

AGENDA

COMMITTEE ON EDUCATIONAL POLICY

Meeting: 3:15 p.m., Tuesday, May 18, 2021
Virtually via Teleconference

Wenda Fong, Chair
Romey Sabalius, Vice Chair
Silas H. Abrego
Larry L. Adamson
Diego Arambula
Jane W. Carney
Jack Clarke, Jr.
Douglas Faigin
Debra S. Farar
Maryana Khames
Christopher Steinhauser

Consent 1. Approval of Minutes of the Meeting of March 23, 2021, *Action*
Discussion 2. Post-Pandemic Academic Programs, *Information*

**MINUTES OF MEETING OF
COMMITTEE ON EDUCATIONAL POLICY**

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

March 23, 2021

Members Present

Wenda Fong, Chair
Romey Sabalius, Vice Chair
Silas H. Abrego
Larry L. Adamson
Diego Arambula
Jane W. Carney
Jack Clarke, Jr.
Douglas Faigin
Debra S. Farar
Maryana Khames
Christopher Steinhauser

Lillian Kimbell, Chair of the Board
Joseph I. Castro, Chancellor

Trustee Fong called the meeting to order.

Approval of Minutes

The minutes from January 26, 2021 were approved as submitted.

***PLEASE NOTE: Due to the Governor's proclamation of a State of Emergency resulting from the threat of COVID-19, and pursuant to the Governor's Executive Orders N-25-20 and N-29-20 issued on March 12, 2020 and March 17, 2020, respectively, all members of the Board of Trustees may participate in meetings remotely, either by telephonic or video conference means. Out of consideration for the health, safety and well-being of the members of the public and the Chancellor's Office staff, the March 23, 2021 meeting of the CSU Board of Trustees was conducted entirely virtually via Zoom teleconference.**

Academic Planning, Action

The presentation began with opening remarks regarding the annual academic planning report by executive vice chancellor of Academic and Student Affairs Fred E. Wood. Dr. Alison Wrynn, associate vice chancellor for Academic Programs, Innovation and Faculty Development, then provided a detailed overview of the CSU's academic planning process and updates to the CSU Academic Master Plan which includes degree programs that have been proposed, suspended admission or discontinued by the 23 campuses over the past year. She also provided an update on campus accreditation. Dr. Wrynn concluded the report with the proposed resolution presented for board action that would authorize CSU campuses to add degree program projections and begin the process of developing degree proposals.

Trustees posed questions regarding the discontinuation of existing degree programs, how departments and colleges are identified for proposed degree programs, the duration of the proposal approval process and how inter-departmental collaboration will be incorporated in the academic planning discussion.

Through a roll call vote, the committee recommended approval of the proposed resolution. (REP 03-21-01)

Academic Preparation Annual Report and Quantitative Reasoning Update, Information

The presentation began with opening remarks from executive vice chancellor of Academic and Student Affairs Fred E. Wood which affirmed the CSU's commitment to academic preparation for all students and the importance of eliminating equity gaps that limit students' academic and career options. Supporting the academic preparation of students from all backgrounds is also one of the six pillars of Graduation Initiative 2025, the CSU's flagship effort to increase graduation rates and eliminate equity gaps.

Dr. James Minor, assistant vice chancellor and senior strategist for Academic Success and Inclusive Excellence, then provided an overview of the implementation of Executive Order 1110, a policy that discontinued stand-alone, non-credit development education courses and transformed the CSU Early Start program to offer college credit. He proceeded to highlight the progress made by student cohorts in completing college-level Mathematics/Quantitative Reasoning or Written Communication/English general education courses in their first year of college since the enactment of Executive Order 1110. As part of the presentation, Dr. Minor also reviewed the conditions outlined in the board's January 2020 resolution regarding the proposed addition of one quantitative reasoning course for first year admission. Such a requirement would go into effect beginning in the fall of 2027 if certain criteria were met.

One condition of the 2020 board resolution includes employing a third party to conduct an independent evaluation of the potential impact of the proposed additional quantitative reasoning course on various student populations. As a result, the CSU has contracted with the nonprofit and nonpartisan firm MDRC to serve as the third-party evaluator and provide independent analysis of the implementation and potential impact of the proposed requirement on CSU applicants. Dr. Susan Sepanik, senior research associate with MDRC, provided a brief overview of the study and proposed timeline.

