEIs.

ABSTRACT: This master plan for higher education in Tennessee sketches a framework for the continued improvement of postsecondary institutions and emphasizes the critical links between higher education and other components of the state. A set of principles and achievement targets undergirding the master plan are outlined. Specific action is called for in several areas of undergraduate education, graduate education, teacher preparation, and the non-public sector of postsecondary education. Higher education is urged to intensify its commitment to enhance the quality of life through closer links with

industry, social organizations, governmental agencies, and art and cultural outreach programs. Additional investments in higher education are recommended for faculty and staff, library resources, equipment, and facilities. Desegregation of students, faculty, and staff at each of the public colleges and universities is also a priority. The governance system must devise innovations to achieve excellence, through assessment, incentive funding, and licensure of quality programs. Appendices contain enrollment projections for each state-supported institution, job placement rates, graduation rates, desegregation objectives, and guidelines for the development of mission statements.

Tennessee Higher Education Commission. (2000). *Annual joint report on kindergarten through higher education in Tennessee*. Nashville: Tennessee State Board of Education.

Keywords: State perspective; Tennessee; Tennessee Higher Education Commission; academic achievement/educational improvement; performance/incentive/performance-based funding; performance indicators/factors/criteria; state programs/state standards.

ABSTRACT: This annual report complies with the requirements of Tennessee's Public Education Governance Reform Act of 1984, which directs the State Board of Education and the Tennessee Higher Education Commission to prepare a report on: (1) the extent of duplication in elementary-secondary and postsecondary education in Tennessee; (2) the extent to which high school graduation requirements are compatible with the admission requirements of postsecondary institutions; (3) the extent to which the respective master plans of the State Board of Education and the Higher Education Commission are being fulfilled; and (4) the extent to which state needs in public education are being met. The Commission and the Board of Education have developed master plans to minimize duplication in a program of continuous learning from pre-kindergarten through higher education. High school requirements in Tennessee are compatible with the admissions requirements of the state's public postsecondary institutions. The study also found that progress is being made toward the master plans of both the State Board of Education and the Higher Education Commission in many areas, although progress has not been significant in some areas, as identified. To meet state needs in public education, Tennessee has adopted a performance funding model. Since the inception of the performance model, there have been consistent improvements in test scores for major fields and general education outcomes, and job placement rates in vocational programs have risen to over 95%.

Texas State Council on Vocational Education. (1988). *Literacy and training: Priorities for Texas*. Biennial Report to the Governor and Legislature. Austin: The author.

Keywords: State perspective; Texas; vocational education; school-business relationship; statewide-planning; educational finance/economics; outcomes of education/college outcomes assessment; state financial support; community/two-year colleges.

ABSTRACT: Among the recommendations of the Texas Council on Vocational Education concerning literacy and training are the following: (1) the governor and legislature should conduct a statewide, multimedia campaign to heighten Texans' awareness of the importance of workplace literacy, dropout prevention, literacy programs, and the human and economic aspects of literacy; (2) continued funding and operation of the Texas Literacy Council; (3) increased funding of adult education and adult vocational education by \$7.5 million per year, thereby doubling the state's investment in adult literacy programs; (4) development and implementation of an integrated delivery system to meet needs for vocational education; (5) expansion of the Joint Advisory Committee to include representatives from relevant state departments and from business, industry, and labor; (6) expansion of the Joint Advisory Committee's responsibilities to include development of the Master Plan and an integrated vocational education system; (7) "blanket weight" funding that more nearly reflects the costs of vocational education; (8) full formula funding for postsecondary occupational education and incentive funding for

the targeted goals of postsecondary occupational education; (9) simplification of the process for community/junior college annexation; (10) administration of state funds through an appropriate agency to match the level of federal funding provided to the network of small business development centers; and (11) continued state funding for apprenticeship programs administered by the state board of education and the state higher education coordinating board. (The document also contains information on the state's vocational education enrollments and expenditures for 1987-88, the economic impact of vocational education in Texas, and a public policy symposium.)

Thompson, M.D., & Riggs, R.O. (2000, Spring). Institutional expenditure patterns and the facilitation of mission. *Community College Review*, 27(4): 1-15.

Keywords: State perspective; Tennessee; institutional perspective; community colleges/two year colleges; educational/indicators/criteria/assessment; outcomes of education/college outcomes assessment; budgeting/resource allocation; educational quality/instructional effectiveness; state HEIs/public HEIs.

