From Scatterplot to Roadmap:
New Efforts to Improve Student Success in The California State University

August 2017
Colleen Moore, Cynthia Schrager, Kathy Reeves Bracco

Student Success Network
in the California State University

Table of Contents

Acknowledgments

We are grateful to the administrators and faculty at several California State University campuses who provided perspectives about their efforts to improve student success. We appreciate Thad Nodine's invaluable assistance with thinking through and structuring the content of this report. Bob Gabriner, James Minor, Rob Shorette, Su Jin Jez, Jodi Lewis and Andrea Venezia helped to inform and improve our drafts. We appreciate the graphic design work by the Williams Group and the Foundation for California Community Colleges. Finally, our graduate research assistant, Patrick Dorsey, made significant contributions at the start of the project by gathering and summarizing research literature and information on national initiatives, collaborating with us on the distillation of information into a framework, and locating and summarizing relevant information for the CSU campuses.

Executive Summary

Among broad-access colleges and universities, promising efforts to increase graduation rates and reduce opportunity gaps are emphasizing campuswide, systemic reforms—a national research finding that appears to be resonating on many campuses of The California State University (CSU). In a study exploring student success initiatives at the 23 campuses of the CSU, researchers at the Education Insights Center (EdInsights) detected a shift in planning at some institutions toward broader campuswide changes—not just discrete program adjustments or implementations—to address institutional barriers that can impede student progress. As one campus administrator said, "The really important goal would be to pull together all of these activities and really have a roadmap…[an] intentional plan as opposed to this kind of scatterplot of activities." This finding is the result of a review of strategic and planning documents associated with student success efforts at all CSU campuses and an analysis of interviews conducted at four of them. This report aims to provide campus and system leaders with a scan of the current state of reform within the CSU, together with contextual insight into the obstacles and possibilities for broader scale adoption of coordinated, systemic change.

Our review found that CSU campuses are planning and implementing a wide range of new programs, services, collaborations, and other innovations designed to increase graduation rates and reduce achievement gaps, partly in response to the Graduation Initiative 2025, which was launched systemwide by the Chancellor's Office in 2016. The strategies planned or implemented at many of the campuses encompass the major functions of the institution and in some cases span the full student pathway from college preparation to completion. In addition, some campuses are beginning to plan and implement reforms that are campuswide in scope. We found evidence of an emerging awareness that significant improvements in student success will require a strategic shift from a focus on individual targeted programs to a systemic approach that engages all of the key functions and processes of the institutions in coordination with each other.

Our interviews with administrators and faculty explored the institutional context of student success efforts and revealed nine major themes—many addressing the challenges campuses face in their efforts to improve student learning, engagement, progression, and success. Several themes addressed the need for changes in the focus of student success efforts on campuses, including:

- Shifting from emphasizing specific programs targeted at student success to making more systemic changes across the entire campus;
- Managing resource constraints with more effective allocation of resources to have the greatest impact;
- Increasing efforts to engage multiple stakeholder groups in student success efforts, recognizing that the relational side of change requires as much attention as does the technical side.

Other themes addressed some of the challenges campuses face in making these shifts, including:

- Coordinating across existing institutional silos, especially finding strategies to integrate academic and student affairs in the service of student success;
- Supporting faculty engagement in campuswide student success efforts, since faculty involvement is critical to improving student success;
- Assisting campus stakeholders in understanding how to use data to inform their role in supporting student success;
- Addressing the diverse needs of students, including financial and social/emotional, as well as academic, issues;
- Working to find solutions to rapid leadership turnover, given the importance of having leaders who are consistently visible and vocal in championing student success;
- Leveraging the CSU as a system by finding more opportunities to learn from successful efforts at peer campuses.

Despite these kinds of hurdles, experiences at some public universities nationally are showing that iterative change, done in a purposeful way, can lead to significant improvements for students over time. Many interviewees discussed the need for such an approach and described how their campuses are making early efforts toward more purposeful, systemic reforms. Efforts to spread such approaches across the system could yield continued improvements in student outcomes in the CSU. Reaching the ambitious goals set by Graduation Initiative 2025 will likely require extensive and robust implementation of the more systemic reforms.

In exploring the shift at some CSU campuses from a focus on programs to the development of systemic campuswide strategies, our analysis points to three important dimensions of the institution that likely must function together effectively for the CSU to reach the levels of student success identified in the Graduation Initiative: 1) resource management and planning, 2) programmatic and curricular design, and 3) guidance on navigating the student path. Responsibilities for these areas are typically assigned to different divisions within institutions and they typically have insufficient structural supports and incentives to coordinate and align their work. As campuses seek to achieve their ambitious goals, they must find the organizational coherence that places student success at the center of all functions. It is our hope that this report will help provide information that can support actions both within institutions and at the system level to support this fundamental shift.

> **We found evidence of an emerging awareness that significant improvements in student success will require a strategic shift from a focus on individual targeted programs to a systemic approach that engages all of the key functions and processes of the institutions in coordination with each other.**

The California State University is Focusing on Improving Student Success

The 23 campuses of the California State University (CSU) are planning and implementing a wide range of new programs, services, collaborations, and other innovations designed to increase graduation rates and reduce opportunity gaps among students, partly in response to the Graduation Initiative 2025 (GI2025), which was launched systemwide by the Chancellor's Office in 2016. These new efforts largely reflect the recommendations of research and national initiatives aimed at improving outcomes in broad-access postsecondary institutions such as the CSU. While many CSU campuses are focusing mostly on more traditional programmatic efforts like improving particular services for students, there are some campuses implementing more systemic, campuswide efforts. In addition, there appears to be an emerging recognition across the CSU of the need for structural and cultural changes to address institutional barriers that can impede student progress.

These findings are based on a study exploring student success efforts on CSU campuses, undertaken by the Education Insights Center (EdInsights) on behalf of the CSU Student Success Network.[1] The research included: a review of national literature on evidence-based student success strategies at broad-access universities; the consequent development of a framework that maps six broad categories of institutional actions to four stages of the student pathway through college; a review of planning documents associated with student success efforts at the 23 CSU campuses; and interviews at four CSU campuses to explore more deeply the context for efforts to improve student progress and outcomes within the CSU (see *Research Methods* sidebar in addition to Appendix A). Many of the campus efforts, including those involving a move toward structural and systemic change, are in the early stages, and data on their success are not yet available. This report is focused on a broad descriptive analysis of the efforts underway and on the organizational context that will either impede or support those efforts.

RESEARCH METHODS

- We reviewed information on evidence-based student success strategies at broad-access universities across the country (see Appendix B) and synthesized the findings into a framework that maps six broad categories of institutional actions along four stages of students' journey through college (see this report's technical appendix, *Student Success Framework: A Tool to Characterize Strategies at Broad-access Universities*).
- We collected and reviewed key planning documents from each of the 23 CSU campuses to identify the kinds of efforts planned or underway, and mapped these efforts against the framework.
- We conducted 12 in-depth interviews with administrators and faculty members at four campuses, identified themes, and cross-walked the themes against the student success strategies uncovered across the CSU. We offered anonymity to participating campuses and individuals in order to encourage candid discussions, so we do not identify them in this report.

Improving Graduation Rates, But Persistent Gaps

The CSU is the largest university system in the country, enrolling over 475,000 students annually, including large numbers of historically underrepresented and first generation students. Student success, with a particular emphasis on increasing graduation rates, has been an explicit systemwide priority of the CSU in recent years. In 2009, the Chancellor's Office adopted a Graduation Initiative that established two primary goals for the system to achieve by 2015: increasing six-year graduation rates for entering freshmen to 54 percent and reducing by half the gap in degree attainment for underrepresented minority students. As shown in Figure 1, graduation rates for entering freshmen have steadily increased over the past decade (and were increasing prior to that, as well), and the six-year graduation rate reached 59 percent for the cohort of freshmen entering in 2010, exceeding the goal in the 2009 initiative.[2] However, the four-year graduation rate remains low in the context of similar institutions nationally; only about one in five freshmen graduate within four years across the system, with even lower rates for many campuses.[3] In addition, gaps in student outcomes persist when analyzed based on ethnicity (11 percentage points), Pell eligibility (8 percentage points), and first generation status (13 percentage points).[4]

Figure 1

Freshman graduation rates in the CSU are increasing, but only 1 in 5 graduate within 4 years.

