Outcomes of higher education: Quality relevance and impact

8-10 September 2008
Paris, France

Enseignement supérieur: qualité, pertinence et impact

8-10 septembre 2008
Paris, France

Creating a Higher Education Accountability System: the Texas Experience

Geri H. Malandra, Strategic Management, University of Texas System, Austin, Texas, U.S.A.
CREATING A HIGHER EDUCATION ACCOUNTABILITY SYSTEM: THE TEXAS EXPERIENCE

Geri H. Malandra, Strategic Management, University of Texas System, Austin, Texas, U.S.A.

Based on a case study of the University of Texas System this presentation describes the development of a comprehensive system of accountability and its impact in the context of accountability efforts across the state of Texas and the USA.

The paper argues that the identification and assessment of student learning outcomes must be an integral part of a robust accountability framework – looking at student learning outcomes out of context has limited value. As part of an accountability framework, student learning outcome data can provide institutions, executive leadership, and governing boards with information that can focus on results and help communicate success to external audiences, as well as support internal campus improvement in student success. The presentation demonstrates how this approach is developing not only at bigger, more mature institutions but also at those that are smaller and growing.

Introduction

This paper argues that to have genuine meaning and impact, identification and assessment of student learning outcomes must be an integral part of a robust accountability framework. Looking at specific outcomes – test results, for example – might be attractive from a political or public relations point of view, but such data are not meaningful in isolation. First, the paper summarizes briefly the status of higher education accountability policy issues in the United States. It provides an overview of the scope of postsecondary education and essential quality assurance mechanisms.

It is in these contexts that The University of Texas (U. T.) System case will be explored. This case helps respond to the questions, “what is the proof that accountability and learning assessment are feasible in a complex university system, and that they work?” Beginning seven years ago, the U. T. System voluntarily tested several approaches and established a framework that includes learning assessment. This approach has evolved into to an integrated and customized accountability framework that has been applied for the past five years across 15 highly varied institutions (nine universities and six health centers), from a combined community college and four-year university on the border with Mexico at U. T. Brownsville, to the world’s leading cancer hospital, U. T. M. D. Anderson Cancer Center.

---

1 I would like to acknowledge the work of Dr. Pedro Reyes, who designed and leads the U. T. System’s work on assessing student learning outcomes. Dr. Gary Hanson contributed significantly to the analysis and presentation of Collegiate Learning Assessment results. Ms. Paula Bales provided significant research and editorial support of the U. T. System’s accountability reports and this paper.
Within this framework of institutional accountability, the U. T. System requires its nine universities to administer the Collegiate Learning Assessment and the National Survey of Student Engagement and now has several years of experience with these instruments. Because of this unusually rich context, we hope it will be useful to share examples of what has worked, what needs improvement, and why we think we’ve achieved these results to date.

Higher Education Accountability Policy Issues in the United States

Embedding learning assessment in an accountability system may seem uncontroversial from a higher education management or research perspective. However, in the United States, the entire issue of measuring student learning outcomes in higher education – let alone accountability – still raises questions and some resistance among faculty and higher education administrators. At the same time, policy leaders and elected officials continue to look for and mandate quick fixes – like mandatory testing – that are applied in a superficial, one-size-fits-all approach. Thus, both internal and external contexts must be understood (see Burke, 2005 for an in-depth study of higher education accountability and assessment).

Over the past decade, a shift toward more public and professional attention has occurred. Today, accountability and assessment are prominent topics of institutional and public discussion. Serious critiques like Bok’s Our Underachieving Colleges (2006) and Hersh and Merrow’s Declining by Degrees (2005) have added weight to the debate and have prompted attention-grabbing headlines: “Should Government Take a Yardstick to College?” “Colleges Enter Testing Debate.” “No Gr_d_ate Left Behind.” “Is Your College a Lemon?” “Is Our Students Learning?”

Accountability seems to generate a clash of cultures in the United States. Externally, politicians and policy makers believe that the cost of education has run amok, that institutions do not attempt to control quality in terms of program content or student outcomes, and that these institutions will not become more disciplined unless external controls are imposed. Certainly, because of federal and state research and financial aid funding programs totaling billions of dollars, governmental bodies have a strong interest in what happens on campuses. However, apart from accreditation and other sorts of compliance activities, the quality of higher education is essentially controlled at the local level – by faculty, administrators, and governing boards.

Critics charge that academia’s current approach to assessing student learning, if it exists at all, is slow, highly elaborate, labor intensive, inward looking, and doesn’t really serve internal or external interests in communicating to the public how colleges and universities add value. As Charles Miller, chair of the national Commission on the Future of Higher Education, complained, “We fought World War II and built an atomic bomb in a shorter time than it takes to do all this stuff... the greatest universities in the history of the world can’t figure that out in a short time when they’ve been working on it for two years already?” (Lederman, 2007).

Some critics contend that accountability is a “myth” if it doesn’t include actions and consequences based on results. Simply gathering information is not enough nor is gathering information purely for internal use. The standards, according to this point of view, must be set externally by accreditors, state higher education boards, or legislatures and must lead to “unavoidable” action. According to this philosophy, accountability should include linking
presidential pay to rankings, if the rankings were based on “good criteria, like success in helping students learn” (Carey, 2007).

Policy makers do not seem to focus on success stories despite the mounting evidence of thousands of accreditation reviews, national meetings, publications, news stories, and voluntary use of assessment at institutions across the country. Instead, what they seem to remember is that educators have been highly resistant to assessment of postsecondary education. This resistance is not new. Forty years ago, Rourke and Brooks (1966) described the belief that “educational outputs cannot be measured, and that any attempt to do so is ludicrous if not actually subversive of the purposes for which academic institutions exist.” More recently, Trudy Banta, a doyenne of the assessment research movement, issued “A Warning on Measuring Learning Outcomes” based on her experience over the past 25 years and on research going back to the 1960s:

A substantial and credible body of measurement research tells us that standardized tests of general intellectual skills cannot furnish meaningful information on the value added by a college education nor can they provide a sound basis for inter-institutional comparisons. In fact, the use of test scores to make comparisons can lead to a number of negative consequences, not the least of which is homogenization of educational experiences and institutions. (Banta, 2007).

She concludes that, while tests can be helpful in initiating faculty conversations about assessment, her research casts serious doubt on the validity of using standardized tests of general intellectual skills for assessing individual students and then aggregating their scores for the purpose of comparing institutions.

