Higher Education Management and Policy
Volume 22/2

Performance incentives and public college accountability in the United States: a quarter century policy audit

by
E. Grady Bogue and Betty Dandridge Johnson

University of Tennessee and Tennessee Higher Education Commission, United States

The allocation of funds to public colleges based on performance criteria rather than activity or enrolment criteria is often described as performance funding. In the United States, performance funding policies have become a frequently used instrument of higher education accountability. The history of such policies, however, is a complex one, with some states implementing such policies while others discontinue them. This paper describes and evaluates the first and the longest-standing performance funding policy in the United States, one designed and implemented in 1980 and remaining in effect for over 25 years.

ISSN 1682-3451
Higher Education Management and Policy
Volume 22/2

Encouragement des performances et transparence des établissements publics d'enseignement supérieur aux États-Unis : analyse d'une politique vieille d'un quart de siècle

Par
E. Grady Bogue et Betty Dandridge Johnson

Université du Tennessee et Tennessee Higher Education Commission, États-Unis

L'attribution de fonds aux établissements publics d'enseignement supérieur sur la base de critères de performance plutôt que de critères basés sur l'activité ou les effectifs est souvent décrite comme un financement fondé sur la performance. Aux États-Unis, les politiques de financement fondées sur la performance sont de plus en plus fréquemment utilisées comme instrument d'évaluation de la transparence de l'enseignement supérieur. Toutefois, l'histoire de ces politiques est assez complexe et certains États les appliquent alors que d'autres les ignorent. Cet article décrit et analyse la première et la plus longue politique de financement fondé sur la performance appliquée aux États-Unis, conçue et mise en œuvre en 1980 et effective depuis plus de 25 ans.

Introduction

In the latter years of the 20th century and the opening years of the 21st, accountability clearly became a major international policy issue. In the United States, the evidence of this policy accent may be found in major public reports, books, op-ed pieces in the media, state legislation mandating assessment and performance indicator reporting and the publication of various higher education "report cards" at national, state and campus levels. Beyond assessments, report cards and other instruments of accountability just cited, performance funding and performance budgeting have been employed in some states as a policy instrument to promote higher education accountability (Burke and Associates, 2002).

Following a five-year design and development period, in 1979/80, the state of Tennessee implemented the Tennessee Performance Funding Policy. It applied to the 23 public colleges and universities in the State of Tennessee (Bogue and Brown, 1982). Linking a portion of state funding to five performance indicators, this is the first performance incentive policy in the United States and one that anticipated the developing accent on accountability for higher education. The design of the policy has contributed to its continued operation now for over a quarter of a century, working in both healthy and difficult budget moments for higher education in Tennessee and remaining viable through two Republican and two Democratic governors.

This paper presents an audit of the Tennessee performance policy design and effectiveness and an exploration of the factors associated with the policy's quarter century longevity and impact. First, it examines the challenge of framing effective accountability policies for colleges and universities and the questions of policy design to be engaged. This policy exploration is followed by a brief review of the five-year developmental origins of the policy and the design features that have permitted continuing revision of the policy. The evolution of the performance standards is profiled over that 25-year period, and the paper concludes with an assessment of policy outcomes and impact.

Emergence of the accountability policy accent

The call for higher education accountability has been growing over the past three to four decades. In the United States, one of the early calls for accountability was Mortimer's monograph *Accountability in Higher Education* (1972). An array of public reports, journal articles and books has documented

the emergence of the accountability expectation. A report entitled *Accountability for Better Results: A National Imperative for Higher Education* was issued by a special commission created by State Higher Education Executive Officers (SHEEO, 2005). In 2008, the Educational Testing Service issued its report *A Culture of Evidence: An Evidence-Centered Approach to Accountability for Student Learning Outcomes*. These "book-end" reports carry an accountability focus on performance results and evidence.

A major national expression of accountability policy in the United States is echoed in the *Measuring Up* reports (2000, 2002, 2004, 2006, 2008) issued by the National Center for Public Policy and Higher Education. These reports grade state higher education systems on such factors as preparation, participation/access, completion/graduation, affordability, benefits and learning outcomes/knowledge and skill. Other recent publications of the continuing and emergent accountability call, in this nation and internationally, include *A Test of Leadership: Charting the Future of US Higher Education* (USOE, 2006), issued by a Commission appointed by the then Secretary of Education Margaret Spellings. The Organisation for Economic Co-operation and Development (OECD, 2006; Ischinger, 2006) published two articles on the subject; finally, the National Conference of State Legislatures issued a report by a Blue Ribbon Commission on Higher Education entitled *Improving Higher Education Performance and Productivity* (NCSL, 2007).

The complexity of higher education's mission, governance and outcome notwithstanding, no timidity on questions of management and educational effectiveness is warranted. But there is also a need for serious reflection on balancing educational cultures of improvement and civic/political cultures of financial stewardship. Balancing cultures of faith and cultures of evidence, however, is neither a small nor simple policy challenge.

For example, to what extent do the several internal and external stakeholders of higher education share an understanding of the definition and purpose of accountability and the evidence they would accept to demonstrate accountability? This is a highly complex issue, as revealed in the following questions:

1. To whom is higher education accountable and what is the basis for various stakeholder claims for accountability?
2. How might different stakeholders define the purpose of accountability policy and how might educational cultures of improvement be reconciled with civic/political cultures of financial stewardship?
3. What evidence will different stakeholders accept as legitimate and adequate? Is there common consent on performance indicators and evidence?
4. Once the indicators and/or evidences of accountability have been established, will the standard of performance evaluation be one of good

practice, of legal compliance, or of comparison to some criterion or peer reference?