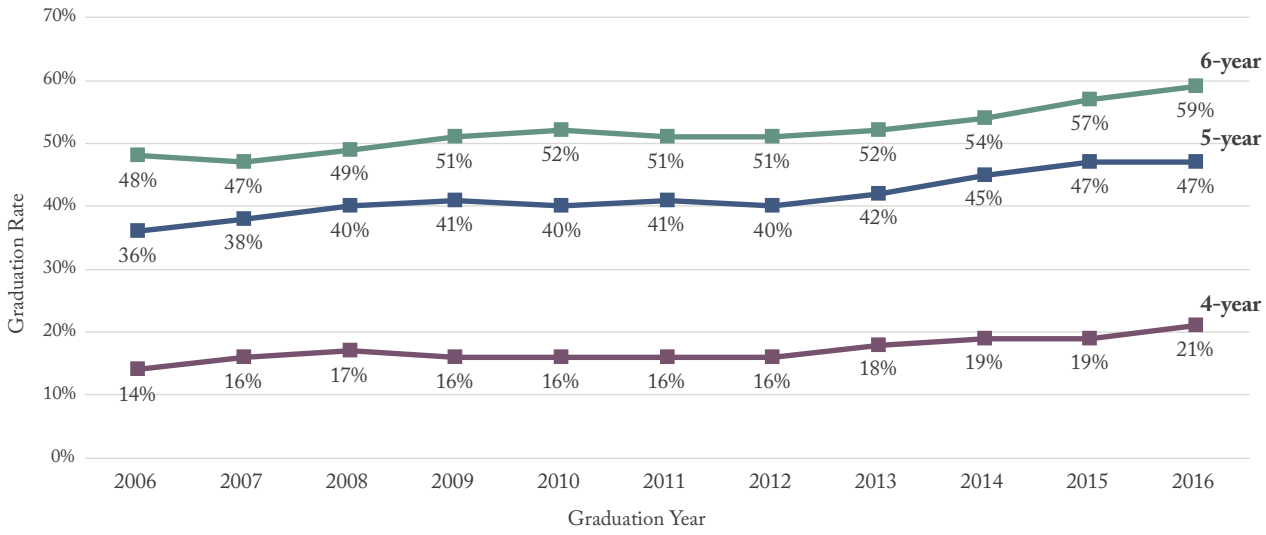
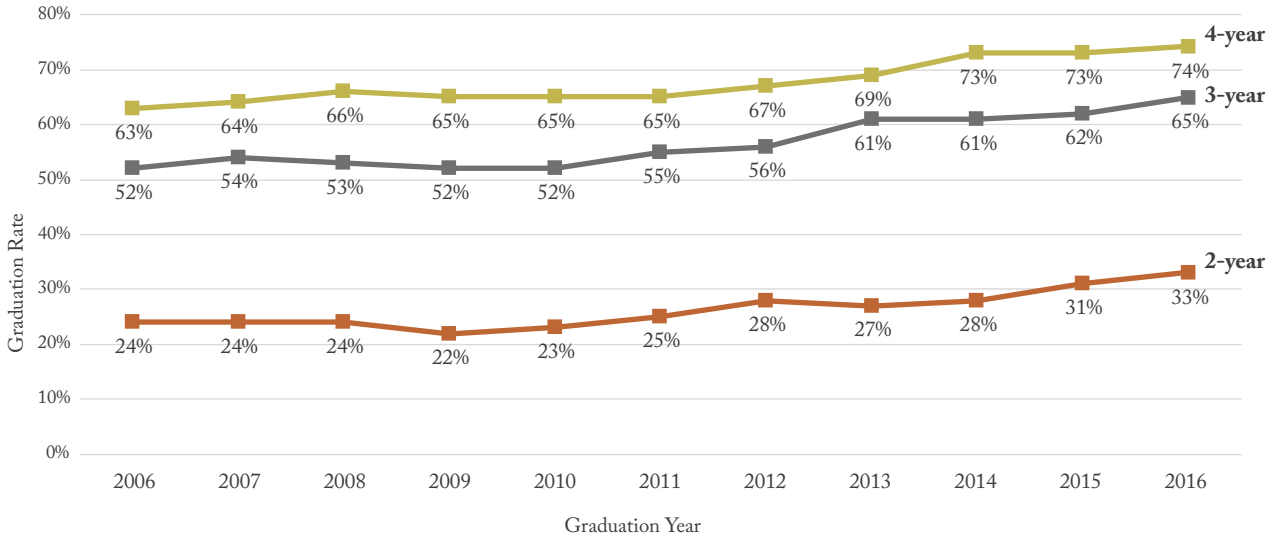


Figure 2

Graduation rates for community college transfers in the CSU are also increasing; about one-third graduate in 2 years.



Graduation Initiative 2025 Encourages New Efforts on Campuses

GI2025 builds upon the first initiative by setting more ambitious goals for improving graduation rates for both first-time freshmen and transfer students, with a particular emphasis on reducing the time to degree (see graduation rates for transfer students in Figure 2). The key goals in the new initiative include:

- Increasing the systemwide four-year graduation rate for first-time freshmen to 40 percent and the six-year rate to 70 percent;
- Increasing the systemwide two-year graduation rate for transfer students to 45 percent and the four-year rate to 85 percent;
- Eliminating the equity gap.

In conjunction with this new initiative, funded in part with $35 million of dedicated state funding for 2016-17, the Chancellor's Office is working on system policy changes to better support student success, and has required each of the 23 CSU campuses to develop its own student success plan identifying short- and long-term objectives to guide efforts to improve graduation rates and eliminate gaps.

National Context: A Movement Toward Systemic Institutional Change

For the last several decades, broad-access postsecondary institutions have implemented a variety of reforms and innovations in an effort to increase "academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, and attainment of educational objectives."[5] This broad definition of student success has served as the foundation for efforts to improve teaching and learning in the classroom, as well as co-curricular activities and student support services. More recently, national initiatives have begun focusing on the need to engage in broad campuswide reform that extends beyond the implementation of individual programs or innovations to change the underlying structures of the institution and its processes. Tom Bailey, a national expert on higher education, recently noted that "substantial improvement requires a continuous process of reform and assessment of evidence of improvement that must become embedded in the college culture" and must involve "an intentional and cohesive package" of components that affect all students throughout their college career.[6] He used as an example the movement toward a "guided pathways" model in community colleges, involving efforts to structure cohesive programs and help students find their way into and through those programs, monitoring students' progress and providing support when needed.[7]

There is a similar movement in four-year institutions toward reforms that are more comprehensive and systemic, and that change the underlying structures of the institutions and their processes in ways that better support student success. For example, the Collaborating for Change initiative of the Association for Public & Land-Grant Universities is supporting campuses to engage in "transformational, often disruptive, reforms" that "touch virtually every aspect of the student experience."[8] The University Innovation Alliance is working with its partner campuses to pilot various innovations, scale successful efforts, and leverage what they learn across the network, hoping to "catalyze systemic changes in the entire higher education sector."[9]

Based on our review of research and national initiatives, we synthesized information on student success strategies at broad-access four-year universities into a framework that maps six general categories of institutional strategies along four stages of the student journey through college (see this report's technical appendix, *Student Success Framework: A Tool to Characterize Strategies at Broad-access Universities*). The institutions most actively engaged in efforts to improve student outcomes are using strategies across all of the categories.

Leadership and Governance. Strong leadership focused on creating a campuswide culture of student success is viewed as essential to the kind of systemic changes needed to achieve significant improvements in student outcomes. Senior leaders set the tone for an institution and can play a critical role in allocating resources to support student progress, facilitating collaboration across divisions and with K-12 and community partners, and ensuring accountability for the student success mission.

Data-informed Decision Making. A common feature of recent initiatives is a focus on using data to evaluate campus programs and services and to drive resource allocations in ways that better support student progress. Many institutions are developing data dashboards to help in tracking and analyzing student success in courses and student use of various support services. "Predictive analytics"—using data and statistical algorithms to identify trends and predict future behaviors—is beginning to be applied in a variety of ways across higher education. For example, some institutions are restructuring

program roadmaps based on more successful course-taking patterns, estimating needs for faculty hiring in particular disciplines, and developing course schedules that reflect student demand and consider historical patterns of success in courses.

Program/Curricular Planning. Institutions are experimenting with innovative approaches to addressing aspects of the curriculum that can be roadblocks to student success. Examples include reforming placement and remediation policies, reexamining general education curricula, and rethinking individual majors. Some institutions are restructuring their curriculum into "meta majors" that group individual majors under a larger academic umbrella to help guide students toward options in their general area of interest and facilitate more efficient progress toward a degree. Additionally, institutions are implementing classroom reforms such as the use of active and collaborative learning strategies, an increasing focus on writing across the curriculum, and an emphasis on cultural pluralism to engage diverse student populations and help students appreciate and respect other cultures. Some universities are actively encouraging students to complete 30 semester credits per year to facilitate timely completion, efforts often referred to as "15 to Finish" after the signature initiative at the University of Hawaii.[10] Research demonstrates that this approach is associated with increases in persistence, credit accumulation, and graduation.[11]

Academic Engagement. First-year experience and sophomore programs, learning communities, service learning, and undergraduate research are among the "high impact practices" intended to increase student engagement and persistence.[12] Other approaches include increasing opportunities for internships and study abroad, and encouraging students to spend more time on campus by increasing on-campus housing and employment options. Senior capstone courses and other culminating experiences or projects aim to keep

GEORGIA STATE UNIVERSITY IMPLEMENTS CAMPUSWIDE REFORMS

In the past decade, Georgia State University has used an iterative, data-driven approach to identify barriers for students.[13] Using an extensive data warehouse to identify barriers for success, the institution has piloted innovations, tested their efficacy and then scaled up when appropriate. Examples of key initiatives include:

- Establishing learning communities that sort first-year students into cohorts based on meta majors, with students taking all first-year courses together in block schedules;
- Utilizing supplemental instruction to guide students through courses with lower success rates, including the use of peer tutors with previous success in the courses;
- Redesigning introductory math courses using face-to-face and machine-guided instruction;
- Issuing small grants to students at risk of not completing due to financial hardship;
- Developing the Graduation Progress System (GPS), which uses predictive analytics to understand the factors that put students at risk for not completing, and an early warning system that helps advisors know when to reach out to students to keep them on track;
- Consolidating undergraduate advising into one unit and more than doubling the number of advisors;
- Establishing a summer success academy for incoming at-risk freshmen, providing students with the opportunity to take courses for credit and receive academic advising and financial literacy training prior to their first full semester.