Within colleges and universities, faculty and administrators feel that critics “just don’t understand.” The culture of higher education in the United States is one of strong independence, founded on deeply-held principles of academic freedom for faculty. The American tradition of lay boards of trustees is another form of voluntary “social accountability” (Zumeta, 2008). Scholarship in turn is founded on a culture of intense, often inward-looking self- and peer-critiques. For most faculty, it is inconceivable that there can be anything constructive about quality controls and external comparisons imposed by external non-specialists, particularly those with political agendas – even if they are funding the university. This point of view was articulated strongly by higher education spokesman Terry W. Hartle commenting on the OECD’s pilot of an international assessment effort: “the notion of measuring students’ achievement within the United States has been very controversial…The notion of developing a mechanism to do it across the world seems orders of magnitude more controversial” (Labi, 2007).

It is in this context of comparative accountability that the debate about mandatory testing has particularly attracted critics and defenders. The idea of testing, per se, is hard to defend as aberrant. We accept tests readily and not just in schools. We’re naturally competitive – and anyone with kids knows this starts early. The ancient Greeks created the Marathon. The ancient Chinese administered civil service exams that were, indeed, high stakes for government careers. From the Olympics to a myriad of top ten lists to competitive reality television shows like American Idol, Americans in particular seem to indulge in a culture of comparison, competition, and rankings. In the United States, the college admissions testing competition has become a kind
of fetish. This was poignantly illustrated in a New Yorker cartoon: a man standing at the gates of heaven exclaims to Saint Peter, “No kidding! You count SATs?” (Twohy, 1991).

For many, a key underlying policy question related to testing and accountability is: who should and will control quality in higher education? Those of us who have voluntarily developed accountability systems are, perhaps, optimists who, like Margaret Miller, director of the Center for the Study of Higher Education at the University of Virginia’s Curry School of Education, believe that “If we can… look at ourselves carefully and rigorously … there’s a very good chance that we will be able to control the terms in which this question [“How well are we doing?”] is answered. If we can keep this question within our own control, we will do something that K-12 was unable to do, to everybody’s great sadness.” Miller has been persuaded that after two decades of trying to assess college (as contrasted with student) performance, it is not sufficient to gauge a college’s success based only on information about itself. “The answer to the question, ‘How well are we doing?’ really depends on an answer to prior questions: ‘Compared to what? Compared to whom?’” (Lederman and Redden, 2007).

Shavelson notes the long lineage for establishing a “culture of evidence.” The history of testing in the U. S. focused until recently on multiple choice admissions tests like the ACT, SAT, and GRE. But, faculty resist using objective testing to assess student learning.

_They are more comfortable with open-ended, holistic, problem-based assessments, which were more in tune with what they thought they were teaching... and empirical evidence supports their intuition. So, we need to 1) develop a conceptual framework for college outcomes and assessment; 2) design assessment systems to collect snapshots of performance and over time (achievement/learning); 3) include broad spectrum of outcomes, including personal and social perspectives; 4) recognize that any large-scale assessment system can, at best, signal where a problem may exist – but will not pinpoint the problem or generate solutions. (Shavelson, 2007)_

And, most essentially, the development of a more robust and meaningful assessment system must be done in the context of institutions’ own assessments, structures, and processes – and should not be perceived as a silver bullet.

**Higher Education Scope and Quality in the United States**

National Scope. In the United States, the scale of postsecondary education (defined as levels higher than high school, which goes to 12th grade) is large, encompassing public and private colleges and universities (61%), two-year institutions (37%), and less-than-two-year institutions (2%). Eighteen million students, 25 percent of whom are 18 to 24 years old, are enrolled in the over 6,700 postsecondary institutions in the U.S. (Knapp et al., 2007a). Together, these postsecondary institutions confer 3.7 million degrees and certificates (Knapp et al., 2007b).

Among the more than 6,500 postsecondary institutions in the U.S. that report data to the U.S. Department of Education, more than 4,300 colleges and universities offer degree programs. Fifteen percent are public 4-year institutions, 25 percent are public two-year institutions, 45 percent are private four-year institutions, and 15 percent are private two-year institutions. Of the 15 million undergraduates, 42 percent are enrolled in public two-year colleges, 37 percent in
public four-year colleges and universities, and 21 percent in private two- and four-year institutions. Thirty-eight percent of all students are enrolled as part-time undergraduates. One-third are non-white and one-third are more than 24 years old (National Center for Public Policy and Higher Education, 2006). Overall, 57 percent of first-time, full-time undergraduates complete a degree in six years (Knapp et al., 2007a).

The funding of postsecondary education in the United States is a partnership among individuals, institutions, states, and the federal government. According to the National Center for Education Statistics (Knapp et al., 2007a), under 30 percent of revenues at all colleges and universities are generated from tuition and fees, and this is under 20 percent for many public institutions. One-quarter to one-third of expenses are dedicated to instruction. The U.S. government spends $83 billion on financial aid for postsecondary study, approximately 60 percent of all student aid (U.S. Department of Education, 2008). Private philanthropists contribute gifts that provide fellowships and, as is too noticeable these days, private financial firms are also in the student loan business. Seventy-five percent of full time, first time undergraduates receive some type of financial aid; 45 percent of first-time, full-time undergraduates have loans. Yet, according to a national report card on higher education, 43 states “flunked” the affordability standards (percent of family income needed to pay for college; state support of need-based financial aid compared with financial aid) (National Center for Public Policy and Higher Education, 2006).

Measuring Quality: National Approaches. The U.S. Higher Education Act is the basis for federal accreditation regulations and other requirements for institutional data reports to the federal government. Since 1984, this act has required evidence of student academic achievement, which was given additional emphasis among accreditation standards in 1998 (Ewell, 2001). In addition to gaining accreditation, which plays a gate-keeping role in authorizing institutions to participate in federal financial aid programs, every institution that allocates federal financial aid must also report data on students, operations, faculty, and more to the U.S. Department of Education Integrated Postsecondary Education Data Set (IPEDS). This is a primary source for studies of postsecondary education and provides the gold standard on data that are used for accountability systems at the local and state level.

The purpose and policies on accreditation for postsecondary education have mixed origins. Originally, the heritage of accreditation was truly voluntary and more academically focused: presidents of major universities in the Midwest of the United States joined in the late nineteenth century to establish a way to demonstrate the quality and value of their institutions. Over the twentieth century, the scope of accreditation expanded as many separate disciplines became more professionalized and accreditation of specific, specialized programs emerged for most fields, like law, engineering, medicine, social work, performing arts, and many more.

Institutional accreditation provides cyclical reviews of overall organizational viability in terms of finances, governance, facilities, quality of faculty, and student achievement. While the language of accreditation suggests that it is voluntary, because students and institutions rely so heavily on federal financial aid, it is essentially mandatory for any institution that enrolls students who need aid. By the 1980s, regulation of the gatekeeper function of accreditation became more urgent when financial aid programs were opened to for-profit institutions in the 1990s, resulting in considerable fraud.
In typical, entrepreneurial American fashion, and given the absence of top-down, federal mandates, many higher education associations, systems, and institutions have been busy designing a kaleidoscopic variety of accreditation and accountability systems and reports. And, individual states, which have the responsibility to charter higher education institutions, have been developing their own systems of accountability for postsecondary education for many years. For example, a recent study by Peter Ewell and Marianne Boeke found that 40 states administer some version of student unit record data systems covering public institutions that serve an estimated 81 percent of the nation's total enrolled students (Ewell and Boeke, 2007).

