

Sub-Committee Questions for SRI International, June 20, 2012

1. **Graduation Rate Measures:** Do other states (or the federal government) use a 6-year graduation rate measure for purposes of measuring institution's performance. If so, which states and do they measure as part of annual "base" funding or is it for annual performance funding. Please comment on whether this is a best practice that the Committee should consider.

Six-year graduation rates are widely used by states and by the federal government to measure performance. In 1990, the federal *Student Right-to-Know Act* required colleges to report the proportion of students completing their program within 150% of the normal time to completion. For a 4-year college, that means the portion of students who earn bachelor's degrees within six years. The Department of Education's National Center for Education Statistics collects this data through its Integrated Postsecondary Education Data System (IPEDS). However, the IPEDS graduation rate does not include people who begin college as part-time students, students that begin at community colleges and transfer to 4-year institutions, or students that transfer at all. To be reported in the IPEDS data students must begin and end at the same institution.¹

Complete College America, a National Governor's Association Initiative, developed a set of Common College Completion Metrics including a completion rate that includes all students that enter – both part-time and full-time. This rate is reported for graduation "on-time", 150% of time, and 200% of time. For a 4-year institution, 150% of the time would be 6 years.²

Best practices currently caution against using the IPEDS 6-year graduation rate for the reasons reviewed above. Due to the lack of quality data, states have not included this metric in their performance pools. However, the National Governor's Complete College Initiative recommends a revised graduation rate that captures all students. Some states, such as Texas in their Texas Accountability System, have begun collecting graduation rates for all students and publishing this information even though it is not tied to funding. Only Tennessee includes a 6-year graduation rate in the institutional annual "base funding" (please see Figure 1 under request 3).

With better data, the choice of 4-year and 6-year graduation metrics depends on what the committee would like to incentivize. 4-year graduate rates incentivize efficiency; however, 6-year graduation rates are more practical and equitable in regards to students in science and engineering (whose course of study often requires work experience) part-time students, and students with non-traditional academic paths.

¹ Glenn, D. "6-year graduate rates: a 6-minute Primer." *The Chronicle of Higher Education*. Dec. 6, 2011. <http://chronicle.com/blogs/measuring/6-year-graduation-rates-a-6-minute-primer/27573>

² Complete College American. *Nevada 2011*.

2. States Funding of “F Grades”: How other states addressed or resolved the funding policy issue of the issuance of “F” grades to students when the amount of “base” funding an institution will receive is tied to the concept of “course completion.” Do states’ approaches differ when the base funding is tied to “successful course completion. Are there best practices the Committee should consider?

There is not a consistent practice among the few states that use course completions as an input to their higher education funding formulas. However, states that use successful course completions do so under the heading of outcome-based funding (Tennessee, Indiana, Ohio), while Louisiana and New Mexico use all course completions under a workload or cost formula.

Successful course completions

Only Tennessee constructs their base funding entirely on successful course completion, though they do not explicitly use credit hours completed in their higher education formula. The formula is driven by successful completion metrics such as credit accumulation (please see Figure 1 under response 3). These calculations would not count credit hours with F grades. A major part of Ohio’s funding formula is called the course completion component, which uses successfully completed courses with a grade D or higher to drive the component.³ Indiana is currently shifting their formula. In 2009, 10% of the enrollment-based funding was shifted to successfully completed credit hours with a grade of at least a D-. In 2014, the enrollment component will shift to 100% completed credit hours.⁴

All course completions

The New Mexico Higher Education Department is currently writing and implementing a new funding formula for higher education. Their new funding formula currently includes a factor for completed student credit hours, which includes all undergraduate and graduate courses for which a student has received a letter grade, pass-fail grade or similar binary outcome, incomplete to be resolve to a grade, or audit complete.⁵ Louisiana uses “end of semester” numbers to drive their cost formula for their 2-year and 4-year institutions (technical colleges are exempt).⁶ End of semester numbers include all students that have not withdrawn from the

