AGENDA

COMMITTEE ON EDUCATIONAL POLICY

Meeting: **8:00 a.m., Wednesday, November 20, 2019**
Glenn S. Dumke Auditorium

Peter J. Taylor, Chair
Jane W. Carney, Vice Chair
Silas H. Abrego
Rebecca D. Eisen
Douglas Faigin
Debra S. Farar
Wenda Fong
Juan F. Garcia
Lillian Kimbell
Thelma Meléndez de Santa Ana
Romey Sabalius
Christopher Steinhauser

Consent

1. Approval of Minutes of the Meeting of September 24, 2019, *Action*

Discussion

2. Amendment to Title 5 Regarding Student Organizations, *Action*
3. Amendment to Title 5 Regarding Admissions Requirements: Quantitative Reasoning, *Information*
4. Research, Scholarship and Creative Activities, *Information*
5. Graduation Initiative 2025, *Information*

MINUTES OF MEETING OF COMMITTEE ON EDUCATIONAL POLICY

Trustees of The California State University
Office of the Chancellor
Glenn S. Dumke Conference Center
401 Golden Shore
Long Beach, California

September 24, 2019

Members Present

Peter Taylor, Chair
Jane W. Carney, Vice Chair
Silas H. Abrego
Rebecca D. Eisen
Douglas Faigin
Debra S. Farar
Wenda Fong
Juan F. Garcia
Lillian Kimbell
Thelma Meléndez de Santa Ana
Romey Sabalius
Christopher Steinhauser
Adam Day, Chairman of the Board
Timothy P. White, Chancellor

Trustee Taylor called the meeting to order.

Approval of Minutes

The minutes from July 23-24, 2019, were approved as submitted.

Approval of Minutes

The minutes of August 29, 2019, were amended to reflect Trustee Fong's recommendation for two minor edits. The amended minutes were approved.

Amendment to Title 5 Regarding Student Organizations

Loren J. Blanchard, executive vice chancellor for Academic and Student Affairs, introduced the information item by stating that it was being brought forward as an information item again as a result of questions raised by trustees.

Luoluo Hong, associate vice chancellor for Student Affairs and Enrollment Management, presented the Title 5 amendment, explaining that it relates to the policy prohibiting recognized student organizations from discriminating on the basis of any protected status. The Title 5 amendment would align CSU policies as defined by federal and state law by adding as protected status: religious creed, medical condition, genetic information, gender identity, gender expression and veteran and military status. Following trustee questions during the July board meeting, citizenship was maintained as a protected status.

There were no questions from the board.

Educational Opportunity Program

Loren J. Blanchard, executive vice chancellor for Academic and Student Affairs, introduced the information item, highlighting that the CSU Educational Opportunity Program has provided educational access and opportunity to a quarter of a million students from historically underserved communities over the past 50 years. This long-standing history of success has informed much of the university's current Graduation Initiative 2025 efforts.

Ray Murillo, director for student programs in Student Affairs and Enrollment Management, provided examples of EOP components that have informed Graduation Initiative 2025 efforts, including intrusive advising, expanded orientation programs, Summer Bridge and an emphasis on fostering a sense of belonging. He also shared information about EOP enrollment and data highlighting that graduation rates are higher for EOP students.

Trustee Abrego shared his firsthand reflections of EOP, as a student during its creation and as an EOP director at CSU Fullerton. In addition, a video was shown highlighting testimonials from EOP alumni about the important role EOP played in their success.

Following the presentation, trustees asked questions related to how best to grow EOP, how to engage alumni in supporting EOP students and how to direct additional resources to the program.

Proposal to Modify First-Year Admission Requirements

Loren J. Blanchard, executive vice chancellor for Academic and Student Affairs, introduced the information item, providing a brief overview of the August 29, 2019 special public comment open forum on the CSU quantitative reasoning proposal.

James T. Minor, assistant vice chancellor and senior strategist for Academic and Student Affairs, presented the official proposal. He highlighted that the proposal expands the a-g requirements that determine minimum eligibility for CSU admission to require the completion of one additional quantitative reasoning course. The course could be fulfilled with a high school science course, an elective with a quantitative reasoning foundation, such as personal finance or computer science, or a more traditional mathematics course beyond Algebra 2. It could also be met with a quantitatively-based course offered through Career and Technical Education or through dual enrollment in partnership with a local community college. In addition, Dr. Minor provided several examples of how students could fulfill the requirement and provided examples of qualifying courses available at specific high schools. Finally, Dr. Minor highlighted that there is an exemption for any student who cannot fulfill the new requirement due to lack of resources and/or course availability at their high school. As a result of feedback from the August 29 open forum, the proposal details that the exemption would be automated through a partnership with the California Department of Education and the University of California (UC).

Marquita Grenot-Scheyer, assistant vice chancellor for Educator Preparation and Public School Programs, provided specific details about the implementation plan. She highlighted data from the UC 'a-g' database that indicate that 99.7 percent of California comprehensive high schools offer at least one course that would satisfy the proposed quantitative reasoning requirement and that only 16 high schools – predominately small, charter schools – currently offer fewer than three qualifying courses or only offer a mathematics course. Dr. Grenot-Scheyer presented a three-prong implementation plan that utilizes the data on capacity to target support to the schools and districts most in need of support. The implementation plan includes helping expand curriculum in quantitative reasoning in high schools, addressing teaching capacity and engaging in a significant communication campaign to ensure educators, families and prospective students are aware of – and prepared for – this admission change.

Following the presentation, trustees had a number of questions and comments. These questions included, but were not limited to: how will the board know if the requirement is having a disparate impact on underserved students and what would their options be; what is the problem the requirement intends to address; why has there been significant opposition; should the CSU be the lever to make this change to K-12 education; and a request for the CSU to delay this proposal.

Trustee Taylor adjourned the Committee on Educational Policy.

COMMITTEE ON EDUCATIONAL POLICY

Recommended Amendment to Title 5 Regarding Student Organizations

Presentation By

Loren J. Blanchard
Executive Vice Chancellor
Academic and Student Affairs

Summary

This action item includes amendments that would align and update California State University (CSU) policies related to student organizations by conforming the requirement that student organizations cannot discriminate on the basis of any protected class with other CSU policies as defined by federal and state law.

The board discussed this matter as an information item during the September 2019 meeting.

Background

Participating in student activities, clubs and organizations is an integral part of the CSU student experience. On each campus there are typically hundreds of organizations, covering a wide range of interests and topics. Students who participate in these activities report higher levels of satisfaction with their college experience, as well as a greater sense of belonging and connection with their peers. Participation also has a number of benefits for students, including:

- Enriching the classroom experience;
- Easing the transition to college;
- Providing connections with the university and available resources; and
- Enabling students to enhance and practice job-related skills (leadership, communication, budget management, fundraising, problem-solving, public speaking, etc.)

Student organizations in the CSU are student-led and are independent from the campus. Recognized student organizations are required to meet and maintain campus requirements, which include:

- A university advisor, who must be either a faculty member or professional staff member. As student organizations are independent from the campus, advisors do not serve in a supervisory or leadership role. Instead, they often act as mentors, educators and interpreters of institutional policy;
- A minimum of five CSU students who are currently enrolled in at least one class;

- A signed agreement that the organization does not discriminate on the basis of protected class (in alignment with CSU policy as defined by federal and state law); and
- Membership and leadership that are open to all currently enrolled students at that campus (except that a social fraternity or social sorority may impose a gender limitation for membership as permitted by California Education Code).

Recognized student organizations are eligible for benefits and privileges, including the use of campus facilities at reduced or no charge, assistance from a campus' student development and leadership department, participation in university activities and programs and funding from Associated Students, Inc.

Proposed Revisions

The proposed Title 5 amendments would align and update CSU policies related to student organizations by conforming the requirement that student organizations cannot discriminate on the basis of any protected class. This amendment would align this section of Title 5 with other CSU policies as defined by federal and state law.

Specifically, the amendments would add as protected classes: ethnicity (including color and ancestry), religious creed, nationality, medical condition, genetic information, sex, gender identity (including transgender), gender expression, sexual orientation, veteran and military status.

The following resolution is proposed to modify Title 5 by amending sections 41500-Witholding of Recognition; 41503-Filing Requisites; 41504-Penalties; and 41505-Athletics and Other Intercollegiate Activities.

> **RESOLVED** by the Board of Trustees of the California State University that Title 5, California Code of Regulations sections 41500, 41503, 41504 and 41505 be amended as follows:

Title 5. Education
Division 5. Board of Trustees of the California State Universities
Chapter 1. California State University
Subchapter 4. Student Affairs
Article 4. Nondiscrimination in Student Organizations
5 CCR § 41500 Withholding of Recognition

§ 41500. Withholding of Recognition.

No campus shall recognize any fraternity, sorority, ~~living group,~~ honor society, or other student organization ~~which~~that discriminates on the basis of race or ethnicity (including color and ancestry), religion (or religious creed), nationality, citizenship,~~national origin, ethnicity, color,~~ age, medical condition, genetic information, gender (or sex), gender identity (including transgender), gender expression, sexual orientation, marital status, ~~citizenship, sexual orientation,~~ veteran or military status, or disability. The prohibition on membership policies that discriminate on the basis of gender does not apply to social fraternities or sororities ~~or to other university living groups~~.

Note: Authority cited: Sections 66600, 89030, 89035 and 89300, Education Code. Reference: Sections 66600, 89030, 89300-89302, Education Code.

Title 5. Education
Division 5. Board of Trustees of the California State Universities
Chapter 1. California State University
Subchapter 4. Student Affairs
Article 4. Nondiscrimination in Student Organizations
5 CCR § 41503 Filing Requisites

§ 41503. Filing Requisites.

Each student organization shall deposit with the Vice President of Student Affairs or equivalent officer of the campus ~~by,~~ copies of all constitutions, charters or other documents relating to its policies. The student organizations shall also deliver to the Vice President of Student Affairs or equivalent officer a statement signed by the president or similar officer of the local student organization attesting that the organization has no rules or policies that~~which~~ discriminate ~~on the basis of race, religion, national origin, ethnicity, color, age, gender, marital status, citizenship, sexual orientation, or disability,~~ on the basis of the protected categories set forth in Section 41500~~, except as excepted above~~. This statement shall be renewed annually and the other documents required by this section shall be refiled within 90 days after any substantive change or amendment.

Note: Authority cited: Sections 66600, 89030, 89035 and 89300, Education Code. Reference: Sections 66600, 89030, 89300-89302, Education Code.

Title 5. Education

Division 5. Board of Trustees of the California State Universities
Chapter 1. California State University
Subchapter 4. Student Affairs
Article 4. Nondiscrimination in Student Organizations
5 CCR § 41504 Penalties

§ 41504. Penalties.

Should the national governing body of any organization described in Section 41500 take any action that~~which~~ has the effect of penalizing or disciplining any branch or chapter at a campus in order to enforce a policy of discrimination based on the protected categories set forth in Section 41500 ~~race, religion, national origin, ethnicity, color, age, gender, marital status, citizenship, sexual orientation, or disability,except as excepted above,~~ recognition of that organization by any campus shall be immediately withdrawn.

Note: Authority cited: Sections 66600, 89030, 89035 and 89300, Education Code. Reference: Sections 66600, 89030, 89300-89302, Education Code.

Title 5. Education
Division 5. Board of Trustees of the California State Universities
Chapter 1. California State University
Subchapter 4. Student Affairs
Article 4. Nondiscrimination in Student Organizations
5 CCR § 41505 Athletic and Other Intercollegiate Activities

§ 41505. Athletics and Other Intercollegiate Activities.

No campus shall enter into intercollegiate activities that~~which~~ will subject its students directly or indirectly to discrimination or segregation on the basis of protected categories set forth in Section 41500 ~~race, religion, national origin, ethnicity, color, age, gender, marital status, citizenship, sexual orientation, or disability~~. The prohibition against discrimination on the basis of gender does not apply to membership on intercollegiate athletic teams, facilities, or competition.

Note: Authority cited: Sections 66600, 89030, 89035 and 89300, Education Code. Reference: Sections 66600, 89030, 89300-89302, Education Code.

COMMITTEE ON EDUCATIONAL POLICY

Amendment to Title 5 Regarding Admission Requirements: Quantitative Reasoning

Presentation By

Loren J. Blanchard
Executive Vice Chancellor
Academic and Student Affairs

James T. Minor
Assistant Vice Chancellor and Senior Strategist
Academic and Student Affairs

Marquita Grenot-Scheyer
Assistant Vice Chancellor
Educator Preparation and Public School Programs

Nathan Evans
Chief of Staff and Senior Advisor
Academic and Student Affairs

Summary

As the largest and most diverse four-year public university system in the nation, the California State University (CSU) is committed to completely eliminating equity gaps – the gaps between degree attainment for students from historically underserved communities and their peers – at all levels of the university. Today, quantitative reasoning skills represent one of the greatest disparities among incoming college students.

The proposal outlined in this item will help achieve educational equity by ensuring that a greater number of students from all backgrounds arrive at the CSU better prepared for a diverse range of majors and career paths. The goal is to expand access and equity for all students to achieve their personal and professional goals rather than limiting their opportunities at the point of college admission because of limited preparation for particular majors during high school.

The California State University (CSU) is recommending that graduating high school students, beginning with the entering first-year class of 2027, be required to complete one additional course of quantitative reasoning to meet the minimum qualifications for CSU first-year admission. Students who would otherwise be CSU eligible, but are unable to meet this requirement because of resource limitations at their high school, will be automatically provided an exemption during the initial implementation of the requirement.