Following the MDRC overview, Dr. Marquita Grenot-Scheyer, assistant vice chancellor for Educator Preparation and Public School Programs, provided an update on progress made on the additional items articulated in the board resolution regarding teacher capacity and preparation, the creation of a steering committee and progress on outreach efforts to PK-12 partners and external stakeholders. Dr. Grenot-Scheyer then invited a panel of education leaders to speak to their work in preparing students for college via a brief video. The speakers included Dr. Mary Barlow, Kern County Superintendent of Schools and member of the CSU Steering Committee on Academic Preparation and Quantitative Reasoning; Dr. Dale Marsten, former San Bernardino City Unified School District Superintendent and founder and CEO of Tomorrow's Talent; and Deacon John Wilson, Education and Enrichment Program Director at West Los Angeles Church.

Trustees posed questions regarding attrition in teacher capacity as a result of a spike in teacher retirements following the pandemic, how the state can improve access to stem classes in K-12, implementing new spending to address deficiencies that contribute to equity gaps, how the CSU plans to promote collaboration across systems of education and what effort will be made to ensure the MDRC report is widely available to address concerns expressed in public comment regarding transparency.

Establishing a Biennial Symposium Recognizing African American History and Achievement and Promoting Anti-Racism Work, Action

The presentation began with Executive Vice Chancellor for Academic and Student Affairs Fred E. Wood's introduction of a proposed resolution for the establishment of a biennial symposium recognizing African American history and achievement as well as promoting and sustaining anti-racism work. Student trustee Maryana Khames explained the impetus for this proposal as a promise by the CSU to not only foster spaces for open dialogue but to create the opportunity to examine ways that the institutions can internally better serve Black students. Trustee Khames invited Christian Holt, president and chief executive officer, Associated Students, San Diego State University, to share his experience via video as a Black student in the CSU and the change he and members of his community hope to see. Dr. Luoluo Hong, associate vice chancellor for Student Affairs and Enrollment Management, concluded the presentation with an overview of the available data that illustrates the need for such a symposium and how it can further amplify and complement the substantial work already underway on campuses led by students, faculty and staff who are dedicated to advancing diversity, equity and inclusion in all its forms.

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Trustees shared comments in support of the resolution and thoughts about the profound impact passing this resolution will have on the CSU's diversity and equity work.

Through a roll call vote, the committee recommended approval of the proposed resolution. (REP 03-21-02)

COMMITTEE ON EDUCATIONAL POLICY

Post-Pandemic Academic Programs

Presentation By

Fred E. Wood
Executive Vice Chancellor
Academic and Student Affairs

Alison M. Wrynn
Associate Vice Chancellor
Academic Programs, Innovations and Faculty Development

Sheila Thomas
Assistant Vice Chancellor, Self-Support Strategy and Partnerships
Dean, Professional and Continuing Education (PaCE)

Overview

The COVID-19 pandemic has left an indelible mark on the world, the nation and the communities across the California State University (CSU) system. The global crisis would not only impact public health, it would have significant and profound implications for the economy and be a catalyst for a growing social movement responding to injustices rooted in systemic racism. Against this backdrop, the CSU was – and continues to be – guided by two North Stars: the safety and well-being of its students, faculty and staff and the ongoing commitment to student success embodied by Graduation Initiative 2025.

This informational item provides a overview of how the CSU responded to the pandemic by building on, or accelerating, innovations in its academic programs while remaining steadfast in its commitment to eliminating equity gaps. This item will be complemented by “deep dive” webinar regarding online education in June 2021. In addition, given the undeniable connection between student well-being and student academic success, a more in-depth overview of the post-pandemic CSU student experience will be presented at the July 2021 CSU Board of Trustees meeting.

In addition to highlights from the last 12 months, this item outlines the anticipated opportunities emerging from a post-pandemic world. It offers a preview of the factors that will have longstanding impact on the state of California and nationwide, including a evolving student population, growing economic needs and a dynamic social landscape.

Background

On March 19, 2020, California Governor Gavin Newsom issued a stay at home order in response to the growing public health threat of the SARS-CoV2 virus, which would become more commonly known as COVID-19. Just eight days prior, the World Health Organization had declared the coronavirus outbreak a global pandemic. Within a year, more than an estimated 575,000 Americans would die from COVID-19 – placing it as the third leading cause of death following heart disease and cancer. Worldwide, approximately 3.1 million have died thus far as a result of the virus and in total 151 million cases have been reported.