The result is a complex system of “voluntary” associations that develop their own standards (aligned with federal and/or state criteria) and that conduct institutional and program reviews through the work of peers – faculty, administrators, and members of the professional community. Yet, despite the thousands of studies and reports produced each year, because of its mixed regulatory and quality assurance heritage, accreditation has not proven to be an accountability system that satisfies internal or external audiences (Lederman, 2008). Instead, new approaches to accountability may overlap with and use some of the same data and approaches that are developed for accreditation reporting.

Quality in American higher education might also be demonstrated by international rankings. Half of the top 100 universities in the world are in the United States (Institute of Higher Education, Shanghai Jiao Tong University, 2007). By contrast, the OECD’s Education at a Glance 2007 indicates that the U.S. is losing ground globally in college completion, literacy, efficiency, and more. Ninety-eight percent of our population has reading literacy, but the level of literacy, for example, seems to be sliding. Expenditures per student have increased since 2000, but outcomes are flat. The U.S. has by far the highest average charges for tuition and fees of OECD countries but it produces less than the median in high science performance. And, school performance is strongly linked to socio-economic background; investments in education are not evening out the disadvantages. This in turn raises the question of value for money – why are we paying more for less? (Schleicher, 2008) The negative trends tend to be emphasized, as in Charles Miller’s commission report, A Test of Leadership: Charting the Future of U.S. Higher Education (U.S. Department of Education, 2006). The unfavorable international comparisons were also repeated in “the national report card” on higher education, Measuring Up, which prominently illustrated OECD data that show the U.S. slipping relative to other OECD nations (National Center for Public Policy and Higher Education, 2006).

Alternative approaches in the U.S. provide objective comparisons that focus on student learning and experience at the campus level. Among ongoing and newer national efforts, two stand out because of their national scope and growing participation: the National Survey of Student Engagement (NSSE) and the Voluntary System of Accountability (VSA)/College Portrait. The NSSE focuses on student experience based on research evidence that a wide range of co-curricular activities contribute to greater student success. NSSE in essence measures the “how” more than the outcome of the educational experience, although it includes some data related to students’ self-perceptions of satisfaction with teaching, advising, the overall experience, etc. Many institutions that participate in the NSSE have been reluctant to publish the survey results because of concerns that the data would be misinterpreted. (This has not been the U. T. System experience; instead, the NSSE data add to the layers of information that are a
valuable part of an accountability system that addresses student outcomes in an appropriate but objective context (see Kuh, 2007).

The VSA/College Portrait is a template targeted at consumers that provides specific indicators of student outcomes, including elements such as graduation rates and post-graduation education or employment plans, and a choice of three specific learning assessment tests (NASULGC, 2008). Designed by public universities and colleges and completed in summer 2007, the template was approved by national association membership in fall 2007. By spring 2008, more than 300 of the over 500 potential participating institutions had committed to use it.

In the United States, we are producing thousands of reports and millions of data points. Some might say we are overdosing on accountability. As one expert has observed, “with all due respect to my colleagues, one might argue that we already have sufficient research on student success….what is missing in our view is the ability to transform the knowledge that we have into practical knowledge” (Redden, 2006). The information remains fragmented, contradictory conclusions are drawn, and there continue to be mismatches between policy questions, audience, big goals, and priorities. I believe the focus will continue increasingly to be on outcomes. And, as I will explain below, we can demonstrate through our work in Texas that it is possible to achieve more positive alignment and use of accountability that includes a focus on student learning, through engagement of stakeholders, articulation of goals, and a flexible application that reflects institutional distinctiveness.

The University of Texas Case

The State of Texas. The University of Texas System (UTS) is a microcosm of the national accountability questions and issues noted earlier. To put this into perspective, Texas is a large microcosm of the United States, with the second-largest population (23.9 million of a total 301.6 million people in 2007). Not only is it large, it is also the second-fastest growing state; like California’s and Florida’s, Texas’ population has grown by roughly three million people since 2000. Its size and demographic trends, and their relation to economic health, have led to increasing concerns about the impact and accountability of higher education in Texas.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Texas Population in Context of Total U.S. and Large State Population Growth</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>U. S.</td>
</tr>
<tr>
<td>California</td>
</tr>
<tr>
<td>Texas</td>
</tr>
<tr>
<td>New York</td>
</tr>
<tr>
<td>Florida</td>
</tr>
<tr>
<td>Illinois</td>
</tr>
<tr>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Ohio</td>
</tr>
<tr>
<td>Michigan</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, Population Estimates Bureau
Unfortunately, the kind of growth that Texas is experiencing – largely among a younger, poorer, and Hispanic population – is likely to make it overall a poorer and less educated state. Currently, fewer than 80 percent of Texans have even a high school diploma, compared with the national average of 85 percent. And, for the younger population, aged 25 to 34, the picture is even dimmer. In Texas, only 60 percent of this group has at least an associate’s degree, compared with 75 percent nationally (Murdock, 2007). Texas is far from those at the top with very large proportions of people with postsecondary degrees, like Canada (100%) and Japan (over 90%) (OECD, 2007). These trends fuel an intense debate in Texas higher education policy about how to balance the competing demands of preparation, access, growth, and quality. They in turn strongly influence accountability and assessment criteria.

Postsecondary Education in Texas. Today, postsecondary institutions in Texas enroll approximately 1.2 million postsecondary students in 101 institutions. Nearly half (500,000) are in public universities like the UTS, Texas A&M University, Texas State University, and others. Since 2000, the state of Texas has experienced an increase of 241,072 postsecondary students, the “equivalent of adding of five University of Texas at Austin campuses” (Texas Higher Education Coordinating Board, 2007). More than half of the increase was in community colleges and more than half of the new students were Hispanic. The state projects that there should be at least 450,000 additional students who will enroll in college by 2015. Seventy percent will be community college (two-year) students. They will come primarily from the major metropolitan areas around Dallas and Houston and from South Texas along the border with Mexico, bringing the total public and private college enrollment to 1.65 million in 2015 (THECB, 2007b).

Postsecondary education in Texas is coordinated by the Texas Higher Education Coordinating Board (THECB), a state agency, but general appropriations go directly to each institution, not through the THECB, individual boards, or system administrations. Within this sector are 35 public universities with four-year or higher degree programs (nine of these are in the U. T. System). These universities are organized into four multi-campus systems (each with its own board) and six stand-alone campuses. In addition, four are independent (private) universities. In Texas there are, as well, ten university health centers (nine are public and six of these – all stand-alone institutions – are in the U. T. System).