The proposed implementation term has been extended to fall 2027 to ensure ample time for planning, communication and capacity building, particularly at high schools that currently have fewer course options. The CSU will continue to collaborate with PK-12 districts in every region of the state – building on decades-long partnerships – to expand curricular offerings in subjects that align with this requirement. To support successful implementation, the CSU has committed an additional $10 million over the next four years to its Mathematics and Science Teacher Initiative to double (from 1,000 to 2,000) the number of mathematics, science and computer science teachers prepared at the CSU. Additionally, the university will tailor and expand existing student outreach and enrichment programs to support PK-12 student learning.

The proposal presented herein has benefited from significant consultation with stakeholders, the public and trustees. This information item details the extensive consultation and the improvements to the proposal that are a result of that consultation. Additionally, this item includes an analysis of student data, which reinforces previously shared CSU data, that was provided by the California Department of Education (CDE) as a result of a data-sharing agreement.

The board previously discussed this matter as an information item during the March 2019 and July 2019 meetings, the August 29, 2019 special forum and the September 2019 meeting. Additional details related to this proposal can be found in the agenda items for those meetings.

This proposal will be presented as an action item during the January 2020 meeting.

Consultation

The development of the CSU proposal has been informed by ongoing consultation and collaboration with a diverse range of CSU constituents, trustees, community partners and PK-12 district and school personnel. It has benefited from the extensive work of the Academic Senate CSU Quantitative Reasoning Task Force, which included participation from state government, the California Department of Education, the California Community College Chancellor's Office, the University of California Office of the President and technology organizations and companies.

Over the past several years, the Office of the Chancellor has facilitated conversations with a number of leaders, staff and organizations regarding the quantitative reasoning admission requirement, including:

- Academic Senate CSU
- California State Student Association
- Associated Students, Incorporated
    - Cal State Dominguez Hills
    - Cal State Los Angeles
    - Cal Poly Pomona

- California Department of Education
- California State Board of Education
- California PK-12 school districts
    - Elk Grove Unified
    - Fresno Unified
    - Kern Union High School
    - Long Beach Unified
    - Los Angeles Unified
    - San Bernardino Unified
    - San Diego Unified
- California County Offices of Education
    - Fresno County
    - Kern County
    - Riverside County
    - San Bernardino County
- California Community Colleges Chancellor's Office
- Long Beach Community College District
- Sacramento City College
- Compton Community College
- University of California Office of the President
- USC Pullias Center for Higher Education
- UMOJA Community Education Foundation
- Office of California Governor Gavin Newsom
- Office of California Lieutenant Governor Eleni Kounalakis
- California Assembly Higher Education Committee
- California Assembly Education Committee
- California Assembly Budget Subcommittee 2: Education
- California Senate Education Committee
- California Senate Budget Subcommittee 1: Education
- Campaign for College Opportunity
- West Angeles Education and Enrichment Program
- Community Education Coalition
- Ed Trust West
- Parent Institute for Quality Education
- Just Equations
- Public Advocates
- Children Now
- College Futures Foundation
- Lumina Foundation
- Kresge Foundation

- Capitol Advisors
- Los Angeles Chamber of Commerce
- Mathematics Diagnostic Testing Project staff
- California Academic Partnership Program Advisory Council
- Intersegmental Coordinating Committee

Additionally, this proposal has been presented at three Board of Trustees meetings, a California Department of Education forum and a California State Assembly hearing. Information regarding the proposed requirement was also provided to more than 5,000 high school counselors and educators during the 2018 and 2019 CSU Counselor Conferences across the state.

Improvements Resulting from Consultation

Throughout the consultation process, feedback received has been incorporated into the proposal and the implementation plan, strengthening both components. These improvements include:

Recommendation for Senior Year

As a result of early consultation, a shift was made from requiring the additional quantitative reasoning course to be taken in a student's senior year to allowing a student to take the course any time during high school. This shift recognizes the importance of providing students and school districts maximum flexibility.

Automated Exemption Policy

Despite the multiple pathways available to meet the quantitative reasoning admission requirement and the CSU's commitment to supporting capacity building over the next seven years, the university acknowledges that some students may experience unique circumstances requiring an exemption. The CSU will provide an exemption for any student, who is otherwise eligible, who cannot fulfill the new requirement due to lack of resources and/or course availability at their high school.

As a result of feedback received during the August 29 special forum, the CSU will seek a working partnership with the University of California and the California Department of Education to classify schools with limited qualifying course offerings related to the implementation of this proposal in 2027. These schools would be internally identified in Cal State Apply, the CSU online application for admission, to ensure any student applying for the CSU from an identified high school receives the exemption. This will automate the exemption for students applying from these schools, removing the burden from students to "seek out" the exemption.

Additional Investment to Address California's Teacher Shortage

As a result of consultation, CSU Chancellor White has committed an additional $10 million to the CSU's Mathematics and Science Teacher Initiative (MSTI) to double the number of mathematics, science and computer science teachers prepared at the university from 1,000 to 2,000 annually. This investment is on top of the $2.7 million invested by the CSU annually.

Since 2005, the California legislature has provided ongoing support to the CSU's Mathematics and Science Teacher Initiative (MSTI), preparing mathematics and science teachers today and developing the next generation of California's STEM teacher-leaders. This work encompasses many components, including:

- Recruiting new students;
- Developing new credential pathways;
- Providing financial support to attract outstanding candidates and facilitate credential completion;
- Ensuring program alignment with California community colleges;
- Developing partnerships with federal agencies, laboratories and industry leaders; and
- Identifying the most successful approaches across the CSU system.

It is particularly noteworthy that the mathematics and science teachers prepared by CSU campuses often go on to teach in the state's high-need schools where 25 percent or more students come from families in poverty and mathematics achievement rates are significantly below statewide averages. As a result, these new mathematics and science teachers are contributing markedly to reducing the disparities in access to qualified teachers that have been found in the state for the past three decades and that have contributed to continued equity gaps in these fields.

Seven-Year Implementation Timeline

Through initial rounds of consultation, the implementation timeline was set at six years (2026). Recently, the timeline was extended to seven years (2027) to allow additional time for capacity-building efforts and communication to students and families. With the extended implementation timeline, the first student cohort that would be required to take an additional quantitative reasoning course for CSU admission is currently in fifth grade.

Chancellor's Office Steering Committee

Incorporating feedback received during the consultation process, the CSU has committed to creating a steering committee that will provide implementation guidance. The committee's charge will be to develop and monitor indicators and metrics to assess the impact and effectiveness of the quantitative reasoning admission requirement. It will report to the executive vice chancellor for

the Division of Academic and Student Affairs. While membership is yet to be determined, it will include some combination of state officials, PK-12 district personnel, students, faculty and community members.

Annual Presentations to the Board

Originating from consultation, the Office of the Chancellor has committed to providing annual reports to the Board of Trustees on the quantitative reasoning admission requirement. These reports, which would commence in 2020, would include implementation updates, progress toward the stated goals and a summary of first-time applicants with attention to changes to student demographics. These updates would provide the board with an annual opportunity to discuss and consider necessary changes to implementation strategies or timelines.

Additional Investment to Support PK-12 Outreach and Enrichment Activities

The final area where the proposal has been improved through direct consultation with the Superintendent of Public Instruction is a plan to leverage existing PK-12 student outreach and enrichment activities – through additional investment and a focus on quantitative reasoning preparation – to provide student support related to this new admission requirement.

The CSU continues to work with PK-12 schools and community partners to address educational attainment disparities. Today, the CSU spends more than $70 million annually on outreach and enrichment programs, engaging with more than 1.1 million elementary, middle and high school students. Specific programs the CSU will leverage to support this admission requirement, include – but are not limited to – those listed below.

<u>CSU Summer Algebra Institute</u>

The CSU Summer Algebra Institute (SAI) is a six-week mathematics enrichment program for rising 9-12 grade students. Currently, approved SAI sites receive $30,000 in funding, program administration training for site coordinators and mathematics instructors, learning community check-ins to support successful program outcomes and support from the Office of the Chancellor to partner with local CSU campuses. The CSU will scale the SAI through the awarding of additional regional grants to build quantitative reasoning capacity across the state.

<u>Early Assessment Program</u>

The Early Assessment Program includes a dedicated employee on each CSU campus who engages directly with high schools in their respective region regarding English and mathematics preparation. This includes workshops and professional development for students and teachers. These efforts, which currently total an approximately $4 million investment, would be tailored to specifically address quantitative reasoning in the coming years.

College Student Placements

The CSU will engage its existing VISTA grants to support the placement of volunteer college students in communities needing additional support in quantitative reasoning preparation. This includes the engagement of STEM VISTA, a program that places volunteers in CSU campus STEM departments and institutes to encourage STEM success in students from historically underserved communities. And, through the Center for Community Engagement and campus-based service-learning programs, additional college student placements are also possible.

Proposal to Require an Additional Course in Quantitative Reasoning

The CSU is recommending that incoming high school students, beginning with the entering first-year class of 2027, be required to complete one additional course in quantitative reasoning in high school to meet the minimum eligibility for CSU admission as a first-year student. The proposal strongly recommends that the additional quantitative reasoning course be completed during the senior year of high school. No changes are proposed for transfer admission eligibility.

The CSU is proposing to expand the 'a-g' requirements that determine minimal eligibility for CSU admission by requiring the completion of an additional course in quantitative reasoning, which could be fulfilled from area 'c – mathematics,' area 'd – laboratory science' or a quantitative reasoning course from area 'g – college preparatory elective.' Such college preparatory courses in area 'g' could include computer science, coding, finance and Career and Technical Education courses with quantitative reasoning content. Students can satisfy this requirement with course-taking beginning in middle school.

As shown in the following charts, under the CSU proposal, the area 'c – mathematics' requirement will not change. It is recommended that area 'g – college preparatory elective' be expanded from one to two courses to include an additional course in quantitative reasoning selected from area 'c – mathematics', area 'd – laboratory science', or a quantitative reasoning course from area 'g – college preparatory elective.' The objective of this change is that students take the next appropriate quantitative reasoning course to strengthen fluency and preparation for college-level coursework.

Existing CSU College Preparatory Course Requirements for First-Year Admission

Area	Subject	Courses
a.	**History and Social Science** (including 1 year of U.S. history or 1 semester of U.S. history and 1 semester of civics or American government AND 1 year of social science)	2
b.	**English** (4 years of college preparatory English composition and literature)	4
c.	**Mathematics** (4 years recommended) including Algebra I, Geometry, Algebra II, or higher mathematics (take one each year)	3
d.	**Laboratory Science** (including 1 biological science and 1 physical science)	2
e.	**Language Other Than English** (2 years of the same language; American Sign Language is applicable - See below about a possible waiver of this requirement)	2
f.	**Visual and Performing Arts** (dance, drama or theater, music, or visual art)	1
g.	**College Preparatory Elective** (additional year chosen from the University of California 'a-g' list)	1
Total Required Courses		**15**

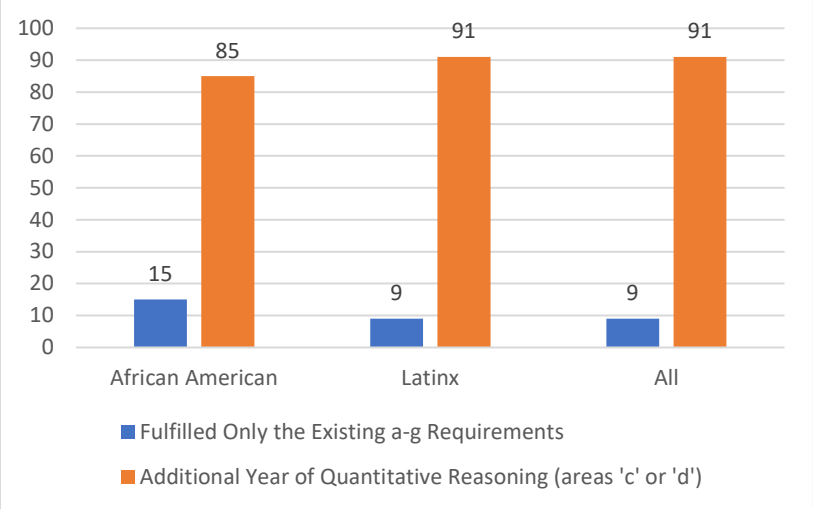
Proposed CSU College Preparatory Course Requirements for First-Year Admission
(The proposed change is indicated in red.)

Area	Subject	Courses
a.	**History and Social Science** (including 1 year of U.S. history or 1 semester of U.S. history and 1 semester of civics or American government AND 1 year of social science)	2
b.	**English** (4 years of college preparatory English composition and literature)	4
c.	**Mathematics** (including Algebra I, Geometry, Algebra II, or higher mathematics or a comparable integrated pathway; take one each year)	3
d.	**Laboratory Science** (including 1 biological science and 1 physical science)	2
e.	**Language Other Than English** (2 years of the same language; American Sign Language is applicable - See below about a possible waiver of this requirement)	2
f.	**Visual and Performing Arts** (dance, drama or theater, music, or visual art)	1
g.	**College Preparatory Elective** (1 year selected from "c – mathematics", "d – laboratory science", or a quantitative reasoning course from the "g – college preparatory elective" areas AND 1 additional year chosen from the University of California 'a-g' list)	2
Total Required Courses		**16**

The proposal is designed to improve the level of preparation of incoming students, not create a barrier to the CSU. During the development of this proposal, the CSU has maintained a commitment to avoid placing an undue hardship on students who are unable to fulfill the new requirement because of limited course offerings in their high school. As previously discussed, the CSU will provide an exemption for any student, who is otherwise eligible, who cannot fulfill the new requirement due to lack of resources and/or course availability at their high school.