5. Will accountability policy highlight economic development and workforce readiness goals but neglect other important purposes of higher education such as personal discovery, civic awareness and responsibility, the pursuit of social justice, and search for new and basic truths?
6. Will accountability policy permit, or even encourage, cosmetic and adaptive responses rather than substantive performance responses?
7. Does it make a difference who gathers and presents data on higher education accountability? Will a third party auditor be required for civic credibility? (Bogue, 2006)

There is research evidence that political, business and academic leaders do not hold the same perspectives on the purposes of accountability policy (nor for higher education) and may not agree on acceptable evidence of accountability (Bogue, 2006; Bogue *et al*., 2009).

Policy purpose and origins

Designed and implemented in the late 1970s, the Tennessee Performance Funding Policy anticipated answers to some of the above accountability questions. But before going into greater detail, a quick summary of policy purpose and origins would be useful. During the 1960s and 1970s, a primary policy question in the United States was how to allocate state appropriations equitably among a growing and diverse number of public colleges and universities. The policy adopted in many states was called formula funding, an allocation policy based on enrolments and costs by programme (from English to engineering) and by level (from undergraduate to graduate).

Such policy formulas recognised cost variations by programme type and level and resulted in a reasonable approach to equity, taking into consideration institutional mission/programme profiles and size of campuses and programmes. A later refinement added a dimension of peer funding in recognition that institutions were competing in a different salary market. The principle of "equivalent funding for equivalent programmes" was easily understood by educators and political leaders. This policy approach, however, was based on activity and not achievement, on how much but not on how good.

Anticipating an emergent interest in accountability, in 1974/75, the higher education community of Tennessee, under the primary leadership of the Tennessee Higher Education Commission, set in motion a five-year, USD 500 000 effort funded by the Fund for the Improvement of Postsecondary Education, the Ford Foundation, the Kellogg Foundation, and an anonymous Tennessee foundation. The purpose of the policy developmental effort was to

explore the philosophical and technical feasibility of allocating some portion of state funds on a performance criterion rather than an enrolment criterion.

It is worth noting that: *i)* the policy initiative was launched by the higher education community and not politically imposed; *ii)* policy development involved representatives from institutions and their governing boards, from legislative and political officers and from national higher education scholars; and *iii)* policy design and pilot implementation took place over a five-year period. **This policy design effort was patient, persistent and participatory.**

This five-year design effort produced an initial policy design that allocated 2% of an institution's budget to its state appropriations request based on five performance indicators, to be more fully described later in the paper. One of the most difficult policy design questions concerned what proportion of institutional budgets should be risked on the performance policy. The educational and political consent was initially 2% of each institution's state appropriation recommendation. Based on the theory that small rudders can move large ships, campuses making a perfect score on the five performance standards would have an additional 2% added to their state appropriation request. In 1987, the percentage of state budget appropriations recommendations at risk on the policy was raised to 5.45%. How the five performance standards were scored is explored in the original project report, *Allocation of State Funds on a Performance Criterion* authored by Bogue and Troutt (1980) and in a *Harvard Business Review* article by Bogue and Brown (1982).

Two other Tennessee policy features were noteworthy. First, a periodic five-year recurrent evaluation/revision was built into the policy. This policy renewal feature allowed higher education and government leaders to look at policy performance through philosophic, political and educational lenses and make adjustments. The "ownership" by multiple stakeholders has been critical to the long-term viability of the policy; it has contributed to important revisions in performance indicators, all of which are examined in this policy audit paper.

Second, this was not a zero-sum policy. Funding gains for one campus were not at the expense of another campus. But this policy feature masked another strength: the policy has held fast during budget periods of increasing state appropriations and in less favourable budget moments. This policy staying power is in serious contrast to some other state enrichment and performance policy approaches that were abandoned or discontinued when state budget conditions grew tight. See, for example, the report of the South Carolina experience in Bogue and Hall (2003) and the demise of performance funding in Illinois, Washington and Florida reported by Dougherty and Natow (2009).

The policy incentive mechanism

Understanding the basic incentive mechanism of the policy may be advanced by examining a hypothetical example of how the policy works in practice. Suppose that First Rate College, a hypothetical public college in Tennessee, has an educational and general appropriations recommendation of USD 20 million derived from an enrolment-driven formula funding policy, which recognises enrolment by level of programme and type of programme. The maximum performance funding amount available to First Rate College would be 2% of USD 20 million, or USD 400 000. In other words, if First Rate College had absolutely perfect scores on each of the five performance indicators, its final appropriation recommendation to the Tennessee Legislature and governor would be USD 20.4 million.

During the pilot implementation of the Tennessee Performance Funding Policy, five performance indicators were identified and standards of performance for each of these five indicators were developed. Scoring protocols for the original five indicators are outlined in the original project report (Bogue and Troutt, 1980). Consider now this hypothetical score profile for First Rate College against the five indicators (Table 1).

Table 1. **A perfect, hypothetical score profile**

Performance standards	Maximum points	Recommended points
Accreditation	20	10
General education outcomes	20	15
Major field outcomes	20	10
Peer evaluation of academic programmes	20	10
Student/alumni evaluation	20	10
Total	100	55

Added to the basic formula, appropriations recommendations of USD 20 million for First Rate College would be an amount equal to 55% of USD 400 000 or USD 220 000, making a total appropriation recommendation of USD 20.22 million.

