Agenda Materials
General Academic Institutions Formula Advisory Committee (GAIFAC) for the 2018-2019 Biennial Appropriations

September 2015

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Agenda

Meeting of the General Academic Institution Formula Advisory Committee
Texas Higher Education Coordinating Board
Board Room, First Floor, 1.170
1200 East Anderson Lane, Austin
Wednesday, September 9, 2015
1:00 p.m.

Agenda

I. Call to Order

II. Consideration and approval of the minutes from August 12, 2015 meeting

III. Discussion, review, and consideration of the Commissioner's 2018-2019 Biennium charges

IV. Planning for subsequent meetings

V. Adjournment

Prior Meeting's Draft Minutes

Meeting of the General Academic Institutions Formula Advisory Committee
Texas Higher Education Coordinating Board
Board Room, First Floor
1200 East Anderson Lane, Austin
Wednesday, August 12, 2015
1:42 p.m.

Minutes

Attendees: Dr. Dana G. Hoyt (Chair), Mr. Martin V. Baylor (Vice Chair), Mr. Allen Clark, Dr. Edward T. Hugetz, Dr. Harrison Keller, Dr. Cesar Malave, Dr. Karen Murray, Dr. Robert Neely, Dr. J. Patrick O'Brien, Dr. Paula M. Short, Ms. Noel Sloan, and Ms. Angie W. Wright

Absent: Dr. James Marquart, Dr. Perry Moore, and Dr. Marc A. Nigliazzo

Staff: Dr. Raymund Paredes, Dr. David Gardner, Dr. Julie Eklund, and Mr. Paul Turcotte

1. The meeting was called to order at 1:42 p.m.

2. Dr. Hoyt, convening chair, called for a nomination for chair. Dr. O'Brien nominated Dr. Hoyt, Ms. Sloan seconded the nomination, and the members present unanimously voted Dr. Hoyt as committee chair.

3. The chair called for a nomination for vice chair. Dr. Hoyt nominated Mr. Baylor; Dr. O'Brien seconded the nomination, and the members present unanimously voted Mr. Baylor as committee vice chair.

4. Dr. Eklund provided a brief overview of the funding formulas and fielded questions from members.

5. The chair reviewed the Commissioner's 2018-2019 biennium charges.

    a. Charge 1 – Funding Levels

        i. The chair requested that members review the information provided in the meeting's agenda materials and be prepared to discuss funding levels at the September meeting.

    b. Charge 2 – Student Success Funding

        i. The chair requested staff provide a summary of 2-year national student success funding models for members' consideration.

        ii. Following members' discussion of potential areas to review, the chair requested that members be prepared to take up this charge at the October meeting.

    c. Charge 3 – Funding Competency-Based Courses

i. The chair requested committee members be prepared to take up this charge during the September meeting and let members know that a representative from Texas A&M University – Commerce would attend to answer questions relating to an expenditure study of that university's CBE program that had been requested by the last GAIFAC.

d. Charge 4 – Professional Practice Pharmacy Funding

i. The chair requested that members review the information related to this charge in this meeting's materials and be prepared to address the charge at the October meeting.

e. Charge 5 – *60x30TX*

i. The chair requested that members review the plan and be prepared to discuss it at the September meeting.

6. The committee considered future meeting dates.

a. The chair reviewed the poll of meeting dates conducted by staff and determined the majority of members could make meetings on September 9, October 7, and November 4 at 1:00. The chair set those dates for the committee's future meetings.

7. The meeting was adjourned at 2:45 p.m. until September 9, 2015 at 1:00 p.m.

Commissioner's Charges

The GAIFAC, conducted in an open and public forum, is charged with proposing a set of formulas that provide the appropriate funding levels and financial incentives necessary to best achieve the four major goals of *60x30TX* plan. A preliminary written report of its activities and recommendations is due to the Commissioner by December 3, 2015, and a final written report by February 3, 2016. The GAIFAC's specific charges are to:

1. Study and make recommendations for the appropriate funding levels for the operations support and space support formulas and the percent split between the "utilities" and "operations and maintenance" (O&M) components of the space support formula. (TEC, Section 61.059 (b))
2. Study and make recommendations for alternative approaches to incorporating undergraduate student success measures into the funding formulas and compare the effects of funding the success measures within the formula versus applying the success measures as a separate formula. (TEC, Section 61.0593)
3. Study and make recommendations on the treatment of competency-based courses in formula allocations.
4. Study and make recommendations on the treatment of pharmacy hours for professional practice pharmacy courses.
5. Study and make recommendations on changes to the funding model that will enable institutions to meet the goals of *60x30TX*.

General Academic Institutions Formula Advisory Committee for the 2018-2019 Biennium

Name	Institution	Contacts
Dr. Dana G. Hoyt (Chair) (2018) President	Sam Houston State University Box 2027 Huntsville, TX 77341	dlg013@shsu.edu (936) 294-1013
Mr. Martin V. Baylor (Vice Chair) (2018) Executive Vice President for Finance and Administration	The University of Texas Rio Grande Valley 1201 West University Dr. Edinburg, TX 78539	baylormv@utpa.edu (956) 665-2121
Mr. Allen Clark (2016) Vice Provost for Academic Resources	University of North Texas 1501 W. Chestnut St., Suite 206 Denton, Texas 76201	Allen.Clark@unt.edu (940) 565-2496
Mr. Edward T. Hugetz (2018) Interim Provost and Senior Vice President for Academic Affairs	University of Houston-Downtown 1 Main Street Houston, TX 77002	hugetze@uhd.edu (713) 221-5005
Dr. Harrison Keller (2020) Deputy to the President for Strategy and Policy	The University of Texas at Austin 1 University Station G1000 Austin, TX 78712	harrison.keller@austin.utexas.edu (512) 232-8277
Dr. César Malavé (2020) Department Head, Industrial and Systems Engineering	Texas A&M University 101 Bizzell St. College Station, TX 77840	malave@tamu.edu (979) 845-5535
Dr. James Marquart (2020) Provost and Vice President Academic Affairs	Lamar University PO Box 10002 Beaumont, TX 77710	james.marquart@lamar.edu (409) 880-8398
Dr. Perry Moore (2016) Vice Chancellor for Academic Affairs	Texas State University System 208 E 10th Suite 600 Austin, TX78701	perry.moore@tsus.edu (512) 463-7281
Dr. Karen Murray (2020) Executive Vice President of Academic Affairs and Provost	Tarleton State University 1333 West Washington Stephenville, TX 76402	kmurray@tarleton.edu (254) 968-9992
Dr. Robert Neely (2016) Provost and Vice President Academic Affairs	Texas Woman's University PO Box 425617 Denton, TX76204	rneely@twu.edu (940) 898-3301
Dr. Marc A. Nigliazzo (2016) President	Texas A&M University Central Texas 1001 Leadership Place Killeen, TX76549	marc.nigliazzo@tamuct.edu (254) 519-5720
Dr. J. Patrick O'Brien (2020) President	West Texas A&M University 2501 4th Avenue Canyon, TX 79016	pobrien@wtamu.edu (806) 651-2100
Dr. Paula M. Short (2018) Senior Vice President for Academic Affairs and Provost	University of Houston 4302 University Dr., Room 204 S2019 Houston, TX 77204	pmshort@uh.edu (832) 842-0550
Ms. Noel Sloan (2020) Chief Financial Officer and Vice President of Administration and Finance	Texas Tech University 2500 Broadway Lubbock, TX 79409	noel.a.sloan@ttu.edu (806) 834-1625
Ms. Angie W. Wright (2020) Vice President for Finance and Administration	Angelo State University 2601 West Ave N San Angelo, TX 76903	angie.wright@angelo.edu (325) 942-2017

Note: The year after the member's name is when that member's term expires.