Since 2004, higher education accountability has also become a state-wide priority in Texas. In January 2004, Governor Rick Perry issued an executive order calling for the development of a statewide higher education accountability system. Now the State of Texas has a Web-based accountability reporting system for the 101 public universities, community and technical colleges, and health-related institutions in the state. It was developed by the THECB in close consultation with the Governor's office and all institutions. It is similar to and, in some aspects, based on the U. T. System’s framework which was completed earlier, but it does some different things. For instance, it emphasizes performance targets and comparisons across clusters of similar institutions (THECB, 2008).2

---
2 Some policy members expected it to provide a basis, tied to performance, for distribution of incentive funding. Over the past five years, the focus has shifted even more to outcomes and incentives, both by the Governor and the Texas legislature. During the 80th Texas legislative session in 2007, Texas Governor Rick Perry put forward a bold but ultimately unsuccessful proposal to set aside incentive funding for production of degrees, weighted for at-risk...
The University of Texas System. Like its home state, the U. T. System (UTS) has a large scale and is diverse. In fall 2007, the campuses together enrolled a total of over 194,000 students. There was an equal proportion (38% each) of White and Hispanic students, compared with the 35 percent Hispanic students in the most recent high school graduating class.

**Figure 1:** Campuses in the University of Texas System

- 194,199 students
- 38% Hispanic (6 Hispanic Serving Institutions)
- 25% degrees in STEM fields
- 35,908 degrees
- 17,488 faculty
- $11 billion budget
- $11 billion capital program
- $17 billion endowment
- $1.9 billion research expenditures
- 655 new invention disclosures
- 117 new patents
- 5.2 million outpatient visits
- 1.4 million hospital days

In 2007, UTS institutions awarded 25,525 baccalaureate degrees; 8,690 master's degrees; 1,142 doctoral degrees; and 554 professional degrees. It employs nearly 17,500 faculty and students and critical fields (Haurwitz, 2007a; House Research Office, 2007, 127). This framework would have included performance on exit – but not high stakes – exams that every graduating student would have to take. The results would have been aggregated (weighted for the number of students' "at risk" factors), and institutions would have received incentives based on the overall institutional performance compared to national standards, signaling a high bar for all.

The policy issue this proposal was attempting to address – how efficiently and effectively do particular degree programs prepare students compared to the same degree programs at other schools – mixed individual, program, and institutional accountability. Thus, the focus was to be on discipline-specific tests but would also have included licensure exams and others that could be designated, perhaps GRES, LSATs, etc. Existing nationally- or state-normed tests would be used; none would be created for this purpose. Each student would just have to take one test for this purpose. The institution would pay for the exams. The key was in the details; too much remained to be worked out, and the proposal was not included in the final version of higher education legislation passed this year. Instead, $20 million for "incentives" was allocated, but it was left up to the THECB to define an incentive formula. Developing this formula has turned into more of a political than a quality debate and has not concluded.

At the same time, following on recommendations of the Spellings Commission, the National Conference of State Legislatures issued a report in November 2006, Transforming Higher Education: National Imperative - State Responsibility, recommending that "state legislatures must take a leading role in reforming higher education, to make college more accessible and to better meet state needs in a competitive global economy" (Fischer, 2006). Commenting on the report's findings, Texas Representative (and chair of the House committee on higher education) Geanie Morrison said: "Too often, higher education policy is made in reaction to the latest budget crisis rather than on the basis of long-term strategic goals. The Texas legislature is trying to do the latter: set clear expectations and develop data collection systems... and base appropriations on progress toward goals - retention, graduation, increase accessibility and affordability." Rep. Morrison’s comments are significant because Texas representatives, senators, and the Governor’s office are gearing up to try again in the 81st session which will be convened in January 2009. The Governor's office is re-circulating its incentive proposal, and a key state Senator has stated that the first bill she introduces will be one that calls for a report card for each institution of higher education.
63,800 staff. In many places, the local campus is among the largest employers in the region. Major sources of the total UTS revenue of nearly $11 billion include: 36 percent from health care; 21 percent from external grants and contracts; 18 percent from state appropriations; 9 percent from tuition in fees; and 6 percent from investment income; its total endowments are valued at nearly $17 billion.

The U. T. System is a research university system, although the amount of research and types of doctoral programs vary considerably by campus. Among the 15 institutions, campuses range in enrollment size from 3,600 (U. T. Permian Basin) to 50,000 (U. T. Austin). One campus, U. T. Brownsville, is a merged community college and four-year institution. U. T. M. D. Anderson Cancer Center is the world's best cancer hospital. Most are growing; some are highly selective while others must compete hard with other schools or local employment possibilities for well-prepared students.

Together, the 15 UTS institutions generate nearly $2 billion in research expenditures. In 2007, health profession faculty treated 5,168,577 outpatients and admitted patients for 1,388,682 hospital days. The six UTS health institutions also together provide $1.4 billion in health care to the un- and under-insured (the Texas rate of uninsured is 25 percent of the population, the highest in the U.S.). This scale, scope, and range of social responsibilities have relevance to the international challenges that the OECD is addressing in terms of accountability and student outcomes.

The University of Texas Accountability Framework. The U. T. System expects each of the 15 institutions to be accountable and to focus on outcomes within a consistent strategic framework in alignment with their distinctive missions, locations, size, and types of student bodies. When the

U. T. System’s accountability framework was established in 2003, it was unique within Texas, the result of internal, state, and national political as well as policy concerns.

Of course, the U. T. System did not invent accountability. Most of the 50 states have some form of accountability system for higher education and had them before the federal requirements of No Child Left Behind (NCLB) for primary and secondary schools (Burke, 2005). But a lot of the policy debate is about audience and who is in charge. Data sets prepared by institutional researchers for a legislative budget committee, the U.S. Department of Education, or accreditors are not intrinsically meaningful to governing board members or presidents who manage their institutions. Nor are they particularly useful to prospective students. And, most data sets at the internal, state, and national levels tend to focus on inputs and process, not outcomes.

In Texas, there was certainly some influence from NCLB because the chair of the U. T. System Board of Regents, Charles Miller, was a key player in the education reforms in Texas that eventually led to NCLB when then-Governor George W. Bush became president. As chair of the U. T. System Board, Charles Miller introduced a big idea, instituting the creation of a system-wide accountability framework that would focus more on student outcomes and learning. With new System leadership under Chancellor Mark Yudof, in mid-2002 this initiative began to move faster. One motivation was that the Chancellor and Board were seeking deregulation of the tuition-setting process, to give the Board more authority to set tuition, which had been completely
vested in the legislature. Part of the agreement to secure deregulation of tuition was the U. T. System's commitment to produce an accountability report that would demonstrate the impact of those Board decisions.