The pandemic initially impacted the CSU system in February 2020 as a result of students returning from study abroad placements. By March 10, as COVID-19 cases began to surge in the Bay Area, San José State University, San Francisco State University and CSU East Bay made the decision to move to virtual instruction. By the end of the following week, all CSU campuses would transition to remote learning and instruction. The campuses took an “academic pause” for a short period of time (typically two to four instructional days) to assist faculty in setting up their courses in the online and virtual environments and to ensure that students and faculty had adequate technology to continue with their academic courses. Two months later, Chancellor Timothy White announced that the majority of CSU courses would continue to be offered virtually in the fall. The CSU would remain primarily virtual through spring and summer 2021.

Pandemic as Catalyst

The onslaught of the pandemic amplified stresses that existed already for many struggling with economic and social hardships. Many individuals faced the heart-breaking loss of a loved one. Others faced the loss of employment or a business as the pandemic wreaked havoc in a variety of industries, many of which employ low-wage earners. At a macro level, the pandemic spotlighted disparities and inequities in public health and society as a whole, and communities responded with demands for reform. Within this context, the division of Academic and Student Affairs and its campus counterparts and colleagues in the Office of the Chancellor sought to build on best practices and existing innovations within their collective departments to provide transformational support to students and faculty alike. Key areas included: maintaining student support services and addressing safety and well-being; teaching and learning support in a virtual environment; workforce demands; and responding to the greater community’s needs.

Supporting a Learning Environment Virtually

With safety of students and faculty as a key directive, the CSU worked closely with the U.S. Department of Education, the office of the Governor of California, the regional accreditor WASC Senior College and University Commission (WSCUC) and a variety of discipline-based regulatory bodies to ensure that student progress to degree would continue in a virtual environment. As reported earlier this year, the spring 2020 graduating class of 128,925 was the largest in CSU history.

An effective transition to virtual instruction during the pandemic required robust support for faculty – many who may never have taught online or who required additional assistance in translating a traditional classroom experience, such as a lab work, to a virtual environment. As way of comparison, in fall 2019 there were 4,323 fully online sections in the CSU. By March 2020, approximately 74,000 sections had transitioned from face-to-face to remote modalities. Following the announcement of the CSU’s transition to virtual learning for fall 2020, working closely with campus partners, Academic and Student Affairs focused on providing professional development for faculty during the summer. Ultimately centers for teaching and learning and academic technology across the CSU provided 17,000 faculty, or 60 percent of the CSU’s total teaching force, with professional development programming. Faculty engaged in nearly a quarter million hours, with an average of 15 hours per participant.

In previous summers, a typical CSU center for teaching and learning might engage 25 to 40 faculty. In summer 2020, smaller campuses accommodated between 250 and 300 faculty members and larger campuses served 1,000 faculty members or more. What made the exponential increase in scale possible was the quick recruitment of faculty already familiar with teaching online to support their peers. Across our campuses, nearly 600 faculty members of all ranks, including lecturers, served as peer mentors in adapting to online instruction modalities.

California State University, Los Angeles’s Center for Effective Teaching and Learning (CETL) is one example of a faculty development center sharing its modules for use by centers across the system. This homegrown programming, developed in the CSU, illustrates the opportunity to both scale resources across the 23 campuses as well as study systemwide the effect of innovating teaching on learning. Last summer the CETL offered four modules that covered the fundamentals of teaching in a learning management system including leveraging multimedia and creating online activities. However, it also offered an innovative fourth module on teaching first-generation students. With the recognition that more than half of CSU students have a parent who does not have a bachelor’s degree, this module helps faculty to support students in acclimating to the college experience. At the conclusion of the course, faculty would be able to better distinguish challenges first-generation students face from their non-first-generation counterparts, define “hidden curriculum” and “impostor syndrome” and identify strategies to help support first-generation students in their classroom.

Other campuses, such as California State University, Dominguez Hills, offered workshops on promoting equity and diversity in an online environment. At California State University, Sacramento, faculty were also provided with additional tools to address student well-being in the time of COVID-19 and other economic and social unrest. The campus developed an online boot camp for nearly 800 faculty members during the summer of 2020 to reinforce faculty skills in empathy and compassion for students’ experiences during the pandemic while applying skills they have learned in virtual instruction. Faculty accumulated a combined 15,000 hours enhancing their abilities.