Georgia State also changed its administrative structure, combining key areas such as financial aid, academic support and advising, admissions, registrar, and student accounts under a single vice provost. The university's six-year graduation rate increased from 32 percent in 2003 to 54 percent in 2014. At the same time, the university has increased its enrollment of traditionally underrepresented students.

students engaged in their majors and to help them integrate their learning experiences.

Support Services. Initiatives have focused on better integrating student advising and other support services with academics and making them more accessible for students. Many institutions have become more "intrusive" about providing services by proactively reaching out to students rather than waiting for them to seek help. Online degree planning tools are used to help students and their advisors map out a pathway to a degree and keep track of students' progress. Peer mentoring programs help new students learn how to navigate the college process and understand campus resources. There is a growing focus on providing mental health services and services to help students through financial or personal emergencies, such as food banks, short-term housing, and emergency grant programs.

Professional Development. Professional development efforts are aimed at supporting faculty, advisors, and other staff in implementing efforts across the other categories (above). Faculty development efforts focus on innovative instructional methods and technology, such as the "flipped classroom"[14] and online and hybrid course design, with a focus on redesigning the approach used in courses with low success rates. Addressing cultural competency and supporting the learning of diverse student populations are another common focus of initiatives. Some institutions use learning communities or mentoring programs to better support new faculty and integrate them into the campus culture. Advisors are also being trained to better understand program requirements and to use more proactive strategies to monitor student progress and intervene as needed. Training on the use of new technology tools and data dashboards is aimed broadly to support administrators, faculty, and staff in using data for service evaluation and planning.

ARIZONA STATE UNIVERSITY TAKES A DATA-INFORMED APPROACH TO CHANGE

Arizona State University (ASU) is taking a data-informed approach to campuswide reforms to improve student success.[15] Examples of ASU's initiatives include:

- Implementing an eAdvisor system that helps students identify a major appropriate to their interests, monitors students' enrollment to ensure they are taking and succeeding in the required courses in the correct order, and refers students to required advising if they get off track;
- Developing exploratory majors in broad areas like "arts and humanities" and "health and life sciences" to allow incoming freshmen to explore options in their general area of interest while ensuring they take courses that will count toward their degree;
- Organizing course sequences within programs so that students are required to take key courses early (e.g., statistics for psychology majors);
- Using computer-aided instructional technology in remedial math courses, which tailors students' learning activities to their specific needs;
- Working collaboratively to extend some eAdvisor functions into feeder community colleges to allow transfer students to map their coursetaking to ensure an efficient path to a degree.

Retention and graduation rates have increased at ASU, including improvements to on-time graduation. The four-year graduation rate of incoming freshmen rose from 29 percent for the cohort entering in 2003 to 52 percent for those enrolling in 2012.[16]

In addition to the specific strategies in the six categories in the framework, a focus of recent reform efforts is on identifying and removing institutional barriers in the form of policies and processes that impede student progress. There are numerous examples of such barriers on both the academic and student services sides of the institutions, such as unnecessarily complex processes to transfer credits, add or change a major or minor, or apply for graduation; course scheduling inefficiencies related to poor use of instructional space, faculty preferences about when to teach, waitlist policies, or failure to consider course sequencing needs; insufficient systems for identifying and supporting students at risk of failure; and inadequate communication between academic and student affairs.

Two examples of public four-year institutions that have combined approaches that span these six categories are Georgia State University and Arizona State University. Georgia State has engaged in an iterative process of piloting, assessing, and scaling a number of efforts that have led to major changes in campus structures, programs, and policies. The institution has seen an increase in its six-year graduation rate of more than 20 percentage points over approximately the last decade, a period during which its enrollment of traditionally underrepresented students increased (see *Georgia State University Implements Campuswide Reforms* on page 8). Arizona State has seen an increase in the four-year graduation rate of incoming freshmen from 29 percent to 52 percent over a decade in concert with its data-informed approach to campuswide reforms (see *Arizona State University Takes a Data-Informed Approach to Change* on page 9).

CSU Campus Strategies Reflect National Efforts, With Some Early Steps Toward Systemic Change

The CSU Chancellor's Office provided recommendations for campuses about the types of strategies to include in their plans for GI2025 (see *CSU Chancellor's Office Guidance on GI2025 Plans* on page 13). The strategies encouraged by the Chancellor's Office reflect the recommendations of recent research and national initiatives, and our review of campus GI2025 plans and other documents suggests that CSU campuses are moving to adopt many of those approaches.

Campuses are Implementing a Broad Set of Strategies

The chart titled *Institutional Strategies to Improve Student Success in the CSU* (page 12) identifies the strategies we found in various campus plans and documents. In the table, we distinguish between those strategies that appear to be more widespread across the 23 campuses and/or in a more mature state of implementation (see roman type) and those that appear to be in early stages of development and/or in place at only a few campuses (see italicized type). The chart also identifies the strategies that were prioritized by the Chancellor's Office in its call for campus plans for GI2025 (marked with an asterisk). Many of the 23 campuses were considering strategies in all six categories of institutional actions and some were planning interventions at all stages of the student pathway captured by the framework. However, it appears that many of the most challenging strategies, in terms of requiring systemic or campuswide reforms, are still emergent rather than widely implemented.

Leadership and Governance. Many campuses are setting up committees with representation across divisions and roles to coordinate student success programs and to establish that accountability for success is broadly shared. A few campuses have taken that effort a step further by creating an office for student success that reports directly to senior leadership. One widespread strategy is to employ campuswide strategic messaging about student success and equity issues, aimed at creating a student success-focused culture at the institutions. Many campuses point to partnership efforts with local high schools and community colleges, particularly around academic preparation and creating a college-going culture in the region. For example, **CSU San Bernardino** worked with University of California, Riverside, to develop a bi-county K-20 collaborative called Growing Inland Achievement to focus on increasing college readiness and bachelor's degree attainment, an effort acknowledged with one of California's Awards for Innovation in Higher Education in 2015.

Data-informed Decision Making. Efforts to acquire data tools and technology are widespread, with most campuses noting ongoing efforts to improve their data systems, implement degree planning software, and develop data dashboards to facilitate evaluation and planning. For example, the Degree, Set, Go campaign at **CSU San Marcos** is aimed at getting students to utilize online degree planners and schedule assistants to map out their schedules for the coming terms—information that can then be used by the institution to plan course sections more efficiently. Some campuses are trying to build faculty and staff capacity to use data through data teams or workgroups, data fellows programs, or other efforts to ensure that each division or department has access to someone who understands how to make use of the new tools and dashboards.

Institutional Strategies to Improve Student Success in the CSU

INSTITUTIONAL STRATEGIES	STUDENT PATHWAY: PREPARING FOR AND CHOOSING THE CSU	ENROLLING AND EARLY ATTENDANCE	SELECTING A MAJOR AND MEETING REQUIREMENTS	PREPARING FOR GRADUATION AND FUTURE PLANS
LEADERSHIP AND GOVERNANCE		Campus-wide Messaging on Equity and Student Success* Clear Prioritization of Student Success Mission* Data Broadly Distributed and Discussed Resources Allocated to Maximize Student Progress Facilitation of Collaboration Across Divisions/Departments		
	Regional Partnerships on College Readiness and Enrollment Planning*			Partnerships with Regional Employers/Leaders
DATA-INFORMED DECISION MAKING		Improved Data Tools and Systems* Accessible Data Dashboards for Planning Building Data Capacity through Workgroups/Fellows Programs *Predictive Analytics (Bottleneck/High Failure Courses, At-risk Students, etc.)** *Evaluating Program Effectiveness*		
	Student Data Sharing across Sectors/Institutions	*Evaluating Placement and Remediation Effectiveness*	Tracking Disparities in Progress by Course/Major*	*Tracking Student Employment Outcomes*
PROGRAM/ CURRICULAR PLANNING		Student-centered Course Scheduling* Capacity Expanded through Summer, Online, Evenings, Weekends* Four-/Two-year Graduation Programs/Pledges		
	Alignment of Program Pathways across Sectors	Redesigned Gateway Courses* Revised GE Programs *Placement/Remediation Reforms** *Meta Majors* *Block Schedules/Course Packages* *Credit for Prior Learning*	Improved Program Roadmaps Revised Major Declaration or Other Academic Policies to Support Student Progress Streamlined Program Requirements	*General Studies or Other Broad Degrees to Facilitate Completion* *Using Labor Market Information to Inform Programs*
ACADEMIC ENGAGEMENT		Increased Full-time Faculty* Focus on Diversity and Inclusion Celebration of Student Achievements and Milestones Cultural Programming* *Social-emotional Learning Assessment/Interventions*		
		Expanded First-year Experience and Learning Communities* Sophomore Programs	Expanded Service Learning, Research, Study Abroad	Senior Capstone/Project Increased Internships/On-campus Employment
SUPPORT SERVICES		Broad Use of E-advising Tools* Increased Advisors/Counselors Restructured Advising Services Intrusive Advising/Early Alert/Learning Assistance* Emergency Funds and Services		
		Mandatory Orientation/Summer Bridge Mandatory Early Advising Supplemental Instruction in Remediation* Success Skills Workshops *Financial Literacy Programs*	Mandatory Major Advising Peer Mentors/Advisors Supplemental Instruction in High-failure Courses*	*Career Development and Readiness Services* Graduation Readiness Reviews* *Incentives for Timely Completion*
PROFESSIONAL DEVELOPMENT		Training on Data Tools/Dashboards Faculty Development on Pedagogy, Technology, Course Redesign and Cultural Competency Training to Improve Academic Advising		
		Faculty Development on Redesigning Remedial and Gateway Courses	Advisor Training on Major Requirements	*Faculty and Advisor Training on Supporting Post-Grad Transition*

Note: Italicized text indicates emergent strategies—that is, strategies noted by only a few campuses (or one), or that appear to be in very early stages across the campuses that noted them.

