

Performance Based Funding in the Utah System of Higher Education

Overview of Performance Based Funding Proposal

For over two years, the Utah System of Higher Education has been laying the groundwork for a performance-based funding system. In cooperation with the State Board of Regents, The Governor's Office of Planning and Budget, the Legislative Fiscal Analyst's Office and the State Legislature's Executive Appropriations Committee, four "budget related" systemwide performance indicators have been identified, data has begun to be collected, and potential funding links have been discussed. This proposal outlines a method for tying performance indicators to funding. The proposal follows the following guiding principles:

- Start with a few core indicators that have the potential to foster change
- Make sure the indicators are clearly defined and measurable
- Initial funding should be somewhat limited
- Funding should be incremental to the base budget
- The mechanism that ties performance to funding should be simple

The following tables report data from the 1997 Assessment and Accountability Report that are related to the proposed system-level indicators. The tables demonstrate that the standards that are being proposed will be challenging for USHE institutions to achieve.

The performance indicators that are proposed are tied to a fund request for the 2000-2001 appropriation year. The change required at an institution for it to meet its 2000-2001 performance criteria, are as follows:

Graduation Efficiency

Average credits to graduation divided by total credit hours required.

This measure is intended to encourage institutions to identify and eliminate bottlenecks to the timely completion of academic programs. This measure will tell how many extra credits the average student takes to graduate. By encouraging institutions to reduce this value over time, policy-makers foster positive institutional change by reviewing the length of programs, strengthening student advising, foster course access, and other steps to reduce the number of credits students take to graduate. An institution will have met its performance criteria if the ratio declines.

On Tables 1 and 2, the minimum credit hours (under the quarter system) to graduate would be 180 for a bachelors degree and 90 for an associates degree. The average credits completed by graduating university students was 203, 17 credits more than the minimum.

TABLE 1
Terms, Years, and Credits Earned by
Native Students who earned BS or BA Degrees, 1997

<u>Institution</u>	<u>Terms to Graduate*</u>	<u>Years to Graduate**</u>	<u>Total Credits</u>	<u>Ratio</u>
University of Utah	15.9	5.3	205	1.14
Utah State University	15.8	5.2	197	1.09
Weber State University	17.9	5.9	208	1.16
Southern Utah University	14.0	4.7	204	1.13
Utah Valley State College***	13.5	6.5	141	1.18

TABLE 2
Terms, Years, and Credits Earned by
Native Students who earned AS or AA Degrees, 1997

<u>Institution</u>	<u>Terms to Graduate*</u>	<u>Years to Graduate**</u>	<u>Total Credits</u>	<u>Ratio</u>
Snow	6.9	2.3	107	1.19
Dixie	7.3	2.4	106	1.18
College of Eastern Utah	7.7	2.6	107	1.19
Utah Valley State College***	7.4	3.7	76	1.27
Salt Lake Community College	11.5	3.8	120	1.33

Source: USHE Biennial Assessment and Accountability Report, 1997

*Terms during which student was registered for one or more classes.

**Calculated on basis of terms completed, assuming 3 terms per year.

***UVSC is on semester calendar, with 2 terms per year.

Transfer Efficiency

Average credits to graduation for transfer students divided by average credits to graduation for native students.

This measure is intended to help the USHE evaluate and improve on its important transfer function. An institution will have met its performance criteria if the ratio declines.

This calculation would be made for schools from which students transfer and also for schools to which students transfer. Making an improvement in this area requires a cooperative effort among institutions. Positive Institutional improvements that may be fostered by this indicator include strengthening student advising, improving

transferability of courses and programs among institutions, expanding student outreach programs, improving the clarity of catalogs, and implementing online computer programs to show students how their courses will transfer to a particular institution.

TABLE 3
Terms, Years, and Credits Earned by
Transfer Students who earned BS or BA Degrees, 1997

<u>Institution</u>	<u>Terms Completed*</u>	<u>Years to Graduate*</u>	<u>Trans Stu Credits**</u>	<u>Native Stu Credits</u>	<u>Ratio</u>
University of Utah	11.1	3.7	212.8	205.0	1.04
Utah State University	11.2	3.7	217.2	197.0	1.10
Weber State University	12.4	4.1	226.0	208.0	1.09
Southern Utah University	10.0	3.3	209.0	204.0	1.02
Utah Valley State College	10.6	3.5	112.3	141.0	0.80

Source: USHE Biennial Assessment and Accountability Report, 1997

*Terms and years transfer students enrolled at receiving University. Terms and years previously spent at other institutions are not included.