The Chancellor's Office supplemented campus-based faculty programming with two additional courses: "Introduction to Quality Online Learning and Teaching" and the Association of College and University Educators (ACUE) micro credential course "Promoting Active Learning Online." Between May and August, 1,700 faculty across the CSU took the introduction course which is offered by Academic Technology Services as part of the Quality Assurance Program. More than 500 faculty from 15 campuses enrolled in the ACUE's micro credential course last summer, with a completion rate of more than 90%. An additional 120 faculty enrolled in the same course in fall 2020.

As a result of the pivot to remote learning, the CSU would emerge in 2020 as the largest online university in the nation with 485,549 students participating primarily through virtual learning. Perhaps more telling was the anecdotal stories of faculty emerging from these professional development experiences with a renewed appreciation for teaching. As one faculty member at California State University, Bakersfield shared, "This is the summer that I fell in love with the craft of teaching again."

Meeting Workforce Needs

Anticipating a time when California would be able to safely re-open businesses and schools, California Governor Gavin Newsom and state leaders recognized the need to address not simply an economic recovery, but one that placed equity at its center. The Recovery with Equity Taskforce, a group of state and national experts in higher education and innovation, was convened in summer 2020. Sonoma State President Judy Sakaki and former Executive Vice Chancellor for Academic and Student Affairs Loren J. Blanchard were among those representing CSU perspectives on the taskforce and given the goal to "...recast today's challenges as an opportunity to help California's economy recover with a post-secondary ecosystem that is more equitable, more resilient, and more coordinated." In its subsequent February 2021 report "Recovery with Equity: A Roadmap for Higher Education After the Pandemic" the taskforce stated student success is "inextricably tied to the future of California." Two months after the report was published, an economic impact study compiled by consulting firm ICF International further captured the financial impact of the California State University on the state. It noted a return of nearly seven dollars for every dollar invested in the university by California. It also attributes to the CSU \$26.9 billion in industry activity throughout the state, \$10.3 billion in labor income, \$1.6 billion in state and local tax revenue and the creation of 209,400 jobs.

The pandemic likely will have lasting impact on future academic programming across higher education. As described in the annual agenda item on academic planning that was presented to the Board in March, CSU campuses address a number of criteria when developing and projecting for new academic programs. In addition to student demand, the need to meet future workforce demand is essential given the CSU's size and impact on the state and the nation. Marketplace factors including innovations in technology as well as a health care crisis can influence future programs. Projected degree programs include a growing number in nursing and public health already, as well as growth in the areas of data science and cybersecurity. San José State University will offer the first CSU degree in artificial intelligence in fall 2021.

It is often through Professional and Continuing Education (PaCE) that the CSU can incubate new ideas related to workforce development and respond nimbly to factors occurring in the field. It is believed that COVID-19 has prompted 40% of employers to shut down certain aspects of the business and 83% of employers to adjust their business practices (SHRM, 2020). For many, this means obtaining a certificate or credential so they can remain in or re-enter the workforce. So as the CSU faculty development centers were designing training for faculty, PaCE launched a suite of free online courses in support of first responders, health care workers, working adults and community members to respond to training and career needs. The COVID-19 Courses for Causes cover a wide range of topics, such as basic life support, Spanish for first responders, chemical dependency, human resources, nonprofit management, contract management and crisis leadership. Participants are provided a level of flexibility, with courses offered for a day or over the course of a year. More than 6,200 students were served, and 200 certificates were issued in its first term. More than 85 courses were offered in fall 2020 and currently 35 courses are offered during spring 2021. Overall, Courses for Causes served nearly 8,000 community members and is on track to reach 10,000 individuals by the end of spring 2021.

Another aspect of meeting workforce needs in the time of COVID-19 is addressing existing gaps that are growing due to the health crisis. Specifically, the pandemic has stressed even further California's teachers in a time when students are struggling with potential learning loss. The CSU is a national leader in creating well prepared diverse teachers for California's PK-12 school system. In fact, the CSU prepares more than 6,000 teachers every year who are helping to address California's teacher shortage. Since 2015, CSU has produced nearly 30,000 new teachers and 45% of all California teachers who earned their teaching credentials in 2019-20 were made in the CSU.