³ Ohio Board of Regents. *State Share of Instruction Handbook: Providing the Methodology for Allocating State Share of Instruction Funds for FY 2012 and FY 2013 For Use by: University Main Campuses*. Accessed 5 June 2012.; IUC Subcommittee of the OBR Subsidy Funding Consultation. *A Funding Formula for Ohio’s Universities based on Outcome Goals*. September 2, 2008. <http://www.ohio.edu/provost/upload/IUC-Funding-Recommendations-Final.pdf>

⁴ Lederman, Doug. “Performance (De-)Funding.” *Inside Higher Edu*. 28 Dec 2009 <http://www.insidehighered.com/news/2009/12/28/indiana> (accessed 1 May 2012).

HCM Strategists. “Performance Funding in Indiana: An Analysis of Lessons from the Research and Other State Models.” Report to Indiana’s Commission on Higher Education. 8 August 2011. http://www.hcmstrategists.com/content/Indiana_PFReport2_8.2.11.pdf (accessed 8 May 2012); Bautsch, Brenda and Ronald Williams. “Recommendation Nine: College Completion.” *The College Completion Agenda State Policy Guide*. CollegeBoard Advocacy & Policy Center. 2010. http://completionagenda.collegeboard.org/sites/default/files/reports_pdf/Policy_Rec_Nine.pdf (accessed 2 May 2012)

⁵ New Mexico Higher Education Department. (2011). *Educating Tomorrow’s Workforce: New Mexico’s Higher Education Funding Formula for Fiscal Year 2013*. p.2 https://www.nmsu.edu/~budget/PDF%20Files/HED_Ed_Funding_Formula_FY2013.pdf

⁶ “Regents Adopt Revamped Formula.” *Regents Recap*. March 23, 2011. <http://regents.louisiana.gov/assets/media/2011/RegentsRecapmarch2011FINAL.pdf>; Louisiana Board of Regents. *Response to Act 309 of the 2009 Regular Session*. February 26, 2010.

class, even if they receive an F grade. It should be noted that when students receive an F, their grade point average is harmed, which could lead to academic probation or dismissal.

3. Institution-Specific Performance Metrics: Please evaluate and comment on the recommendation to include institution-specific measures in a performance pool, whether this is practice in other states and if it would be considered a best practice.

The American Association of State Colleges and Universities considers including institution-specific performance metrics to be a best practice:

Account for institutional differences. *[Performance-based funding] architects must ensure that programs do not discriminate against institutions that serve the needs of poor or at-risk students. Mission creep should not be encouraged. They must account for the institutional missions, roles and outcomes.*⁷

Failure of past performance-based funding systems have been attributed in part to failure to account for the differing mission of the various types of institutions.⁸ Most states that now employ performance pools also employ institution-specific measures, some of which are reviewed in detail below. Incorporating institutional-specific measures also includes two widely considered best practices for performance funding: getting support from institutions and incorporating stakeholders in the process.⁹ Though some states, such as Indiana only differentiate between 2-year or 4-year institutions, Kansas, Tennessee, Pennsylvania, and Ohio employ institution-specific performance metrics as described below.

Since 1999, Kansas distributes any new state money based on institutions' compliance individual performance agreements made with the Board of Regents. Once every three years, institutions negotiate a new performance agreement with the Board, which covers three calendar years. The agreement supports Foresight 2020, which consists of following six strategic goals:

1. Achieve alignment between the state's preK-12 and higher education systems and continue to enhance alignment between higher education institutions.
2. Achieve participation in the state's higher education system that better reflects the state's demography and more fully engages adult learners.
3. Achieve measureable improvement in persistence (retention) and completion (graduation) rates for higher education institutions across the state.
4. Ensure that students earning credentials and degrees across the higher education system possess the foundational skills essential for success in work and in life.
5. Enhance alignment between the work of the state's higher education system and the needs of the Kansas economy.
6. Enhance the regional and national reputation of Kansas universities through aspirational initiatives.