Charge 1 – Study and make recommendations for the appropriate funding levels for the operations support and space support formulas and the percent split between the "utilities" and "operations and maintenance" (O&M) components of the space support formula. (TEC, Section 61.059 (b))

Sector	2016-17 Appropriations (millions)	2018-19 Appropriations (millions)	Change Amount (millions)	Percent Change
General Academic Institutions	4,676	5,146	469	10.0%

Draft Recommendation for Discussion Purposes

The GAIFAC recommends the legislature **return formula funding rates to the 2010-11** biennium appropriated rates ($62.19 for the Operations Support formula and $6.21 for the Space Support formula) by phasing in these increases over the next three biennia. While the GAIFAC understands the Legislature decreased funding due to a reduction in state revenue, the committee is concerned that institutions may not meet the *60x30TX* goals at current funding levels and urges legislators to find funds to support higher education, specifically to

- fund $5,146 million to the formulas for the 2018-19 biennium, which would be an increase of $469 million, or 10.0 percent, compared to the $4,676 million appropriated for the 2016-17 biennium;
- fund $4,360 million to the Operations Support (includes Teaching Experience Supplement) formula for the 2018-19 biennium, which would be an increase of $418 million, or 10.6 percent, compared to the $3,942 million appropriated for the 2016-17 biennium.
    - ❖ The recommendation increases the funding rate to $58.99 per weighted semester credit hour (SCH), which would be an increase of $3.60, or 6.5 percent, compared to the $55.39 funded for the 2016-17 biennium. This rate includes a $2.27 increase to return the rate to the 2010-11 biennium rate (a third of the way to $62.19) and a 2.3 percent increase for inflation.
    - ❖ It assumes a 3.9 percent increase for growth in weighted SCH between the 2015 and 2017 base years.
    - ❖ It allocates funding using a relative weight matrix based on the three-year average of expense per semester credit hour to include fiscal years 2014, 2015, and 2016;
- fund $786 million to the Space Support (includes Small Institution Supplement) formula for the biennium, which would be an increase of $51.6 million, or 7.0 percent, compared to the $734 million appropriated for the 2016-17 biennium.
    - ❖ The recommendation increases the funding rate to $5.86 per square foot, which would be an increase of $0.31, or 5.6 percent, more than the $5.55 funded for the 2016-17 biennium. This rate includes a $0.18 increase to return the rate to the 2010-11 biennium rate (a third of the way to $6.09) and a 2.3 percent increase for inflation.

- ❖ It assumes a 2.3 percent increase for growth in square feet between fall 2014 and 2016;

- split the recommended Infrastructure rate between "utilities" and "operations and maintenance" components using FY 2016 utility rates, update the utility rate adjustment factors using the FY 2016 utilities expenditures, and allocate the Infrastructure formula using the fall 2016 space model predicted square feet and;
- fund the Small Institution Supplement using the same methodology and rate as the 2016-17 biennium

Fiscal Year	Fall	Fall Head-count[1]	Annual Percent Change	Fall Full-Time Student Equivalents (FSTE)[2,3]	Annual Percent Change	Fall Predicted Square Feet (PSF) (Millions)	Annual Percent Change	Annual Average CPI-U[6]
2001	2000	414,626		321,284		42.73		177.100
2002	2001	430,770	3.89%	335,469	4.42%	44.60	4.38%	179.900
2003	2002	455,719	5.79%	354,855	5.78%	48.14	7.92%	184.000
2004	2003	472,818	3.75%	369,905	4.24%	49.65	3.14%	188.900
2005	2004	482,123	1.97%	377,818	2.14%	49.95	0.60%	195.300
2006	2005	484,999	0.60%	384,306	1.72%	51.03	2.17%	201.600
2007	2006	491,140	1.27%	388,395	1.06%	52.22	2.33%	207.342
2008	2007	497,195	1.23%	393,257	1.25%	53.54	2.52%	215.303
2009	2008	509,136	2.40%	400,536	1.85%	54.78	2.33%	214.537
2010	2009	532,226	4.54%	415,376	3.71%	58.17	6.18%	218.056
2011	2010	557,550	4.76%	434,218	4.54%	61.00	4.86%	224.939
2012	2011	568,938	2.04%	443,881	2.23%	62.05	1.71%	229.594
2013	2012	576,693	1.36%	453,988	2.28%	61.75	-0.48%	232.957
2014	2013	584,785	1.40%	461,614	1.68%	63.43	2.73%	236.736
2015	2014	603,598	3.22%	475,890	3.09%	64.65	1.93%	240.686
2016	2015	616,262	2.10%	485,875	2.10%	65.18	0.82%	245.904
2017	2016	626,838	1.72%	494,213	1.72%	66.16	1.51%	250.150
2018	2017	634,771	1.27%	500,467	1.27%	67.41	1.88%	253.850
2019	2018	640,720	0.94%	505,158	0.94%	68.21	1.18%	258.028
				FTSE projected biennial percent change: fall 2014 to 2016	3.9%			
				PSF projected biennial percent change: fall 2014 to 2016			2.3%	
				Biennial Projected Average CPI-U				255.9
				Biennial Projected Change in Average CPI-U				2.3%

Notes:

1. Institutional Targets - Accountability System. Projected fall headcount based on Enrollment Forecast Report.
2. Accountability System - University Enrollment FTE.
3. Projected FTSE based on percent change in projected headcount from previous year.
4. Space Projection Model. Projected on a five-year linear regression.
5. Fiscal Year 2015 (fall 2014 values) and earlier are actual. Later values are projected as indicated.
6. Annual Average Consumer Price Index data from Series Id: CUUR0000SA0, Non-Seasonally Adjusted U.S. City Average, All items, Base Period: 1982-84=100
ftp://ftp.bls.gov/pub/special.requests/cpi/cpiai.txt 'Last Updated: 2015-07-17

General Academic Institution Formula Funding Level Recommendation (excludes Texas State Technical College and Lamar State College Space Support	
Operations Support and Teaching Experience Supplement (in millions)	
2010-2011 Appropriated Rate	$62.19
2016-2017 Appropriated Rate	$55.39
Difference	$6.80
One-Third Difference	$2.27
Recommended Funding Rate (before inflation)	$57.66
Anticipated Inflation	2.31%
Recommended Funding Rate (with inflation)	$58.99
Rate Percent Increase	6.5%
2016-2017 Weighted Semester Credit Hours	35,583,654
2018-2019 Projected Weighted Semester Credit Hours	36,953,718
2016-2017 Appropriation	$3,942
2018-2019 Recommendation with Inflation, Growth, and Increases (Projected Weighted Semester Credit Hours x Recommended Funding Rate x 2)	$4,360
Recommended Increase	$ 418
Percent Increase	10.6%

Space Support (in millions)	
2010-2011 Appropriated Rate	$6.09
2016-2017 Appropriated Rate	$5.55
Difference	$0.54
One-Third Difference	$0.18
Recommended Funding Rate (before inflation)	$5.73
Anticipated Inflation	2.31%
Recommended Funding Rate (with inflation)	$5.86
Rate Percent Increase	5.6%
2016-2017 Adjusted Predicted Square Feet	63,934,369
2018-2019 Projected Adjusted Predicted Square Feet	65,429,835
2016-2017 Appropriation	$ 715
2018-2019 Recommendation with Inflation, Growth, and Increases (Projected Adjusted Predicted Square Feet x Recommended Funding Rate x 2)	$ 767
Recommended Increase	$52.1
Percent Increase	7.3%

Small Institution Supplement (in millions)	
2016-2017 Small Institution Supplement	$19
2018-2016 Recommendation with 2 percent Headcount growth	$18
Recommended Increase	$(0.5)
Percent Increase	-2.5%