* Indicates that Chancellor's Office recommended prioritizing the strategy in campus plans for GI2025.

Program/Curricular Planning. Most campuses note efforts to increase course availability, with a focus on bottleneck or high-demand courses, as encouraged by the Chancellor's Office with respect to GI2025 plans. Many campuses note efforts to better utilize summer sessions, evenings, and weekends to expand course offerings, as well as online and hybrid course formats. Several campuses are working to improve program roadmaps, catalogs, and other sources of guidance for students about program requirements. Many note changes (or campus discussion around changes) to their remedial education programs, often involving development of two-semester "stretch" versions of their freshman composition course. There are numerous references to redesigning gateway courses and courses with high failure rates in the documents, though the redesign efforts are often in the planning stage.

Academic Engagement. The Chancellor's Office has supported "high impact practices" to increase student engagement,[18] as well as other programs to ensure that the state's very diverse student populations feel welcome on CSU campuses; the campus plans and documents reflect these areas of emphasis. Expanding first-year experience programs is a common strategy, with some campuses focusing on making these mandatory for all freshmen while others are aiming to develop a similar experience for community college transfer students. Increasing the number of full-time, tenure-track faculty is another common goal related to increasing student engagement and success, particularly given the growth in the number of part-time faculty across the system that occurred with the budget cuts imposed during the Great Recession. This is a particular focus at **CSU Channel Islands**, which had the lowest tenure density in the system as of 2013-14 at 38 percent, a figure the campus is aiming to increase to 62 percent to facilitate student access to high impact practices. Some institutions are targeting engagement efforts to underrepresented student populations, including the STEM (Students Transitioning to Engaged and Motivated) Success program at **CSU Stanislaus**, which targets activities and supports to incoming freshmen and transfer students in math and science disciplines.

CSU CHANCELLOR'S OFFICE GUIDANCE ON GI2025 PLANS

In a memo to campuses, the Chancellor's Office encouraged them to include plans to strengthen processes for at least five or six of the following areas:[17]

- Enrollment management (e.g., course availability based on students' degree plans)
- Advising (e.g., more proactive and intrusive, predictive analytics)
- Data capabilities to use student progress data for specific populations
- Planning and communicating to foster a culture of student success
- The first year for freshmen and transfers
- General support services (e.g., supplemental instruction, tutoring)
- Targeted support services for specific student populations
- Benchmarking curriculum against appropriate peer curricula
- Success in low completion rate courses
- Digital learning
- Tenure track hiring
- Partnerships with K-12 and community colleges
- Remediation in math and English
- Physical spaces to support student success

Support Services. According to campus plans and other documents, most campuses are working to improve advising services (primarily using e-advising tools), making advising mandatory at particular points along the student pathway, and implementing more proactive advising for at-risk or struggling students. Some campuses note the need to increase the number of advisors in order to provide additional services, while others are developing or expanding peer mentoring programs or using more faculty advising. In addition, some campuses are reorganizing the structure of their advising services, often through setting up advising services within each college to serve students considering or admitted to majors in the college. **Cal Maritime** is placing professional advisors in each of its schools, aiming to have students stay with the same advisor throughout their four years. Other campuses have created advising teams or instituted centralized advising. **Sacramento State** is working to bring advising closer to students through just-in-time mobile services featuring roving advisors with mobile advising tablets and drop-in advising stations.

Professional Development. Most campuses in their planning documents identify efforts to provide faculty development related to innovations in pedagogy, the use of instructional technology, cultural competency, and/or course redesign. Many campuses also note efforts to train administrators, faculty, and staff on the use of data tools and dashboards. Another common approach is to provide training to advisors and faculty to improve academic advising. **Cal State LA** holds twice-yearly advising institutes and weekly workshops focused on advising skills, and hosts monthly advisor forums to share best practices in advising and to review new advising policies.

Structural and Systemic Efforts are Emerging on Some Campuses

In addition to the more common approaches summarized above, we identified other strategies that can best be described as emergent—that is, strategies that are undertaken by only a few CSU campuses (or just one), or that appear to be in the very early stages of development at the campuses that utilize them. One example is the use of predictive analytics. While the planning documents at many campuses point to efforts to use data to identify at-risk students, high-failure-rate courses, or other issues to be addressed, much of the current activity appears to involve acquiring the tools needed to perform such analyses and to make the results accessible.[19] Few campuses appear to have developed coordinated intervention strategies once at-risk students are identified, redesigned courses on a broad scale, or otherwise used such data analyses to change programs, policies, or processes. Similarly, many campuses note efforts to evaluate the effectiveness of their student success programs, but few discuss the details in a way that suggests progress. **Fresno State** is one exception, given its work with national research organizations to evaluate its implementation of the Integrated Planning and Advising for Student Success (IPASS) initiative, which involves the use of e-advising tools, early alert, and predictive analytics to identify optimal course-taking patterns.[20]

Changes to academic program structures, including program requirements or curriculum, also appear to be in the very early stages. For example, a number of campuses point to the development of "stretch courses" as a means of ensuring all students get college credit for their freshman composition coursework, but only a few campuses describe any effort to address the structure and curriculum for math remediation. The exceptions are **CSU Northridge** and **Sonoma State**, which note efforts to develop "stretch" options in math, and **CSU East Bay** and **San Jose State**, which continue to explore the use of Statway.[21] Few campuses highlighted efforts to develop co-requisite courses, which provide students with the option of taking a standard one-semester writing or math course with academic support. The Chancellor's Office recently issued an executive order directing the campuses to eliminate remedial math and English courses, in favor of co-requisite and "stretch" courses, beginning in fall 2018.[22]The order also eliminates the use of systemwide placement exams - the English Placement Test (EPT) and Entry Level Mathematics (ELM) test - and instructs campuses to use multiple measures to place students into appropriate English and math courses, including their high school grades. The order indicates that math courses should be appropriate to students' intended major,

which, under another recent policy change, will allow students not majoring in math or science disciplines to meet GE requirements with non-algebra-based math courses.[23] These actions by the Chancellor's Office will spark curricular reforms across the campuses that were not evident in the planning documents we reviewed.

In terms of significant efforts to reform the delivery of curricula, we found evidence of change at a few individual campuses rather than widespread changes across the system. **Cal Poly San Luis Obispo** is using block scheduling for all entering freshmen to ensure they are taking appropriate courses. All freshmen are assigned to a set schedule, based on their choice of major, for the fall quarter of their first year to ensure a good start toward completing major and general education requirements, with plans to expand the block scheduling through the first year. **CSU East Bay** plans to develop first-year "course packages" as part of a redesign of its first-year experience programs for freshmen and transfer students. We found little evidence of campuses taking steps toward re-structuring their curriculum into meta majors, although **Humboldt State** plans to adopt flexible course pathways along disciplinary clusters to make it easier for students to change majors without increasing time to degree.

Overall, our review of documents indicates that CSU campuses are actively working to develop and implement new efforts to improve student success and increase timely graduation. Their efforts appear to be informed by national research and initiatives, with many campuses using the kinds of programmatic innovations that have become common across higher education. Moreover, campuses appear to be engaging simultaneously in multiple strategies across institutional functional areas. At some campuses, the kinds of "transformational" or "systemic" changes to institutional structures, programs, or policies encouraged by initiatives like Collaborating for Change and the University Innovation Alliance are beginning to emerge (see *A More Comprehensive Approach at CSU Long Beach* on page 18).

Campuses are Recognizing the Need for Systemic Reform, But Face Challenges Making the Shift

To begin to understand the extent to which transformational or systemic change is occurring across the CSU and the cultural and other barriers to such a change, we conducted in-depth interviews with administrators and faculty at four CSU campuses. Our analysis of the interview transcripts revealed nine major themes, which we then mapped to the student success strategies uncovered across the entire CSU system, finding that the themes provide a broad context for understanding student success efforts across the CSU. The themes are summarized here primarily through the interviewees' words.

> **"The really important goal would be to pull together all of these activities and really have a roadmap…[an] intentional plan as opposed to this kind of scatterplot of activities."**

Shifting from a Focus on Individual Programs to a Strategy for Systemic Change

Several interviewees described a cultural shift from implementing specific programs targeted at student success to making systemic structural changes across the entire campus.