As part of its performance agreement, the Board requires each institution to propose at least three institutional goals that support Foresight 2020 and are consistent with the institution's mission. The Board requires that one goal support strategic goal four, which focuses on learner outcomes. The remaining two goals are selected from strategic goals one through three, five

⁷ Harnisch, Thomas L. (2011). *Performance-based Funding: A Re-Emerging Strategy in Public Higher Education Financing*. http://www.congressweb.com/aascu/docfiles/Performance_Funding_AASCU_June2011.pdf

⁸ HCM Strategists. *Performance Funding in Indiana. An Analysis of Lessons from the Research and other State Models*. 2012. http://www.hcmstrategists.com/content/Indiana_PFRReport2_8.2.11.pdf; Ohio Board of Regents, 2011. *State Share of Instruction Handbook, for use by Community and Technical Colleges, Draft*.

⁹ Harnisch, *op. cit.*, p. 8.

and six. An institution may propose up to two additional institutional goals. The goals may be unrelated to Foresight 2020. If they are unrelated to Foresight 2020, they cannot conflict with or detract from Foresight 2020 and must be consistent with the institution’s mission.¹⁰ Appendix A includes a copy of Kansas institutions’ recent performance agreements.

Ohio performance pool differs by 2-year and 4-year institutions and also among the 2-year institutions because in addition to the standardized performance indicators of the number of student who successfully complete remedial education, progress metrics, and degree and transfer metrics, each community college will choose an addition performance indicator on which to be evaluated, though this portion is still being implemented.

Tennessee has different weights on the performance components dependent on the institutional mission as shown in Figure 1 and

Figure 2. Most institutions have different weightings, yet some institutions have similar missions and therefore the same weights, such as East Tennessee State University (ETSU) and Tennessee State University (TSU); however, due to the 40% premium on certain outcomes for low-income and adult students, the actual calculations may be different with the same inputs. The weighting structure was determined by the Formula Review Committee and is based on institutional mission and, at the university level, informed by Carnegie Classification. Each institution’s leadership determined priorities, with input from the Formula Review Committee.¹¹

| Universities | APSU | UTM | TTU | UTC | MTSU | ETSU | TSU | UM | UTK |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Students Accumulating 24 hrs | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 2% | 2% |
| Students Accumulating 48 hrs | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 3% | 3% |
| Students Accumulating 72 hrs | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 5% | 5% |
| <i>Progression</i> | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 10% | 10% |
| Bachelors and Associates | 25% | 30% | 25% | 25% | 25% | 25% | 25% | 25% | 15% |
| Masters / Ed Specialist Degrees | 20% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% |
| Doctoral / Law Degrees | 0% | 0% | 5% | 5% | 7.5% | 7.5% | 7.5% | 10% | 10% |
| Research and Service | 10% | 10% | 10% | 10% | 12.5% | 12.5% | 12.5% | 12.5% | 15% |
| Transfers Out with 12 hrs | 10% | 10% | 10% | 10% | 5% | 5% | 5% | 5% | 5% |
| Degrees per 100 FTE | 10% | 15% | 10% | 10% | 10% | 10% | 10% | 7.5% | 10% |
| Six-Year Graduation Rate | 10% | 5% | 10% | 10% | 10% | 10% | 10% | 15% | 20% |
| | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Figure 1 Tennessee’s performance factor weighting dependent on institutional mission for universities.¹²

¹⁰ 2011 Performance Agreements. Kansas Board of Regents. <http://www.kansasregents.org/resources/PDF/1698-BoardDec2011PerformanceAgreements.pdf> (accessed 3 May 2012).