The pandemic has caused the CSU's educator preparation programs to explore more ways to prepare its students to be culturally responsive educators and change agents. For example, it is reexamining clinical placements to ensure they are supportive environments where teaching candidates, especially candidates of color, can learn and thrive. Recruiting and retaining teachers of color, also remains a priority as research shows the tangible impact teachers of color have upon students of color. The CSU has developed innovative approaches to recruit teachers of color, including supporting high school students in accessing dual-enrollment classes, helping paraprofessionals work towards their teaching certificate and collaborating with community college partners to recruit and prepare teachers.

Supporting Community in Addressing Systemic Racism

On May 25, 2020, the murder of George Floyd while under arrest in Minneapolis, Minnesota, led to worldwide protests against police brutality and racial injustice. Less than a month later, the Chiefs of Police of the university's 23 campus police departments issued a statement pledging their commitment to implement the recommendations of The President's Task Force on 21st Century Policing originally reported to President Barack Obama in May 2015. The recommendations featured six key pillars: building trust and legitimacy; policy and oversight; technology and social

media; officer wellness and safety; community policing and crime reduction; and training and education. Additionally campus leaders, administrators and students alike, continued to advance efforts to create spaces and centers to hold discussions and increase awareness on anti-racism work. More work is needed on this vital issue and information regarding these efforts will be provided in a future item regarding the CSU student experience.

Training and education are essential to addressing issues of racism in our culture. As the CSU seeks more ways to be responsive to the community it serves, one program that is leading the way is San Diego State University's Criminal Justice offerings. Designed to encourage thoughtful exploration of the ways that criminal justice systems provide "justice", or fail to do so, the San Diego State program studies criminal justice from a social justice perspective, allowing for the examination of policy issues as diverse as genocide, institutionalized racism, organized crime and environmental destruction, in addition to traditional criminal justice issues. The Bachelor of Science in Criminal Justice appeals to students who are interested in working in the fields of law, law enforcement, probation and parole, corrections or other social service agencies. Pending for fall 2021 is the addition of race relations as required coursework that will encompass how racial bias and discrimination impact the criminal justice system and policing. Students may meet the race relations requirement by taking an existing San Diego State Africana studies course, Blacks in the American Justice System. Criminal justice is San Diego State's second-most popular major, with nearly half of its graduates pursuing careers in criminal justice and in nonprofit organizations.

Planning for the Future

"It is critical to chart a course to a new day when all Californians can actively participate in helping our state thrive. What is the best route to that future? Preparing everyone with the training and education necessary to engage in the high-quality, in-demand jobs that will drive a recovering, vital economy." – Recovery with Equity Taskforce Report, February 2021

Higher education is facing unprecedented change, driven in part by the paradigm shift of a global pandemic as well as a changing student population. The CSU is no stranger to innovation – alumni have imagined the microprocessor, augmented reality, DNA analysis methodology and Bluetooth technology, to name a few. However, preparing for post-pandemic academic programs means beginning the conversation today so campuses are prepared to plan for both a transitional and post-pandemic university.

The Changing Face of Future Learners

When the high school Class of 2025 earn their high school diplomas, the nearly four million graduates will mark the peak of a student population that has grown consistently over the last 25 years. This graduating cohort is anticipated to mark the beginning of an impending national decline in high school graduates – and presumably prospective traditional college students – beginning at

the end of this decade if high school graduation rates remain the same. Attributed to the decline in birthrates during and after the Great Recession of 2008, the Western Interstate Commission on Higher Education (WICHE) predicts California will experience a 15% decrease from the size of the Class of 2019 (484,630 graduates) to the Class of 2037 (410,860 graduates). This decrease places the Golden State in line with the nationwide average. However, improving California high school graduation rates and greater shares of cohorts completing ‘a-g’ college preparatory courses may temper the impact of this projected decrease.

Number of U.S. High School Graduates



Source: Western Interstate Commission for Higher Education, 2020

With the potential decrease in traditional first-time first-year students, the CSU may experience a continued rise in enrollment interest and demand from adult learners. Many may be returning students, with some college credit but no degree or credential completed. According to California Competes, four million Californians have completed college courses but never finished a degree. Enrolling and supporting this growing population of learners will require additional adaptation and innovation across CSU campuses.