It is important to note that the principal policy accent in the pilot phase was to use the power of fiscal policy to call institutions to more assertive performance assessment efforts – **without the state specifying or mandating an assessment instrument.**

Evolution of policy indicators and standards

The Tennessee Performance Funding Policy was established to engage questions of educational and instructional performance and not performance in research and public service missions. As we venture into the audit analysis of

the policy over its history, a first observation is that the performance indicators and standards have changed over the years. Table 2 provides a quick summary of how the standards profile appeared in the pilot years (1979-82) and in the most recent cycle (2005-10). The following commentary provides a broad overview of changes in the standards, followed by more specific details:

1. The number of standards has changed, moving from the original five to ten in the 1980s and back to five in the period 2005-10.
2. The initial set of standards for all campuses evolved to a set that allows some variance by campus mission (*e.g.* four-year and two-year institutions).
3. The evaluation of performance shifted from the original accent on improvement – an internal criterion – to comparative examinations of performance against institutions of similar mission.
4. The relative importance or weight of a standard may have shifted. As more institutions, for example, begin to achieve full accreditation for their academic programmes (Table 4), at or approaching 100% for most schools, the accent on that standard was lowered.
5. The accent on goal achievement, both institutional and state, was added, and an accent on what institutions did (decision and policy affected) with what they learned from assessments was added in the more recent two cycles.

The original five standards called for a more assertive initiative on measuring general education outcomes. As earlier noted, however, no common assessment was mandated or specified. In 1979-80, all public institutions began using ACT COMP (American College Testing College, Outcome Measures Program), which was one of only two or three assessments for general education available at that time. Now, institutions are using a variety of general education assessments that include the ETS Measure of Academic Proficiency and Progress (MAPP), College Base, California Critical Thinking Skills Test (CCTST) and the ACT WorkKeys assessment.

An explanation of the scoring protocols for the performance standards may be appropriate here. First, institutions are not in competition with one another and are not scored against one another. Thus, each institution has the opportunity to earn 100 points, as previously illustrated, on criterion referenced benchmarks. With the exception of Standard 5, each performance indicator is objectively scored by a set of established criteria that determine the points awarded. In the case of the "assessment pilot" and "assessment implementation," evaluations and points awarded are determined by an evaluation committee composed of faculty and staff from the institutions, the two governing boards and the Tennessee Higher Education Commission. These scoring protocols may be accessed online.*

* See: *http//tn.gov/thec/Divisions/AcademicAffairs/PerformanceFunding.*

Table 2. **Performance funding standards**
Pilot years (1979-82) and current cycle (2005-10)

Performance standards pilot cycle (1979-82)		Points awarded
Standard 1	Programme accreditation	20 points
Standard 2	Graduate performance in major fields	20 points
Standard 3	Graduate performance on general education	20 points
Standard 4	Evaluation of institutional programmes/services by students/alumni	20 points
Standard 5	Peer evaluation of academic programmes	20 points

Performance standards sixth cycle (2005-10)		Community colleges	Universities
Standard 1	Student learning environment and outcomes		
	Student learning: general education	15	15
	Student learning: major field assessment	10	10
	Accreditation	5	5
	Programme review	5	10
Standard 2	Student, Alumni and Employer Surveys	10	10
Standard 3	Student persistence (retention and graduation)	15	15
Standard 4	State Master Plan priorities		
	Institutional strategic planning goals	5	5
	State strategic planning goals	10	10
	Transfer and articulation	–	5
	Job placement	10	–
Standard 5	Assessment outcomes		
	Assessment pilot (Delaware/Kansas Cost Study)	5	5
	Assessment implementation	10	10

The following commentary outlines a summary of major changes in the policy standards and scoring protocols over the years.

Accreditation

Point value

1978-82: 20 points

2005-10: 5 points

Throughout the life span of the Performance Funding Policy accreditation has been one of its core elements, assisting institutions not only to achieve accreditation but to maintain it. The point value assigned to accreditation signified the importance placed on quality assurance and as institutions began to effectively maintain accreditation (including achieving accreditation for new programmes), the point emphasis declined.

For the 1997-2000 cycle, point differentiation by institutional type was introduced, with universities receiving 15 points and community colleges receiving 10 points for achieving accreditation for all programmes.

General education

Assessment options

1978-92: Single test

1992-2000: Two tests

2000-10: Three or more tests

Recent performance funding cycles have reflected the increased availability of appropriate assessments for the general education programme. For over a decade there were very few assessments available other than ACT COMP and the Academic Profile was developed by the Educational Testing Service. However, as from 1992, the College Basic Academic Subjects Examination (College BASE) became an alternative to the ACT COMP. Effective with the 2000 cycle, institutions could select from the College BASE, California Critical Thinking Skills Test, Measure of Academic Proficiency and Progress and WorkKeys.

With the 2000-05 cycle, institutions could switch to a different general education assessment beginning with the third year of the cycle. This option provided institutions an opportunity to pilot different general education assessments.

Major field assessment: licensure programmes

The assessment of graduates' performance in academic programmes has always been a part of the performance funding programme. Beginning with the 1987 cycle, selected professional fields by institutional type were assessed twice during the five-year cycle. Universities were required to report on nursing, teacher education, engineering and accounting. Community colleges reported on nursing, allied health and engineering technology. For the next three cycles, licensure programmes – along with other undergraduate programmes – were only assessed once during the five-year cycle. With the increased scrutiny on graduates' performance, the standards were modified in 2005 to report annually on all licensure programmes.