Majority of California Students Already Meet the Proposed Requirement

As shown in the chart below ((based on CSU data and previously shared in the August 2019 Ed Policy agenda item 1), 91 percent of all fall 2018 incoming first-year CSU students would have fulfilled the quantitative reasoning requirement by virtue of having taken an additional mathematics or science course. That figure holds steady when looking solely at incoming Latinx students, while the figure dips slightly to 85 percent for African American students.



CSU Institutional Research & Analyses: Fall 2018 Incoming First-Year Students

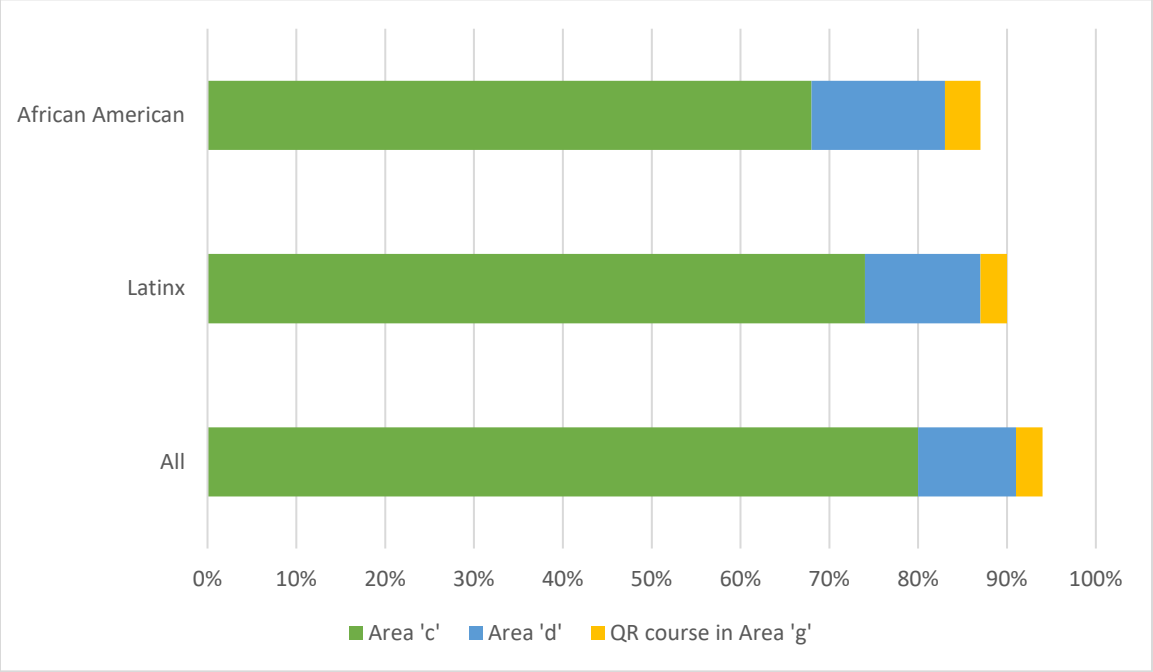
On August 29, 2019, the CSU finalized a new data sharing agreement with the CDE to jointly gain a better understanding of 'a-g' course outcomes for CSU applicants. There are two important notes regarding this data sharing agreement. First, the agreement, as negotiated over the previous four months, limits data accessibility to CSU applicants. It does not include the universe of California high school students. However, given the vast number of CSU applicants each year and their geographic and demographic diversity, these data reflect college-bound students across the state and the high schools they attend. Second, the assessment of existing data is historical—a view of the landscape as things were or as students behaved under the existing 'a-g' requirements. These data do not account for projected increases in course offerings over the next seven years or changes in advising and course-taking behavior that would occur as a result of the proposed requirement being adopted.

The CSU has carefully analyzed the CDE data, which it received in late-September. The CDE data provide more granular, detailed course records for each CSU applicant. For example, while the CSU student data reflect students who have taken an additional quantitative reasoning course (as measured in area 'c-mathematics' or 'd-laboratory science') in high school prior to enrolling in the CSU, the CDE data expands this universe to include outcomes for students whose additional quantitative reasoning course is from area 'g-college elective.'

The CDE data presented in this agenda item reflect fall 2018 regularly admitted applicants (meeting current 'a-g' and CSU admission standards), as this student population provides the best reference point from which to consider the proposed standard.

The data reinforce the findings of the CSU data presented in August and September that the vast majority of students currently meet the proposed quantitative reasoning admission requirement through their existing course-taking behavior. Based on the CSU analysis of the CDE data, 93 percent of 126,071 regularly admitted fall 2018 applicants would have met the proposed requirement (including 88 percent of African American applicants and 91 percent of Latinx applicants). With the additional, granular detail from CDE, the overall rates improved from the previously shared CSU data by two percentage points, with rates previously shared for African American students improving three points.

The chart below (based on the CDE data), shows how these applicants would have met the proposed requirement.



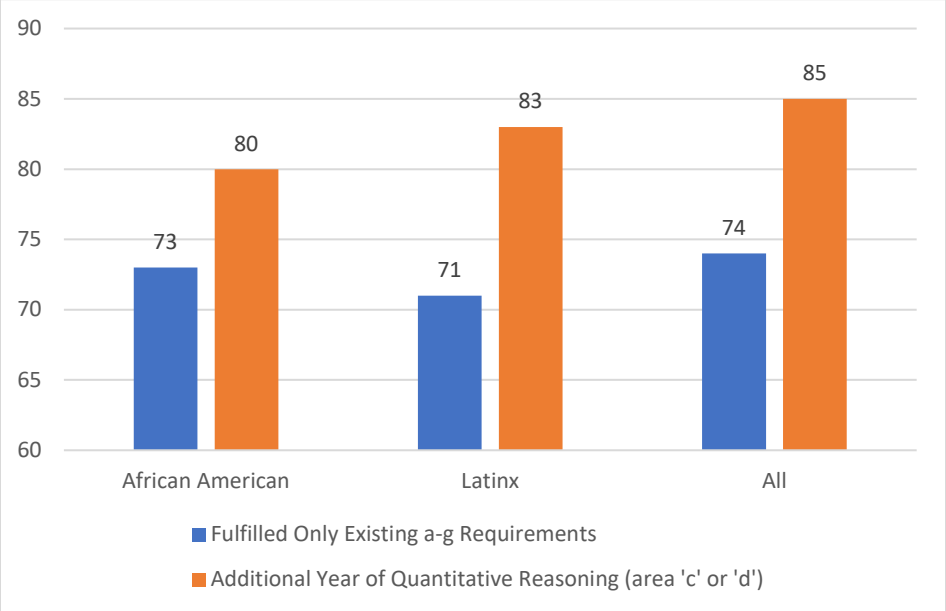
CSU Analysis of California Department of Education California Longitudinal Pupil Achievement Data System: Fall 2018 CSU First-Time, Regularly Admitted Applicants

Preparation in Quantitative Reasoning Matters for College Retention

CSU-specific data and a growing body of national research suggest that additional quantitative reasoning preparation is associated with improved outcomes in college. While much of the data has been included in previous agenda items, this section highlights new CDE data related to first-year retention.

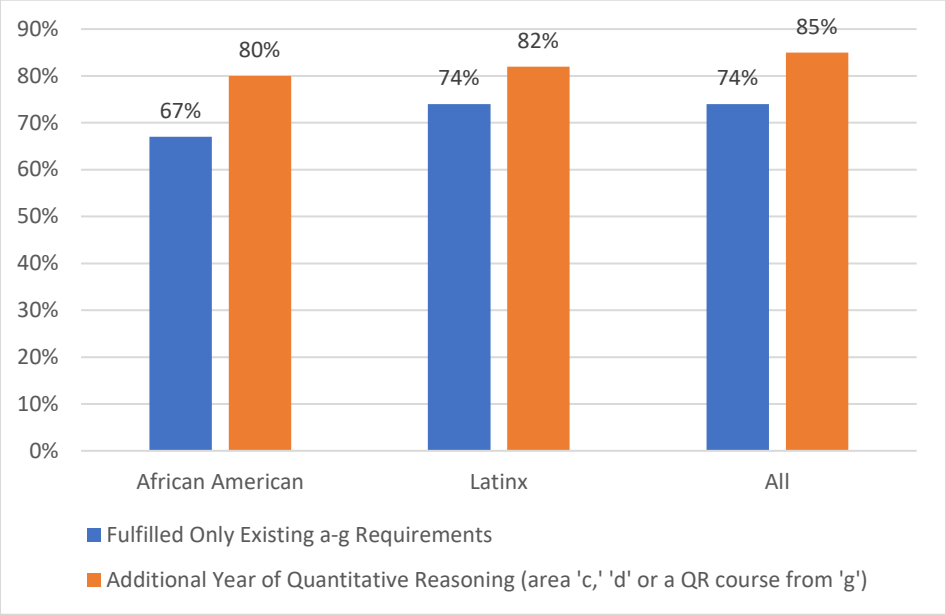
CSU Data

Students taking an additional quantitative reasoning course in high school are more likely to return for their second year of college. As shown below using CSU data, 85 percent of CSU students who took an additional quantitative reasoning course (from areas 'c' or 'd') in high school returned for their second college year, compared to 74 percent who only fulfilled the existing 'a-g' requirements. This is consistent across all ethnic groups, including African American and Latinx students.



CSU Institutional Research & Analyses: Fall 2017 Cohort

The data on first-year retention are reinforced by the CDE data. As shown below, there is an 11-point gap in one-year retention rates for enrolled regularly admitted fall applicants between those meeting the proposed standard (85 percent retained after one year) and those not meeting the standard (74 percent retained after one year). These gaps hold across ethnic groups, as is shown in the chart below.



CSU Analysis of California Department of Education California Longitudinal Pupil Achievement Data System: Fall 2018 CSU First-Time Enrolled Regularly Admitted Students

Understanding California School District Capacity

Given the CSU's longstanding partnerships with school districts across the state, there is a working knowledge of existing capacity disparities and regional variations, which will be used to target implementation support to the districts and schools that are most in need.

A Review of the University of California 'a-g' Database

Data from the University of California's 'a-g' database indicate that 99.7 percent (or 1,448 of 1,453) of California comprehensive high schools offer a course that would satisfy the proposed quantitative reasoning requirement. Still, CSU staff acknowledge the concerns about sufficient access to qualifying courses. A preliminary analysis of approved 2019-20 'a-g' courses provides a clearer picture of course accessibility to meet the proposed requirement:

- Select charter schools with low enrollments presently have the least capacity. In many cases, these schools currently recommend students complete online courses or community college courses if they are seeking to satisfy the existing 'a-g" requirements. Several have since closed or have only recently begun enrolling students.

  - Five schools with 136 students combined earning their diploma (2017-18) currently do not offer courses that would meet the proposed requirement.
  - Six schools, two with 56 students earning a diploma (2017-18) and four charter schools with 112 students earning their diploma (2017-18), had only area 'c-mathematics' courses that would meet the proposed requirement.
  - Seven schools, one with fewer than 10 students earning their diploma (2017-18) and six charter schools with a combined 89 students earning their diploma (2017-18), had only one area 'd' or 'g' course that would meet the proposed requirement.
- The remaining 1,435 schools offer multiple courses to satisfy the proposed requirement.

The table below summarizes these findings:

Method to Meet Proposed Requirement	**Charter School**		**Not a Charter School**		**Grand Total**	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*
Can meet with area 'c' course or 2 or more courses from areas 'd' or 'g'	380	89.8%	1,018	98.8%	1,398	96.2%
Can meet with area 'c' course or 1 area 'g' course	3	0.7%	2	0.2%	5	0.3%
Can meet with area 'c' course or 1 area 'd' course	11	2.6%	4	0.4%	15	1.0%
Can only meet with 2 or more courses from areas 'd' or 'g'	14	3.3%	3	0.3%	17	1.2%
Can only meet with an area 'c' course	4	0.9%	2	0.2%	6	0.4%
Can only be met with 1 course in areas 'd' or 'g'	6	1.4%	1	0.1%	7	0.5%
Does not meet proposed requirement	5	1.2%	--	--	5	0.3%
Grand Total	423	100%	1,030	100%	1,453	100%

A Review of CSU Data

In other school contexts, ample course offerings are available, but student course-taking behavior may need to be examined. Preliminary assessment of CSU fall 2018 first-time student data (through a review of high school course-taking behavior in areas 'c-mathematics' and 'd-laboratory science') identified the districts (shown below) that have 20 or more students who entered the CSU not having met the proposed standard and where the overall percentage of students meeting the requirement was well below the average (91 percent).

- Baldwin Park Unified
- Calexico Unified
- Central Unified
- Central Union High
- Chico Unified
- Coachella Valley Unified
- Delano Joint Union High
- Kern County Office of Education
- Lodi Unified
- Manteca Unified
- Merced Union High
- Oceanside Unified
- Salinas Union High
- San Gabriel Unified
- San Juan Unified
- Santa Rosa High
- Turlock Unified
- Visalia Unified
- Wasco Union High
- Washington Unified

These districts account for one in fourteen of new fall 2018 enrollees from California public high schools while also accounting for one in six students who would not have met the proposed standard. The CSU recognizes it will need to work closely with these districts to build capacity and/or change course-taking behavior.

A Review of CDE Data

The CDE data analyzed by the CSU as part of the data-sharing agreement found that 361of the 469 school districts (77 percent) with at least one CSU regular admit for fall 2018 would have 20 or fewer students who would not have met the proposed quantitative reasoning requirement. Only 12 of the 469 districts (3 percent) would have had 100 or more students who would not have met the standard.