Student Success

Recruiting, retaining and graduating students through and beyond the COVID-19 health crisis is a priority that undergirds all of the discussions of the transition to a post-pandemic university. With any academic program planning, eliminating equity gaps will continue to inform discussion and development. Instruction needs to be more responsive to students, and the CSU will need to be even more focused on identifying how students learn best and what resources can be provided to help all students be successful.

Academic advisors play a major role in helping to support students. Best practices gleaned from successful remote advising can be shared and integrated across all campuses, creating broader and stronger networks to connect students to the institution and to their college experience. Similarly, focusing on a greater integration of career centers into the fabric of orientation and advising will help students meet their career goals more seamlessly.

Faculty Professional Development

The CSU's response to the sudden need to support thousands of faculty as they abruptly transitioned to be highly effective online teachers in 2020 will likely evolve over time given the likely demand for more online courses. In fact, a recent survey published in partnership with Cengage, the Online Learning Consortium, and the University Professional and Continuing Education Association, among others, found that faculty and student respondents' attitudes toward online learning had improved significantly over the last year. What's more, 73% of students somewhat or strongly agreed that they would like to take online courses in the future. This continued interest in continued opportunities for online learning aligns with initial student responses from CSU campus surveys. The system will consider ways in which to prioritize faculty development, and effectively and efficiently deliver training to faculty with differing levels of knowledge. Teaching – like everything – requires lifelong learning and continuous improvement. The experience of pivoting rapidly to remote teaching has opened CSU faculty to both the value of online teaching and the advantages of using digital tools to support engagement and check for understanding. The result has been a deeper appreciation and learning around more equitable learning for many. By designing courses for learning, faculty can be successful in creating the conditions (regardless of modality) where students learn best.

Prioritizing effective teaching and improvement in teaching as part of reward structures and institutional policies should also be considered in post-pandemic programs. Similarly, the system could consider prioritizing training on issues related to equity and access in teaching and learning (e.g., accessible technology, empathy- and trauma-informed pedagogies, teaching multicultural, diverse student populations, etc.). Faculty development, investments in academic technology and incentive structures are a high priority: we can address equity issues, support our faculty to be even more effective teachers and serve our students better through these investments.

Academic Planning

Preparing an increasingly diverse population for jobs critical to the state's economic recovery and future with credentials and degrees in areas such as STEM (science, technology, engineering, and math), health care and education will inform CSU academic programming. Addressing inequitable impacts by race and income is also another priority in which the CSU will need to focus, as students and alumni alike will expect the system to help contribute to resolving social issues that are at the heart of inequality in American society.

From a program delivery perspective, remote teaching and learning will have a lasting impact beyond 2020. CSU campuses have begun evaluating what is most successful to capitalize on those best practices. Campuses will likely continue to support the development of a mix of online, hybrid and "HyFlex" – those courses delivered on-site and simultaneously available off-site for those who do not want to come or cannot come to class. Recent educational literature suggests that universities that do not offer flexibility and options to students may lose enrollments and face retention challenges. These topics will be explored during the June 2020 "deep dive" webinar.

The CSU will also continue to explore how best to increase student access with more pathways to degrees. The transfer student population will likely continue to grow, and the Associate Degree for Transfer may be primed for additional enhancements to meet the demand. Dual enrollment, providing high school students the opportunity to earn early college credit, can also help expand access to the CSU by giving learners not only credit toward a post-secondary degree but instilling confidence in their ability to be successful in college. Credit for prior learning, already expanding before the pandemic, is positioned to grow as more adult learners seek greater flexibility as well as acknowledgment of past accomplishments such as military service.

And in a post-pandemic world, there is an opportunity to examine campus academic portfolios, creating more streamlined approaches to a degree. Traditionally, the timeline to curricular approval for new programs remains long and the process cumbersome. The system has responded by expediting curricular review and approval; however, the campus-level changes and new proposals still take time. If the CSU is to better position itself to be responsive to changing workforce needs and student interests, more expedient curricular approval pathways may be needed. Similarly, there may need to be consideration given to where programs already exist before new programs are added – particularly in light of the rise of online and hybrid offerings.

Additionally, there is an urgency to focus on market-driven programs as a result of the changing nature of the post-pandemic student population. Fields that likely will increase interest in the pandemic and post-pandemic world include: allied health, especially public health, mental health disciplines (including psychology and counseling), and data science related to the health professions and the social inequities of health.