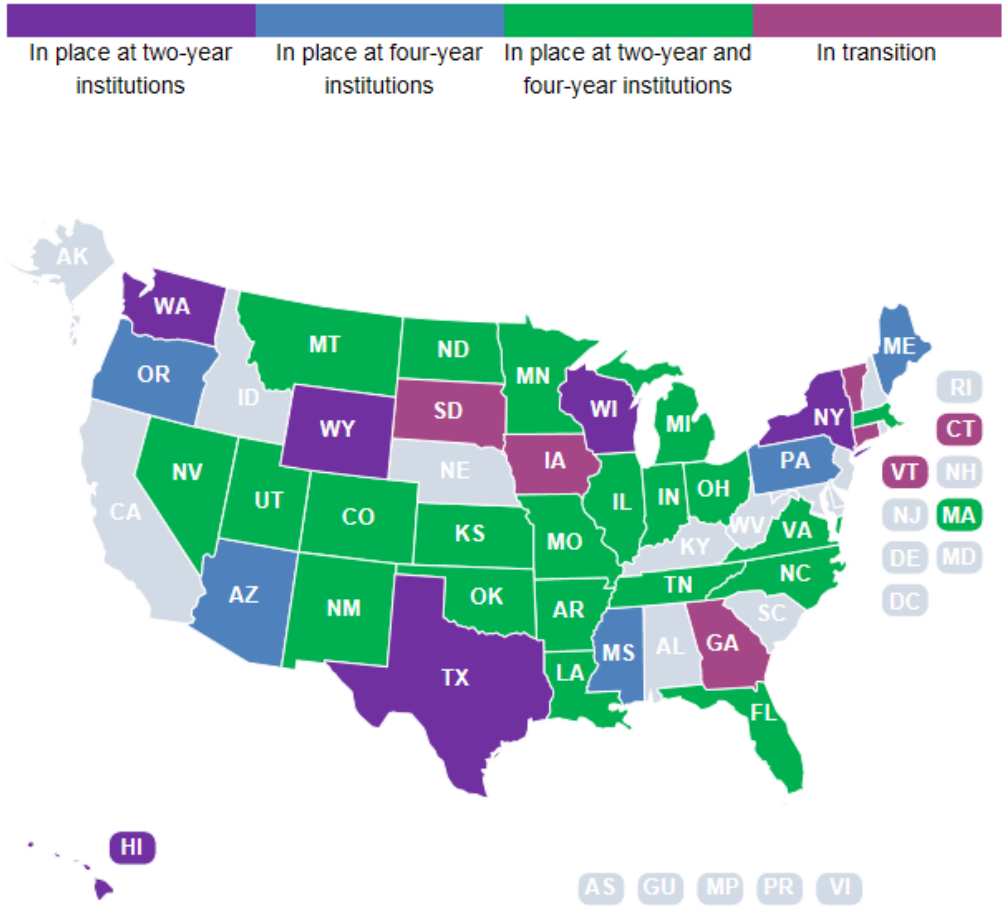
Total Formula Funding (in millions)	
2016-2017	
Operations Support with Teaching Experience Supplement	$3,942
Space Support	$ 715
Small Institution Supplement	$19
Total	$4,676
2018-2019	
Operations Support with Teaching Experience Supplement	$4,360
Space Support	$ 767
Small Institution Supplement	$18
Total	$5,146
Recommended Increase	$ 469
Percent Increase	10.0%

Charge 2 – Study and make recommendations for alternative approaches to incorporating undergraduate student success measures into the funding formulas and compare the effects of funding the success measures within the formula versus applying the success measures as a separate formula. (TEC, Section 61.0593)

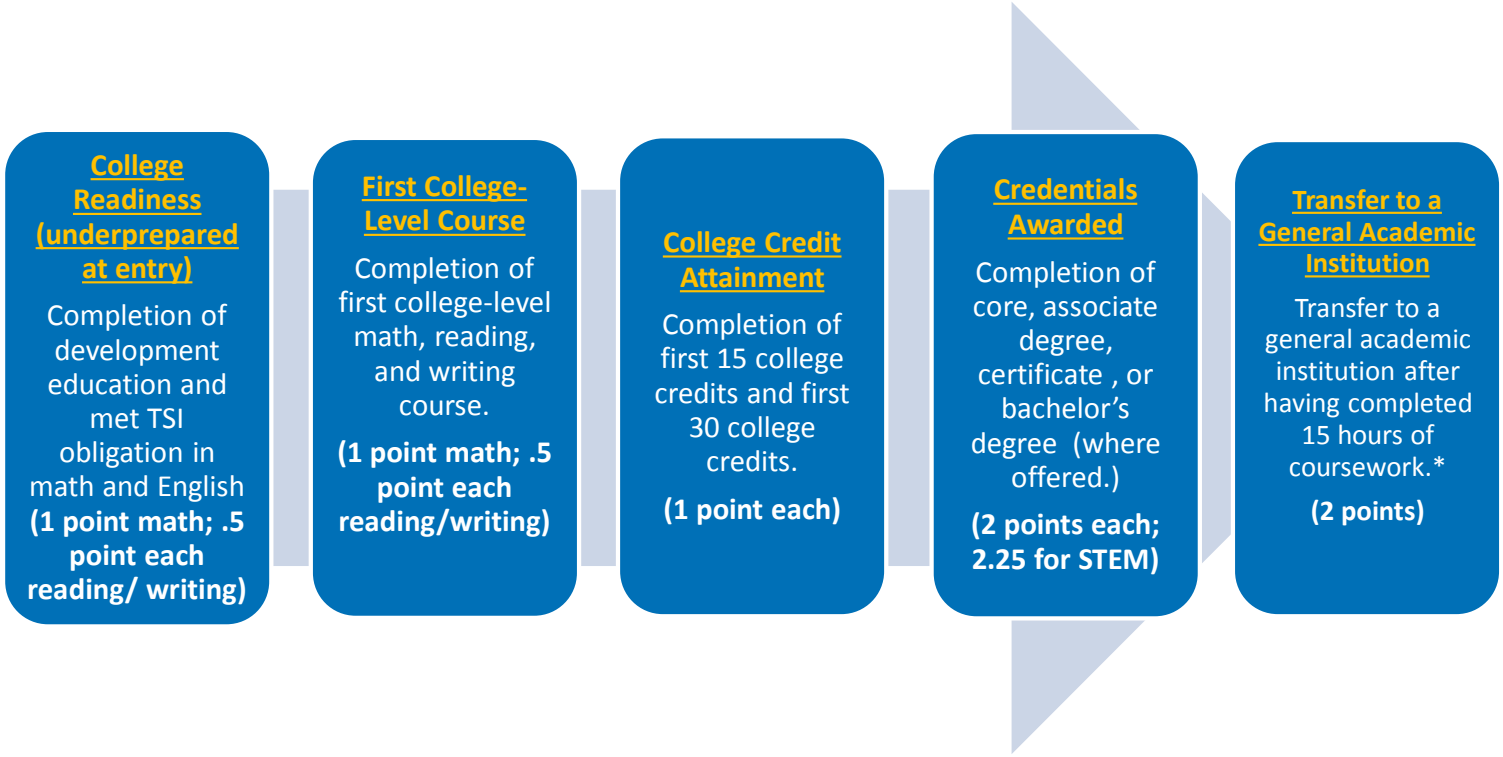
Work from Dr. Martha Snyder at HCM Strategist on this issue.

http://hcmstrategists.com/drivingoutcomes/wp-content/themes/hcm/pdf/Driving%20Outcomes.pdf
http://www.nga.org/files/live/sites/NGA/files/pdf/1204POSTSECONDARYJONES.PDF
http://scholars.unh.edu/radio/39/
https://www.insidehighered.com/news/2015/02/12/report-seeks-add-specificity-debate-over-states-performance-based-funding-models
http://hcmstrategists.com/wp-content/uploads/2014/04/HCM-State-Shared-Responsibility-RADD-2.0.pdf

The National Conference of State Legislatures (NCSL) has compiled a list of each state's status in implementing performance-based funding for higher education. The 4-year institution summary was included in the August meeting materials. This link will take members to the full list: http://www.ncsl.org/research/education/performance-funding.aspx



COMMUNITY COLLEGES AND THE THECB REACHED CONSENSUS ON A VARIETY OF STUDENT SUCCESS METRICS



THECB 7-8-14

*NOTE: Institutions may choose to report out-of-state transfers to the THECB

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Charge 3 – Study and make recommendations on the treatment of competency-based courses in formula allocations.