Three districts (Los Angeles Unified, Long Beach Unified and Chaffey Joint Union High) had more than 150 students regularly admitted to CSU who would not have met the standard in 2018. This graduating class preceded Long Beach Unified School District's adoption of a four-year mathematics high school graduation requirement. Further, a close examination of Los Angeles Unified indicates that 91 percent of the 15,169 regularly admitted students from the district met the proposed standard.

To be clear, considering the existing course completion and the intervening seven years to provide adequate curricular and advisement capacity for students, the proposed requirement will require limited changes in some high schools. The CSU is committed to working with all districts to meet this challenge.

Proposed Title 5 Revision

A modification of first-year admission requirements for the CSU would necessitate revisions to two sections of Title 5. The proposed amendments are included below and are would be presented for board action in conjunction with this proposal to modify first-year admission requirements for the CSU.

Title 5. Education
Division 5. Board of Trustees of the California State Universities
Chapter 1. California State University
Subchapter 3. Admission Requirements
Article 1. Construction and Definitions
5 CCR § 40601

§ 40601. Applicants Who Are California Residents or Graduates of a California High School.

The following terms, whenever used or referred to in this subchapter, shall have the following meanings, respectively, unless a different meaning appears from the context:

(a) The term "Chancellor" means the Chancellor of the California State University or designee.

(b) The term "the campus" means the campus to which application for admission is made.

(c) The term "appropriate campus authority" means the president of the campus or designee.

(d) The term "college" means:

(1) Any institution of higher learning that is accredited to offer work leading to the degree of Bachelor of Arts or to the degree of Bachelor of Science, by the applicable regional accrediting agency recognized by the United States Department of Education, except an institution which is accredited only as a "specialized institution";

(2) Any foreign institution of higher learning which, in the judgment of the Chancellor, offers course work equivalent to that offered by institutions included within subdivision (d)(1) of this section.

(e) The term "application" means the submission to the campus, by the person applying for admission, of all documents, including official transcripts of all the applicant's academic records and information that the applicant is required personally to submit, and the payment of any application fee due, pursuant to Section 41800.1.

(f) The term "eligibility index" means the number derived for admission determination, from a weighted combination of the grade point average for courses taken in the comprehensive pattern of college preparatory subjects during the final three years of high school, and the score on either the ACT or the SAT (examinations), pursuant to Title 5 section 40752 or section 40802. The weighting of grade point averages and test scores shall be determined and adjusted from time to time by the chancellor on the basis of standards defined by a California higher education eligibility study.

(g) The term "good standing at the last college attended" means that at the time of application for admission and at the time of admission, the applicant was not under disciplinary or academic suspension, dismissal, expulsion or similar action by the last college attended and was not under disciplinary suspension, dismissal, expulsion or similar action at any institution of the California State University.

(h) The term "first-time freshman" means an applicant who has earned college credit not later than the end of the summer immediately following high school graduation or an applicant who has not earned any college credit.

(i) The term "undergraduate transfer" means any person who is not a first-time freshman pursuant to Section 40601(h), and who does not hold a baccalaureate degree from any college.

(j) The term "full-time student" means any student whose program while in attendance at a college averaged twelve or more semester units per semester, or the equivalent.

(k) The term "resident" shall have the same meaning as does the same term in Section 68017 of the Education Code, and shall include all persons so treated by the provisions of that section.

(*l*) The term "unit" means a semester unit within the meaning of Section 40103, or the equivalent thereof.

(m) The term "transferable" when used in connection with college units, college credit or college work, shall mean those college units, credit or work which are determined to be acceptable (either for specific requirements or as electives) toward meeting the requirements of a baccalaureate degree. The Chancellor is authorized to establish and from time to time to revise procedures for the implementation of this subdivision.

(n) The term "comprehensive pattern of college preparatory subjects" means, in each area of study, at least four years of English, three years of mathematics, two years of history or social science, two years of laboratory science, two years of foreign language, one year of visual and performing arts, one year of electives from any combination of mathematics, laboratory science, CSU-approved career technical education courses, and other fields of study with quantitative reasoning content determined by the Chancellor to be appropriate preparation for California State University study, and one year of electives from any combination of English, mathematics, social science, history, laboratory science, foreign language, visual and performing arts, CSU-approved career technical education courses, and other fields of study determined by the Chancellor to be appropriate preparation for California State University study.

(o) The terms "impacted campus" or "impacted programs" at any campus mean that the number of applications from eligible applicants received during the initial application filing period exceeds the number of available admission spaces.

(p) The terms "redirection" or "redirect" refer to the responsibility of each CSU campus that opens to receive new undergraduate applications for any given term to admit eligible transfer applicants with Associate Degrees for Transfer or to forward their application to another CSU campus with the capacity to admit.

Note: Authority cited: Section 89030, Education Code. Reference: Sections 89030 and 89030.5, Education Code.

Title 5. Education
Division 5. Board of Trustees of the California State Universities
Chapter 1. California State University
Subchapter 3. Admission Requirements
Article 4. Admission as First-Time Freshman
5 CCR § 40753

§ 40753. Applicants Who Are California Residents or Graduates of a California High School.

(a) A graduate of a California high school or a high school graduate who is a resident may be admitted to a campus as a first-time freshman if

> (1) the graduate's eligibility index is equal to or greater than that minimum eligibility index, as determined by the Chancellor, required to limit eligibility to that one-third of California high school graduates which has the greatest probability of academic success in the California State University, and

(2) for admissions prior to fall term ~~2003~~ 2027, the graduate has completed satisfactorily a comprehensive pattern of college preparatory subjects to include at least four years of English, three years of mathematics, two years of history or social science, two years of laboratory science, two years of foreign language, one year of visual and performing arts, and one year of electives from any combination of English, mathematics, social science, history, laboratory science, foreign language, visual and performing arts, CSU-approved career technical education courses, and other fields of study determined by the Chancellor to be appropriate preparation for California State University study. ~~four years of English, three years of mathematics, one year of United States history or United States history and government, one year of laboratory science, two years of foreign language, one year of visual and performing arts, and three years of electives from any combination of English, mathematics, social science, history, laboratory science, foreign language, visual and performing arts, and other fields of study determined by the Chancellor to be appropriate preparation for California State University study. A graduate who qualifies for admission under subdivision (a)(1) and who has completed at least ten of the courses in the comprehensive pattern of this subdivision may be admitted on condition that the graduate completes the work identified by the Chancellor or designee at the time of the graduate's admission as necessary to remove the coursework deficiency within the first two years of the graduate's baccalaureate studies. The Chancellor shall implement the comprehensive pattern of college preparatory subject requirements and in so implementing shall make every effort to avoid undue hardship during the phasing in of these requirements and shall determine satisfactory completion of the requirements and may grant exceptions for preparation determined by the Chancellor to be equivalent.~~

(3) commencing with admissions for the fall term ~~2003~~ 2027, the graduate has completed satisfactorily the comprehensive pattern of college preparatory subjects defined in Section 40601. The Chancellor shall implement the comprehensive pattern of college preparatory subject requirements and in so implementing shall make every effort to avoid undue hardship during the phasing in of these requirements and shall determine satisfactory completion of the requirements and may grant exceptions for preparation determined by the Chancellor to be equivalent.

(b) This section shall not apply to an applicant who is eligible for admission as a first-time freshman pursuant to Section 40755.

Note: Authority cited: Section 89030, Education Code. Reference: Section 89030, Education Code.

Title 5. Education
Division 5. Board of Trustees of the California State Universities
Chapter 1. California State University
Subchapter 3. Admission Requirements
Article 4. Admission as First-Time Freshman
5 CCR § 40754

§ 40754. Applicants Who Are Neither California Residents nor Graduates of a California High School.

(a) A high school graduate who is neither a resident nor a graduate of a California high school may be admitted to a campus as a first-time freshman if

(1) the graduate's eligibility index is equal to or greater than that minimum eligibility index, as determined by the Chancellor, which is required to limit eligibility to that one-sixth of California high school graduates which has the greatest probability of academic success in the California State University, and

(2) for admissions prior to fall term ~~2003~~ 2027, the graduate has completed satisfactorily a comprehensive pattern of college preparatory subjects to include at least four years of English, three years of mathematics, two years of history or social science, two years of laboratory science, two years of foreign language, one year of visual and performing arts, and one year of electives from any combination of English, mathematics, social science, history, laboratory science, foreign language, visual and performing arts, CSU-approved career technical education courses, and other fields of study determined by the Chancellor to be appropriate preparation for California State University study. ~~four years of English, three years of mathematics, one year of United States history or United States history and government, one year of laboratory science, two years of foreign language, one year of visual and performing arts, and three years of electives from any combination of English, mathematics, social science, history, laboratory science, foreign language, visual and performing arts, and other fields of study determined by the Chancellor to be appropriate preparation for California State University study. A graduate who qualifies for admission under subdivision (a)(1) and who has completed at least ten of the courses in the comprehensive pattern of this subdivision may be admitted on condition that the graduate completes the work identified by the Chancellor or designee at the time of the graduate's admission as necessary to remove the coursework deficiency within the first two years of the graduate's baccalaureate studies. The Chancellor shall implement the comprehensive pattern of college preparatory subject requirements and in so implementing shall make every effort to avoid undue hardship during the phasing in of these requirements and shall determine satisfactory completion of the requirements and may grant exceptions for preparation determined by the Chancellor to be equivalent.~~

(3) commencing with admissions for the fall term ~~2003~~ 2027, the graduate has completed satisfactorily the comprehensive pattern of college preparatory subjects pursuant to Section 40601. The Chancellor shall implement the comprehensive pattern of college preparatory subject requirements and in so implementing shall make every effort to avoid undue hardship during the phasing in of these requirements and shall determine satisfactory completion of the requirements and may grant exceptions for preparation determined by the Chancellor to be equivalent.

(b) This section shall not apply to an applicant who is eligible for admission as a first-time freshman pursuant to Section 40755.

Note: Authority cited: Section 89030, Education Code Reference: Section 89030, Education Code.

Conclusion

This proposal to modify first-year admission requirements to the CSU continues the progress made to ensure equity and authentic access for all CSU students. The proposal has benefited from years of consultation, incorporating feedback that includes a seven-year implementation timeframe, an automated exemption policy and investments in teacher preparation and student outreach and enrichment programs,

The CSU remains committed to access and takes seriously the responsibility to do no harm to students who may be attending schools with limited access to qualifying courses. And the university is committed to partnering with districts, schools and community organizations to build the necessary capacity for successful implementation.

COMMITTEE ON EDUCATIONAL POLICY

Research, Scholarship and Creative Activities

Presentation By

Ganesh Raman
Assistant Vice Chancellor
Research

Ariana Gonzalez
Alumna
California State University, Los Angeles

Summary

Research, scholarship and creative activity touch every part of the California State University (CSU) – enhancing learning and preparing students for the workplace of the future. The breadth and depth of this work spans 23 campuses and 10 multi-campus affinity groups through shared expertise, facilities and resources.

Background

As the CSU enters the fourth year of Graduation Initiative 2025, its ambitious effort to improve student success, increase graduation rates and eliminate equity gaps, "high-impact practices" – including research and creative activities – connect students to the university and increase the likelihood of a student earning a degree. The CSU offers a wide scope of high-quality, hands-on research opportunities to undergraduate students. With the mentorship of outstanding CSU faculty, students develop critical skills that support their learning and prepare them for future careers. This is particularly critical for students from historically underserved communities. CSU campuses pursue external funding grants specifically aimed at engaging and retaining underrepresented students in scientific and technical fields.

The myriad of research, scholarship and creative activity opportunities also help attract and retain outstanding faculty, sustain their engagement and provide opportunities for their continued growth in their field. Through peer-reviewed awards, journal publications, presentations and performances, faculty have the opportunity to demonstrate their leadership. As a result, CSU faculty create new knowledge and experiences across all academic disciplines.

Additionally, research, scholarship and creativity activities in the CSU advance California's most pressing needs. From agriculture, biotechnology and oceanography to palliative care and social science, faculty experts and students are conducting research that impacts communities, the state, the nation and the world.

External Funding Accomplishments

Several of the most prestigious grants and contracts received by CSU faculty during the 2018-19 academic year are included below.

National Institutes of Health: Building Infrastructure Leading to Diversity (BUILD)

Many of the CSU's larger federal awards relate to community improvement and to student success, especially among historically underserved students, supporting the CSU goal of closing equity gaps.

The biotechnology and diversity foci of the National Institutes of Health (NIH)-funded Building Infrastructure Leading to Diversity (BUILD) grants are one example. The BUILD program supports the educational success of historically underserved students in educational programs that prepare graduates for biomedical research careers and graduate school.

Five years ago, three CSU campuses—Long Beach, Northridge and San Francisco—won three of the ten BUILD grants awarded nationally, for a combined total of more than $61 million. In 2019, these three campuses competed for, and were successful in receiving, renewal grants for more than $54 million dollars. These renewal grants will enable the campuses to continue to support the success of historically underserved students in biomedical sciences.

<u>California State University, Northridge</u>

Funding Amount: $19.3 million

At CSU Northridge, the campus' BUILD effort, known as BUILD PODER, is rooted in critical race theory, uniting educational social justice and health equity to make biomedical research meaningful and relevant. The second phase funded through the renewal grant, BUILD PODER II, will sustain best practices through partnerships with community colleges and research institutions, faculty training and research infrastructure. It will also be supported through the Health Education Research and Education Center in CSU Northridge's first building dedicated to research, Lilac Hall.