The new U. T. System accountability framework was outlined by late 2002. The details were filled in by defining and selecting the specific indicators in collaboration with presidents, faculty, and management from each campus. We consulted state higher education policy makers to find out what they expected. We tied it to the state-wide master plan for higher education and aligned it with the System mission statement and goals. And, we tried to focus on outcomes and to emphasize transparency. This framework had to cover and be meaningful to each of the nine universities and six health institutions in the System and had to satisfy concerns of faculty leaders, campus administrative leaders, and System leaders, as well as the Board. The first accountability report was presented to the Board and the legislature in March 2004. In May 2008, we published our fifth edition, covering 72 indicators, with five-year trend data displayed by institution on each measure, analysis of progress on high-priority themes like affordability, student outcomes, diversity among health care institutions, and institutional rankings, together with customized accountability profiles for each of the 15 U. T. System institutions (The University of Texas System, 2008). (See Appendix A for a list of the 72 indicators.)

The University of Texas System-level accountability framework is constant, but the consideration of trends is not one-size-fits-all; instead, progress is evaluated in relation to each campus's individual mission, regional location, and types of students who attend. The data are made readily available to institutions and the public: the accountability report is posted on the Web and sent to legislators and hundreds of other people in Texas and nationally. The U. T. System also looks at the trends when it evaluates presidents and when proposals are considered by the administration and the Board about specific investments in the campuses. In other words, the information is used for strategic decision making and institutional improvement.

Student Outcomes in the U. T. System Accountability Framework. The U. T. System accountability framework has influenced and has been influenced by this changing national and state context. The UTS case demonstrates that institutional progress can be achieved even in the midst of ongoing external policy debates. Of 72 performance indicators, approximately 75 percent address outcomes and/or productivity across student, teaching, research, health care, and organizational efficiency themes that align with the System’s strategic plan. Among these, the focus on student outcomes has been prominent from the start. As early as 2001, the U. T. System first began development of an approach to learning assessment and, in 2002, the System decided voluntarily to include some information about outcomes in its new accountability report. By 2003, it had made the decision to include the results of assessment surveys and tests in its accountability framework. And, since 2004, a form of testing (through sampling of undergraduates at the nine universities in the System) has been required for all nine universities in the System for institutional accountability. The U. T. System has provided financial support for the institutions to participate, covering the costs of the tests and incentives for student participants. While some of the nervousness reflected in headlines is understandable, our experience with transparency has been largely positive and have attracted national attention for U. T. System institutions whose test results show performance above expected levels (Carey, 2006; Kantrowitz, 2006; Ewell, 2006).
In the UTS accountability framework, student outcomes are a major focus. The following table illustrates the relationship between a sample of these outcome indicators and the U. T. System’s strategic goals:

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Outcome Questions and Indicators in the U. T. System Strategic Framework</td>
</tr>
<tr>
<td>Goal: Retain and graduate promising students</td>
</tr>
<tr>
<td>Indicator</td>
</tr>
<tr>
<td>1st year persistence</td>
</tr>
<tr>
<td>4-, 5-, and 6-year graduation rates</td>
</tr>
<tr>
<td>Graduation rates of community college students who enter U. T. System institutions with at least 30 credits to transfer</td>
</tr>
<tr>
<td>Composite persistence and graduation rates for students who matriculate at a UTS institution but go elsewhere in Texas to complete their education</td>
</tr>
<tr>
<td>Goal: Generate student learning and degree completion Provide high-quality and demanding curricula and instruction</td>
</tr>
<tr>
<td>National Survey of Student Engagement (NSSE) data on satisfaction with advising, the students' overall assessment of their college experience, and whether they would &quot;attend again&quot; if given the chance</td>
</tr>
<tr>
<td>Results of Collegiate Learning Assessment (CLA), administered to random samples of 100 freshmen and 100 seniors</td>
</tr>
<tr>
<td>Degrees conferred in high-demand science, technology, engineering, math, and health fields</td>
</tr>
<tr>
<td>Goal: Prepare students for employment and careers</td>
</tr>
<tr>
<td>Licensure exam pass rates for key fields (e.g., teaching, engineering, nursing)</td>
</tr>
<tr>
<td>Postgraduation experience – employment or enrollment in a graduate/professional program after graduating:</td>
</tr>
<tr>
<td>Source: The University of Texas System Accountability Report 2007-08</td>
</tr>
</tbody>
</table>

Together, these indicators illustrate that the U. T. System assesses student outcomes in multiple ways. A summary of data displayed for the most current year includes the following:
Table 3
SAMPLE SUMMARY OF UT SYSTEM STUDENT OUTCOMES

<table>
<thead>
<tr>
<th></th>
<th>NSSE</th>
<th></th>
<th>CLA Performance Task</th>
<th>6-Year Graduation Rate</th>
<th>Postgraduate Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Persisten ce</td>
<td>Advising Experience</td>
<td>Educational Experience</td>
<td>FRESHMEN SENIORS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>First Year Seniors</td>
<td>First Year Seniors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTA</td>
<td>64.1%</td>
<td>70%</td>
<td>66%</td>
<td>78%</td>
<td>82%</td>
</tr>
<tr>
<td>Austin</td>
<td>92.1%</td>
<td>80%</td>
<td>75%</td>
<td>89%</td>
<td>91%</td>
</tr>
<tr>
<td>UTB</td>
<td>79.9%</td>
<td>73%</td>
<td>68%</td>
<td>77%</td>
<td>83%</td>
</tr>
<tr>
<td>UTD</td>
<td>67.3%</td>
<td>78%</td>
<td>54%</td>
<td>86%</td>
<td>75%</td>
</tr>
<tr>
<td>UTEP</td>
<td>72.1%</td>
<td>84%</td>
<td>67%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>UTPA</td>
<td>57.0%</td>
<td>80%</td>
<td>82%</td>
<td>86%</td>
<td>90%</td>
</tr>
<tr>
<td>UTPB</td>
<td>64.5%</td>
<td>62%</td>
<td>61%</td>
<td>75%</td>
<td>79%</td>
</tr>
<tr>
<td>UTT</td>
<td>58.7%</td>
<td>75%</td>
<td>71%</td>
<td>92%</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CLA - Writing Task</td>
<td>Licensing/Certification Exam Pass Rates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen Seniors</td>
<td></td>
<td>Teaching</td>
<td>Nursing</td>
<td>Engineeri ng</td>
<td></td>
</tr>
<tr>
<td>UTA</td>
<td>1125</td>
<td>1220</td>
<td>98.9%</td>
<td>99.3%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Austin</td>
<td>1296</td>
<td>1326</td>
<td>98.5%</td>
<td>96.7%</td>
<td>88.4%</td>
</tr>
<tr>
<td>UTB</td>
<td>--</td>
<td>--</td>
<td>92.6%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>UTD</td>
<td>1264</td>
<td>1333</td>
<td>99.6%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>UTEP</td>
<td>1132 **</td>
<td>91.9%</td>
<td>91.0%</td>
<td>32.0%</td>
<td>28.9%</td>
</tr>
<tr>
<td>UTPA</td>
<td>1035 **</td>
<td>88.9%</td>
<td>93.2%</td>
<td>--</td>
<td>32.4%</td>
</tr>
<tr>
<td>UTPB</td>
<td>1037 **</td>
<td>98.2%</td>
<td>--</td>
<td>76.9%</td>
<td>29.2%</td>
</tr>
<tr>
<td>UTT</td>
<td>1083 **</td>
<td>97.9%</td>
<td>98.1%</td>
<td>100.0%</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