Draft Recommendation for Discussion Purposes

- Fund competency-based education as courses using the existing formula calculation and updated expenditure-based weights for the 2018-19 biennium.
    - ❖ The expenditure study should include the courses' expense and hours reported for the respective fiscal years, and institutions should report hours to the Coordinating Board upon the student's completion of all the modules associated with the course.
    - ❖ Fund hours through the formula for courses where the student attained mastery of the subject at the institution through instruction or independent study. Exclude hours where the student obtained mastery of the entire course prior to enrolling in the program. This includes not funding credit obtained through CLEP tests or similar evaluation practices through the formula.
- Expenditure data from the Texas A&M University-Commerce program was insufficient in determining the appropriate funding formula for competency-based education.
    - ❖ The program had only been in operation a single semester during Fiscal Year (FY) 2014. The committee requests Texas A&M University-Commerce continue to provide competency-based course expenditure data as a subset of the expenditure study data provided for the FY 2015 and 2016.
    - ❖ The commissioner should charge the 2020-21 biennium GAIFAC with reviewing this information to determine if the expense per hour for these courses varies enough from the statewide ratios to warrant an additional formula-to-fund competency-based education courses.

The 2016-2017 GAIFAC recommended semester credit hours for Competency-Based Education CBE programs be included in the operations support formula as students completed all the modules associated with a course. Additionally, it recommended the hours for courses completed entirely through testing and with no instruction not be reported or included in the formula funding allocations.

1. Texas A&M Commerce and South Texas College began their competency-based education (CBE) pilot programs in spring 2014. The university reported courses on the class report (CBM004) as students completed all the modules associated with each course.
2. The university provided a breakout of its expenditure study data to separate the expenses and hours associated with the program (see below).
3. See students' perspectives on the value of the Texas A&M University-Commerce's competency-based "Texas Affordable Baccalaureate" degree program in this short video. http://www.tamuc.edu/admissions/oneStopShop/undergraduateAdmissions/transferAdmissions2/BAASorganizationalLeadership/default.aspx

Key Terms

A **competency** is a specific skill, knowledge, or ability that is both observable and measurable.

Competency-based education (CBE) is an alternative to the credit hour-based system of credentialing. Student progress is based on demonstration of mastery of competencies as measured through assessments and/or through application of credit for prior learning. In competency based education programs, time is the variable and student competency mastery is the focus, rather than a fixed-time model where students achieve varying results.

Proficiency vs. Mastery: Proficiency and mastery are terms used to signify achievement within an educational program context. Proficiency is the level of achievement that is considered "passing" (e.g. 60%), whereas mastery is a higher level of achievement (e.g. 80%) required for progression through, and completion of, the program. Most CBE programs require mastery of competencies.

Prior learning assessment (PLA) is the evaluation and assessment of an individual's life learning for college credit, certification, or advanced standing toward further education or training. Prior learning assessment is often applied to military and work experience, as well as community service, informal online learning, and other learning acquired outside traditional academic institutions.

Direct assessment refers to the use of academic assessment methodologies utilized for evidence-based evaluation of student competencies, rather than evaluation based on indirect measures such as the student's seat time in the classroom. In competency-based education, tests, rubrics, papers, projects, and other assessment measures can be aligned with specific competencies for evaluation of evidence of competency mastery.

A **direct assessment program** is federally defined as an instructional program that, in lieu of credit hours or clock hours as a measure of student learning, utilizes direct assessment of student learning, or recognizes the direct assessment of student learning by others, and meets the conditions of 34 CFR 668.10 (http://www.gpo.gov/fdsys/granule/CFR-2011-title34-vol3/CFR-2011-title34-vol3-sec668-10) For Title IV, HEA purposes, the institution must obtain approval for the direct assessment program.

The **Department of Education Experimental Sites Initiative** (https://experimentalsites.ed.gov/exp/index.html) allows flexibility in how institutions provide Federal financial aid to students enrolled in competency-based education programs that use only direct assessment and do not utilize evaluation based on indirect measures such as the student's seat time in the classroom.

Sources:

Department of Education: Federal Student Aid Office (https://experimentalsites.ed.gov/exp/index.html)

American Council on Education/Blackboard: Clarifying Competency Based Education Terms (http://bbbb.blackboard.com/Competency-based-education-definitions)

CBE 101: What is Competency-Based Education?

Judith Sebesta, Ph.D.
Director of Innovation

TEXAS HIGHER EDUCATION
COORDINATING BOARD

Presentation to the General Academic Institution Funding Advisory Committee, September 9, 2015

Higher education then…

14th Century

…and now.

21st Century

Students are changing

"Most fundamentally, students themselves are changing. After long decades of exclusion, college access has expanded opportunities for **minority students, first-generation students, and low-income students**. In 2015, students are . . . more likely to be older, living away from campus, and may be attending part-time while balancing work and family."

Competency-based education is one strategy that can be employed to meet the needs of many of these students and fulfill all four of the goals of *60x30TX*.

Source: Homeroom, the official blog of the U.S. Department of Education

Competency-based education defined

Competency-based education (CBE) is an alternative to the credit hour-based system of credentialing.

- Student progress is based on demonstration of mastery of competencies.
- Mastery is measured through assessments and/or through application of credit for prior learning.

CBE is not new, but its current, increasingly widespread application to undergraduate education is.

Source: "Clarifying Competency-Based Education Terms," American Council on Education

Traditional vs. Competency-based education

Trad.

Time is fixed and learning variable.

Some students demonstrate mastery, others may not.

CBE

Learning is fixed and time is variable.