Alumni/student satisfaction

Student and alumni surveys

1978-96: Locally developed student and alumni surveys

1997-99: ACT Student and alumni surveys

2000-05: Locally developed student and alumni surveys

2005-10: National Survey of Student Engagement (NSSE) and alumni survey aligned with NSSE

The provision for an alumni survey in the original and subsequent five cycles featured efforts to acquire "customer/client" opinions from graduates only. Now the standard rotates among enrolled student surveys, alumni surveys and employer surveys.

Retention and persistence

Scoring options

1992-97: Goals set by institution (10 points)

2000-05: Compared with prior performance and state (10 points)

2005-10: Compared with prior performance and benchmarked with funding peers (15 points)

Student retention and persistence-to-graduation rates are among the most commonly used indicators in higher education. In the 1992 cycle, evaluation was based on the institution's progress towards retention and graduation goals that were set by each institution. With institutions setting very deliberate and achievable goals, the scoring option was modified in the 2000 cycle, and student success goals were compared with prior performance as well as the overall state goals.

To further encourage institutions to focus their efforts on retention and graduation rates, for the 2005 cycle an institution's performance is compared with its funding peers. The funding formula for distributing state dollars was based on funding faculty salaries based on their funding peers. This alignment of the funding formula with performance funding was a significant policy change for higher education in Tennessee.

Assessment outcomes

Focus

1980-82: Evaluation planning/action for renewal and improvement

1982-87: Institutional improvement plan

1993-97: Improvement action

2000-05: Assessment implementation

2005-10: Assessment implementation (faculty per teams)

Throughout the performance funding programme, the focus has been on instructional improvement and faculty participation. Early standards encouraged campuses to furnish evidence of faculty participation in the development, implementation and use of assessments. With the regional accrediting agency focused on institutional effectiveness in the mid-1980s, incentives were provided for institutions to document quality and effectiveness by employing a comprehensive system of planning and evaluation for every major aspect of the institution that was impacted by performance funding. The 2005 cycle encouraged institutions to focus on student learning outcomes through their Quality Enhancement Plan (accrediting agency requirement) or through an institutional Student Learning Initiative.

Institutional history of points and dollars earned

As noted earlier, the philosophy behind the policy was that small rudders can move large ships. During the first iteration of the policy in 1978-82, the University of Tennessee at Knoxville, the largest institution in the state, could have earned approximately USD 1.0 million beyond its basic formula funded appropriation request (see the allocation mechanism outlined earlier). In more recent years, the amount available on the policy for this institution would be closer to USD 8 or 9 million. As reflected in Table 3, these fiscal amounts are enough to attract institutional attention.

The policy does not appear to favour institutions in relation to the Carnegie Classification, as both four-year and two-year institutions have been high and low scorers over the life of the policy. Moreover, for any of the five-year cycles depicted in Table 3, high and low scores have tended to fluctuate among different schools.

Following the early implementation years (the "shakedown" years of the policy), almost all institutions have performed at higher levels, achieving scores in the 80%-90% range. One can see this movement very clearly when one looks at the scores on accreditation. In the first years of the policy, the percentage of accredited programmes averaged around 80% and that figure is now 100%, with two exceptions at 98%. Before the design work started on the policy in the mid-1970s, the accreditation figure would have been closer to 66%, or two-thirds of eligible programmes accredited.

Evidence of policy impact and effectiveness

Has the Performance Funding Policy proved effective? Has the performance of Tennessee's public colleges and universities improved? These questions will be engaged from multiple perspectives and evidence sources. The policy's persistence for over 25 years may be accepted as partial evidence of its effectiveness, although longevity is not an infallible indicator of policy merit. However, the longevity of the policy under changing political climates and budget conditions offers additional evidence of its robustness and the increase in funding percentage represents endorsement of its effectiveness. Clearly, the wisdom of allocating some state funds on a performance criterion has been demonstrated.

A secondary goal of the policy effort was to demonstrate an accountability initiative by the higher education community so that political officials would not impose external accountability measures on higher education. This initiative has also been successful, as there are no statutory mandates for assessment. Some additional data points on performance are given in Table 3.