**U of U, USU, WSU, and SUU include total credits earned by transfer students at all institutions which they attended. Credits reported at UVSC are the total earned at that institution and do not include credits transferred from other institutions.

Faculty Workload

Average weekly teaching contact hours per full-time faculty divided by Regent-approved standard weekly teaching contact hour load.

This measure is intended to help the Regents evaluate the adequacy of instructional workloads at the USHE institutions.

Assuring efficiency and effective allocation of faculty resources is a goal that all USHE institutions share. One way to pursue this goal is to encourage optimum contact between students and full-time faculty in instructional settings. A standard weekly teaching contact hour load was established by the Regents for each institution. Institutional averages would be compared against the standard loads as shown in Table 4. Positive institutional improvements that may be fostered by this indicator include an increased reliance on full-time faculty for instructional purposes, and continued improvement in undergraduate education.

An institution will have met its performance criteria if the Regent standard is met.

Table 4

Faculty Teaching Workload Instructional Credit Hours for Fall 1998						
	Regular Classes & Labs	Student Teaching	Dissertation/Thesis/Individualized Instruction	Total	SBR Standard	Instructional Teaching Ratio
Research Universities						
University of Utah	7.02	0.15	3.35	10.52	9.00	1.17
Utah State University	9.04	0.44	1.09	10.57	9.00	1.17
Weighted Average	7.80	0.26	2.47	10.54		
Regional Universities						
Weber State University	11.42	0.29	0.68	12.38	12.00	1.03
Southern Utah University	11.62	0.42	0.78	12.82	12.00	1.07
Weighted Average	11.49	0.33	0.71	12.53		
Community Colleges						
Snow College	14.41	0.06	0.09	14.56	15.00	0.97
Dixie College	16.76	0.00	0.10	16.86	15.00	1.12
College of Eastern Utah	13.74	0.02	0.04	13.80	15.00	0.92
Utah Valley State College	14.73	0.15	0.10	14.98	15.00	1.00
Salt Lake Community College	14.19	0.00	0.00	14.19	15.00	0.95
Weighted Average	14.60	0.05	0.05	14.70		
USHE Weighted Average	10.42	0.22	1.45	12.09		

**Instructional Quality
and Student Learning**

The number and proportion of students who pass licensure examinations.

This performance indicator is intended to assist the USHE in tracking and improving instructional quality at the institutions.

This measure will provide one important indicator of the quality of instruction at USHE institutions. The test scores of students who take norm-referenced licensure exams and other norm-referenced examinations are perhaps the most readily available measures of quality of their educational experience.

An institution will have met its performance criteria if at least 95% of students pass licensure examinations. If 90 to 95 percent of students pass licensure examinations, institutions would meet one-half of the expected performance

TABLE 5
Baccalaureate Student Performance on Professional Examinations,
1996 Graduates

<u>Professional Examinations</u>	<u>Pass rates</u>
Accounting (CPA).....	Results not reported to the University; However, SUU reports 25-30%
Audit.....	39%
Communication Disorders.....	100%
Engineering.....	100%
Engineering (fundamentals of) Mechanical, Civil.....	First time pass rate low 90's,
Chemical and Fuels, and Mining Engineering.....	Ultimately 100% (must pass to graduate)
Clinical Laboratory Science.....	83%
Foods & Nutrition.....	100%
Finance	60%
Human Resource Management.....	90%
LSAT.....	Individual test scores are private.
Law.....	91% - Bar Exam (First time pass rate)
Medicine (MD).....	100%
National Biology.....	Total & sub-scores were 50 to 61%
National Business.....	82.5% on Princeton Standardized
National Chemistry.....	Total & sub-scores were 50 to 75%
National Mathematics.....	Total score on Mathematics was 57%
Pharmacy.....	100%
Physical Therapy.....	100%
Recreation & Leisure.....	100%
UT State Licensure.....	100%
Social Work.....	College does not receive data on pass rates
Tax, Mgmt, & Gov.	65%

TABLE 6
Associate Degree And Certificate Student Performance
on Professional Examinations: 1996 Graduates