California State University, Long Beach

Funding Amount: $19.8 million

CSU Long Beach's BUILD II Program (the second phase of its work funded with the renewal grant) prioritizes enhancement, institutionalization and sharing of the evidence-based practices that were created during the first phase of the program. As part of BUILD II, the university has developed a plan to share these best practices in collaboration with CSU Northridge and San Francisco State, creating a CSU BUILD Alliance.

San Francisco State University

Funding Amount: $14.8 million

With the NIH grant renewal, San Francisco State partnered with the University of California (UC), San Francisco, to continue to implement, investigate and share their transformative institutional efforts to enhance diversity of the biomedical research workforce. The partnership's BUILD efforts focus on students, faculty and institutional practices to create change that will transform teaching and research environments.

National Science Foundation CAREER Award

The National Science Foundation (NSF) Faculty Early Career Development Program award – or CAREER award – is the foundation's most prestigious award in support of early-career faculty who have the potential to serve as academic role models in research and education. Four CSU faculty members received this award in 2018-19:

- Alicia Kinoshita, associate professor, Department of Civil, Construction and Environmental Engineering, San Diego State: $226,083 to understand and predict changes in vegetation, soil and stream processes that occur after fires;
- Susan Cohen, assistant professor, Department of Biological Sciences, CSU Los Angeles: $330,239 to gain a near comprehensive understanding of the cyanobacterial circadian clock, and help set the foundation for leveraging these bacteria for broad ranging applications including bioremediation, biotechnology, and ecological/environmental issues;
- Kimberly Blisniuk, assistant professor, Geology Department, San José State: $313,619 to re-evaluate the seismic hazard potential of individual faults that make up the southern San Andreas Fault system; and
- Chantal Stieber, assistant professor, Department of Chemistry and Biochemistry, Cal Poly Pomona: $195,448 to study small molecule reactions at metal centers as mimics for existing biological processes involved in agricultural nitrogen fixation (such as in legumes) or for reducing the health effects of automobile pollutants.

National Science Foundation's Centers of Research Excellence in Science and Technology II (CREST II)

Funding Amount: $5 million

CSU San Bernardino received a CREST II grant – one of only five CREST awards announced nationwide this year – to further extend the campus' Center for Advanced Functional Materials' capacity for discovery, innovation and student success in STEM fields. The funds also help broaden the campus' capacity to recruit and retain diverse students pursuing STEM degrees and careers as well as strengthen research collaborations with institutions and local community colleges to help students advance through the academic pipeline.

California Education Learning Lab

In 2018, California Assembly Bill 1809 established the California Education Learning Lab in order to increase learning outcomes and close equity and achievement gaps across California's public higher education segments, particularly in science, technology, engineering and mathematics (STEM) disciplines. The following CSU campuses partnered intersegmentally to receive these state-based research grants:

- CSU Fullerton, UC Berkeley, Santa Ana College: $1,300,000 to improve outcomes for STEM learners in targeted courses by deploying and improving open, adaptive courseware;
- Humboldt State, UC Irvine, Foothill-De Anza Community College District, Modesto Junior College: $1,300,000 to enact a three-year plan to initiate a systemic shift in the culture of online and hybrid STEM instruction across California public higher education institutions;
- CSU Los Angeles, UCLA, Los Angeles Pierce College: $1,300,000 to develop, implement and continuously improve an online interactive textbook for introductory statistics;
- Cal Poly San Luis Obispo, UC Santa Barbara, Allan Hancock College: $1,300,000 to eliminate equity and performance gaps in mechanics courses by developing a suite of adaptive web-based tools that incorporate videos while leveraging cognitive tools and interventions to establish a sense of belonging, a strong STEM identity and deep conceptual understanding;
- CSU San Marcos, MiraCosta College: $1,038,000 to address the high rates of students not passing introductory computer science classes; and
- Sonoma State, UC Berkeley, College of Marin, Diablo Valley College: $1,300,000 to disrupt pervasive narratives and misplaced assessments of what defines scientific brilliance through materials to help both instructors and students view science as an expansive and inclusive set of practices

National Science Foundation

San Francisco State University

Funding Amount: $1.3 million

San Francisco State received funding from the National Science Foundation (NSF) to develop and implement a computing applications minor that promotes an inclusive learning environment. The project seeks to increase the number of students who are proficient in data and computer science and to increase diversity in data and computational science to advance the diversification of the workforce.

California State University, Dominguez Hills

Funding Amount: $1.3 million

CSU Dominguez Hills was awarded a NSF Improving Undergraduate STEM Education: Hispanic-Serving Institution (HSI) Award, which seeks to enhance the quality of undergraduate STEM education at HSIs and to increase retention and graduation rates of undergraduate students pursuing degrees in STEM at HSIs. The project seeks to broaden STEM faculty's use of inclusive pedagogy and welcoming environments in STEM courses, improve alignment between courses offered at the community colleges and the universities, and support the development of a diverse faculty.

California State University Channel Islands

Funding Amount: $2.5 million (over five years)

CSU Channel Islands was also awarded a NSF Improving Undergraduate STEM Education: HSI Award for their project that aims to increase graduation rates and reduce the time to degree completion for all STEM majors and to reduce the gap existing between Latinx and non-Latinx white students as well as between female and male students. This program aims to create a self-propagating student community as Latinx and female students move through advising workshops and introductory courses and are looped back into the learning and research assistantship programs as they proceed toward graduation.

California State University, Fresno

Funding Amount: $1.4 million

Fresno State was awarded a NSF Robert Noyce Teacher Scholarship Program Award, which seeks to encourage talented STEM majors and professionals to become K-12 mathematics and science teachers. With the award, the campus will provide scholarships to help majors in the integrated credential option pay tuition and other costs, so that the students can concentrate on earning a degree. The project is a collaboration between Fresno, Clovis and Sanger unified school districts and 14 community colleges to strengthen the teacher preparation pipeline.

National Institutes of Health

Dr. Marcelo E. Tolmasky, professor of biological science and director for the Center for Applied Biotechnology Studies at CSU Fullerton, was awarded $1.3 million by the National Institutes of Health (NIH) to support the "LA Basin CSU Minority Health and Health Disparities Research Training Program." Among a number of goals, this program works to increase the number of individuals from historically underserved communities who pursue advanced degrees and careers in the fields of biomedical, behavioral, clinical and social sciences research. The program is a consortium of seven CSU campuses – Fullerton, Dominguez Hills, Northridge, Long Beach, Los Angeles, Pomona and San Marcos – in addition to Charles R. Drew University of Medicine and Science.

National Aeronautics and Space Administration (NASA)

CSU Northridge received a $3 million NASA award for an interdisciplinary team led by Dr. Nhut Ho. In partnership with the NASA Armstrong Flight Research Center and Jet Propulsion Lab, this award will establish the Autonomy Research Center for STEM, which will contribute to NASA's research, further develop the STEM workforce and begin commercializing research results to address pressing societal needs.

California Arts Council

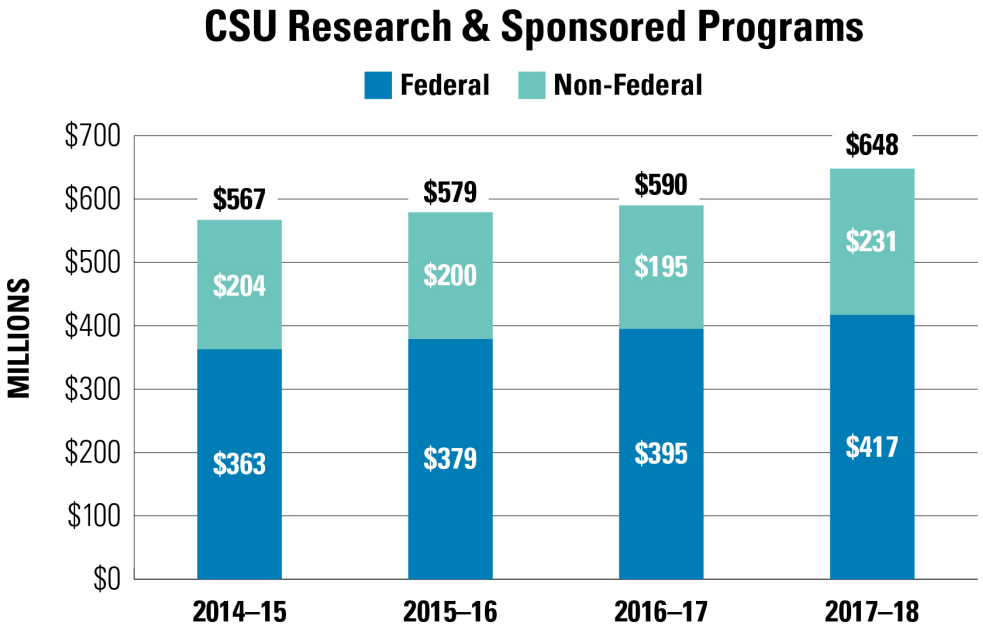
The PRAXIS City ArtS Parks program at CSU Dominguez Hills has received a $135,000 award from the California Arts Council. The award will be used to provide art workshops taught by working artists at additional parks throughout the City of Carson and to create two public arts projects in the city. The PRAXIS City ArtS Parks program works to expand narratives of South Los Angeles with afterschool art and mentoring programs. The award was given to Devon Tsuno and Aandrea Stang, co-directors of PRAXIS.

California Department of Education

Dr. Carola Oliva Olson, an associate professor of early childhood studies at CSU Channel Islands, received a $1.1 million grant from the California Department of Education for her project that provides continuous and comprehensive professional development focused on dual language learning to teachers, assistant teachers, administrators and coaches via online instruction.

External Funding

As demonstrated in the chart below, total external funding – grant and contract revenue – for CSU research and sponsored programs has increased steadily over the past several years. In 2017-18, the most recent year for which data are available, the total amount was $648 million. This is an increase from the previous year's $590 million in external funding.



Unlike state funds that are used exclusively for basic university operations, faculty compete for these external funds, which are used for innovative projects that benefit local communities and prepare students for 21st century careers.

These external funds include approximately $72 million to cover institutional overhead, also known as indirect costs. Programs in research, scholarship and creative activities have associated infrastructure expenses that are recovered with indirect costs budgeted into the application for external funding.

Research in the CSU

Examples of faculty-led and student-led research can be found at all 23 CSU campuses. The following research focuses on addressing the needs facing local communities, California, the nation and the world. Some examples are included below.

California State University, Sacramento

Dr. Kimberly Mulligan, an assistant professor of biological sciences at CSU Sacramento, is conducting research on whether three common environmental chemicals used in the synthesis of plastics exacerbate neurodevelopmental phenotypes in a Drosophila model of fragile X syndrome and autism spectrum disorder. The purpose of the research is to identify environmental factors that may confer risk or increase the severity of neurodevelopmental disorders (NDD), like autism and Fragile X syndrome, in individuals that have genetic risk factors for NDDs.

California State University Maritime Academy

Dr. Alejandro Cifuentes-Lorenzen, an assistant professor of oceanography at Cal Maritime, is conducting research aimed at developing a better understanding of the complex process of energy transfer across the air-sea interface. The research project is a collaboration with the University of Connecticut, Woods Hole Oceanographic Institution, the University of Rhode Island and other research academics. Dr. Cifuentes-Lorenzen is overseeing all aspects of the technical research equipment deployment and retrieval in the North Atlantic Ocean. The study results will be shared in peer-reviewed journals and through presentations with students in California high schools and community colleges.

California State University, Fullerton

Dr. JeeLoo Liu, a professor and department chair of the Department of Philosophy at CSU Fullerton, is pursuing research on "Confucian Robotic Ethics." The research explores the possibility of implementing Confucian ethical codes in robots and considers what ethical precepts could be incorporated into robot morality. Dr. Liu was named a 2019 Andrew Carnegie Fellow for her work, and was the only one of the year's 32 fellows chosen for a project that focuses on philosophy.

California State University, East Bay

Dr. Brian Perry, an associate professor and department chair of the Department of Biological Sciences at CSU East Bay, is conducting research on fungal biodiversity and molecular phylogenetic analyses with data from disciplines such as genetics, ecology and geography. The goal is to address broad questions about how biological and physical processes interact to drive

evolution. His research has focused on regions with high levels of endemic, endangered plants and wildlife including Hawaii, Borneo and Micronesia. Most recently, his attention has been on Vanuatu where graduate student, Jonathan del Rosario and Dr. Perry have been on a survey of mushrooms and other fungi.

Scholarship and Creative Activities in the CSU

Faculty scholarship benefits students, particularly as faculty weave their research into curricula and include students in the research and scholarship process. From 2014-19, CSU faculty authored 38,000 journal publications, the majority of which included student coauthors.

Creative activities are subject to discipline-specific standards for judging academic excellence. Faculty artistic contributions undergo peer evaluation, can qualify for funding from nationally competitive grants, may be included in scholarly conferences and journals and may be judged by specific criteria for tenure and promotion.

Below are some prime examples of those creative works at the CSU.

California State University, Fullerton

Dr. Jamila Moore Pewu, an assistant professor of digital humanities and new media in history at CSU Fullerton, demonstrates to her students that books are not the only avenue for exploring history. An example of one of her compelling history projects is the study of Santa Ana's public murals. Funded by Cal Humanities, Dr. Moore Pewu collaborates with students, delves into local history and collects data that informs the community of the artist's vision. Her students interview artists, community members and archivists to map the location of the murals and provide information that was then adapted to a coloring book for youth and an app-based walking tour of 21 mural sites, provided in English and Spanish.