Table 3. **A 25+year history of performance funding points and dollars**

Institution	1978-82		1982-87		1987-93		1993-97		1997-2000		2000-05		2005-10	
	Avg. points	Total USD	Avg. points	Total USD	Avg. points	Total USD	Avg. points	Total USD	Avg. points	Total USD	Avg. points	Total USD	Avg. points	Total USD
Austin Peay	**56**	352 428	**94**	2 592 534	**78**	3 263 365	**90**	5 189 253	**92**	3 484 330	**95**	8 273 316	**88**	6 221 714
East Tennessee	**44**	568 984	**86**	4 632 841	**81**	6 811 325	**85**	8 570 113	**95**	6 172 453	**98**	14 495 022	**96**	10 989 211
Middle Tennessee	**61**	878 976	**90**	5 948 048	**76**	8 181 453	**90**	12 788 952	**97**	9 900 838	**95**	22 980 284	**95**	19 021 135
Tennessee State	**45**	521 661	**84**	3 592 708	**51**	2 978 562	**80**	5 622 167	**90**	4 202 454	**86**	8 283 684	**81**	5 837 225
Tennessee Tech	**72**	789 099	**98**	5 136 264	**84**	6 525 823	**93**	8 050 890	**92**	5 000 132	**96**	11 332 121	**96**	8 520 971
Univ. of Memphis	**61**	1 578 081	**91**	10 743 739	**80**	14 238 431	**90**	18 502 259	**89**	11 572 751	**93**	27 881 676	**88**	20 300 974
UT Chattanooga	**63**	560 278	**87**	3 557 180	**79**	4 670 112	**92**	6 533 513	**96**	4 725 759	**94**	10 159 202	**94**	8 049 639
UT Knoxville	**75**	3 261 881	**99**	19 137 613	**84**	23 710 066	**89**	28 970 873	**98**	20 125 447	**97**	43 932 856	**93**	34 486 316
UT Martin	**65**	477 541	**91**	2 925 204	**77**	3 470 876	**87**	4 751 459	**97**	3 389 852	**98**	7 558 161	**91**	5 524 280
Universities		**8 988 929**		**58 266 131**		**73 850 013**		**98 979 479**		**68 574 016**		**154 896 323**		**118 951 465**
Chattanooga	**50**	193 008	**91**	1 627 585	**84**	2 685 522	**87**	3 694 427	**91**	2 556 443	**91**	5 315 646	**90**	4 118 392
Cleveland	**57**	161 246	**90**	1 013 639	**73**	1 129 126	**88**	1 674 507	**95**	1 177 326	**97**	2 530 565	**94**	1 839 268
Columbia	**62**	125 458	**93**	813 589	**95**	1 424 127	**96**	1 922 715	**98**	1 447 560	**92**	3 129 844	**92**	2 496 986
Dyersburg	**27**	30 097	**94**	527 284	**82**	725 757	**86**	980 122	**95**	746 569	**93**	1 741 067	**92**	1 429 521
Jackson	**69**	146 442	**97**	891 125	**76**	1 131 219	**86**	1 614 382	**92**	1 211 373	**90**	2 850 753	**88**	2 191 429
Motlow	**67**	114 264	**95**	704 247	**85**	1 055 179	**95**	1 576 937	**96**	1 086 077	**95**	2 499 908	**93**	2 124 213
Nashville	**58**	191 770	**100**	1 455 401	**82**	1 633 040	**85**	1 910 020	**98**	1 305 256	**91**	3 511 182	**95**	3 212 203
Northeast	**12**	14 700	**88**	637 644	**84**	948 277	**90**	1 584 319	**89**	1 381 948	**97**	3 133 586	**93**	2 755 168
Pellissippi	**34**	58 493	**84**	695 753	**81**	1 759 759	**89**	3 089 343	**96**	2 241 009	**95**	4 964 129	**92**	4 045 916
Roane	**64**	166 456	**97**	1 209 117	**92**	2 120 846	**90**	2 797 022	**92**	1 911 377	**98**	4 604 976	**94**	3 388 998
Southwest	**49**	469 643	**97**	3 733 809	**81**	4 657 542	**87**	6 863 379	**80**	2 465 360	**93**	8 375 586	**82**	5 515 738
Volunteer	**72**	175 103	**100**	1 069 624	**89**	1 572 782	**94**	2 547 349	**94**	1 954 261	**95**	4 477 895	**91**	3 406 812
Walters	**48**	136 710	**94**	1 198 726	**92**	1 920 956	**91**	2 644 351	**94**	1 973 235	**97**	4 537 244	**94**	3 644 743
Community colleges		**1 983 390**		**15 577 543**		**22 764 132**		**32 898 873**		**21 457 794**		**51 672 381**		**40 169 387**
Grand total		**10 972 319**		**73 843 674**		**96 614 145**		**131 878 352**		**90 031 810**		**206 568 704**		**159 120 852**

Programme accreditation. As shown in Table 4, campuses have raised the national accreditation of eligible academic programmes from 65% to nearly 100%. Accreditation is, for academics, one of the most distinctive symbols and indicators of quality in American higher education. Even those educators critical of accreditation are usually not willing to remove "bragging rights" from their catalogues, where lists of accredited programmes are often placed. Thus, the academy would consider the results on this indicator as evidence of both educational improvement and meeting a quality criterion.

Table 4. **Percentage of accredited programmes**

	Pilot 1980-81	Cycle 1 1982-83	Cycle 2 1987-88	Cycle 3 1992-93	Cycle 4 1997-98	Cycle 5 2000-01	Cycle 6 2005-06
Austin Peay	70	80	65	95	100	100	100
East Tennessee	70	76	90	64	98	100	100
Middle Tennessee	90	88	90	100	98	98	98
Tennessee State	75	80	65	96	98	98	98
Tennessee Tech	95	96	85	79	93	100	100
University of Memphis	95	100	100	93	100	100	100
UT Chattanooga	75	80	75	100	100	100	97
UT Knoxville	95	96	100	100	100	100	100
UT Martin	85	68	65	83	100	100	100
Universities	**83**	**85**	**82**	**90**	**99**	**100**	**99**
Chattanooga	100	100	80	100	100	100	100
Cleveland	70	80	100	100	100	100	100
Columbia	50	84	100	100	100	100	100
Dyersburg	0	100	100	100	100	100	100
Jackson	100	100	65	100	100	100	100
Motlow	100	100	100	100	100	100	100
Nashville	100	100	100	100	100	100	100
Northeast	65	76	65	100	100	100	100
Pellissippi	100	80	65	100	100	100	100
Roane	100	80	100	100	100	100	100
Southwest	83	92	100	100	100	100	100
Volunteer	100	100	100	100	100	100	100
Walters	100	100	100	100	100	100	100
Community colleges	**82**	**92**	**90**	**100**	**100**	**100**	**100**

General education assessment. When work on the policy began, only two public institutions in Tennessee were involved in any assessment of general education. Today, all institutions have accepted methods of evaluation. Table 5 shows recent data for institutions. While there is some movement, in general the score patterns have remained relatively stable, with institutional performances in most cases slightly exceeding national peer performance.