> "Supporting student success doesn't just mean waving a magic wand over here in a particular program or support group that's going to solve all retention problems. It means making fundamental changes to our curriculum."

> "We moved from looking at program and service effectiveness to looking at how do you change a culture. Once we developed that perspective, things moved very quickly for us. This is a change of culture. It's not a program effectiveness model."

Examples of CSU Campus Strategies

FINISH IN FOUR INITIATIVES

Several CSU campuses have implemented new programs that encourage students to finish in four years. These programs typically require students to complete 15 credits per semester (or 30 per year) and to maintain a specific grade point average in return for certain incentives. The **CSU Dominguez Hills** Toro Ambassadors Finish in Four Scholars Program, which began in fall 2016, provides students with priority registration and guaranteed course availability; individual tutoring for all courses; holistic/developmental advising for all four years; the opportunity to participate in campus leadership, research, and service-learning activities; and individualized mentorship and guidance from faculty members. In return, the institution requires a commitment from students to complete at least 30 units each academic year, take required courses when they are offered, meet with their advising team each semester, maintain a 2.5 cumulative and major grade point average (GPA), and participate in activities to develop leadership and employment skills. Some campuses are adding financial incentives for students who adhere to such programs. For example, **CSU Chico** is implementing plans to waive the graduation fee for students completing its Aim for Four program.

REDESIGNING CLASSES WITH HIGH FAILURE RATES

Many of the CSU campuses are using data to identify their high-failure-rate classes and considering ways to improve success rates in these courses, such as through supplemental instruction or course redesign. As one example, at **Humboldt State University**, faculty in the chemistry department, concerned about a 50 to 60 percent success rate in its introductory chemistry course, evaluated the curriculum over one semester. This resulted in a complete revision of the course (Chemistry 109).[24] The content of the course was restructured to be consistent with the recommendations of the American Chemical Society, but also to even out the rigor and amount of material covered in this course and its sequel. In addition, the department developed a freshman-only section of the class to address historically low success rates for lower-division students in these courses. Since the changes were implemented, the success rate has increased to 70 to 80 percent, with the number of successful freshmen in the introductory course more than doubling.

RETHINKING ADVISING STRUCTURES

Several CSU campuses are revising the structure of their advising services. As one example, **CSU Fullerton** has developed divisional/cross-departmental "student success teams" within each of its eight colleges. The teams are designed to provide a "flexible, dynamic, outcomes-oriented" approach to student advising.[25] Teams include associate deans, faculty and staff major advisors, retention specialists (helping freshmen and sophomores navigate their college transition and overcome academic struggles), graduation specialists (helping juniors and seniors plan for degree completion), assistant deans, career specialists, and partners in the Academic Advisement Center. The approach is designed to integrate academic, career, and personal development. **Cal Poly Pomona** is emulating Fullerton's model, establishing student success teams that include faculty, staff advisors, career services, and graduation/retention specialists.

Examples of CSU Campus Strategies (continued)

TARGETED EXPERIENCES TO INCREASE STUDENT ENGAGEMENT AND LEARNING

To ensure that students entering the CSU have a solid support community, many campuses group first-year students into cohorts and provide them with common coursework and other experiences. At **San Francisco State**, the Metro College Success Program extends this model to the first two years. Participating students enroll in two linked courses for three or four semesters, with shared themes across courses (community health, science for the public good, educational equity, or social justice). At the other end of the student pathway, some campuses are providing senior capstone courses or other culminating experiences. At **CSU Monterey Bay**, all students must complete a capstone requirement to synthesize their knowledge and skills and apply them to their future plans. Departments use different models for their capstone and they hold Capstone Festivals each term for graduating seniors to present their work. **San Diego State's** Aztec Mentor Program connects juniors and seniors to alumni and professional mentors to help prepare them for careers.

REEXAMINING GENERAL EDUCATION

Several campuses are making or considering changes to their general education (GE) requirements to increase student success. Some examples of the strategies include organizing the curriculum around specific themes, placing students into cohorts, adding required freshman seminars or first-year experiences, or incorporating more online courses. In fall 2016, **CSU Bakersfield** implemented a new general education program called Achieving Integration and Mastering Skills (AIMS), which continues to include the disciplinary breadth requirements in its previous GE program but adds several new dimensions to the curriculum. First, the campus identified three themes (quality of life, revolutionary ideas and innovations, and sustainability and justice) that are woven throughout both the lower- and upper-division GE coursework, as well as co-curricular and extracurricular activities. Faculty Interest Groups are organized around each of these themes in an effort to build and deepen relationships across the different schools. In addition, the new curriculum includes a focus on foundational skills (oral and written communication, critical thinking, and quantitative reasoning), with courses in each of these areas tied to the three themes. Finally, students will take three "guidepost" courses, including a freshman seminar, junior diversity course, and senior capstone course.

REALLOCATING FUNDING TO ADDRESS BOTTLENECK COURSES

Several institutions have initiated efforts to use data tools and analysis to determine which courses students are most likely to need each semester, and then to allocate resources in a manner that ensures those courses can be offered. As one example, **San Jose State** introduced the Induced Course Load Matrix model, which tries to maximize course availability by reallocating the distribution of full time equivalent students (FTES) across colleges based on analysis of historical FTES generated by majors in each college.[26] Colleges with higher-demand majors are then in a better position to offer the courses students need. Several other institutions are utilizing information from course planning software to identify the courses that students are planning to take the following semester, and then using this information to improve course scheduling to ensure that the courses offered match what students need to take.

Whereas student success programs might reside in student affairs, a systemic strategy touches on core campus processes, such as designing the curriculum, resourcing the curriculum, making sufficient enrollment seats available, and advising students about what courses to take to complete their degrees. Ultimately, this requires moving, as one interviewee put it, from a "scatterplot" of activities or programs to an intentional "roadmap" for student success.

Managing Resource Constraints with More Effective Allocation of Existing Resources

Interviewees described a culture change toward making data-informed decisions about where to direct resources to have the greatest impact.

> **"In the past, we've said, 'Wow, that sounds like a great program. Let's run it.' Then, we may not have collected the correct data or any data at all to assess whether it was effective in terms of student success."**

They also noted the difficulty in making the tough political decisions and the importance of doing so, given limited resources.

> "There's still a little bit of a disconnect between all of the things we want to do and what we can actually afford to do, and there are some hard decisions I think we haven't yet made as a campus."

They described a shift underway from reflexively seeking more resources toward rigorously undertaking a smarter allocation of existing resources. Such difficult decisions might include discontinuing or consolidating programs or activities, for example. This shift meant having a new type of campuswide conversation.

> "We're just gearing up to have hard budget conversations, because next year's budget is going to be tight… It's kind of amazing that this is a new conversation on campus – the idea of strategic budgeting."

A MORE COMPREHENSIVE APPROACH AT CSU LONG BEACH

CSU Long Beach is often highlighted as an institution that has taken a comprehensive approach to student success and has been able to demonstrate results for those efforts. The Highly Valued Degree Initiative (HVDI), inspired by a graduation rate study the institution conducted in 2005, was intended to maintain the quality of the university degree while increasing retention and completion rates for all students, including traditionally underrepresented students.[27] The initiative includes a broad set of strategies, including some common programmatic approaches (e.g., learning communities, advising, and tutoring programs) as well as some actions that are less commonly attached to student success, including changes to strategic planning, budget planning, and enrollment management processes. The campuswide effort sought to bring together the efforts of academic affairs, student affairs, and administration and finance to focus the institution around the student success goal. The campus now utilizes data dashboards to closely track the progress of students by gender, ethnicity, and academic preparation. To make clear its commitment to student success, the institution requests that candidates for tenure-track faculty positions submit a "student success statement" to demonstrate how they are prepared to teach diverse students. Another component of the initiative is the Long Beach Education Partnership with the local K-12 school district and community college, centered on an admission guarantee for local students who meet the minimum qualifications for admission to the CSU. The comprehensive approach has shown results, with six-year graduation rates increasing from 54 percent for the freshman cohort enrolling in 2005 to 69 percent for those enrolling in 2010, an increase substantially larger than that seen across the entire CSU system over that period. Gains were realized for all student subgroups, though gaps in student outcomes remain and the institution continues to work to close those gaps.

> "Allocating resources for curriculum based on enrollment demand is likely to be the most important and most effective of our student success initiatives, because it's the cheapest to implement. It doesn't take extra money. It just takes a redistribution of the resources to better match student need and student demand."

Both from our scan of campus plans and from our interviews, we found that many of these broader changes (involving redistribution of resources and strategic budgeting, for example) appeared to be emergent, and so it is too soon to assess their effectiveness. Nonetheless, some interviewees emphasized that this was the direction their campus was already moving, or needed to move.

Coordinating across Multiple Functions

Interviewees also described efforts to coordinate multiple campus functions across existing organizational silos.

> "We [a campus-wide workgroup] identified the need for a centralized information hub or a sort of 'university concierge' to respond to at-risk students. The Dean of Students' office ended up establishing that, and we ended up working together. The early warning system tool was being fed into the Dean of Students' office. Then they would refer to other entities on campus, and we would then take care of these students who fell into our purview."