ABSTRACT: Examines the relationship between institutional spending patterns and performance funding standards at the 14 public community colleges in Tennessee. Analyses reveal a relationship between expenditure categories and performance standard scores, with higher scoring colleges spending a greater portion of funds on academic support and instruction than lower scoring colleges.

Utah State Board of Higher Education. (2000). *Highlights of the Utah system of higher education Master Plan, 2000: A commitment to the people of Utah*. Salt Lake City: The author.

Keywords: State perspective; Utah; academic achievement/educational improvement; educational quality/instructional effectiveness; community/two-year colleges; state HEIs/public HEIs; long-range planning.

ABSTRACT: The Utah Board of Higher Education Master Plan, 2000 describes how the Board of Regents and Utah's nine public colleges and universities will serve the changing and diverse needs of students. In the plan, the Board of Regents promises students superior quality educational opportunity through nine major commitments: (1) expanding opportunities for access to quality programs; (2) increasing accountability for performance; (3) using resources efficiently; (4) funding quality improvements; (5) expanding opportunities for applied technology education; (6) collaborating with public K-12 education; (7) promoting economic development through research, training, and cooperative extension; (8) refining institutional missions to respond to citizens' needs; and (9) making long-term educational improvements. Expansion of high-quality educational opportunities throughout all areas of the state will be accomplished by evaluating local needs and developing service area education coordination plans. Emphasizing differing roles and missions of the nine Utah System of Higher Education institutions will provide greater choices for students. This includes adoption of more stringent admission standards at the University of Utah and Utah State University (main campus), and exploration of possible higher admission standards at Southern Utah University at an appropriate time.

Accountability and performance indicators have been specified with a recommendation that some additional funding be attached to achievement of the desired results.

Van Dyke, J., Rudolph, L.B., & Bower, K.A. (1993). Performance funding. In T.W. Banta & Associates (Ed.), *Making a difference: Outcomes of a decade of assessment in higher education* (283-293). San Francisco: Jossey-Bass.

Keywords: Performance/incentive/performance-based funding; state perspective; Tennessee; state programs/state standards; educational/indicators/criteria/assessment; performance indicators/factors/criteria; accountability/institutional autonomy.

The authors attest to the ways performance funding in Tennessee—and later the institutional effectiveness criterion of the Southern Association of Colleges and Schools—stimulated campus interest in outcome assessment at public colleges and universities in the state. Several anecdotal evidences demonstrate the differences that the performance funding program has made and enumerates the positive outcomes in HEIs in Tennessee. Institutions and policy makers have found that assessment can provide the information needed to accomplish a number of educational goals, as well as to give assurances to other publics that higher education is providing the programs required for a changing and complex society. Although forces external to HEIs imposed assessment initially, both faculty and students in Tennessee’s institutions are benefiting directly from the process.

Virginia State Council of Higher Education. (1999). *Virginia higher education performance funding model*. Richmond: The Author.

Keywords: Performance/incentive/performance-based funding; performance indicators/factors/criteria; state perspective; Virginia; state financial support; budgeting/resource allocation; accountability/institutional autonomy; college administration/governance; educational finance/economics; academic achievement/ educational improvement; policy formation/public policy/educational policy; quality control/institutional quality.

ABSTRACT: This report reviews the proposed Virginia Higher Education Performance Funding Model. It includes an overview of the proposed funding model, examples of likely funding scenarios (including determination of block grants, assumptions underlying performance funding for four-year and two-year institutions); information on deregulation/decentralization and block grants (focusing on procurement, personnel, real property management, management of tuition and fee revenue, accumulated balances, elimination of consolidated salary authorization, elimination of employment restrictions, and use of tuition and fee revenues associated with new enrollment); institutional accountability; technical adjustments; inflationary growth factors; base budget adequacy adjustment; incentive funding; and future performance measures.

Walter, Amy. (1998). *Balancing the books: Affording college in Minnesota*. St. Paul: Minnesota State Planning Agency.

Keywords: State perspective; Minnesota; accountability/institutional autonomy; performance/incentive/performance-based funding; educational finance/economics; community/two-year colleges; business-school relationship.