Table 5. **General education: outcome average and comparison**

Institution	2005-06		2006-07		2007-08	
	Score	Nat'l avg.	Score	Nat'l avg.	Score	Nat'l avg.
	California Critical Thinking Skills Test (CCTST)					
East Tennessee	17.5	16.8	17.4	16.8	17.7	16.8
Tennessee Tech	18.6	16.8	18.9	16.8	19.4	16.8
Univ of Memphis	18.1	16.8	17.5	16.8	17.3	16.8
UT Knoxville	18.8	16.8	19.4	16.8	19.9	16.8
Chattanooga	16.1	14.8	15.9	14.7	15.4	14.7
Cleveland	15.2	14.8	15.9	14.7	15.9	14.7
Columbia	14.9	14.8	15.2	14.7	15.4	14.7
Dyersburg	15.6	14.8	15.4	14.7	15.1	14.7
Nashville	14.6	14.8	14.7	14.7	14.8	14.7
	Measure of Academic Proficiency and Progress (MAPP)					
Austin Peay	446.8	448.0	446.5	448.5	446.0	447.9
Middle Tennessee	449.1	451.8	446.8	451.3	18.0	16.8
Tennessee State	438.6	451.8	435.3	451.3	432.7	450.8
UT Martin	450.6	448.0	445.4	449.3	447.6	447.9
Motlow	440.6	440.8	443.7	440.6	443.3	440.5
Northeast	443.6	440.8	440.5	440.6	442.5	440.5
Roane	442.9	440.8	442.6	440.6	441.4	440.5
Volunteer	441.8	440.8	442.6	440.6	443.7	440.5
	College Basic Academic Subjects Examination (College BASE)					
Jackson	275.0	275.0	275.0	277.0	274.0	278.0
Southwest	243.0	275.0	239.0	277.0	247.0	278.0
Pellissippi	279.0	275.0	279.0	277.0	276.0	278.0
	Collegiate Assessment of Academic Proficiency (CAAP)					
UT Chattanooga	62.1	61.8	62.3	61.7	62.0	61.5

While all institutions are engaged in general education assessment, the decision impact of the assessment is not uniform. That is, for some institutions, the assessment is derived from a sample of senior students, but no decisions about the general education curriculum/programme or student progress or degree qualification are affected.

Alumni and student satisfaction. The Alumni Survey is conducted twice during the five-year cycle. Early in the history of the policy, the instrument used to assess alumni was a locally developed instrument that permitted comparisons only with other institutions in the State of Tennessee. In the fourth cycle (1997-1998), the ACT Alumni Opinion Survey was used but was abandoned in the 2000-05 cycle due to an extremely low response rate. Beginning with the sixth cycle (2005-10), the Alumni Survey was aligned with

Table 6. **Alumni Survey: students' educational experiences**[1]

	2001-02	2004-05	2006-07
Austin Peay	3.30	3.31	3.27
East Tennessee	3.24	3.26	3.31
Middle Tennessee	3.28	3.28	3.39
Tennessee State	3.13	3.11	3.05
Tennessee Tech	3.42	3.48	3.55
Univ of Memphis	3.12	3.15	3.24
UT Chattanooga	3.17	3.21	3.27
UT Knoxville	3.21	3.22	3.34
UT Martin	3.41	3.43	3.49
Chattanooga	3.44	3.47	3.50
Cleveland	3.29	3.39	3.52
Columbia	3.34	3.39	3.52
Dyersburg	3.33	3.50	3.43
Jackson	3.50	3.42	3.55
Motlow	3.60	3.47	3.56
Nashville	3.63	3.59	3.41
Northeast	3.49	3.41	3.61
Pellissippi	3.33	3.57	3.50
Roane	3.48	3.53	3.52
Southwest	3.37	3.36	3.45
Volunteer	3.38	3.48	3.56
Walters	3.47	3.47	3.54

1. In response to the question How satisfied are you with the educational experience you received? Likert scale: *i)* very dissatisfied; *ii)* dissatisfied; *iii)* satisfied; and *iv)* very satisfied.

questions from the National Survey of Student Engagement to allow survey comparisons between responses from students and alumni (Table 6).

The "financial bite" and importance of this indicator in the middle years of the policy can be illustrated as follows. In 1995, for example, the enrolled student satisfaction scores for the University of Tennessee at Knoxville earned the university only one point on a ten-point scale. As a result, the University's appropriations funding recommendation was approximately USD 500 000 below its potential award of USD 6 million from performance funding. Even with a very large budget, half a million dollars is enough to get attention.

Persistence to graduation. Table 7 presents persistence to graduation rates for public universities and two-year colleges. Evaluation on this standard is based on the extent to which institutions achieve state-wide goals set for persistence to graduation. The state goals for universities and community colleges are 51% and 35% persistence-to-graduation rates respectively. The overall statistics suggest a slight improvement for universities and two-year colleges.

Table 7. **Persistence to graduation rates (%)**

Freshmen cohort year	Universities	Community colleges
1985	43.1	25.0
1986	42.9	25.2
1987	43.3	26.9
1988	44.5	26.3
1989	46.1	25.3
1990	45.4	25.9
1991	44.2	22.3
1992	44.9	22.2
1993	45.4	21.9
1994	47.0	22.7
1995	47.9	24.3
1996	49.0	24.0
1997	48.7	23.8
1998	49.2	25.1
1999	49.8	30.5
2000	50.5	31.0
2001	49.3	31.2
2002	50.4	31.0

Job placement rates. Job placement rates for two-year colleges, based on a survey of graduates over a one-year period after graduation, appear in Table 8. Evaluation on this standard is based on job placement for each career programme. Statistics for individual campuses show both stable and high employment rates.