Notes:
Persistence: First-year persistence rates for first-time, full-time degree-seeking students entering in fall 2005.
NSSE Advising Experience: % of survey respondents that rated the academic advising "good" or "excellent," 2007.
NSSE Educational Experience: % of survey respondents that evaluated their entire educational experience "good" or "excellent," 2007.
CLA Performance Task: Student results on performance task, Freshmen 2006 and Seniors 2007.
CLA Analytical Writing Task: Student results on analytical writing task, Freshmen 2006 and Seniors 2007.
Pass Rate: % of first-time test takers that passed the exam, 2006.
Graduation Rate: Six-year graduation rate for students first enrolled in fall 2000.
Postgraduate Experience: % of baccalaureate graduates employed and/or enrolled in a graduate or professional program within one year, 2005-06. For UT Austin: The employment proportions are slightly lower because, in addition to students employed or enrolled in a Texas graduate program, a significant number of graduates are recruited into universities around the country or work for corporations.
Source: U. T. System Accountability and Performance Report 2007-08
Beyond these summary data and trends, it is important to emphasize that U. T. System campuses are already investing in initiatives to improve performance in areas which may have an indirect impact on graduation rates and learning. Each campus has adopted a different combination of strategies tailored to its unique needs; some of these approaches are being used by a number of campuses. For example, four campuses have structured living/learning communities and interest groups, and four have expanded supplemental instruction and tutoring programs. Six are adding academic advisors and improving their advising systems, including the implementation of Web-based technology that tracks individual student progress and flags problems. And nine have instituted formal “guaranteed financial aid” plans for their poorest students.

Using the Collegiate Learning Assessment. After piloting other approaches, in 2004-05, the U. T. System selected the CLA as the System-wide learning assessment tool because it provides a window on students' development of higher order cognitive skills in a holistic framework that transcends specific academic disciplines, assessing performance on integrated writing, critical thinking analytic reasoning, problem solving, and reading comprehension skills. Because hundreds of colleges and universities participate, benchmarks can be established in comparison with similar institutions. The results are useful in this accountability framework but also relate to expectations by the THECB that institutions evaluate the results of general education programs and by regional accreditors that student achievement must be assessed (Reyes, 2008; Millet et al, 2007). While there continues to be debate about the concept, methodology, and validity of this instrument, the U. T. System experience has been positive and helpful in most cases, suggesting that it is worth having the policy discussion and clarifying the purpose and use of this approach (Haurwitz, 2007b). In this context, the testing of learning outcomes has improved and is becoming meaningful because the accountability framework is broader and aligned with the System’s and campuses’ own strategic frameworks.

The following summary of CLA results is published in the U. T. System’s accountability report, together with analysis in customized “accountability profiles” of individual campus results.

**Figure 2:** Assessing Learning Outcomes: CLA Summary

![CLA Summary Chart](image)

Source: UT System Accountability and Performance Report 2007-08
Generally, CLA results demonstrate, as illustrated chart above, that sample of U. T. students taking the test are performing within the expected range, and, in some cases, well above the expected range. And, this graph is just one example from an in-depth report that goes to the Board separately, as well as a range of summary tables that are published in the accountability report.

The U. T. System considers carefully the critiques of the CLA, which focus on both the sampling methodology and validity of inferring value-added information from the test. Our response is that we will persist in using it, while looking at, questioning, and trying to enhance our understanding of the results. Wider use and study of its results nationally will also make it better. For some institutions, a cross-sectional design is being implemented with samples of freshmen and seniors. In others, a longitudinal approach (testing the same students as freshmen and seniors) will be used (Reyes, 2008). In all cases, however, because the NSSE and CLA involve small samples of students, more in-depth campus study is needed, and is conducted, to interpret and apply results.

Use of and attitudes toward the CLA and student outcome assessment more broadly vary by type of institution. For some institutions, the results of the CLA tests are embedded in broader institutional assessment plans. Institutions use the data in their internal planning and improvement efforts, amplified by more in-depth campus-based assessments which can cover domain-specific knowledge, soft skills, or other topics. This is the level at which faculty can and must become engaged. These activities may also be initiated because of or aligned with the individual Quality Enhancement Plans required by Southern Association of College and Schools (SACS) for regional accreditation. The U. T. System approach complements the focus on student achievement that is required for regional accreditation by the SACS, as all campuses have recently completed or are preparing for full review. As a result, and as the examples below illustrate, attention to student outcomes is clear and is increasingly embedded in accountability reporting as well as the ongoing work of faculty and administration.

**U. T. System Campus Experience with Learning Assessment**

The University of Texas at El Paso (UTEP) is the leading U.S. doctoral/research university serving a majority Mexican-American student population. Over 80 percent of UTEP’s 20,155 students come from the El Paso area, which has the lowest household income among six major metropolitan areas in Texas. Over 75 percent of undergraduates are Hispanic. The graduation rates for UTEP students are below the national and state averages and exclude a significant proportion of students who do not start as first-time, full-time freshmen. For UTEP, the CLA is a very useful tool because its national benchmarking provides a unique method to show the value that UTEP adds for its students (Jarvis, 2008). The CLA results have validated what campus officials have sensed: while UTEP students deal with economic and other challenges and appear to be less well prepared based on traditional measures (like SAT or ACT admissions test scores), compared with a national pool of similar schools, these students “beat the predictions,” outperforming in terms of expected results on the CLA. For example, for seniors taking the test in 2007, the expected total score was 1073, whereas UTEP seniors’ actual score was 1168.