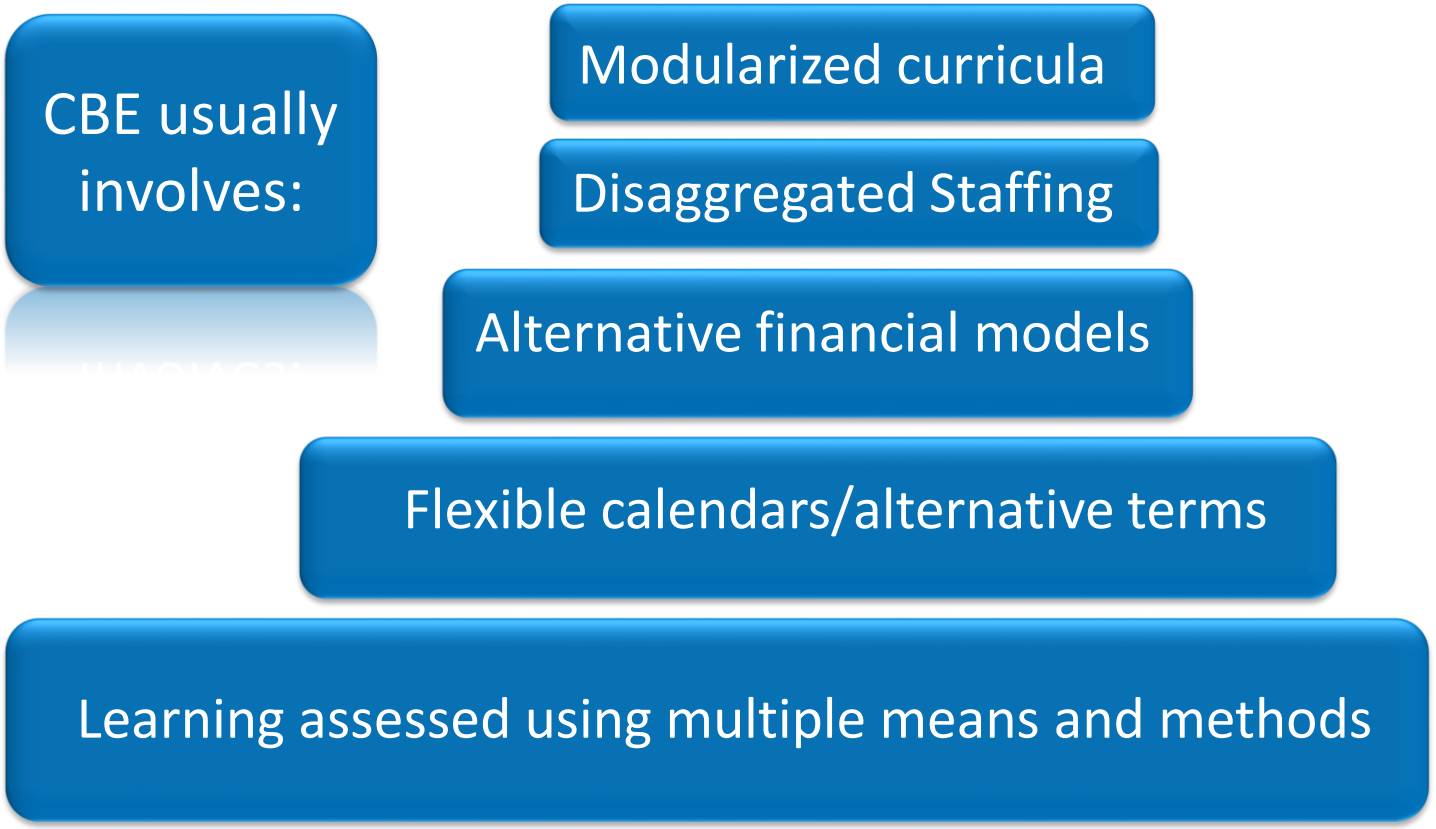
All students demonstrate mastery, usually at a level of 80% or higher.

Competency-based education framework

CBE often (but not always) is:

- Self-Paced
- Online
- Personalized
- Accelerated
- Affordable

Competency-based education framework



Instruction is a key component to CBE – and for SACS

Accredited CBE Programs MUST ensure that:

Students have access to qualified faculty.

Regular and substantive interaction occurs between faculty and students.

Source: Department of Education/Southern Association of Colleges and Schools Commission on Colleges 8

Mapping back to the credit hour

CBE programs map back to the SCH for purposes of accreditation, financial aid, transcription, and transferability.

However, a national movement to break from the SCH as the basic unit of instruction is being supported by the Department of Education's Experimental Sites Initiative.

CBE is growing throughout Texas

At least 20 Texas institutions -- ~16 public and 4 independent -- have implemented, are developing, or are interested in developing, CBE programs.

BAAS in Organizational Leadership

- Part of the Texas Affordable Baccalaureate program, developed jointly with South Texas College and the THECB.
- First CBE bachelor's degree program at a public IHE in Texas.
- Launched in spring 2014.
- Graduated the first class of students in May 2015.

TEXAS A&M UNIVERSITY COMMERCE

"This is a game-changing innovation for higher education that has the potential to reshape the way that we deliver higher education in Texas. But [it] is also firmly grounded in the A&M Commerce mission of creating a pathway for students to earn the degree that will forever transform their lives and reshape their futures."

--Dr. Dan Jones, President, Texas A&M University-Commerce

BAAS in Organizational Leadership: Quick Facts

99 competencies – 91 lower and 8 upper division – mapped back to courses and credit hours (120 SCH total).

Competencies defined by faculty and industry.

7 week terms, $750 tuition and fees per term

- Delivered completely online
- Unbundled instructional and staffing model
- 95% of students at least 25 years old
- Average end of module assessment score: 85.5 to 89.2 for an average 33.9 SCH/student completed during year 1

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BAAS in Organizational Leadership
Degree Plan: 99 Comp. = 120 SCH

General Education
(72 comp. = 42 SCH)

Professional Development Electives
(19 comp. = 48 SCH)

Students can receive up to 42 SCH of the general education/core curriculum as well as up to 48 SCH of PLA toward their professional development electives.

Applied Major Courses
(8 comp. =30 SCH)

Must be taken through instruction at TAMU-C.

TEXAS A&M UNIVERSITY COMMERCE

"To be honest, the process has not been an easy one (I jokingly said we were not on the cutting edge, but rather on the bleeding edge of innovation), but the reward of seeing students achieve their dreams has been worth it."

Dr. Mary W. Hendrix, Vice-President for Student Access and Success, Texas A&M University-Commerce

Texas A&M University Commerce Competency-Based Education FY 2014 Expenditure Study

Texas A&M University-Commerce began offering competency-based education courses leading to the BAAS in Organizational Leadership in spring 2014. At the request of the 2016-2017 general academic institutions formula advisory committee (GAIFAC), the institution is to report semester credit hour activity for courses each student completes.* The institution reported a total of 87 hours of activity for 32 students during fiscal year (FY) 2014 on the summer 2014-class report (spring 2014 semester activity). Note: for FY 2015, the program reported 1,059 semester credit hours or 35 full-time student equivalents.

The program is still nascent and data shared here are insufficient for setting CBE-specific funding levels. Like any start-up, initial costs are much higher compared to a program that is at scale. The Education Advisory Board report "Financial Models for Competency-Based Education" (2012) points out that "competency-based systems require significant capital investment" and that traditional degree programs demand a much lower investment (p. 19). TAMU-C President Dan Jones acknowledged and was supportive of the projection that the program likely would operate at a loss in the first five years.

A significant portion of the start-up costs were funded via a $1 million EDUCAUSE Next Generation Learning Challenges grant, an initiative supported in part by the Bill and Melinda Gates foundation to encourage technology-based education innovations to improve college readiness and completion. As with most grants, the award amount shaped, in part, the program design and thus expenditures. TAMU-C may not have pursued a CBE degree program without these grant funds, or may have delayed this pursuit.

Exhibit I, submitted by TAMUC, identifies the $378,555 in FY 2014 expenses reported on the institution's Annual Financial Report (AFR) Statement of Revenues, Expenses, and Changes in Net Position (SRECNP) related to competency-based education. All expenses in the exhibit were included in the study with the exception of Overhead (space, utilities, etc.). This type of expense is typically not included in the annual expenditure study.

Table 1. Allocated Expense per Semester Credit Hour for Undergraduate Course Level and Program.

Allocated Expense per SCH	UGL-Liberal Arts	UGU-Liberal Arts	UGL-Science	UGL-Business
Competency-Based Education	$3,952	$10,133	$2,075	$2,782
Non-CBE	$224	$324	$254	$317

Table 2. Semester Credit Hours for Undergraduate Course Level and Program.

Semester Credit Hours	UGL-Liberal Arts	UGU-Liberal Arts	UGL-Science	UGL-Business
Competency-Based Education	72	6	12	3
Non-CBE	45,322	24,159	15,311	4,703

* Although the program curriculum is organized around a series of 99 competencies – 91 lower and 8 upper division – currently these competencies are mapped back to courses and credit hours (for a total of 120 SCH). This ensures transcript portability, ease of navigation of the financial aid process, and eligibility for formula funding under the current formula.