Table 8. **Job placement rates (%)**

Academic year	Placement rate
1993-94	90
1994-95	92
1995-96	92
1996-97	92
1997-98	90
1998-99	94
1999-00	90
2000-01	89
2001-02	90
2002-03	90
2003-04	91
2004-05	92
2005-06	92
2006-07	93
2007-08	92

Survey and case study evidence

Over 1999/2000, five doctoral students at the University of Tennessee conducted case studies to explore the impact of performance funding at a doctoral research university, a doctoral university, a comprehensive university and two community colleges. A sixth student conducted a qualitative study among major educational and civic leaders in relation to the policy. These case studies were designed to probe more deeply the influence of performance-funding policy at the campus level. A summary of findings follows, with more extended results to be found in each of the original case study reports.

1. In interviews of some 30 executive-level college administrators and government officials in Tennessee, Russell (2000) found that respondents attributed the long life of the Tennessee Performance Funding Policy to its original and continuing "ownership" by both campus and government officials.
2. Hall's case study (2000) of the University of Tennessee, Knoxville, found that interest in performance funding had waned over its quarter-century history, that awareness of policy intent and method centred primarily at the administrative level (vice-chancellor and above), and that a decade of modest financial support for higher education in Tennessee had caused administrators to concentrate on points and dollars rather than on instructional improvement. For example, the University of Tennessee has required in recent years that a sample of its graduating seniors take the College BASE general education assessment in response to the long-standing indicator in the Tennessee performance-funding policy. However, no decisions related to the academic diagnosis, progress, or degree certification of any student is based on this assessment, and no general education requirement appears based on the test results.
3. Latimer's case study (2001) of the University of Memphis, a doctoral research university, also uncovered the lack of awareness of the details of performance funding at levels other than the senior administration.
4. Lorber (2001) examined the impact of the Tennessee Performance Funding Policy at Tennessee Technological University (TTU), one of the ten pilot institutions involved in the original developmental work on the policy. He found few significant educational policy changes had occurred at TTU as a result of performance funding. But the campus respondents suggested that the policy had prepared the university for the interest on effectiveness and outcomes assessment that emerged in recent years from both regional and programme accreditation agencies.
5. In a study of performance-finding impact at Volunteer State Community College, Freeman (2000) also found that executive level administrators were more aware of the policy than division chairs and faculty, and that faculty members did not perceive a close link between the data derived from various

assessments and their needs in instruction. Still, none of those interviewed suggested dropping the policy. Most also seemed pleased that Tennessee had taken a lead role in this accountability and assessment effort. Freeman also found that in recent years, as state funding lagged, administrative concern centred more on maximising dollar return on the policy.

6. Shaw (2000) undertook the second case study involving a community college, Walters State Community College (WSCC). The performance-funding policy is part of a larger campus effort to build a culture focused on continuous improvement, and the institution's president, who has been in office for more than a quarter century, emphasises this culture. There is a 46-member Strategic Planning and Continuous Improvement Council on the WSCC campus. One of the findings of this case study echoed findings of other case studies. Early participation in the Tennessee performance-funding venture prepared WSCC well for the change in regional accreditation standards of the Commission on Colleges of the Southern Association of Colleges and Schools, which shifted from process-oriented standards to standards focused on assessment of educational outcomes and applying the results for institutional improvement.

Many of the themes found in these five case studies were affirmed by a more recent qualitative study conducted by three doctoral students at Vanderbilt University (Baxter *et al*., 2007). Two surveys have been conducted that speak to the effectiveness of the Tennessee policy. One was reported by Banta *et al*. in 1996 and a second by Burke and Associates in 2002.

Reconciling improvement and accountability: a summary

The record supports several affirming conclusions about performance funding in Tennessee. First, the policy has been in operation for almost thirty years, which suggests continuing support from a succession of political and educational leaders. Second, periodic policy reviews by panels of campus, governing board, and co-ordination commission representatives have added new ideas and encouraged a sense of ownership that have contributed to its longevity. And finally, the policy remains in effect while policies in other states have been abandoned.

Tennessee now has in place an extensive array of performance indicators and trend lines not present in 1980, furnishing the state and its higher education community an important source of operational and strategic performance intelligence. While some of the direct performance assessments – general education assessments, for example – do not reveal dramatic improvement in student performance, they do reveal favourable results when compared to national norms. In relation to programme accreditation – another key indicator of both institutional and programme quality, virtually 100% of

community colleges and universities have achieved this goal. From few campuses doing any educational assessment in the opening years of performance funding, all institutions now have active assessment programmes.

Some important liabilities remain. Some assessments are clearly conducted mostly to satisfy the policy and have little or no relation to student decisions or programme orientations. In some cases, the policy does not adequately penetrate to the department and programme level, and performance results are often not used for decisions on programme improvement or for student placement and progress. In pleasant contrast is the recent implementation of academic audit processes for programme improvement in the 19 institutions operated by the Tennessee Board of Regents System. The particulars of that venture have been nicely captured in *Academic Quality Work* (Massy *et al*., 2007).