In addition, UTEP uses a variety of more traditional outcomes assessments, including the NSSE. Recently, UTEP has implemented a six-stage planning and assessment cycle to define,
review, and formalize outcomes and to translate those outcomes into action steps, formalize the action steps, and assess the impact of changes made. These activities are focused at the unit (academic department) level, take considerable energy to complete, and require ongoing effort. At the same time, UTEP is implementing curricular reform to reduce required credits in majors to 120, and then to phase in comprehensive academic program reviews on a three- to five-year cycle. In this context, UTEP is considering extension of its use of the CLA to some of the larger colleges in the university and, eventually, to conduct longitudinal analysis of CLA outcomes among students in these colleges.

UTEP is an institution that, in UTEP Provost Richard Jarvis’s view, is on the cusp of a shift from “compliance to real application,” from using the CLA because the campus was asked to use it to seeing intrinsic value in its use.

The University of Texas of the Permian Basin (UTPB). The smallest university in the U. T. System, UTPB enrolled 3,559 students in fall 2007. Similar to the demographics of the surrounding region, 37 percent of students are Hispanic and 54 percent are White. 70 percent of students are first-generation college students. UTPB is essentially an open-enrollment university, admitting 98 percent of all applicants; 52 percent of new freshmen graduated in the top 25 percent of their high school class; and a small proportion require remediation (8%, compared with the 21% statewide average).

UTPB has developed a multi-level approach to learning outcomes assessment which begins with the development of new academic programs that are planned to meet the criteria for professional accreditation, as it has in business, education, and other fields. These accreditations lay out requirements for assessing student achievement that are built into the program design. In addition, UTPB measures outcomes of its general education program through embedded course assessments and undertakes external reviews of academic programs.

In this context, the CLA is a valuable affirmation of the quality UTPB has achieved and confirms that what faculty do in the classroom is effective. It provides insight based on comparative and quantitative information. However, it does not show what needs to be changed; that insight comes from the other types of assessments noted above. For the future, UTPB is making a focus on assessment part of the faculty and leadership culture (Watts and Fannin, 2008).

When compared with national peers, UTPB exceeds expected results on both the NSSE and the CLA. For example, 90 percent of seniors at UTPB viewed their overall educational experience as good or excellent, compared with 85 percent at peer institutions. Seniors at UTPB scored higher than expected compared with peers and the higher than the national average on the CLA total score (1206 vs. 1151 and 1192). The difference between the freshmen CLA total and the senior total was 197 points, substantially higher than the national average of 111 points. And, UTPB students have achieved similar results throughout the three years that the U. T. System has participated in the CLA. UTPB’s CLA results demonstrate that universities can successfully address the challenges faced by Texas and through the U.S. in educating students without a family history of higher education, with different cultural and language backgrounds, and from groups that historically have not performed well (Watts and Fannin, 2008).
The University of Texas at Dallas (UTD) enrolls over 14,500 students, more than half of whom come from the counties surrounding the Dallas metropolitan area, which all have median family incomes above the state median. One-third of freshmen come from the top 10 percent of their high school graduating classes, and the average SAT score of 1240 far exceeds the state (999) and national (1017) averages. Because approximately 80 percent of the variance in CLA scores is correlated with SAT scores, UTD students are expected to perform highly and they do: in 2007, for example, the senior scores on the analytic writing task were 1333 (1334 was expected), compared with the national average of 1224. Similarly, the CLA total score for UTD seniors was 1332, compared with an expected score of 1339, and the national average of 1192.

Overall, UTD freshmen and senior scores on the CLA have been around the 95th percentile for the three years of participation. With little room for quantitative improvement, UTD feels this ceiling effect limits the usefulness of the CLA – well-prepared students are admitted, and they generally do well while enrolled on the skills the CLA emphasizes like problem-solving. The campus critique of the CLA includes the following concerns:

...gain scores, residual scores, and repeated measures approaches to assessing educational outcomes all evidence substantial limitations as indices of change that include limited reliability, extreme sensitivity to ceiling and floor effects, and the nagging question as to whether they even assess change at all... [the] current value added assessment models should be used primarily for assessing student's discipline specific knowledge and skills as well as more generic skills such as writing and critical thinking as they apply to their major fields of study. Their use in assessing broader areas of student performance or to benchmark institutions against each other exposes the general insensitivity and limited value of such approaches. (Coleman, 2008)

While UTD does not find the CLA to be a particularly helpful assessment tool, the campus is seriously concerned with using the assessment of the outcomes of student learning for diagnosis and program improvement, utilizing a wide range of highly robust approaches (Coleman, 2008). These strategies include the setting of and evaluation of expected outcomes and measures for each course as required for regional accreditation. Assessment of students’ ability to construct effective written arguments and to gather, incorporate, and interpret source material in their writing (skills on which the CLA focuses) is embedded in the learning objectives and course-by-course assessment of the communications component of UTD’s core curriculum. The enhancement of critical thinking is an objective for most components of this curriculum. Demonstrating how the campus uses assessment data to improve student learning, the campus monitored entry-level calculus for three years and devised strategies to improve what was considered a high withdrawal/failure rate (benchmarked against peer institutions). UTD also monitors placements of its graduates in graduate school, in law and business schools, and in health programs for its prehealth majors (The University of Texas at Dallas, 2006).

The University of Texas at Austin (UT Austin). The System’s flagship university, U. T. Austin is ranked highly in the U.S. and internationally for its research and quality of faculty. The university is in high demand, drawing students from over 230 Texas counties, all states in the nation, and 126 foreign countries. With a total enrollment in fall 2007 of 50,170, it received 29,626 applications for the fall 2008 freshman class. The target enrollment for that class is 7,200. By spring 2008, it already admitted more than 9,100 Texas applicants who graduated in the
top 10 percent of their high school class (state law requires admission of this group; for fall 2008, an estimated 81 to 85 percent of freshmen from Texas high schools will be automatically admitted under the top 10 percent law.

For U. T. Austin, the primary focus is on enhancing excellence of faculty, of research, and of students’ academic experience. A recent reorganization has created an integrated core curriculum for all undergraduate students. This focus is reflected in the indicators the campus tracks at the school/college as well as institution-wide level, including graduation rates, student flow, retention rates, ethnicity of entering students and of graduates, as well as indicators of faculty excellence and research activity.

In this context, with highly able and well-prepared students, U. T. Austin continues to see value in using the CLA. For example, the campus successfully used the CLA results to document for its regional accreditor that the campus is addressing the state’s mandated general education requirements, specifically the outcomes related to critical thinking and communication. U. T. Austin also plans to use the CLA results to help improve its general education program. It hopes to understand better the statistical significance of the CLA “value-added” metric and to work with larger and more representative samples and disaggregated data that will help analyze results by school/college.