Issues

Because instruction started in the spring and not the fall of the fiscal year and hours taught are reported at the end of the semester, only a single spring semester of activity is included in the study for this program. This resulted in elevated cost per semester credit hour rates in the study. The effect is compounded by the fact that this was the initial semester and these tend to be a low activity semester for most programs.

Headcount was estimated to be 32 (16 lower-level and 16 upper-level) students using the spring student schedule report. The activity on the spring student schedule report matched the summer class report with the exception of 9 hours reported for ORGL 297 on the student schedule report that were reported as ORGL 397 enrollments on the summer class report.

The expenditure study calculation dropped 6 semester credit hours reported on the summer class report. These hours were dropped because a faculty member was reported on the summer class report as teaching two courses, but not reported on the summer faculty report. The standard practice is to drop the hours associated with the classes taught by faculty members who do not match to the faculty report for the semester.

Faculty salaries reported on Exhibit I total $57,067.01, but the cost study allocated only $5,512 in faculty salaries based on the other courses the faculty taught and their other non-teaching activities not related to competency-based education. Exhibit II includes a list of staff and faculty and their associated expense. In the early stages of this program, faculty were paid overload salaries.

Assumptions

- The costs reported in Exhibit I were expended or accrued in fiscal year 2014. Expenses not reported in the Annual Financial Report (AFR) Schedule of Changes in Revenues, Expenses, and Net Position (SCRENP) are not included here.
- All the indirect costs associated with academic support, institutional support, and student services have been adequately accounted for.
- The expenditure study calculations include faculty salaries for both competency-based and non-competency-based courses. When faculty members teach both instruction modes, their salaries will be allocated to each course. Only the amounts allocated to competency-based courses should be included in the faculty salary portion of this study, and only this portion should be included in Exhibit I. The table below is a list of courses taught by faculty who taught both non-competency-based and competency-based courses (classified as instruction mode 2, fully distance education courses).

Faculty	Course Subject	Course Number	Course Section	Course Hours	Lower	Upper	Mast	Doc	Prof	Fund Code	Course Level	Teaching Load Credit	Total Reported TLC	Percent of Total TLC	Teaching Salary
1	TDEV	424	50051	3	0	8	0	0	0	4	4	250	330	0.76	4174
2	MATH	179	23241FE	3	0	1	0	0	0	1	1	0	0	0	2250
3	ENVS	403	50318	3	0	10	1	0	0	2	4	250	1000	0.25	5995
3	ENVS	503	40753	3	0	0	2	0	0	2	5	250	1000	0.25	5995
3	ENVS	505	40765	3	0	0	1	0	0	2	5	250	1000	0.25	5995
3	ENVS	506	40766	1	0	0	1	0	0	1	5	250	1000	0.25	5995
3	ENVS	502	40767	3	0	0	1	0	0	1	5	0	1000	0	5995

Operating Expenses (Uses) - Expenses paid to acquire goods and services provided in return for operating revenues and to carry out the mission of the institutions, are reported in 10 categories.

The following functional category definitions are extracted from the National Association of College and University Business Officers (NACUBO) glossary.

Instruction - Funds used for all activities that are a part of an institution's instruction program to include faculty salaries, academic departmental operating expenses, and support staff salaries.

Research - Funds used for activities specifically organized to produce research outcomes.

Public Service - Funds used for activities that are established primarily to provide non-instructional services beneficial to those external to the institution.

Academic Support - Funds used primarily to support services for an institution's primary mission of instruction, research, and public service. This may include technical support, academic administration, and the retention and display of educational materials.

Student Services - Funds used for activities whose primary purpose is to contribute to the students' emotional and physical well-being outside the context of the formal instruction program. Included are funds used for the admissions and registrar offices.

Institutional Support - Funds used for items such as central executive level management, fiscal operations, administrative data processing, human resources; and records, logistical activities, and activities concerned with community and alumni relations.

Operation and Maintenance of Plant - Funds used for the operation and maintenance of the physical plant, such as custodial services, landscape and ground maintenance, and utilities.

Scholarships and Fellowships - Funds used for scholarships and fellowships in the form of grants to students.

Capital Outlay

Other Expenses (Material entries are explained in the footnotes)

Exhibit I

Texas Affordable Baccalaureate - Expenditure Study

Direct Costs		Total	FY 2014	Function
Salaries - Faculty		55,567.01	55,567.01	Instruction
Salaries - Non-Faculty		39,700.09	39,700.09	Academic Support
Wages		4,250.00	4,250.00	Instruction
Benefits - Instruction		18,097.16	10,059.73	Instruction
Benefits - Academic Support			8,037.43	Academic Support
Travel		204.79	204.79	Instruction
Supplies		170.52	170.52	Instruction
Telecom		908.45	908.45	Instruction
Civitas Learning, Inc.		75,000.00	75,000.00	Academic Support
Computer		1,184.31	1,184.31	Instruction
Total Direct Costs		**195,082.33**	**195,082.33**	
Indirect Costs				
Overhead (space, utilities, etc.)	10%		19,508.23	Institutional Support
Ricia Montgomery	15%	50,959.92	7,643.99	Student Services
Dr. Mary Hendrix (development)	25%	203,360.00	50,840.00	Student Services
Course Setup prior to Middleware	15%	113,839.96	17,075.99	Instruction
Student Enrollment Support	5%	320,222.94	16,011.15	Student Services
Pearson	89		44,500.00	Instruction
eCollege	6		21,098.34	Instruction
Dr. Dan Jones (teaching)	2		500.00	Instruction
Dr. Mary Hendrix (teaching)	4		1,000.00	Instruction
Financial Aid Advisor	15%	35,300.00	5,295.00	Student Services
Total Indirect Costs		**723,682.82**	**183,472.70**	
Total Costs		**918,765.15**	**378,555.03**	

Additional Information:

- Civitas Software expense is a total of $150,000 for a two-year subscription. The second payment of $75K was paid in FY15.
- Regent 8 also provided software support for a cost of $50,000, which was paid in FY15.
- Direct costs are increasing as the scale increases (i.e., number of students is increasing).

Direct Cost Wages

Faculty	Amount	Type
1	6,500.00	1410 Sal-Teaching - Faculty
2	250.00	1410 Sal-Teaching - Faculty
3	6,780.01	1410 Sal-Teaching - Faculty
4	250.01	1410 Sal-Teaching - Faculty
5	1,100.00	1410 Sal-Teaching - Faculty
6	19,821.42	1410 Sal-Teaching - Faculty
7	1,250.00	1410 Sal-Teaching - Faculty
8	5,250.00	1410 Sal-Teaching - Faculty
9	450.00	1410 Sal-Teaching - Faculty
10	1,500.00	1410 Sal-Teaching - Faculty
11	3,100.01	1410 Sal-Teaching - Faculty
12	5,816.68	1410 Sal-Teaching - Faculty
13	1,250.00	1410 Sal-Teaching - Faculty
14	250.00	1720 Wages - Classified
15	45,060.09	1510 Sal-Support Staff - Professional
16	888.88	1415 Sal-GAT - Fac/Academ
	99,517.10	

Alternative approaches for the committee's consideration in making recommendations:

1. Estimate the number of weighted semester credit hours to complete the CBE program using a degree audit of a similar program and include those hours in the base year for each CBE that graduates in the base year.
    a. This approach would encourage timely completion, maintain the program's activity in the expenditure-based formula, and eliminate the need to associate the program modules with courses.
    b. This option results in funding lags for students who take longer to complete and excludes activity for students who never complete.
2. Fund institutions based on the fraction of total number of competencies in a CBE program that a CBE student completes during the semester.