California State University, Sacramento

Dr. Kathryn Kasic, assistant professor of communication studies at CSU Sacramento, is a collaborator on a NSF grant that is examining the physical and biological characteristics of Subglacial Lake Mercer, a lake that lies 1200 meters beneath the West Antarctic Ice Sheet. Dr. Kasic oversees the education and outreach components, including the production of a short film series and creation of accessible learning modules for K-12 students.

California State University, Fresno

Dr. Vadim Keyser, assistant professor of philosophy at CSU Fresno, fuses art, philosophy and science to develop measurement puzzles that increase student engagement in science education.

His transdisciplinary research brings together the humanities and STEM to develop empirical applications of measurement theory. His work involves models of reliable measurement in biology, ecology, biophysics and the social sciences and how to systemically make sense of producing new phenomena in science and technology.

California State University Channel Islands

Heather Castillo, an assistant professor of performing arts at CSU Channel Islands, founded Arts Under the Stars to bring awareness to the collaboration between the performing arts and research disciplines, including nursing, mathematics, environmental science and resource management, education and communication. With her students and in consultation with faculty researchers at CSU Channel Islands, Dr. Castillo choreographs pieces that interpret the significance of current research on campus with performances on an outdoor stage that are inclusive and express a commentary on subjects ranging from diversity to the environment to mental health.

Systemwide Collaborations

The CSU is uniquely positioned to have a statewide impact through collaborative research across disciplines and campuses. The CSU has a number of multi-campus partnerships, bringing together researchers from across the 23 campuses to share expertise, initiatives and facilities. Through these collaborations, faculty advance knowledge and expose their students to diverse perspectives, regional issues and innovative partnerships. These multi-campus partnerships share expertise, resources and facilities.

Affinity Groups

The CSU has ten multi-campus affinity groups that support research collaborations on a breadth of topics that are important to California.

<u>Agricultural Research Institute</u>

The Agricultural Research Institute (ARI) supports and funds applied agriculture and natural resource research within the CSU, which improves the economic efficiency and sustainability of California agriculture. Additionally, ARI is helping develop a highly-trained professional workforce for California agricultural and natural resource industries through student participation in research projects.

Six campuses comprise ARI: Chico, Fresno, Humboldt, Monterey Bay, Pomona and San Luis Obispo; however, faculty from all 23 campuses participate in ARI research programs. ARI faculty work on projects to develop and examine methods of maintaining or increasing California's contributions to the agriculture industry and the provision of healthy food resources in response to changes in weather, climate and political trends.

Students are the backbone of the research conducted by the ARI. In 2017-18, students were involved in 81 percent of ARI-funded projects. One hundred and seventy nine CSU students benefited from 53,000 hours of career mentoring and scientific training that prepared them to enter the workforce with necessary experience and skills.

In one example, Dr. Nathaniel Jue (CSU Monterey Bay) and his students are studying genetic material to understand how microbial soil communities can be used to break down pesticides in soils. Another example, at Humboldt State, Dr. Matt Johnson and his students are conducting research with the goal of using barn owls to control rodents in vineyards in the Sonoma and Napa Valley vineyards.

Council on Ocean Affairs, Science and Technology

The CSU Council on Ocean Affairs, Science and Technology (COAST) is the umbrella organization for marine, coastal and coastal watershed-related activities within the CSU. COAST promotes research and education to advance knowledge of marine and coastal resources and the processes that affect them. COAST also shares scientific information with stakeholders for informed decision making and the development of responsible policy across California.

COAST is piloting a new program to connect CSU undergraduate students with graduate students for a mutually beneficial partnership in which the graduate students receive assistance with their research and the undergraduate students gain new skills and experience to prepare them for the workforce.

COAST projects are both rapid responses to urgent marine-related issues as well as longitudinal projects to study long-term impacts. In 2018-19, COAST provided more than $290,000 to faculty to address a number of critical issues including ocean acidification, invasive species, water quality and microplastics.

CSU Program for Education and Research in Biotechnology

The CSU Program for Education and Research in Biotechnology (CSUPERB) mission is to develop a professional biotechnology workforce by catalyzing and supporting collaborative CSU student and faculty research, innovating educational practices and partnering with the life science industry. CSUPERB faculty are committed to ensuring that all CSU biotechnology students have access to an education that integrates experiential learning, especially team-based research or entrepreneurial projects.

As an example, Omar Apolinar, a first-generation college student at CSU San Marcos, was funded as a CSUPERB Presidents' Commission Scholar for summer research with chemistry professor Dr. Robert Iafe. Following the conclusion of his research, Mr. Apolinar published his discoveries,

recently graduated, won a prestigious NSF Graduate Research fellowship and is pursuing a joint Ph.D./D.Phil degree through the Skaggs-Oxford program. Like Mr. Apolinar, more than 87 percent of the Presidents' Commission Scholars pursue life science-related graduate programs or careers.

Additionally, CSU I-Corps is a CSUPERB program in partnership with San Diego State that provides entrepreneurial training opportunities. Through this program, 12 start-up companies are active today, five teams have won $50,000 NSF I-Corps Teams grants and CSU participants have won more than $500,000 in commercialization grants and investment funding.

California Desert Studies Consortium

The CSU Desert Studies Consortium is a collection of seven campuses – Dominguez Hills, Fullerton, Los Angeles, Long Beach, Northridge, Pomona, and San Bernardino – that operate the CSU Desert Studies Center (DSC), located in the Mojave National Preserve. The DSC serves as a premier location and resource for research and education in the geology, hydrology and biology – among other areas – of California's desert and the American West.

In 2018-19, the Desert Studies Center hosted 22 research groups, typically externally-funded research projects. In addition, more than 30 CSU courses used the Desert Studies Center as a field laboratory.

Two CSU-led projects that exemplify this important resource are the 20 year investigation of the population dynamics of the Desert Holly (a shrub that is the most drought tolerant saltbush in North America) led by Cal Poly Pomona professors Drs. Christine Hartney and Sara Garver, and the continuation of the longest-known demographic record of a Mojave Desert reptile community led by CSU Fullerton professor Dr. William Presch and alumnus Jason Wallace. These projects have contributed to innumerable undergraduate research experiences.

CSU Shiley Institute for Palliative Care

As the population ages, the CSU Shiley Institute for Palliative Care works to train professionals with evidence-based, online and in-person programs for the variety of disciplines related to palliative care. The institute, located at CSU San Marcos, includes Fresno, Fullerton, Long Beach and Los Angeles as members, and collaborations are supported with other campuses throughout the CSU.

With funding from the California Health Care Foundation, the institute is collaborating with CSU San Marcos, Fresno State and CSU Monterey Bay on the development of a Faculty Toolkit for Palliative Care Curriculum Integration. The toolkit is a web-based repository of teaching and learning resources – slide sets, reading lists, case studies, discussion questions and role plays – that can be used in any classroom. Faculty directors on each of the campuses recruited 11 faculty across a variety of disciplines to pilot the toolkit for 684 students in kinesiology, gerontology, human development, health administration, nursing, social work, sociology and psychology.

Moss Landing Marine Laboratories

Moss Landing Marine Laboratories (MLML) is both a marine science field station with state-of-the-art research equipment and a satellite campus that administers the Master of Science in marine science program for CSU campuses in northern and central California. MLML is known for its hands-on, field-oriented approach that places students, faculty, researchers and staff at the forefront of marine science worldwide.

MLML received more than $3 million in funding from the Ocean Protection Council/California Sea Grant to support monitoring of Marine Protected Areas (MPAs) off California. MLML-San José State graduate students and CSU Monterey Bay undergraduates are monitoring the surf zone and sandy beaches inside and outside of MPAs at eight sites. There, they are measuring beach profiles and physical characteristics, conducting beach seines to catch and measure fish sizes, and deploying surf zone remote video systems to characterize the fish living in the surf.

Ocean Studies Institute

The Ocean Studies Institute (OSI) is a consortium of CSU campuses that decided to pool resources to more effectively explore the ocean and coastal regions. It is based out of the Los Angeles Harbor and includes nine campuses – Channel Islands, Dominguez Hills, Fullerton, Long Beach, Los Angeles, Northridge, Pomona, San Bernardino, and San Marcos – addressing research and education on urban ocean and coast sciences.

A recent example of OSI research is an investigation on the spawning of giant sea bass and sound production conducted by Dr. Larry Allen, professor and chair of the Department of Biology at CSU Northridge. Alongside students, Dr Allen completed the acoustic monitoring of captive giant sea bass through two breeding seasons using handheld and underwater hydrophones. The sounds made by the male giant sea bass were found to be in the sound range of concert bass drums.

Social Science Research and Instructional Center

The CSU Social Science Research and Instructional Center (SSRIC) supports the development and use of quantitative research skills among CSU students, faculty and staff. SSRIC provides a range of quantitative-skill teaching modules and exercises that faculty members can incorporate into classes, and which faculty, students, and staff can use to review specific topics.

Among other activities, SSRIC covers registration fees for faculty members to participate in training programs to improve their quantitative skills; awards faculty members funding that allows them to place questions on the CalSpeaks public opinion survey of Californians; and awards stipends to faculty for developing new instructional modules. SSRIC continues to provide CSU users with access to some of the most widely used subscription databases.

Science, Technology, Engineering, and Mathematics Network (STEM-NET)

Today's students must have a strong foundation in STEM to meet tomorrow's workforce needs and the needs of California's innovation economy. The CSU is the state's largest supplier of engineers and is the leading supplier of top-tier talent to California's renowned high-tech companies. Additionally, the CSU produces more than 1,500 K-12 STEM teachers annually – the most of any institution in the country.

Recognizing the need for a systemwide affinity group to empower faculty to share campus best practices and produce scholarship and advancements that power California's future, in 2018-19, the CSU launched STEM-NET. This network will open up pathways for students to pursue STEM careers and to become STEM teachers through involvement in directed research and other scholarly activities. Through their engagement, students will learn teamwork and problem solving while also gaining the technical skills required to be successful in their future studies and careers.

Water Resources and Policy Initiatives (WRPI)

Founded in 2008, this systemwide affinity group is developing and executing solutions for sustainable water resource management that changes the way California manages water. It is composed of more than 250 water experts from all 23 campuses across the CSU and is focused on developing water management solutions through research, partnerships, education and training, while providing students directed research opportunities. Through WRPI, the CSU has developed internship programs with the U.S. Department of Agriculture and the Environmental Protection Agency so that students can enter the workforce ready to develop solutions for business, government and the public.

During the past year, WRPI provided more than 210 individuals from 20 CSU campuses with faculty research incentives, internship programs and an annual conference. Additionally, WRPI collaborated with other water agencies to co-host symposia on arsenic in water, homelessness and juvenile salmon Bioenergetics. WRPI also commercializes new ideas and services in water industries that are making irrigation more efficient than ever. Finally, WRPI and partners are working with communities to promote water education with a WaterTalks toolkit program in the Los Angeles and Ventura area.

Conclusion

CSU research, scholarship and creative activities contribute to the intellectual and creative vibrancy of campus life while offering solutions to real-world problems. As a high-impact practice, these activities are critical to the success of Graduation Initiative 2025 and to fulfilling the CSU mission of student success, faculty excellence and service to California and beyond.

COMMITTEE ON EDUCATIONAL POLICY

Graduation Initiative 2025

Presentation By

Loren J. Blanchard
Executive Vice Chancellor
Academic and Student Affairs

Jeff Gold
Assistant Vice Chancellor
Student Success Strategic Initiatives

Luoluo Hong
Associate Vice Chancellor
Student Affairs and Enrollment Management

Summary

Graduation Initiative 2025 is the California State University's (CSU) signature effort aimed at increasing degree completion rates and eliminating equity gaps, thereby supporting student success and meeting the future workforce needs of California. As the initiative enters its fourth year, this information item provides an update based on final systemwide graduation rate data for 2019. It also provides details on the systemwide areas of focus for the 2019-20 academic year.

Graduation Initiative 2025 Goals

At the September 2016 Board of Trustees meeting, the board heard a detailed report on Graduation Initiative 2025 and voted to approve the CSU's ambitious student completion and equity targets. The approved targets are:

- A 40 percent 4-year graduation rate goal for first-time students;
- A 70 percent 6-year graduation rate goal for first-time students;
- A 45 percent 2-year graduation rate goal for transfer students;
- An 85 percent 4-year graduation rate goal for transfer students;
- The elimination of achievement gaps (the gaps that exist between students who identify as African American, Native American or Latinx and their peers) throughout the CSU; and
- The elimination of opportunity gaps (the gaps that exist between Pell recipients and their peers) throughout the CSU.

These system targets are extremely ambitious and, when attained, will place CSU campuses among the very top of comparable institutions across the nation. Nationally, virtually no institutions with profiles comparable to the CSU campuses (funding level, student preparation and diversity) have attained graduation rates at a level consistent with the CSU's new targets. Indeed, attainment of these goals – with the CSU's vibrantly diverse student population – will set new, unprecedented national standards for student success and timely degree attainment.

Operational Priorities

At the January 2017 Board of Trustees meeting, Chancellor White outlined five priority areas where focus is needed to achieve the Graduation Initiative 2025 goals: academic preparation, enrollment management, financial support, data-informed decision making and administrative barriers. Based on feedback received from campus constituents, "student engagement and well-being" was added as a sixth focal area.