¹¹ Tennessee Higher Education Commission Fiscal Affairs. *Dynamic Outcomes Funding Formula*. http://www.tn.gov/thec/Divisions/Fiscal/fiscal_affairs.html

¹² *Ibid.*

| Community Colleges | CHSCC | CLSCC | COSCC | DSCC | JSCC | MSCC | NASCC | NESCC | PSCC | RSCC | STCC | VSCC | WSCC |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Students Accumulating 12 hrs | 6% | 6% | 4% | 6% | 6% | 6% | 4% | 4% | 6% | 2% | 4% | 2% | 4% |
| Students Accumulating 24 hrs | 7% | 7% | 5% | 7% | 7% | 7% | 5% | 5% | 7% | 3% | 5% | 3% | 5% |
| Students Accumulating 36 hrs | 7% | 7% | 6% | 7% | 7% | 7% | 6% | 6% | 7% | 5% | 6% | 5% | 6% |
| Progression | 20% | 20% | 15% | 20% | 20% | 20% | 15% | 15% | 20% | 10% | 15% | 10% | 15% |
| Dual Enrollment | 5% | 10% | 10% | 5% | 5% | 5% | 5% | 5% | 10% | 10% | 5% | 10% | 10% |
| Associates Certificates 1-2 Years | 5% | 15% | 10% | 10% | 20% | 10% | 20% | 20% | 20% | 20% | 10% | 20% | 20% |
| Certificates Less Than 1 Year | 5% | 1% | 4% | 2% | 3% | 0% | 7% | 17% | 0% | 6% | 2% | 4% | 1% |
| Total Certificates | 10% | 10% | 5% | 10% | 10% | 5% | 20% | 20% | 5% | 20% | 20% | 20% | 20% |
| Job Placements | 20% | 5% | 5% | 10% | 5% | 10% | 10% | 10% | 10% | 15% | 10% | 5% | 5% |
| Remedial & Developmental Success | 10% | 20% | 10% | 20% | 15% | 10% | 10% | 5% | 5% | 5% | 20% | 10% | 10% |
| Transfers Out with 12 hrs Workforce Training (Contact Hours) | 15% | 10% | 20% | 15% | 10% | 20% | 10% | 10% | 15% | 10% | 5% | 15% | 10% |
| Awards per 100 FTE | 10% | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 10% | 5% | 5% | 5% | 5% |
| | 5% | 5% | 20% | 5% | 10% | 15% | 5% | 10% | 5% | 5% | 10% | 5% | 5% |
| | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Figure 2 Tennessee's performance factor weighting dependent on institutional mission for community colleges.¹³

¹³ Ibid.

In addition to Tennessee's outcome-based formula, the Tennessee Higher Education Commission has a separate performance-funding program that has been in operation for 30 years. All public universities and community colleges have been able to "earn" additional funds (up to 5.45 percent of the institution's state funding) on the basis of quality improvement as measured by a common set of indicators. A collective \$50 million is awarded annually for evidence of improved quality in programs and services. For 2010-15, 100 percent of Performance Funding points are now dedicated to quality assurance. Thus, the 2010-15 Performance Funding Program reinforces the Funding Formula but does not duplicate its purpose. Within the performance pool, institutions choose five subpopulations to measure quality of student learning and engagement and access and success that are important to their mission and service area.¹⁴ This results in institution-specific performance metrics that are reviewed every five years.

Pennsylvania¹⁵ is currently implementing a performance pool equal to 2.4% of the system's education and general budget function. After an implementation year, performance funding will be determined for each university based upon performance on the ten indicators. Indicators are chosen by the universities in consultation with the system, which results in institution-specific indicators. Each institution has the ability to meet performance on each measure listed below for a maximum total of ten points, or one point per measure. Measures include components for individual performance and performance in relation to peers or external standards. Institutions may lock in their optional indicators for the five years of the plan or they may elect to have a three-year review of their optional measures to determine if the measure is still appropriate for growth toward strategic initiatives. The performance indicators are listed below.