Funds allocated per student per semester =
$$\left(\frac{Number\ of\ modules\ completed\ in\ a\ semester}{Total\ number\ of\ modules\ in\ CBE\ program} * Program\ Weight\right) * Value\ of\ CBE\ Program$$

    a. This approach takes into account the number of competencies a student places out of as a result of Prior Learning Assessments (PLA).
    b. It is more in line with how CBE programs are being designed in Texas and across experimental sites in the U.S.
    c. The Program Weight equalizes the variation in the maximum length and that number of competencies across CBE programs.
    d. This option requires the CBE program must be valued or monetized.

Charge 5 – Study and make recommendations on changes to the funding model that will enable institutions to meet the goals of 60x30TX.

Draft Recommendation for Discussion Purposes

State funding is an essential resource for institutions to meet the *60x30TX* goals. The committee considered the four goals of this plan when setting the funding level recommendations included in this report. Over the course of the 15 years during the *Closing the Gaps* plan, general academic institutions increased enrollments 45 percent and increased graduation rates over 11 percentage points (from 49.5 to 60.5 percent). These strides require quality faculty and staff motivated to reaching a higher standard of education for our students and our state.

Since fiscal year 2000, these same institutions received decreasing amounts in state support on a per full-time student equivalent basis – a trend that must reverse if the state intends to educate 3 out of 5 citizens, nearly double the annual graduates, increase students awareness of their marketable skills, all while maintaining student debt levels. This committee encourages the legislature to work diligently in forming budgets over the next 15 years that help higher education in the state of Texas reach these ambitious but attainable goals.

A copy of *60x30TX* is available at http://www.thecb.state.tx.us/

Additionally, the Higher Education Strategic Planning committee agendas, materials, and presentations can be viewed at http://www.thecb.state.tx.us/index.cfm?objectid=26A44722-B21E-CCCB-7A8E798C996AD204&flushcache=1&showdraft=1

A summary of *60x30TX* follows on the next six pages.

By 2030, at least 60 percent of Texans ages 25-34 will have a certificate or degree.

July 2015 – Next Higher Education Strategic Plan for Texas
(Targets and Strategies)

8/13/15
Texas Higher Education Coordinating Board

Overarching Goal

60x30

By 2030, at least 60 percent of Texans ages 25-34 will have a certificate or degree.

Goal and Interim Benchmarks	2020	2025	2030
Increase the percent of Texans ages 25-34 with a certificate or degree to at least … *38.3% as of 2013*	48%	54%	60%

Strategies

Respond to the needs of the changing population of Texas so students are supported into and through higher education.

For example:

- Aggressively **promote college attainment** to students and parents prior to high school.
- Develop and implement **education and curriculum delivery systems** (e.g., competency-based programs) to make higher education available **to a broader and changing population**.
- Provide high-quality education programs for educationally underserved adults.
- Develop practices to encourage **stop-outs** with more than 50 semester credit hours to return and complete a degree or certificate.
- Collaborate with the TWC to identify **critical fields** and to update them periodically.

COMPLETION

Goal: By 2030, at least 550,000 students in that year will complete a certificate, associate, bachelor's, or master's from an institution of higher education in Texas.

Goal and Interim Benchmarks	2020	2025	2030
Increase the number of students completing a certificate, associate, bachelor's, or master's from an institution of higher education in Texas to at least ... *298,989 as of 2014*	**376,000**	**455,000**	**550,000**

Targets to Reach the Goal	2020	2025	2030
Increase the number of Hispanic students completing a certificate or degree to at least ... *Hispanics 89,355 as of 2014; African Americans 37,658 as of 2014*	138,000	198,000	285,000
Increase the number of African American students completing a certificate or degree to at least ...	48,000	59,000	76,000
Increase the number of male students completing a certificate or degree to at least ... *122,744 as of 2014*	168,000	215,000	275,000
Increase the number of economically disadvantaged undergraduate students (Pell Grant recipients) completing a certificate or degree to at least ... *107,419 as of 2014*	146,000	190,000	246,000
Increase the percentage of all Texas public high school graduates enrolling in an institution of higher education in Texas by the first fall after their high school graduation to at least ... *54.2% as of 2014*	58%	61%	65%

Strategies

Support the completion pipeline by providing access to multiple postsecondary options.

For example:

- Scale up and share practices that **guide students** to higher education.
- **Reach out to K-12** to collaborate in improving college and career readiness.
- Increase the participation of **economically disadvantaged** high school students in dual credit and other **college-level courses**.
- **Build credentials** at each level with the aim of reducing course work duplication and time to subsequent degrees.

Improve academic preparation and academic support for students to enter and complete higher education.

For example:

- Scale up and share practices that support students in their **academic preparation** for postsecondary education.
- **Streamline credential pathways** through the P-16 continuum to ensure that secondary education graduation plans, including endorsement coursework, prepare high school graduates for completing a postsecondary credential.
- Scale up and share practices that **support underprepared students** to increase persistence and completion and to reduce their time to degree.

Structure programs and support services to be responsive to the changing needs of the student population to help students persist through key transitions in higher education.

For example:

- Use **innovative approaches for content delivery** (e.g., block scheduling) and assessment to improve completion and reduce student cost.
- Employ **High-Impact Practices** (HIPs). HIPs are evidence-based teaching and learning practices shown to improve learning and persistence for college students from many backgrounds. Various practices demand considerable time and effort, facilitate learning outside of the classroom, require meaningful interactions with faculty and students, encourage collaboration with diverse others, and provide frequent and substantive feedback.
- Increase use of **predictive analytics** to identify and assist students at risk of not completing.

MARKETABLE SKILLS

Goal: By 2030, all graduates from Texas public institutions of higher education will have completed programs with identified marketable skills.

Targets to Reach the Goal	2020	2025	2030
By 2020, institutions will have created and implemented a process to identify and regularly update marketable skills for each of their programs, in collaboration with business and other stakeholders.	100% Implemented	Continuously Updated	
Maintain the percentage of students who are found working or enrolled within one year after earning a degree or certificate. *77.1% as of 2013*	80%	80%	80%

Students need to be aware of the marketable skills affiliated with their programs. The targets above ensure that institutions document, update, and communicate to students the skills acquired in their programs so that students can communicate those skills to potential employers. Target years can be modified to accommodate institutional program review cycles.

Strategies

Identify marketable skills in every higher education program.

For example:

- **Convene a statewide group** to explore general characteristics of marketable skills by meta-majors. This group should include representatives from institutions, industry, and other relevant stakeholders.
- Establish **collaborations** among institutions, state, regional, and local employers to define desirable skills, and identify in-demand programs and courses that offer those skills.
- **Leverage existing efforts** (e.g., the Liberal Education and America's Promise – LEAP – initiative) to ensure that marketable skills are addressed in every program.

Communicate marketable skills to students, families, and the workforce.

For example:

- Increase the quality and availability of information targeted to students about the transition from **higher education to the workforce**, including information about the transferability and alignment of skills. This information should be available through **academic and career advising** strategies.
- Ensure marketable skills are integrated into curricula so that students can **demonstrate and communicate those skills** through established mechanisms.

STUDENT DEBT

Goal: By 2030, undergraduate student loan debt will not exceed 60 percent of first-year wages for graduates of Texas public institutions.

Goal and Interim Benchmarks	2020	2025	2030
Maintain undergraduate student loan debt at or below 60 percent of first-year wages for graduates of Texas public institutions. *60% as of 2012*	**60%**	**60%**	**60%**

Targets to Reach the Goal	2020	2025	2030
Decrease the excess semester credit hours (SCHs) that students attempt when completing an associate or a bachelor's degree. *21 as of 2014*	12	6	3
Work to limit debt so that no more than half of all students who earn an undergraduate degree or certificate will have debt. *50.7 as of 2014*	50%	50%	50%

Strategies

Finance higher education in a manner that provides the most effective balance among appropriations, tuition and fees, and financial aid.

Make higher education more affordable for students.