> "This [student success] office was not designed to run all the student success efforts, but rather to have a place that knew about them all and to make sure that they were talking to each other. Like any other CSU campus, we're big and decentralized and bureaucratic and complicated and so I think it's made a huge difference to have that in place."

Several interviewees emphasized the importance of developing strategies to integrate student affairs and academic affairs in service of student success.

> "The first-year experience has been a collaboration between Student Affairs and Academic Affairs. Not to say that there aren't tensions that crop up occasionally. But we have a first-year program advisory group that's chaired by someone from Student Affairs and someone from Academic Affairs."

> **"We've developed mechanisms to integrate more fully the work of Student Affairs and Academic Affairs. We've been able to put college advisors in each academic college who are also doing the equity work to ensure that achievement gaps are closing."**

While some successful integration strategies are in place, figuring out how to manage the coordination of student success efforts is still a work in progress.

> "How do we coordinate a broad university addressed to success, [including] co-curricular and curricular efforts? I think it remains unclear exactly where the coordination of that happens."

Engaging Multiple Stakeholder Groups, Including Those Who Have Been Overlooked

Interviewees noted the importance of communicating broadly with campus stakeholders about student success strategies. They expressed these ideas both from the perspective of leadership recognizing the imperative to be transparent and open, and from the perspective of stakeholders who sometimes felt overlooked. Interviewees consistently articulated the important insight that the relational side of change requires as much attention as does the technical side.

> "As this campus grows, I have seen more of a tendency to skip over some people whose perspectives would be good to consider. Not in any gross or intentional manner. But when something comes down from the top, and we're under a tight time crunch to make things happen quickly, people aren't necessarily given the opportunity to think things through and to determine who else might be good to bring to the table."

> "One cannot underestimate the amount of dialogue that needs to occur, especially in academia. It's not enough to think out the problem, devise the solution, look at the data. Lots of time has to be devoted to legwork on communication. Different types of communication with different constituencies as well."

Interviewees indicated that messaging needs to be tailored to multiple stakeholder groups, including some that have not always been at the table.

> "Now we're creating norms, which is one of the few things that works in changing behaviors. We went right to the students and their families. I think we'll be doing much more work about bringing families to the model as opposed to just saying, okay, you're 18 so that means you can make all these decisions for yourself."

> "If you want to get beyond the faculty who volunteer for things, beyond the gods to the mere mortals who don't volunteer, you need to make it specific to them. If I'm going to train a student in growth mindset, I need to do it in the area in which they're struggling. If I'm going to do faculty development on growth mindset, I need to do it in the context of that faculty member's teaching."

Finally, some interviewees also described the importance of creating opportunities for deep campuswide conversations that are based on and that foster a culture of collaboration rather than a culture of blame.

> **"We realized that the faculty felt blamed and the advisors felt blamed. The focus on the achievement gap came across, at least sometimes and to some people, as finger wagging and that wasn't what we were trying to do. It has taken time to have the right kind of conversations, and we're still working on it so that we're actually talking — not about who did or didn't do what, but rather what we can do that will make a difference. Because that's what we all are hoping for — that the students in our classrooms get degrees and go out into the world and make a difference."**

Supporting Faculty Engagement

Across the board, interviewees recognized faculty leadership and engagement as crucial to improving student success. They shared a range of strategies to engage more faculty in campuswide student success efforts, for example through investing in faculty development or sharing data about student progress.

> "From the beginning, we have had a problem engaging faculty in a way that helps them see their role. If faculty are not successful in the classroom, then all of the other structures we build aren't going to work. That takes faculty development. I am a strong proponent that if we're not investing in faculty success, we're not investing in student success."

> "We've been asking our faculty to really work like field medics. They clean up the wounds, if you will, and set the bones and never know what happens. We have to connect faculty to better information. How does their student scaffold to the next class and what happened next?"

Interviewees described faculty leaders who were leading successful change efforts, especially in terms of curriculum. These champions appear to play a critical role in bringing their colleagues on board.

> "One of our faculty members has been working on a project that is about expanding our learning community model from the sciences to the humanities. She's been really active in her college, asking, 'What can we do here that's as great as what's happening with the sciences? We want to do it, too.' She's been really active as a leader in bringing folks on board with that conversation."

Interviewees also described situations in which faculty were resistant to change and identified some strategies for overcoming that resistance.

> "Friday was underutilized [for classes], so we were running out of classrooms. Eventually, after about a year of discussion, I got the faculty to vote *for* offering more classes on Fridays. The idea was that if we don't increase our classroom utilization, we will have no chance of approving a new building, which is something the university and faculty wanted. When it was made clear that using time better was a prerequisite for the new building, the faculty majority shifted to changing the time blocks."

> "When you put a bunch of administrators under a lot of pressure to get results and you have a structure like the university where the faculty have tenure, you have this kind of mismatch. The administrator may be under a lot of pressure, but an average faculty member doesn't feel the direct urgency. So it requires real leadership and care and listening to the faculty and talking to the faculty, if you're going to get them to be part of the solution."

Empowering Campus Stakeholders and Decision Makers through Data Access

According to interviewees, new technology tools are beginning to transform the way their campuses manage their institutions and support student success. Based on our scan of documents as well as our interviews, it appears that campuses are focusing on making data more transparent and available to campus stakeholders. This includes students who are deciding on a major, faculty who are being asked to teach courses at different times, and academic administrators who are allocating resources to the curriculum.

> "The research office has developed these gorgeous new data dashboards, and we are individually working with chairs to make them comfortable with data if they're not already. We have completely revamped our assessment process this last year. We're making sure that we've got continuous improvement. I feel like we have opened up all the windows and shaken the rugs out. Actually, I think we just bought new rugs!"

> "We want to democratize the data. We want the students to have the data in a predictive way that literally says to them, 'if you take this course, here's your probability of getting into nursing.'"

> **"Now, we can go to a faculty member and say, 'You'll be teaching in classroom X at 3:00 in the afternoon.' If that person says, 'I'm sorry, I only do that at 1:00' or 'That's not convenient to my office,' we can show how the data are telling us that's the most optimal time and place for the class."**

At the same time, campuses are still figuring out how to best utilize the data that are available and how to build the structures that will enable them to act on the information.

> "A lot of data are available in the data warehouse, and there are lots of customized reports that have been created, but people have to be aware of those reports and they have to utilize those reports."

> "We're working with our assessment office now to create matrices of evaluations or assessments of our learning outcomes, so we can start to look at milestones and plateaus. We haven't done that. We haven't integrated the data about the learning experience with the journey of the student at all."

> "The next step is getting more early feedback from faculty — whether that's attendance data or assessments from faculty of students who are in need of support. And then there's also a question of what's the infrastructure for providing students with that support?"

Understanding that Multiple Roads Can Lead to Student Success

Interviewees emphasized that students come from a wide range of demographic groups and circumstances, and that strategies to improve student success need to be customized to meet the diverse needs of students. This includes addressing financial, socioemotional, and academic issues.

> "While we're working on large-scale reform for the university, it's really important that we keep a close eye on closing and eliminating the achievement gap — for underserved and underrepresented students and for low-income students who are Pell eligible."

> "We look at why students leave this institution and others. It's not just for academic reasons. It's for financial and health issues and other reasons."

Students' journeys to and through college are various, and roadmaps must be flexible enough to accommodate their differences, while still providing a clear path to the destination. Some campuses are engaged in research to ensure that solutions based on the research fit the needs of their specific student populations and take into account local context.

> "Initially, there was a push to say, 'Oh, everyone should be taking 15 units, because that's taxpayers' money.' But then many faculty and some departments objected. There are students who have to work 30 or more hours a week; there are students who have kids and have to care for them at home. That prompted us to stop and think about this issue more carefully. It's not one size fits all. So can we actually come up with a unit campaign that is tailored to the student?"

Promoting Visible, Stable Leadership

Many interviewees described the challenges that rapid leadership turnover presents for campuses seeking to develop systemic strategies to improve student success.

> "I've been in this job for three years altogether. I've had four different provosts in that time. So, there's just been a lot of change. Where is the center for student success going to be and what role does my area play in relationship to that conversation?"

> "We've had a tremendous turnover in terms of retirement, so we have all of these new people coming in. Some are still interim. I'm interim. Our president is new. With all of that turnover and new people in positions, there's bound to be a new approach."

In this environment of frequent turnover, interviewees also pointed to the importance of having existing leaders be visible and vocal in championing student success.

> "Things changed when [the interim provost] came, because she spoke her mind. But I also feel like she was saying things everyone knew needed to be said. I think that sort of cracked things open so that people were more willing to think about change."

> "In order for a global student success effort to work on the campus, you need leadership. I think having the leadership that resides on the president's cabinet allows it to be more of a university effort that informs practices across divisions and across the university."

Leadership could take many forms and could derive from a variety of roles, whether from a president, a chief academic officer, or a dedicated student success officer. What is important, according to interviewees, is that a senior leader with access to resources prioritize student success.

> "The same president has been here for the many years I've been here, and under that leadership [student success] has definitely been the culture. Working for students and helping our students to be successful—it definitely gets the president's attention."

> "The idea was to create one individual within the cabinet, one office, that could help look at university initiatives and move us to a very specific understanding of student success."