Student Success

Group I: Two measures

1. Degrees Conferred (1.0)
 - a. Number of associate, baccalaureate, and graduate degrees conferred (.50)
 - b. Baccalaureate degrees awarded per FTE undergraduate enrollment (.50)
2. Closing the Achievement Gaps for Freshmen (1.0)
 - a. Closing the Achievement Gap for Pell Recipients (.50)
 - b. Closing the Achievement Gap for Underrepresented Minority (URM) Students (.50)

Group II: Universities can select from the following:

3. Student Persistence (1.0)
 - a. Overall percentage of students returning for a third academic year (.66)
 - b. Overall percentage of students returning for a fourth academic year (.34)
4. Value-Added—Senior CLA, CAAP, or ETS® Proficiency Profile Scores (1.0)
5. STEM and Health Profession (STEM-HP) Degree Recipients—Percentage of university degree recipients in high need programs such as science, technology, engineering, mathematics(STEM), and health care (1.0)
6. Closing the Achievement Gaps for Transfer Students (1.0)
 - a. Closing the Transfer Achievement Gap for Pell Recipients (.50)
 - b. Closing the Transfer Achievement Gap for URM) Students (.50)

¹⁴ Tennessee Higher Education Commission. *The Public Agenda for Tennessee Higher Education 2010-2015*. http://www.tn.gov/thec/complete_college_tn/ccta_files/master_plan/The%20Public%20Agenda%20with%20Appendices%20Jan2011.PDF

¹⁵ Pennsylvania State System of Higher Education. 2011–2017 Performance Funding Program. March 30, 2012. [http://mansfield.edu/academic-affairs/media/files/PBF%20Conceptual%20Framework%20Document%203-30-12%20Final%20\(4\).pdf](http://mansfield.edu/academic-affairs/media/files/PBF%20Conceptual%20Framework%20Document%203-30-12%20Final%20(4).pdf)

Access

Group I: Two measures

1. Closing the Access Gaps for Freshmen (1.0)
 - a. Closing the Access Gap for Pell Recipients(.50)
 - b. Closing the Access Gap for URM Students (.50)
2. Faculty Diversity (1.0)
 - a. Percent of full-time tenure/tenure-track faculty who are nonmajority persons (.50)
 - b. Percent of full-time tenure/tenure-track faculty who are female (.50)

Group II: Universities can select from the following:

3. Faculty Career Advancement (1.0)
 - a. Percent of Associate Professors who are nonmajority (.25)
 - b. Percent of Associate Professors who are female (.25)
 - c. Percent of Professors who are nonmajority (.25)
 - d. Percent of Professors who are female (.25)
4. Employment (Nonfaculty) Diversity (1.0)
 - a. Percent of Executives who are nonmajority (.25)
 - b. Percent of Executives who are female (.25)
 - c. Percent of Professional staff who are nonmajority (.25)
 - d. Percent of Professional staff who are female (.25)
5. Student Diversity (1.0)
 - a. Percent of total student enrollment who are federal Pell Grant recipients (.50)
 - b. Percent of total student enrollment who are nonmajority (.50)
6. Closing the Access Gaps for Transfers (1.0)
 - a. Closing the Access Gap for Pell Recipients(.50)
 - b. Closing the Access Gap for URM Students (.50)

Stewardship

Group I: One measure

1. Private Support—Three-year average of total dollars raised (1.0)

Group II: Universities must select at least one from the following:

2. Facilities Investment (1.0)
3. Support Expenditures as Percent of Cost of Education (1.0)
4. Instructional Productivity (1.0)
5. Employee Productivity (1.0)

University-Specific Indicators

Group III: Universities may create no more than two Group III indicators, which have to be approved by the Chancellor for inclusion in the performance-funding program. Proposals should follow the prescribed template for defining the performance indicator including the data source(s). The Accountability and Performance Funding Committee members are available to consult with universities to help develop successful indicators.

- 4. Funding of Remedial Courses: To the extent that data is available, please provide comparison information on how states approach funding remedial education. More specifically, do states typically fund remedial education at select institutional tier levels (community college, state college) only and is enhanced or additional funding provided to the institution(s) per remedial course than is otherwise provided for a 100 level English or mathematics course.**

Presently some states, for example Alabama and Louisiana, allow increased weights for remedial student credit hours as part of a funding formula. Three states fund remedial education separately through their community colleges, Tennessee, North Carolina, and Illinois. Florida funds remedial education separately at its senior institutions. These states employ enrollment as the main driver of the formula.