For example:

- **Fully fund grants** for eligible students.
- **Support innovative approaches** for more affordable credentials.
- Reduce time to degree through **alternate degree pathways** to completion.

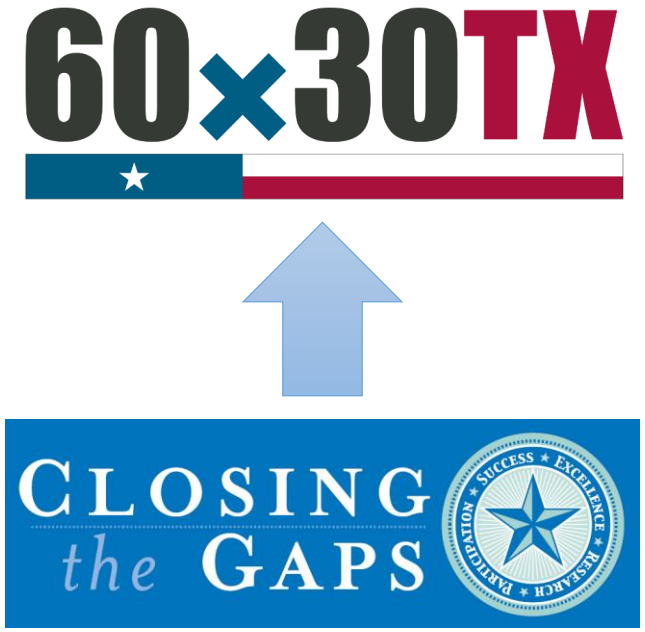
Build the financial literacy of Texans to promote a better understanding of how and why to pay for higher education.

For example:

- Implement personal **financial literacy** programs to support students going to college.
- Convene a statewide advisory group to determine ways to better **advise students and parents on financial aid** options and the impact of those options on students' finances before and during their college careers.

By 2030, at least 60 percent of Texans ages 25-34 will have a certificate or degree.

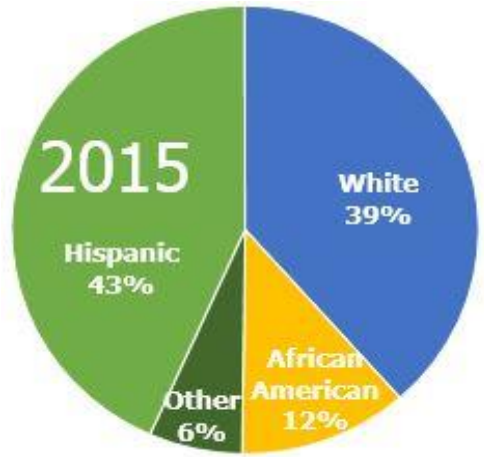
60x30TX Builds on Past Achievements

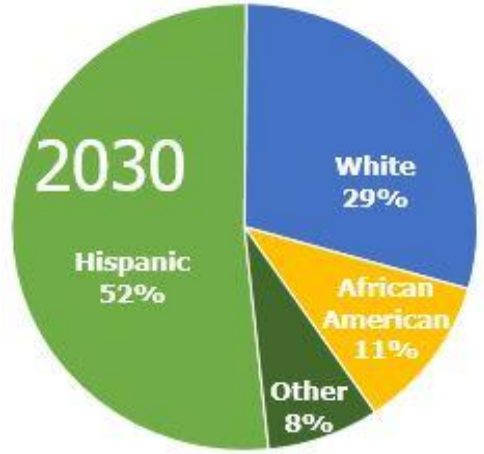


The Texas Higher Education Strategic Plan

60x30TX

Race/ethnicity distribution of projected Texas population, ages 25-34





60x30TX

The 2015-2030 plan includes four student-centered goals

60×30

By 2030, at least 60 percent of Texans ages 25-34 will have a certificate or degree.

Completion

By 2030, at least 550,000 students in that year will complete a certificate, associate, bachelor's, or master's from an institution of higher education in Texas.

Marketable Skills

By 2030, all graduates from Texas public institutions of higher education will have completed programs with identified marketable skills.

Student Debt

By 2030, undergraduate student loan debt will not exceed 60 percent of first-year wages for graduates of Texas public institutions.

60×30TX

60x30

By 2030, at least 60 percent of Texans ages 25-34 will have a postsecondary credential or degree.

Achieving the 60x30 goal is critical for Texas to remain globally competitive and for its people and communities to prosper.

60x30TX

Our future workforce will demand even more postsecondary trained and educated workers

In 1973, only 28% of all U.S. jobs required postsecondary education/skills. By 2020, **65% of all new jobs** will require this level of education.

59% of all new jobs in Texas will require postsecondary training or education by 2020. Currently, **35%** of Texans aged 25-34 have an associate degree or higher.

COMPLETION

Goal: By 2030, at least 550,000 students in that year will complete a certificate, associate, bachelor's, or master's from an institution of higher education in Texas.

If reached, Texas will award a total of 6.4 million certificates or degrees during the 15 years of this plan.

MARKETABLE SKILLS

Goal: By 2030, all graduates from Texas public institutions of higher education will have completed programs with identified marketable skills.

What is a marketable skill?

Students exit from any degree program with a variety of skills.

Marketable skills are those valued by employers that can be applied in a variety of work settings, including interpersonal, cognitive, and applied skill areas. These skills can be either primary or complementary to a major and are acquired by students through education, including curricular, co-curricular, and extracurricular activities.

MARKETABLE SKILLS

Goal: By 2030, all graduates from Texas public institutions of higher education will have completed programs with identified marketable skills.

In a 2012 UCLA study, 88 percent of surveyed students identified "getting a better job" as the most important reason for attending college.

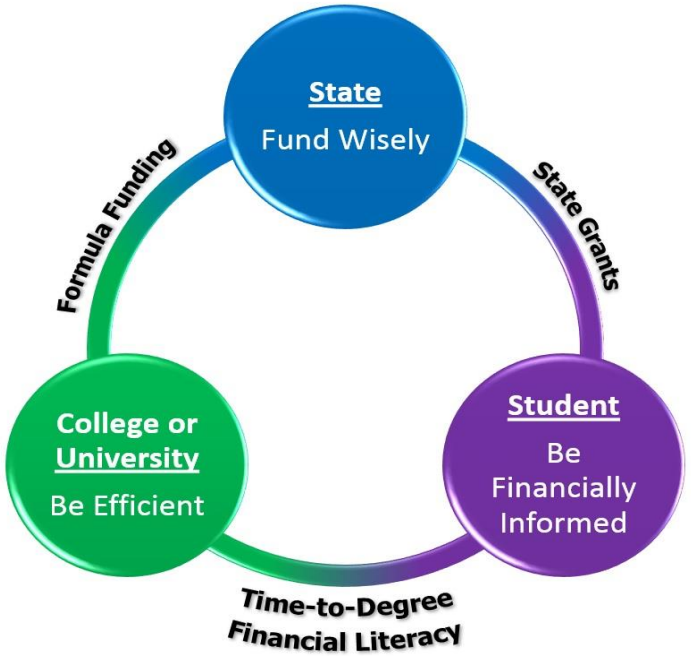
STUDENT DEBT

Goal: By 2030, undergraduate student loan debt will not exceed 60 percent of first-year wages for graduates of Texas public institutions.

Texas could experience greater shortages in important fields if student loan debt spikes to the point at which a majority of students choose programs based entirely on potential income.

STUDENT DEBT

Goal: By 2030, undergraduate student loan debt will not exceed 60 percent of first-year wages for graduates of Texas public institutions.



"Only those who will risk going too far can possibly find out how far one can go."

-- T. S. Elliot

This document is available on the Texas Higher Education Coordinating Board Website: **http://www.thecb.state.tx.us/formulafunding**

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