> "My office is a prominent office. For example, I'm in charge of the entire academic budget. The campus prioritizes student success by putting it in my corner. If it's in my corner, we know it's going to receive the funding necessary for student success efforts to be done right."

Leveraging Learning from the Field and across the System

Interviewees were eager to learn from successful efforts at peer institutions. In particular, they sought opportunities for peer exchange to leverage learning across the system.

> "I'll tell you one thing that has happened more than once for me when I went to a lot of these systemwide meetings. I might see a hole in one of our services and realize that we're not quite getting it right. But then hearing these other campuses talk about their problems and how they solved them, or describe their programs in general – many times I have found the missing pieces I was looking for in those interactions and those networks."

> **"When I first started, I was just teaching my classes, and I wasn't really thinking about the institution itself or the way it fit into the system. But the more I've gotten involved in thinking about the campus and then how the campus relates to the other campuses, I'm just constantly amazed that we don't leverage the system as much as I think we could."**

One interviewee noted the iterative nature of change and the importance of opportunities to engage and interact systemwide in order to improve strategies at the campus level.

> "I think that as you implement new practices, you explore what's working. You retool and you make improvements. I think that it is a systemwide effort. Many areas have their systemwide meetings, and they're able to learn from one another about what's working and what's not working so well. I think a strength of the Graduation Initiative has been the meetings and symposia to explore what are the best practices that are working on a variety of different campuses."

Interviewees also said they would like the systemwide leadership to consult with and learn from the campuses more often when designing policies and initiatives in order to ensure that the new initiatives are effective and appropriate at the local level.

> "It's not always the right thing for the systemwide office to sit down and decide, 'Okay, maybe now this is what's needed on the campus.' Sometimes it's on point, sometimes it's not. In some areas, we're way ahead of the Chancellor's Office — our campus is. So I think that measuring the right things, finding out what is being done on the ground, what are the best practices that are working, what are the ideas that seem to be the right ideas, and disseminating these is the right thing to do."

Conclusions and Implications: Creating a Roadmap for Student Success

Our review of documents across the 23 campuses and our interviews with a subset of those campuses indicates that CSU campuses have a robust set of multi-pronged strategies focused on improving student success and outcomes. Although many of their efforts are oriented toward improving particular programs and services, the strategies at many campuses encompass all six categories of institutional action, and some plans address all four stages of the student pathway described in our framework. If the ongoing efforts are integrated cohesively and if the more ambitious changes currently in the planning stages gain traction across campus functions, then the strategies have the potential to add up to a systemic approach that is greater than the sum of its parts.

In line with these findings from our document scan, our interviews suggest that there is a recognition of the need for more structural and cultural change, which itself is an encouraging sign. The people with whom we spoke were also clear that significant barriers remain in supporting success among increasingly diverse student populations, including institutional inertia, organizational silos, leadership churn, resource constraints, and limited capacity to analyze and use data for improvement. Despite these kinds of hurdles, experiences at some public universities nationally are showing that iterative change, done in a purposeful way, can lead to significant improvements for students over time.[28] Many interviewees discussed the need for such an approach and described how their campuses are making early efforts toward more purposeful, systemic reforms. Efforts to spread such approaches across the system could yield continued improvements in student outcomes in the CSU.

> **As the campuses seek to achieve their ambitious goals for GI2025, they need to create organizational coherence that places student success—student learning, engagement, progression, and completion—at the center of all functions.**

As we consider the need to shift from a focus on programs to the development of strategies for systemic change, our analysis points to three important dimensions of the institution that likely need to function together effectively for the campuses and the CSU system to reach the levels of student success identified in GI2025. Many campuses appear to be making strides in each of these areas.

Resource Management and Planning. First, institutional leaders are tackling resource management and planning differently by making smarter decisions about the allocation of resources based on rigorous data analysis. This might entail using data to project student enrollment demand to ensure adequate capacity in courses and majors; assessing the effectiveness of programs that support student success and directing resources towards those that achieve results; reorganizing administrative or advising structures to create synergies and efficiencies; and improving classroom utilization by changing how courses are scheduled. Such efforts to reallocate resources and change administrative structures and processes require strong leadership and open, transparent communication with faculty and staff across departments, all of whom are critical allies in this process, which reaches the core of the academic mission.

Programmatic and Curricular Design. Second, institutional leaders are approaching programmatic and curricular design differently. This includes data-focused efforts to identify curricular roadblocks that impede student progress, such as placement processes that funnel students who could succeed in college-level courses with appropriate support to remediation; lengthy remedial course sequences; or high failure rates in key gateway courses. It also includes support for faculty to redesign courses and course pathways to support success. Such efforts may involve rethinking traditional pathways to college through partnerships that tighten the articulation of program pathways with K-12 and community colleges; rethinking traditional departmental silos by creating meta-majors; rethinking traditional academic calendars by using summer or intersessions; and rethinking traditional instruction modalities by using supplemental instruction, co-requisites, and online learning, to name a few examples. All of these efforts require trusted partnerships with the broader community, strong faculty leadership, institutional support for faculty development and curriculum redesign efforts, and tight, effective coordination between academic affairs and student affairs to ensure that co-curricular support for students' overall well-being is fully integrated.

Guidance on Navigating the Student Path. Third, institutional leaders are providing guidance on navigating the student path differently, by collaborating with K-12 and community college partners to improve college readiness; by giving faculty, staff, and students better advising tools for academic planning once they are in college; and by providing guidance to students that address their needs holistically, including academic, health, and financial wellbeing. Better data tools and systems are necessary, but interviewees also discussed the need for improved organizational structures to leverage advising resources and support coordination of efforts across organizational silos; professional training for staff advisors and faculty in using new advising tools; and better communication with students and their families and communities about academic expectations. In addition, interviewees discussed the need to be more intentional in helping students transition successfully to life beyond college, including graduate education and careers.

Institutions function best when these three dimensions—resource management and planning, programmatic and curricular design, and guidance on navigating the student path—are aligned and mutually supportive. Yet responsibilities for these areas are typically assigned to different campus divisions, and they typically have insufficient structural supports and incentives to coordinate and align their work. The findings from this scan of student success efforts across the CSU system demonstrate that many campuses are recognizing the need for tighter articulation of functions that have traditionally been separated by custom, by practice, and by organizational charts, and they are taking some steps in that direction. This report is intended to support those kinds of efforts across the CSU—efforts to implement systemic reforms to core campus processes to maximize the impact on student outcomes. As the campuses seek to achieve their ambitious goals for GI2025, they need to create organizational coherence that places student success—student learning, engagement, progression, and completion—at the center of all functions.

Appendix A: Research Methods

Review of Literature and Development of Framework. We reviewed a number of sources pertaining to evidence-based student success strategies at broad-access universities across the country (see Appendix B). We synthesized our findings about the types of efforts underway into a framework that maps six broad categories of institutional actions along four developmental stages of the student pathway through college (see this report's technical appendix, *Student Success Framework: A Tool to Characterize Strategies at Broad-access Universities*). Within the framework, we characterized common strategies in the form of questions to guide our review of efforts in the CSU. Campuses may find the questions in the full framework helpful in framing discussions around their student success planning efforts.

Document Review and Analysis. We collected key documents from each of the 23 CSU campuses, with a particular focus on campuswide strategic documents relevant to student success, including the Draft Student Success Plans submitted by each CSU campus as part of the CSU Graduation Initiative 2025,[29] campus strategic plans, accreditation documents, and other campuswide planning documents to identify the kinds of efforts planned or underway at each campus. We then mapped these efforts against the framework to explore how CSU campuses are approaching student success in the context of strategies uncovered in the national review.

Interviews. We selected four CSU campuses with diverse characteristics by enrollment size, geographic location, and baseline and target graduation rates, for a deeper dive into the context for these efforts. We offered anonymity to participating campuses and individuals in order to encourage candid discussions, so we do not identify the participating campuses in this report. During the Spring 2017 semester, we conducted a total of 12 in-depth interviews with three administrators or faculty members with responsibility for student success at each of the four campuses. These interviews explored the institutional context of student success efforts, including the interviewees' perspectives about how such efforts are structured on the campuses; how and why efforts have evolved over time; the major challenges campuses face in seeking to increase student success and meet system goals; and the kinds of support needed to make progress. Coding and analysis of these interviews generated a set of nine themes that we then cross-walked against the student success strategies uncovered across the CSU system. This exploratory analysis suggested that the themes provided a broad context for understanding student success efforts across the CSU system.

Limitations. There are several limitations to our approach. First, we relied on a high-level review of campus documents with a focus on broad efforts rather than targeted programs, so we may not have captured every campus program or effort related to improving student success. Second, our findings reflect what campus leaders chose to highlight in planning documents, and by their nature the documents were forward-looking and aspirational. It was sometimes difficult to distinguish between activities that were still in planning and those that were already implemented. It was also difficult to determine how extensive and developed the efforts were. As a result, our findings reflect the overall direction in which campuses are heading rather than the accomplishments they had already achieved. Third, the policy and budget environments that will influence the work going on across the campuses are constantly changing, so campus plans are likely to evolve. They have likely already evolved to some extent since our review, given that the GI2025 plans available at the time of our review were in draft form, and the campuses have now submitted final plans to the Chancellor's Office. Finally, our methods did not include collecting data on the success of specific initiatives or strategies within the CSU system, as such data are not readily available. Therefore, our conclusions are limited in terms of providing direct evidence of impact on student success.