U. T. Austin also emphasizes that longitudinal results are needed to demonstrate whether the CLA is a good test of its students’ learning. As at U. T. Permian Basin, the institution emphasizes the importance of relating results on the CLA to those on other measures that will help assess more accurately the growth in critical thinking, analytical reasoning, and effective communication learning outcomes. (Armstrong, 2008)

Conclusions

Are accountability and learning assessment working at the U. T. System? Since the publication of the U. T. System’s first accountability report in 2004, much has occurred that suggests the answer is “yes.” The culture of accountability and use of data at the System and campus level is expanding for evaluative and improvement purposes.

Externally, when this report was first presented to the higher education subcommittee of the Texas Senate in 2004, a senior senator observed that this was the best thing she had ever seen come out of higher education in her 20 years in the Senate. Internally, one measure of the success of the accountability framework is its adoption by campus leadership. It is not a top-down issue. As one U. T. System university president said in a speech to his faculty assembly, “the public has every right to expect results. Our challenge is to meet these expectations head on and do a much better job explaining our value” (Spaniolo, 2006).

Another measure of success is the extent to which accountability and learning outcomes information is embedded in other ongoing processes. The U. T. System campuses and administration use a subset of the indicators in institutional planning documents and as background for evaluation of presidents. Many institutions are using the data sets to frame internal planning and evaluation down to the department level, one reason we are careful about how much we tweak the framework and contents. And, as the campus descriptions show,
learning assessment tests, surveys, and other student outcomes indicators are being integrated into the ongoing work of program improvement.

The Board of Regents takes specific steps to address issues where data show significant problems, as with the graduation rates initiative, including focused tracking of data trends and setting of specific targets. While the U. T. System has not adopted an accountability system that directly ties all key budget or financial decisions to performance data, the Board and System executives look at graduation rates and other key trends when executive compensation recommendations are developed each spring.

At the campus level, these trends are being taken very seriously. For instance, at The University of Texas at El Paso and The University of Texas-Pan American data showed that while first-year persistence was improving, there was still a drop-off in enrollment after the sophomore year. Both institutions have made investments to study the causes and make improvements – in advising, in curriculum design, and more – to sustain persistence into the “middle years.”

Also at the campus level, The University of Texas at Dallas recognized from accountability and internal data that it had a problem with first-year persistence, despite that fact that U. T. Dallas freshman average the highest SAT scores of any academic campus in the U. T. System. Looking at the results of the NSSE survey, the CLA assessment test, and in-depth analysis of performance in gateway courses like calculus, UTD has been able to pinpoint obstacles to student success in the classroom and is redesigning its advising and curriculum based on those findings.

More work is needed to align the various U. T. System approaches so that the totality of assessments of institutional quality is greater than the currently somewhat disparate sum of its various parts. At the same time, it will be important to maintain a customized focus on results and outcomes for individual institutions. Continued progress will depend on leadership, willingness to invest resources, and involvement of presidents and faculty members, together with administrators and policy makers, who will use the information to pursue internal institutional improvements as well as to communicate institutional progress and impact. This and similar experiences in many institutions and systems across the country demonstrate that higher education accountability and learning assessment can be addressed in responsible, flexible, useful, and meaningful ways.
## Appendix A

### The University of Texas System
Accountability and Performance Report 2007-08: Performance Indicators

### STUDENT ACCESS, SUCCESS, AND OUTCOMES

**Preparation and Academic Cost**
- Admission test scores: ACT, SAT, GRE, GMAT, LSAT
- Average net academic cost and average percent discount for full-time undergraduate students
- Undergraduate financial aid awards

**Enrollment**
- Total enrollments and percent increase over previous five years
- Comparison of total UT System enrollment increases with increases for all Texas universities
- Proportion of undergraduate, graduate, and professional students by ethnicity and level
- Number and percent increase of first-time undergraduates and transfer students

**Outcomes**
- First-year persistence rate for first-time, full-time degree-seeking undergraduates, and by ethnicity
- Four-year graduation rates of first-time, full-time degree-seeking undergraduates
- Six-year composite graduation and persistence rates, and by ethnicity
- Progress to six-year graduation rate goals
- Six-year graduation rates of first-time, full-time degree-seeking undergraduates, and by ethnicity
- Four-year graduation rates for community college transfer students
- Graduation rates of graduate students at health-related institutions

**FACULTY, INSTRUCTION, AND RESEARCH**

**Faculty**
- Number of tenured/tenure-track faculty

**Instruction**
- FTE student/FTE faculty ratio
- Proportion of lower division semester credit hours taught by tenured/tenure-track faculty

**Research**
- Research expenditures, by funding source (federal, state, private, local)
- Sponsored revenue
- Ratio of research expenditures to FTE tenured/tenure-track faculty
- Number and percent of FTE tenured/tenure-track faculty holding extramural grants
- State appropriations for academic institutions’ research as a percent of research expenditures
- Health-related institutions’ research expenditures as a percent of formula-derived general appropriations revenue
- National and state research rankings

**HEALTH CARE**
- Total patient care revenue at UT health institutions
- Charges and revenue per FTE clinical faculty
- State-owned hospital admissions by faculty
- State-owned and affiliated hospital days by faculty
- Outpatient visits in state-owned and affiliated facilities by faculty
- Hospital and clinic service in relation to General Revenues

**OPERATIONS, EFFICIENCY, AND PRODUCTIVITY**

**Revenues and Expenditures**
- Key revenues by source
- Key expenses by purpose
- Ratio of campus administrative costs to expenses
- Appropriated funds per FTE student
- Revenue (tuition and fees) per FTE student
- Total dollar amount of endowed, and ratio per FTE student and per FTE faculty

**Sources of donor support**
- Alumni support trends

**Efficiency and Productivity**
- UT System bond rating
- Historically underutilized business trends
- Energy use
- Space utilization of classrooms
- Ratio of research expenditures to research E&G sq. ft.
- E&G assignable space per FTE faculty
- E&G assignable space per FTE student
REFERENCES

Armstrong, N. (2008), email interview with Neal Armstrong, Vice Provost for Faculty Affairs, The University of Texas at Austin, April 29 and 30, 2008.

http://www.insidehighereducation.com/views/2007/01/26/banta


Coleman, J. M. (2008), phone and email interviews with J. Michael Coleman, Dean of Undergraduate Education, The University of Texas at Dallas, April 21, 2008; March 17, 2008.


http://www.statesman.com/news/content/region/legislature/stories/02/01/1highed.html


http://factfinder.census.gov/servlet/GCTTable?_bm=y&-geo_id=01000US&-_box_head_nbr=GCT-T1-R&-ds_name=PEP_2007_EST&-format=US-9S


http://www.ed.gov/about/bdscomm/list/hiedfuture/reports/final-report.pdf


The University of Texas System (2008), Accountability & Performance Report 2007-08.


http://www.highereducation.org/crosstalk/ct0107/voices0107-zumeta.shtml