<u>Professional Examination</u>	<u>Pass rates</u>
Air Conditioning/Refrigeration, EPA Certificate.....	98%
Chemical License.....	98%
Air Frame & Power Plant	85%
Apprentice Electrical & Plumbing Journeyman	80%
Automotive- National ASE Certification.....	80%
Aviation- Private & Commercial Pilot Licenses, Flight Instructor Certification, Instrument and Multi- Engine certificate Ratings.....	100%
Building Inspector's Certificate.....	90%
Clinical Laboratory Technologist.....	88%
Contractor's License.....	80%
Cosmetology.....	100%
Dental Hygiene.....	100%
Electrical Automation/Robotics State License.....	100%
Emergency Care & Rescue	100%
Engine Certification Ratings	100%
Flight Instructor Certification, Instrument & Multi- Fire Fighter I and II, EMT, Fire Inspection, and Hazardous Materials Handling Certifications.....	80%
Lineman Federal Certification	99%
Medical Record Technology.....	90%
Nursing LPN.....	96%
Nursing RN	86%
Occupational Therapist.....	100%
Radiologic Technologist.....	98%
Respiratory Therapy.....	97%
State Deaf Interpreter Program.....	22% at Level I
Water Treatment, Waste Water Treatment, Water Distribution System, & Waste Water Collection.....	70%
Welding- AWS Certification.....	100%

Institution Specific Indicators

In addition to the four statewide indicators, each institution will prepare two institution-specific performance indicators that will be measured and to which funding will be tied. Examples of these institution specific indicators are included below.

University of Utah

Research Scholarship Index - This Index will measure the activity of the University in four key Research/Scholarship areas including: 1) publishing, 2) external research dollars attracted, 3) number of patents disclosed, and 4) number of patents issued. The index will be used much like the Index of Leading Economic Indicators and will chart the “scholarly health” of the institution.

Specifically, the index will be defined as the sum of 1) the percent of tenured/tenure track faculty who have published or produced other creative works, 2) extramural funding for research divided by one million, 3) the number of patents disclosed divided by five, and 4) the number of patents issued--all measured on an annualized basis. Funds would be made available based on annual improvements in the index.

Utah State University

1st Year Retention Rate - Several institutions, including USU, are making concerted efforts to improve the retention of first time students at their institutions. The period between the first and second year is the most likely time for students to “stop out” and either delay or terminate their educational plans. USU has already started several programs to increase first year retention. The measurement of progress will be made by identifying a discrete cohort of first-time degree-seeking freshmen each fall and count how many remain a year later. (Appropriate adjustments will be made for Mormon missions).

Funds would be made available based on annual improvements in the retention ratio.

Snow College

Transfer Student Grade Point Averages - A major function for Snow College is the transfer function. Many first time students at Snow College intend to transfer to a 4-year institution within the USHE following graduation from the two-year school. This indicator would measure how well these students who begin at Snow College do academically when they transfer to a four-year institution.

Specifically, the GPA of Snow graduates who subsequently transfer to a 4-year institution would be measured against the GPA of students who both begin and finish at that same 4-year institution. In both cases, only the final 60 credit hours earned prior to graduation with a bachelor’s degree will be counted. Funds would be made available if the average GPA of the Snow transfer students is equal to or greater than the average GPA of the students who both begin and finish at the 4-year institution.

Utah Valley State College

Student Learning - UVSC is an institution that focuses on learning, particularly in the areas of writing, mathematics, and critical thinking skills. UVSC currently gives Collegiate Assessment of Academic Progress (CAAP) examinations in the area of writing, mathematics, and critical thinking. The examination is designed to assess student learning in these three core areas of general education. The college intends to use CAAP scores as one of its institution-specific indicators.

The college has set the standard of an average CAAP score for its AA and AS graduates to be no more than one-third of a standard deviation from the national average for public 4-year institutions. Funds would be

made available if the institutions meets this standard. Partial funding may

be made available if the average UVSC score is within two-thirds of a standard deviation from the national average for public 4-year institutions.

Other Key Provisions of this Proposal

1. An ongoing funding request will be allocated to the Board of Regents for 2000-2001.
2. Allocations for FY 2001 will be made based on each institution's Fall 1999 student headcount.
3. The base year of measure for indicators 1 and 2 will be Fall 1999 and the comparison year will be Fall 2000. Indicator 3 and indicator 4 will be compared to a standard and will not have a base year. The comparison year for indicator 3 will be 1999-2000 and the comparison year will be Fall 1999 for indicator 4.
4. If an institution meets one of its six performance criterion, 1/6 of its 2000-2001 funding will be provided. If an institution meets all six of its performance criterion, all of its 2000-2001 funding will be provided.
5. Funding not earned by the USHE institutions will be added to the 2001-2002 performance-based funding
6. In the future, other features could be added to the performance funding program such as:
 - Using scaling to more precisely indicate progress, not just the direction of change.
 - Giving greater weight to certain indicators.

Recommendations

It is recommended that the Executive Appropriation Committee direct the Higher Education Appropriation's Subcommittee of the Legislature to review and approve the systemwide performance measures as well as the 18 institution specific indicators as part of their deliberations for the FY 2001 USHE budget during the 2000 General Session of the Legislature.