Appendix B: Literature and Other Resources

Association of Public & Land Grant Universities (n.d.). *Collaborating for change.* Retrieved from http://www.aplu.org/projects-and-initiatives/urban-initiatives/collaborating-for-change/index.html.

Bridges, B. K., Kuh, G. D., Kinzie, J., & Hayek, J. C. (2007). *Piecing together the student success puzzle: Research propositions and recommendations.* San Francisco: Jossey-Bass.

Complete College America (n.d.). *The game changers: Systemic reforms. Significant results. More college graduates.* Retrieved from http://completecollege.org.

Educause Center for Analysis and Research (2013, August 30). *Integrated Planning and Advising Services (IPAS) research.* Retrieved from https://library.educause.edu/resources/2013/8/integrated-planning-and-advising-services-ipas-research.

Fletcher, J., Grant, M., Ramos, M., & Karp, M. M. (2016). *Integrated Planning and Advising for Student Success (iPASS): State of the literature.* New York: Community College Research Center, Teachers College, Columbia University.

Kurzweil, M. & Wu, D. (2015). *Building a pathway to student success at Georgia State University.* New York: Ithaca S+R. Retrieved from http://www.sr.ithaka.org/publications/building-a-pathway-to-student-success-at-georgia-state-university.

Kirst, M. W. & Stevens, M. L. (2015). *Remaking college: The changing ecology of higher education.* Stanford: Stanford University Press.

Kuh, G. D. (2008). *High impact practices: What they are, who has access to them, and why they matter.* Washington, DC: Association of State Colleges & Universities.

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2010). *Student success in college: Creating conditions that matter.* San Francisco: Jossey-Bass.

McNair, T. B., Albertine, S., Cooper, M. A., McDonald, N., & Major, T. (2016). *Becoming a student-ready college: New culture of leadership for student success.* San Francisco: Jossey-Bass.

National Association of System Heads (n.d.). *Taking student success to scale.* Retrieved from http://ts3.nashonline.org.

National Center for Postsecondary Improvement (n.d.). *Reform and innovation in higher education: A literature review.* Retrieved from https://web.stanford.edu/group/ncpi/unspecified/student_assess_toolkit/pdf/reforminnov_litreview.pdf.

University Innovation Alliance (n.d.). Retrieved from http://www.theuia.org/#home.

Venite, E. (2016, October 24). *The evolution of student success.* Washington, DC: Education Advisory Board. Retrieved from https://www.eab.com/technology/student-success-collaborative/members/infographics/the-evolution-of-student-success.

Yeado, J., Hycock, K., Johnstone, R., & Chaplot, P. (2014). *Learning from high-performing and fast-gaining institutions: Top 10 analyses to provoke discussion and action on college completion.* Washington, DC: The Education Trust.

Endnotes

1 The CSU Student Success Network, established in 2016, brings together faculty, staff, and administrators from throughout the CSU system to connect and improve on progress for students. The Network is facilitated by EdInsights. For more information, see the Network website at http://csunetwork.edinsightscenter.org.

2 Graduation rate information is available on the website of the California State University Chancellor's Office Analytic Studies Division. See the California State University Graduation Rates Consortium for Student Retention Data Exchange at http://asd.calstate.edu/csrde/index.shtm.

3 For a more in-depth discussion of CSU graduation rates and the impact of the Graduation Initiative, see Jackson, J. & Cook, K. (2016). *Improving college graduation rates: A closer look at California State University.* San Francisco: Public Policy Institute of California.

4 See the preliminary draft report in response to Assembly Bill 1602, titled California State University Graduation Initiative 2025: CSU System and Campus Completion Goals and Plans, p. 3. Retrieved from https://www.calstate.edu/bot/agendas/sep16/ED-POL-2-ADDENDUM-GI-2025.pdf.

5 Bridges, B. K., Kuh, G. D., Kinzie, J., & Hayek, J. C. (2007). *Piecing together the student success puzzle: Research propositions and recommendations*. San Francisco: Jossey-Bass.

6 Bailey, T. (2017, May/June). Community colleges and student success: Models for comprehensive reform. *EDUCAUSE Review*, *52*(3), 33-42.

7 Recent investments by the state and by private foundations are aiming to establish guided pathways across California's community colleges. For information, see https://www.caguidedpathways.org.

8 For more information about Collaborating for Change, see http://www.aplu.org/projects-and-initiatives/urban-initiatives/collaborating-for-change/index.html.

9 University Innovation Alliance, *Vision and Prospectus*, p. 4. Retrieved from http://www.theuia.org/sites/default/files/UIA-Vision-Prospectus.pdf.

10 More information on the *15 to Finish* initiative at University of Hawaii is available at http://15tofinish.com.

11 Belfield, C., Jenkins, D., & Lahr, H. (2016). *Momentum: The academic and economic value of a 15-credit first-semester courseload for college students in Tennessee*. New York: Community College Research Center, Teachers College, Columbia University.

12 For a description of these and other "high impact practices," see the American Association of Colleges and Universities website at https://www.aacu.org/resources/high-impact-practices.

13 This summary is based on information in Kurzweil, M. & Wu, D. (2015). *Building a pathway to student success at Georgia State University*. New York: Ithaca S+R. Retrieved from http://www.sr.ithaka.org/publications/building-a-pathway-to-student-success-at-georgia-state-university.

14 The "flipped classroom" is a pedagogical model that reverses the typical lecture and homework elements of a course. Generally, students view video lectures at home before the class session, while in-class time is devoted to discussions, projects, and other more active and collaborative learning activities.

15 Some of Arizona State's activities are summarized in Parry, M. (2012, July 18). Big data on campus. *The New York Times*, retrieved from http://www.nytimes.com/2012/07/22/education/edlife/colleges-awakening-to-the-opportunities-of-data-mining.html?pagewanted=all.

16 Arizona State University (n.d.). Graduation rate trends – metropolitan campuses, *ASU Facts.* Retrieved from https://facts.asu.edu/Pages/Retention%20and%20Graduation/Graduation-Rates-FTF.aspx.

17 The memorandum summarizing instructions to the campuses for submitting their GI2025 plans can be viewed at http://www.csuchico.edu/fs/documents/academic_senate/2016-2017/9-15-16/4.ljb_to_presidents_grad_initiative2025_target_and_plan_memo072916.pdf.

18 More information on the Chancellor's Office efforts related to high-impact practices can be found at http://www.calstate.edu/highimpact.

19 Note that predictive analytics is still under development across all of higher education. See Biemiller, L. (2017, April 9). Big data for student success still limited to early adopters. *The Chronicle of Higher Education, 63*(32). Retrieved from http://www.chronicle.com/article/Big-Data-for-Student-Success/239713.

20 More information on the ongoing evaluation is available at http://www.mdrc.org/project/evaluating-impact-integrated-planning-and-advising-student-success-ipass#overview.

21 For information on Statway, see the website for Carnegie Math Pathways at http://carnegiemathpathways.org.

22 The California State University (2017, August 2). Assessment of academic preparation and placement in first-year general education written communications and mathematics/quantitative reasoning courses. Executive Order 1110. Retrieved from http://www.calstate.edu/eo/EO-1110.pdf.

23 Zinshteyn, M. (2017, August 1). Cal State drops intermediate algebra as requirement to take some college-level math courses. EdSource. Retrieved from https://edsource.org/2017/cal-state-drops-intermediate-algebra-requirement-allows-other-math-courses/585595.

24 This description is drawn from remarks from Professor Chris Harmon at Humboldt State's President's Spring Welcome 2017, retrieved from http://www2.humboldt.edu/president/node/176.

25 For more information, see Cruz, J. L. (2016, Winter). The power of intentionality: Cal State Fullerton's strategic approach to ensuring equity. *Diversity & Democracy*, *19*(1). Retrieved from https://www.aacu.org/diversitydemocracy/2016/winter/cruz. Also see California State University, Fullerton (n.d.). *The power of intentionality: Cal State Fullerton's student success teams and gap closing campaign pilots*. Retrieved from http://www.fullerton.edu/academicprograms/_resources/pdf/SST_at_Fullerton_A_Description.pdf.

26 For a description of San Jose State's approach, see the document produced by the institution's Provost's Office, *2014-15 FTES Distribution Explained*, at http://www.sjsu.edu/provost/budget/docs/ICLM_Explained_2014-15.pdf.

27 This description is drawn from Dowell, D. A. (2016). Highly valued degrees at California State University, Long Beach. *Change: The Magazine of Higher Learning, 48*(2), 24-31.

28 Bailey, T. R., Jaggars, S. S., & Jenkins, D. (2015). *Redesigning America's community colleges: A clearer path to student success*. Cambridge, MA: President and Fellows of Harvard College.

29 While campuses have now submitted their final plans to the Chancellor's Office, only the draft versions were available at the time of our research.

Student Success Network
in the California State University

Education Insights Center

CSU Student Success Network
Facilitated by the Education Insights Center (EdInsights)
California State University, Sacramento
6000 J Street
Sacramento, California 95819-6081
Email: studentsuccessnetwork@edinsightscenter.org
Follow: @EdInsightsCtr

SACRAMENTO STATE