The following represents the CSU's aspirational goals with respect to each of these areas of focus:

- **Academic preparation:** We will provide CSU students, including those who arrive academically underprepared, the opportunity and support needed to complete 30 college-level semester units – 45 quarter units – before beginning their second academic year.
- **Enrollment management:** We will ensure students are able to enroll in the courses they need, when they need them.
- **Student engagement and well-being:** We will continue to address the well-being of all CSU students while fostering a strong sense of belongingness on campus.
- **Financial support:** We will ensure that financial need does not impede student success.
- **Data-informed decision making**: We will use evidence and data to identify and advance the most successful academic support programs.
- **Administrative barriers:** We will identify and remove unnecessary administrative impediments.

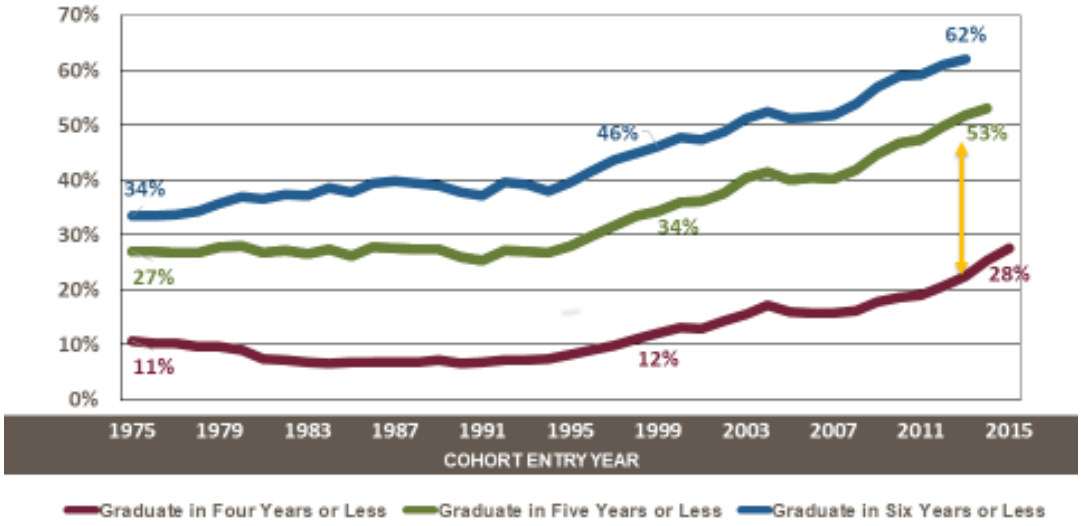
2019 Graduation Rate Data

Meeting the student success goals of Graduation Initiative 2025 requires the CSU to consistently measure progress. In the 2018-19 academic year, 107,319 CSU students earned their baccalaureate degree. This represents a record high for the CSU, with more than 20,000 additional students crossing a commencement stage compared to 2015, the year before the initiative was launched.

These 107,319 CSU graduates leave the university with a high-quality degree, but also having developed the knowledge, skills, cultural competency and professional dispositions needed to support their future workforce and educational goals.

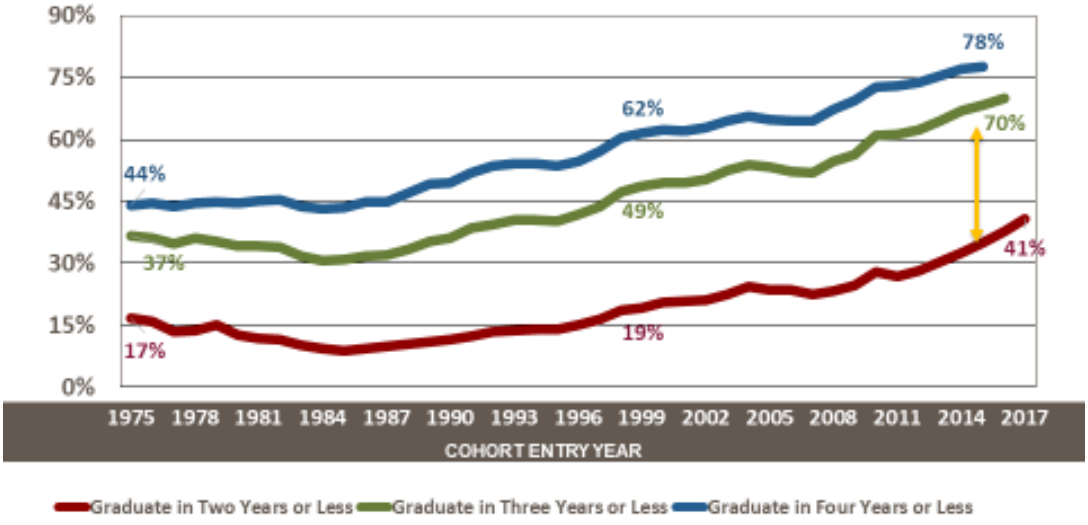
Historical Graduation Rates for First-Time Students

The chart below places the 2019 graduation rates for first-time students into historical context. Over the past 40 years, there have been peaks, valleys and plateaus in graduation rates; however, the overall trend has been one of progress.



Historical Graduation Rate for Transfer Students

Similar to the chart for first-time students, the historical chart of graduation rates for transfer students includes peak, valleys and plateaus, however the overall trend has been one of progress. CSU degree completion rates for transfer students already exceed most comparable universities nationwide and continue to improve.

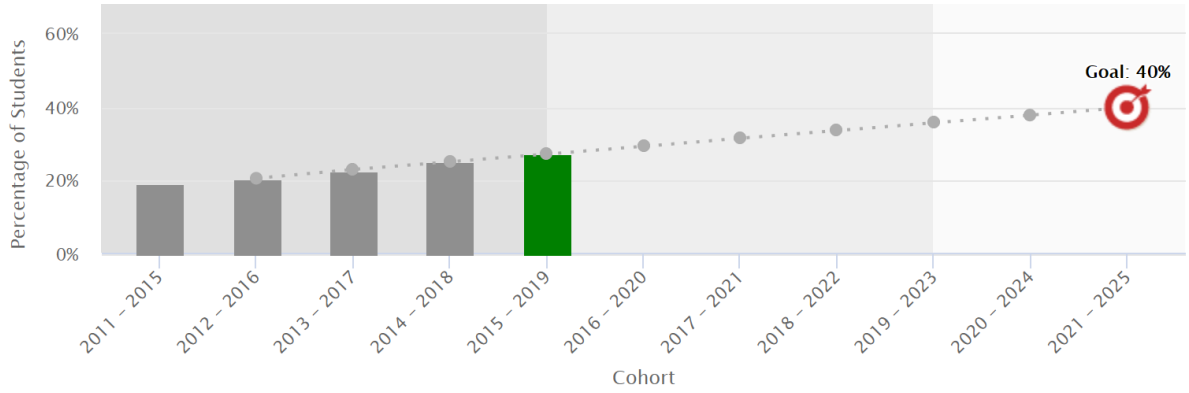


As the CSU pursues its Graduation Initiative 2025 goals, it is likely that progress from year-to-year will not always be linear. However, similar to the historical trend lines, it is anticipated that trends will demonstrate long-range progress in meeting the initiative goals.

4-Year Graduation Goal for First-Time Students

The 4-year graduation rate for the first-time student cohort that began in 2015 and graduated in 2019 or earlier was 28 percent. This rate is the highest ever for the CSU and builds on recent momentum as demonstrated in the charts below.

Cohort	**Grad Rate (%)**
2006-2010	15.8
2007-2011	15.9
2008-2012	16.2
2009-2013	17.8
2010-2014	18.6
2011-2015	19.2
2012-2016	20.7
2013-2017	22.6
2014-2018	25.5
2015-2019	27.7
2025 Goal	**40**

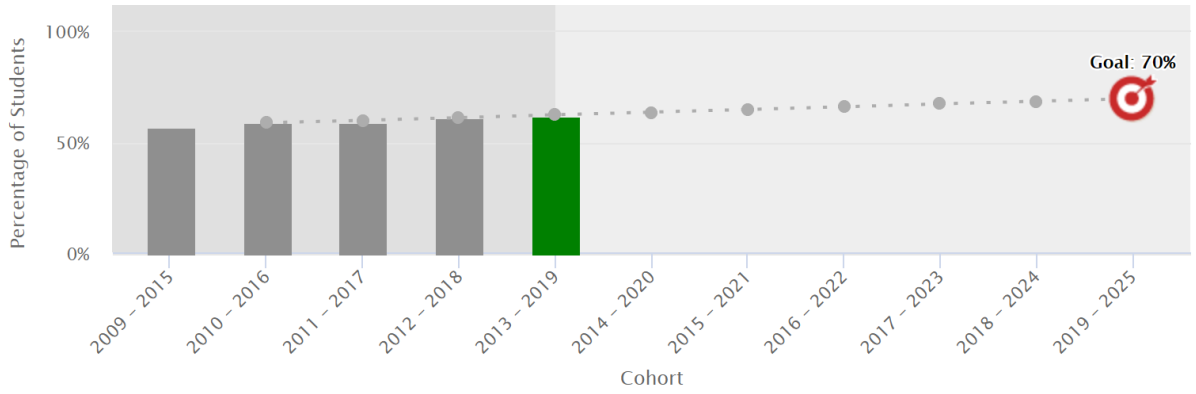


6-Year Graduation Goal for First-Time Students

The 6-year graduation rate for the first-time student cohort that began in 2013 and graduated in 2019 or earlier was 62 percent. This rate is the highest ever for the CSU.

The CSU currently exceeds the national average for public four-year universities (59 percent) according to the National Center for Education Statistics.

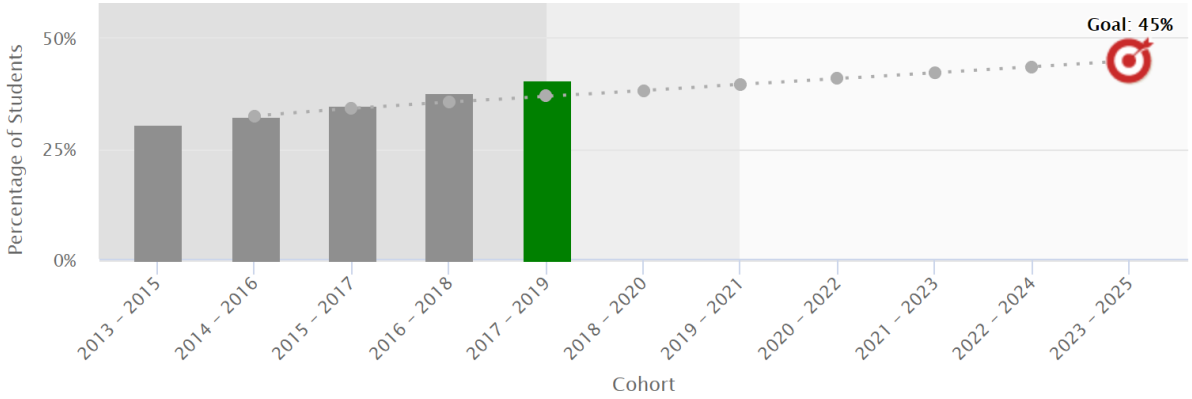
Cohort	Grad Rate (%)
2006-2012	51.4
2007-2013	51.8
2008-2014	54.0
2009-2015	57.0
2010-2016	59.1
2011-2017	59.2
2012-2018	61.1
2013-2019	62.1
2025 Goal	**70**



2-Year Graduation Goal for Transfer Students

The 2-year graduation rate for the transfer cohort that began in 2017 and graduated in 2019 or earlier was 41 percent. This rate is the highest ever for the CSU and builds on recent momentum as demonstrated in the charts below.

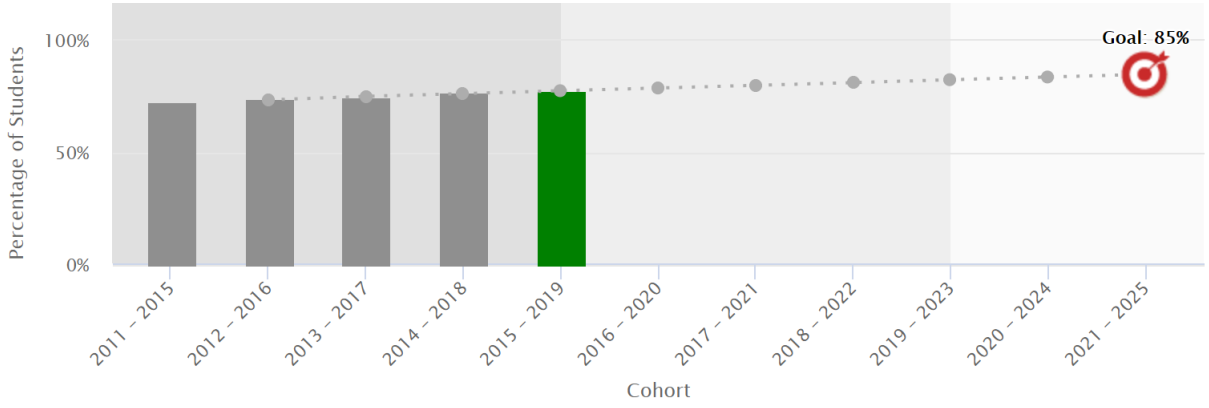
Cohort	Grad Rate (%)
2008-2010	23.3
2009-2011	24.5
2010-2012	27.8
2011-2013	26.7
2012-2014	28.4
2013-2015	30.5
2014-2016	32.6
2015-2017	35.1
2016-2018	37.8
2017-2019	40.7
2025 Goal	**45**



4-Year Graduation Goal for Transfer Students

The 4-year graduation rate for the transfer cohort that began in 2015 and graduated in 2019 or earlier was 78 percent. This rate is the highest ever for the CSU and builds on recent momentum as demonstrated in the charts below.