While accountability policy has had a constructive effect on performance evidence in United States higher education, there will continue to be differences over stakeholder expectations of higher education (its mission and purposes) and differences over credible evidence for demonstrating accountability (indicators of fiscal responsibility and educational outcomes). The decision to start colonial colleges in the early history of the United States was religiously inspired to keep the Devil at arm's length and was not a cost benefit or performance accountability decision. The current value placed on higher education as a guarantor of liberty, a foundation of an open and transparent society, and an enemy of tyranny is not a cost-benefit decision either. Cultures of evidence and cultures of faith will continue to be complementary and essential principles in the health and performance of American higher education.

The authors:

Dr. E. Grady Bogue
Professor, University of Tennessee and
Chancellor Emeritus, Louisiana State University in Shreveport
A 325 Bailey Education Complex
University of Tennessee
Knoxville, TN 37919
United States
E-mail: bogue@utk.edu

Ms. Betty Dandridge Johnson
Assistant Executive Director
Tennessee Higher Education Commission
404 James Robertson Parkway, Suite 1900
Nashville, TN 37243

United States
E-mail: Betty.Dandridge.Johnson@tn.gov

The research and development work reported in this paper was originally supported by grants from the Kellogg Foundation, the Ford Foundation, the US Office of Education Fund for the Improvement of Postsecondary Education and an anonymous private foundation in Tennessee.

References

Banta, T., L. Rudolph and J. Van Dyke (1996), "Performance Funding Comes of Age in Tennessee", *Journal of Higher Education*, 67, 1, pp. 23-45.

Baxter, S., B. Brant and J. Forster (2007), "Linking Learning, Assessment and Performance", unpublished doctoral dissertation, Capstone project, Vanderbilt University, Nashville, TN.

Bogue, E. (2006), "What's All this Talk about Accountability?", in *Trusteeship*, pp. 14-19.

Bogue, E. and W. Brown (1982), "Performance Incentives for State Colleges", in *Harvard Business Review*, November-December, pp. 123-128.

Bogue, E. and K. Hall (2003), Quality and Accountability in Higher Education: Improving policy, Enhancing Performance, Praeger Publishers, Westport, CT.

Bogue, E. and W. Troutt (1980), *Allocation of State Funds on a Performance Criterion*, Tennessee Higher Education Commission Nashville, TN.

Bogue, E. *et al*. (2009), "Academic, Business, and Political Perspectives on Accountability Policy", paper presented to the 2009 meeting of the Association for the Study of Higher Education, Vancouver, British Columbia.

Burke, J. and Associates (2002), Funding Public Colleges and Universities for Performance: Popularity, Problems, and Prospects, Rockefeller Institute Press, Albany, NY.

Burke, J. and A. Serban (eds.) (1998), "Performance Funding for Public Higher Education: Fad or Trend?" in *New Directions for Institutional Research*, spring, Jossey-Bass, San Francisco, CA.

Dougherty, K. and R. Natow (2009), *The Demise of Higher Education Performance Funding in Three States*, May, Community College Research Center, Teachers College, Columbia University, New York, NY.

Freeman, M. (2000), The Experience of Performance Budgeting on Higher Education at the Campus Level in the Past 20 Years, unpublished doctoral dissertation, University of Tennessee, Knoxville, TN.

Hall, K. (2000), "Tennessee Performance Funding and the University of Tennessee: A Case Study", unpublished doctoral dissertation, University of Tennessee, Knoxville, TN.

Ischinger, B. (2006), "Higher Education for a Changing World", in *OECD Observer*, No. 255, May.

Latimer, D. (2001), "A Case Study of the Twenty-Year History of Performance Funding at the University of Memphis", unpublished doctoral dissertation, University of Tennessee, Knoxville, TN.

Lorber, J. (2001), "Long-Term Effects of Performance Funding: A Case Study of 20 Years at Tennessee Technological University", unpublished doctoral dissertation, University of Tennessee, Knoxville, TN.

Massy, W. *et al.* (2007), *Academic Quality Work: A Handbook for Improvement*, Jossey Bass, San Francisco, CA.

Millett, C. *et al.* (2008), *A Culture of Evidence: An Evidence-Centered Approach to Accountability for Student Learning Outcomes*, Educational Testing Service, Princeton, N.J.

Mortimer, K. (1972), *Accountability in Higher Education*, February, American Association for Higher Education, Washington DC.

National Conference of State Legislatures (NCSL) (2007), *Improving Higher Education Performance and Productivity,* Washington DC.

National Center for Public Policy and Higher Education (2000, 2002, 2004, 2006, 2008), Measuring Up: The National Report Card on Higher Education, *http://measuringup.highereudcation.org*.

Organisation for Economic Co-operation and Development (OECD) (2006), "Higher Education Quality, Equity and Efficiency", *OECD Observer*, No. 256, July.

Russell, M. (2000), "Performance Funding in Tennessee: A Twenty Year Perspective", unpublished paper, University of Tennessee, Knoxville, TN.

Shaw, T. (2000), "An Evaluation of Tennessee's Performance Funding Policy at Walters State Community College", unpublished doctoral dissertation, University of Tennessee, Knoxville, TN.

State Higher Education Executive Officers (SHEEO) (2005), *Accountability for Better Results: A National Imperative for Higher Education,* National Commission on Accountability in Higher Education.

Utah State Office of Education (USOE) (2006), "A Test of Leadership: Charting the Future of US Higher Education", also known as "The Spellings Report", pre-publication copy, pp. ii-51, *www.ed.gov/about/bdscomm/list/hiedfuture/reports/pre-pub-report.pdf*, accessed 21 June 2007.