ABSTRACT: Minnesota assigns responsibility for paying the price of college to students, families and taxpayers. This document explores how the state determines the financial role of each contributor, offers incentives for families and students to prepare for assuming their share of costs, and discusses how higher education institutions and political leaders can address the price of higher education. It examines student and parent debts, the partial support provided by financial aid, and the limited affordability of higher education as prices rise at public and private educational institutions in the 90s nationwide. Offers suggestions for containing college costs, including: (1) **accountability should be increased through**

performance-based funding; (2) the different higher education institutions should work cooperatively; (3) more collaborations should be formed with businesses and other schools; and (4) the potential for technology to extend geographic reach should be exploited. Included are graphs illustrating the rate at which average annual tuition is likely to continue to rise, earnings needed for annual loan payments, and legislature's maximum allowed college price as it compares to colleges' estimated price.

Woodhouse, D. (1996, December). Quality assurance: International trends, preoccupations and features. *Assessment and Evaluation in Higher Education*, 21(4): 347-356.

Keywords: International perspective; performance indicators/factors/criteria; quality control/institutional quality; accountability/institutional autonomy; educational quality/instructional effectiveness; educational finance/economics; educational finance/economics.

ABSTRACT: Common concerns in quality assurance in higher education and convergence in power balances within educational systems worldwide are resulting in adoption of similar methods for quality assurance. Quality issues addressed include definition of quality, international comparability of education, academic standards, institutional autonomy, external review, evaluation methods and focus, peer review, use of performance indicators, funding, and follow-up.

Yorke, M. (1997). *Can performance indicators be trusted?* Revised version of a paper presented at the AIR Forum, 37th, Orlando, FL, May 18-21.

Keywords: International perspective; United Kingdom; performance indicators/factors/ criteria; policy formation/public policy/educational policy; quality control/institutional quality; politics of education; critique of performance assessment approaches.

ABSTRACT: This paper examines the purpose, validity, and reliability of performance indicators in higher education, focusing on the experience of higher education institutions in the United Kingdom. Specifically, it studies the role of student entry and exit performance, teaching and staff quality, retention and completion, and placement in employment as indicators of higher education performance. It examines these indicators in terms of the interests they serve, their validity, and their robustness (including their vulnerability to manipulation). The paper discusses the problems associated with each set of indicators, noting that the validity and reliability of such indicators are mixed and that government attempts to tie funding to performance indicators may have unintended consequences. The paper concludes that the belief that performance indicators can provide accurate information on institutional functioning appears to have weakened in recent years, with early optimism having becoming tempered by debate and experience.

Zumeta, W. (2001). *Public policy and accountability in higher education: Lessons from the past and present for the new Millennium. In D.E. Heller (Ed.), The states and public higher education: affordability, access, and accountability. Baltimore: John Hopkins University Press.*

Keywords: Performance/incentive/performance-based funding; performance indicators/factors/criteria; state perspective; Tennessee; Missouri; South Carolina; Washington; accountability/institutional autonomy; performance reporting; government-school relationship; politics of education; business-school relationship; statewide planning; state programs/state standards; program development/implementation; productivity/efficiency.

: This article discusses the past and present approaches employed by the states to ensure accountability of public higher education. William Zumeta examines the following issues: the recent origins of accountability demands on American higher education and the way they are linked to expectations for

other publicly funded activities and current business practices; historic evolution of the approaches to the democratic accountability of public HEIs; current accountability practices and initiatives in higher education across the states; and a contemporary synthesis of academic autonomy and accountability. He offers the following observations of the current state of accountability: public higher education is undergoing “the initial phases of a sharp, historically significant ramp-up in the degree of government involvement in academic matters” (p.155); the state’s priorities have begun to “range well into the traditional realm of academic decision making” (p.156); and historically evolved ideas and institutions are “less able to secure accustomed levels of academic autonomy than in the past” (pp. 156-57). Discussing the recent accountability initiatives, Zumeta notes that policy makers have been generally dissatisfied that performance reporting, which was popular in the 1980s and early 1990s, can alone lead HEIs to fully accountable behavior. As a result, states have turned to linking state dollars to measured performance on specific indicators, termed incentive funding or performance funding. At the time of writing, this initiative appears to be the leading edge of the movement for greater accountability in higher education. Zumeta summarizes the major findings by Burke and Serban on the following: measures of accountability; sources of the accountability initiatives; and implementation approaches. He then turns to outlining the four most significant cases of performance funding: Tennessee, Missouri, South Carolina, and Washington.