Cohort	Grad Rate (%)
2008-2012	67.2
2009-2013	69.2
2010-2014	72.8
2011-2015	72.9
2012-2016	73.9
2013-2017	75.3
2014-2018	77.1
2015-2019	77.6
2025 Goal	**85**

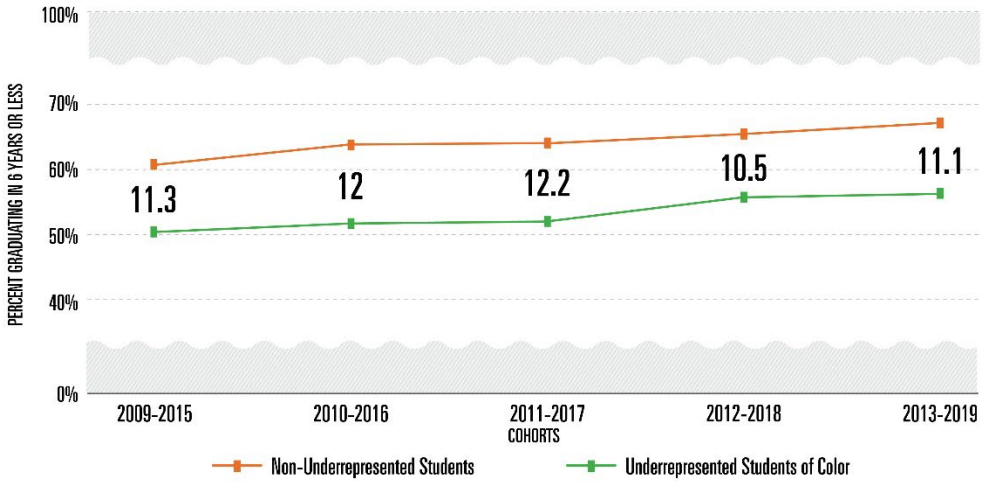


Underrepresented Students of Color Equity Gap Goal

The data indicate that students from historically underrepresented communities – those who identify as African American, Native American or Latinx – continue to make gains in their graduation rates, rising at rates equal to their peers. However, it is clear that more work is needed to fully eliminate the gaps. Following last year's progress, the gap for the 2013 cohort that graduated within six years increased slightly to 11.1 percentage points.

Cohort	Grad Rate (percentage points)
2006-2012	13.5
2007-2013	13.4
2008-2014	12.3
2009-2015	11.3
2010-2016	12.0
2011-2017	12.2
2012-2018	10.5
2013-2019	11.1
2025 Goal	**0**

The graphic below provides a visual representation of the equity gap for students who identify as African-American, Native American or Latinx. The orange line at the top represents the graduation rate for non-underrepresented students. The green line at the bottom represents the graduation rate for underrepresented students of color. The figure in between the two lines represents the percentage point gap between the two rates, the equity gap.

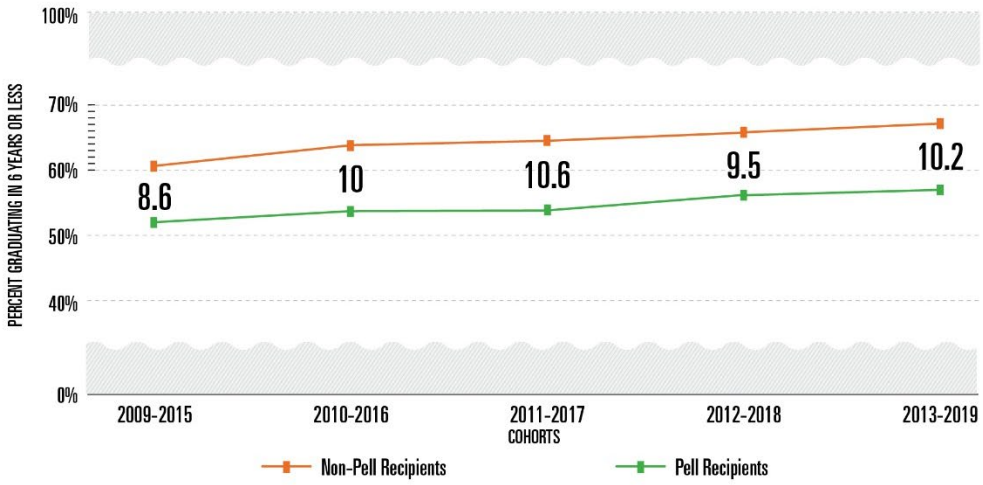


Pell Equity Gap Goal

The data indicate that Pell recipients continue to make gains in their graduation rates, rising at rates equal to their peers. However, it is clear that more work is needed to fully eliminate the gaps. Following last year's progress, the gap for the 2013 cohort that graduated within six years increased slightly to 10.2 percentage points.

Cohort	Grad Rate (percentage points)
2006-2012	10.4
2007-2013	9.3
2008-2014	9.1
2009-2015	8.6
2010-2016	10.0
2011-2017	10.6
2012-2018	9.5
2013-2019	10.2
2025 Goal	**0**

The graphic below provides a visual representation of the equity gap for Pell recipients. The orange line at the top represents the graduation rate for non-Pell recipients. The green line at the bottom represents the graduation rate for Pell recipients. The figure in between the two lines represents the percentage point gap between the two rates, the equity gap.



Impact of Graduation Rate Improvements

As Graduation Initiative 2025 efforts continue to result in more students having the opportunity to graduate earlier, according to their goals, there are positive impacts for both current and future CSU students. For example, graduating at least one term earlier enables students to begin earning a salary sooner and avoid paying for an additional term of college. Research indicates that first-time students graduating one term earlier will see an immediate economic gain of $13,264 and a long-term gain of $31,370.

In addition, as students earn their degree sooner it provides additional enrollment capacity at CSU campuses. For example, a one percentage point improvement across the cohorts of students reflected in the reported graduation rates creates additional capacity for approximately 2,500 students or approximately 9,000-10,000 additional open seats in course sections.

2019 Graduation Initiative 2025 Symposium

The 2019 Graduation Initiative 2025 Symposium was held in Sacramento, California, on October 17-18. The symposium engaged national higher education leaders, practitioners and members of the CSU community in rich exchanges focused on improving degree completion and closing equity gaps. This year, more than 350 individuals attended the symposium, with hundreds more watching from their campuses via livestream.

At this year's symposium, main stage speakers included:

- **Michael Sorrell, Ph.D.,** president, Paul Quinn College. Under his leadership, Paul Quinn has become nationally renowned for its innovative approach of using higher education to address the most persistent and pressing problems of society.
- **Alexandra Bernadotte,** founder and CEO of Beyond 12, a high-tech, high-touch nonprofit that integrates personalized coaching with mobile technology to increase the number of historically underserved students who graduate from college.
- **Doug Lederman,** co-founder and editor of *Inside Higher Ed*. In this capacity, he leads the site's editorial operations, overseeing news content, opinion pieces, career advice, blogs and other features. He speaks widely about higher education, and his work has appeared in *The New York Times* and *USA Today*, among other publications.
- **Michelle R. Weise,** senior vice president, workforce strategies, and chief innovation officer for Strada Education Network, a national nonprofit dedicated to improving lives by strengthening the pathways between education and employment. In this capacity, she leads the organization's workforce alignment initiatives as well as innovation and thought leadership priorities.

- **Gavin Newsom**, governor of the state of California and former lieutenant governor. Newsom's top priorities for his administration are tackling the state's affordability crisis, creating inclusive economic growth and opportunity for every child, and standing up for California values — from civil rights, to immigration, environmental protection, access to quality schools at all levels, and justice. At the symposium, Governor Newsom spoke about the future of public higher education in California.
- **Lande Ajose, Ph.D.,** senior policy advisor for higher education in the Office of Governor Gavin Newsom. In this capacity, she utilizes her expertise in education, poverty alleviation, workforce development and issues of inequity to develop policy for the governor. Before joining the Newsom administration, she was executive director of California Competes.

Faculty Innovation and Leadership Awards

At the conclusion of the first day of the 2019 Graduation Initiative 2025 Symposium, the CSU honored the recipients of the 2019 Faculty Innovation and Leadership Award. This award recognizes outstanding faculty who are implementing innovative practices and have demonstrated leadership in improving student success at the department, college or university level.

The award selection committee was led by CSU faculty and included representatives from the Office of the Chancellor. The committee reviewed more than 200 nominations. Ultimately, 19 awardees were chosen.

Awardees receive a $5,000 cash award and $10,000 allocated to their academic department on their behalf. These funds will be used for professional activities related to their nominated work.

2019-20 Areas of Focus

For the 2019-20 academic year – the fourth year of Graduation Initiative 2025 – there are three primary areas of focus from a systemwide perspective.

Closing Equity Gaps

The first priority, which is ongoing and underlies all initiative work, is a concerted focus on closing persistent equity gaps in student success, retention and completion. Given the CSU's diverse student population, focusing on equity gaps helps ensure that the university achieves all six initiative goals.

The CSU continues to identify actions that are good for all students yet also have a disproportionately positive impact on our most underserved populations. These include adapting and expanding best practices utilized in the Educational Opportunity Programs, such as intrusive advising, summer bridge, learning support, and cohort communities.

Efforts to close equity gaps also include supporting and expanding strategies that have a proven ability to improve educational outcomes for men of color. On November 6, the CSU held its second annual Young Males of Color Forum. This forum, a partnership among the CSU Young Males of Color Consortium, the Southern California College Access Network and the Los Angeles Scholars Investment Fund, is part of a systemwide focus on improving outcomes for young males of color in the CSU.

Since its inception in 2017, the CSU Young Males of Color Consortium has facilitated a CSU Graduation Initiative 2025 Pre-Symposium on young males of color, conducted a series of focus groups with young males of color, held a series of capacity-building consortium meetings, analyzed campus data and launched the forum. The consortium was recently awarded nearly $1 million in grant funding over the next two years.

As the efforts that began over the past several years become more ingrained on campuses, we firmly anticipate that we will see significant narrowing of the equity gaps. This is particularly true when the first cohort of students who entered the CSU under the new academic preparation policies begins to graduate starting in 2022.

Advising

The second area of focus for the 2019-20 academic year is systematically improving the quality of advising that students receive while enrolled at the CSU. To this end, there are four specific components of advising that are being addressed:

- **Accountability –** Ensuring that every student has at least one individual, or office, responsible for monitoring their progress through degree completion.
- **Advising Structures –** Supporting campuses as they rethink and simplify advising structures to improve coordination across the various offices on campus where students receive guidance.
- **Data Integration –** Combining existing data systems to increase the availability and use of real-time information that advisors use to support students.
- **Degree Plans for Students** - Increasing the percentage of students who have a clear degree plan, before they begin their first academic term.

Campuses continue to make improvements to their advising structures, to the benefit of all students. At the Office of the Chancellor, work is ongoing to identify how best to support these campus efforts. This includes providing advisors with resources and professional development so that they are fully prepared to respond to the myriad of issues facing students today.

Supporting Student Engagement and Well-being

The final focal area is creating a framework for student engagement and well-being. The CSU is committed to addressing student well-being in a holistic manner. As an educational institution, the university is particularly focused on the areas that impact students' ability to be successful, persist and complete their degree. This includes areas such as quality education, food, housing, a sense of belonging and mental and physical health. To support students, CSU campuses focus their efforts on providing education, outreach, training and acute crisis support to students in need. At the same time, the CSU is actively developing and strengthening relationships with regional and local agencies and organizations to provide comprehensive care to students, in instances where students' needs go above and beyond campus capabilities.

Supporting these efforts, the Office of the Chancellor has released three Request for Proposals (RFPs) to campuses related to basic needs, emergency housing and mental health. These RFPs are for the distribution of funding that was allocated to the CSU in the most recent state budget ($15 million in one-time funding for basic needs, $6.5 million in recurring funds for rapid rehousing and $3 million one-time funding for mental health). In their proposals, campuses are highlighting how the funds would be used to support and develop partnerships with local agencies and organizations to ensure students have access to the resources and care they need.

Intersegmental Basic Needs Summit

On February 6-7, 2020, the CSU, University of California and California Community Colleges will be hosting the first ever intersegmental basic needs summit. The theme of the summit is "Advancing Student Success." The event seeks to accomplish several goals:

- Share best practices/barriers/challenges/innovations in order to advance student success;
- Understand the policy and legislative landscape to foster informed strategies;
- Explore opportunities for collaboration to strengthen interventions and basic needs strategies across California higher education; and
- Examine current research and data developments in basic needs in order to advance practices and assessment for student success.

This inaugural gathering will bring together more than 750 leaders from across the state, as students, staff, faculty and community partners explore the efforts of advancing basic needs security in order to address student success on individual, community and institutional levels.

Conclusion

CSU students, faculty, staff and administrators continue to work diligently to achieve the goals of Graduation Initiative 2025 and ensure that all students have the opportunity to be successful and graduate according to their own personal goals. Entering the fourth year of the initiative, graduation rates indicate that strong progress is being made; however, additional work is needed to completely close the equity gaps. The focus on closing these gaps, student engagement and well-being and quality advising will play an integral role in maintaining progress and ensuring that all CSU students benefit from the initiative efforts.

To continue this momentum and innovation, Graduation Initiative 2025 must remain a budget funding priority for the CSU and the state of California. Graduation Initiative 2025 must also be achieved in parity with increased enrollment growth funding in order for the CSU to achieve its share of additional college graduates needed by the year 2030, enabling California to meet its projected workforce goals. These results will also allow our graduates the opportunity to apply their knowledge and skills while using their earnings to provide for themselves, their families and help fuel California's economy.