States' approaches to remedial education are undergoing wide-ranging reevaluation, following recognition that enrollment in remedial classes is not associated with greater graduation rates. Indeed, there is evidence to suggest that non-credit remedial classes harm completion rates because they extend the time it takes to get a degree. As a result, policies and practices around remediation are changing. Four-year institutions in more than a dozen states are no longer offering remedial classes. Instead, students either take regular, for-credit classes combined with supplemental support, or they have to take remedial classes at community colleges.

The key to successful support for students who are not ready for college level classes is accurate, fine-grained assessment. Those who are close to the required level of preparation are now being directed straight into college course work, combined with extra academic support. Others are directed away from four-year institutions to community colleges. There they may be prepared for college level work through accelerated remedial learning that gets them on track in the shortest possible amount of time. Some students will never successfully complete college degrees, and following assessment they are directed into vocational tracks.

Because current practice is changing so quickly, it is not reasonable to speak of "best practices", but rather of evolving practices of the kind described above. Given the particular challenges presented by Nevada's student population, all of the practices above are important. Extra funding for remedial classes and "wrap-around" services to support remedial students at community colleges will be required, and should be written into any new base funding formula through an additional weight.

- 5. Additional Weighting for First Year (Entry Level) Undergraduate Courses: Please comment on whether, as a best practice strategy to improve student retention and completion, undergraduate, first-year English, Mathematics and Science courses should receive a higher weighting than the 1.0 weight currently proposed in Appendix A, the discipline cluster/course weighting matrix which forms the basis for the NSHE's alternative funding formula proposal. If so, would the recommendation be to add the weighting at the community college and state college level and what added weighting would be considered appropriate.**

Roughly half of the states employ a funding formula based on some mixture of student enrollments and the cost of courses delivered. As a result, science classes are weighted more highly. The NSHE alternative formula recognizes the added cost of science classes at the lower level by giving them a weight of 2, as compared to a weight of 1 for mathematics and English classes. Altering weights would alter the incentive for institutions to offer the classes, but it would not alter in any direct way the likelihood of students succeeding in those classes.

One way to provide an incentive to institutions for success in first year classes is through the use of an appropriate progress metric, for example, the completion of a specific number of credit hours by students in their first year of full-time enrollment. Such a metric is proposed in version 17 of the NSHE proposed performance pool in the case of remedial students at community colleges. Such a metric may be appropriate for all first-year students at all NSHE institutions. These kinds of metrics could be termed “emerging practices” that are being considered by many states.

6. Weighting of Courses for Economic Development: Please comment on states’ practices and whether it is a best practice to provide enhanced weighting for science, technology, engineering and mathematics (STEM), allied health or other high demand fields of study.

Nine states have implemented performance pools in which institutions are rewarded for the production of specific degrees, especially STEM and allied health, four have applied these rewards to two-year colleges only. As skill mismatches in the labor market become more acute, there will be increased attention by all states on producing degrees for jobs that are in demand. The relationship between curricula, skills and qualifications, and the needs of the workplace is a complex one. Detailed analysis of the existing workforce and the needs of targeted economic sectors can identify gaps that higher educational institutions should be rewarded for filling.

Tennessee has commissioned a study by the University of Tennessee at Knoxville aimed at exactly this kind of analysis.¹⁶ SRI International also conducted this kind of analysis for two year institutions in the Tampa Bay region of Florida.¹⁷

¹⁶

http://www.tn.gov/thec/complete_college_tn/ccta_files/master_plan/The%20Public%20Agenda%20with%20Appendices%20Jan2011.PDF

¹⁷ <http://www.sri.com/work/projects/northwest-florida-industry-cluster-development-strategy>

Appendix A
2012-2013 Kansas institutions' performance agreements

See separate attachment

Note: A copy of Appendix A (105 pages) is available upon request from the Fiscal Analysis Division at (775) 684-6821.