A Case Study: Health Care and the CSU

California's health care workforce is an area that will expand as the state's population continues to grow and age. Pre-pandemic, one out of eight jobs in the state were in health care. The sector itself is expected to increase by 79% within the next 20 years. As there is a significant shortage of health care workers, there is an increased need for health care professionals that are also representative of the increasingly diverse state population. And with the dramatic changes facing the current health environment, these figures are expected to only increase. With nearly 400 health care profession-related degree programs and concentrations and a diverse student body, the CSU is a major contributor to the health care workforce in California. The CSU is also responding dynamically to the evolving healthcare industry demand. Many of the university-educated healthcare professions that are in most demand in the state are already offered at many of our campuses.

To develop and design relevant health care programs, some of the strategies the CSU employs include conducting workforce intelligence, investing in pipeline development, providing relevant curriculum and advocating for workforce policies.

The CSU and its graduates represent a large number of health care professionals within the state, in part due to the variety of academic programming options that are offered throughout the system. As a whole, the CSU continues to adapt to emerging state and national needs with the addition of three stand-alone doctoral programs in the past 10 years and the implementation of mental and social wellness academic programming.

Innovative partnerships, such as one developed with the California Community Colleges in nursing, continue to be developed to address both short and long-term industry demands. Since the fall, the CSU has responded to workforce needs by participating in several initiatives such as: the expansion of concurrent nursing enrollment programs with the California Community Colleges, exploration of health care apprenticeships, implementation of a systemwide medical school pipeline, development of a public health workforce initiative and participation in vaccination clinics.

With many health care systems actively seeking qualified BSN nurses, the pipeline of ADN to BSN nurses is a challenging bottleneck in producing qualified professionals. The average percentage of practicing RNs who transition to become BSNs is approximately 59%, with the average time to completion in eight years. This, along with other factors, hinders a seamless progression of students seeking advancements and meeting workforce demands. As a result, the CSU actively collaborates with California Community Colleges to work collectively in developing a curriculum that allows nursing students to earn their BSN in an efficient and timely means. To achieve these objectives, students are concurrently admitted into both programs while curriculum at each campus is streamlined. Additionally, financial aid is coordinated at the CSU campus. As a result, enrolled students can graduate in four years with a BSN. The first cohorts who started in fall 2019 in a partnership between California State University, Fullerton and Riverside City College are slated to graduate this June and December. Additional models are in development with California State University, San Bernardino and San José State University. Another collaboration is pending with the Los Angeles Regional Nursing Curriculum Consortium and their colleges and four CSU campuses: Dominguez Hills, Long Beach, Los Angeles and Northridge.

Another avenue taken to meet the health care workforce needs is the establishment of baccalaureate apprenticeships. The CSU has engaged with the Department of Labor and the Department of Apprenticeship Standards to form a first-of-its-kind collaborative to establishing these kinds of apprenticeships. This collaboration has led to the development of the state's first clinical laboratory scientist apprenticeship with San José State University among others.

As a continuous goal, many campuses throughout the system have had success establishing linkage agreements to medical schools throughout the nation, allowing CSU's diverse student population to be more represented in the health care field. From a systemwide level, the CSU also has engaged with the California Medicine Scholars initiative with the aim to create a community college to CSU to medicine pathway. Additionally, the system has recently created a systemwide pathway to medical school with Keck Graduate Institute that will provide scholarships to students pursuing

their Master of Science in Community Medicine degree. When students complete this program, they will be sent automatically to the interview stage for medical schools with linkage agreements with the Keck Graduate Institute. All of these efforts support the system's overall objective to ensure equity, while students have a seamless transition into medical school where they will reflect the state's diverse population.

The CSU also has developed a relationship with the California Department of Public Health (CDPH) through its Laboratory Field Services Department as a result of student participation in COVID-19 testing. From this activity has evolved an industry-academia relationship with both the CSU and CDPH and an understanding of the importance in partnering to meet public health workforce needs. Through this partnership, CSU students now have a systemwide opportunity to apply for a paid internship through the CDPH. Additionally, beginning in fall 2021, both students and faculty can receive professional development through the CDPH to better address public health workforce and industry needs. The CSU and CDPH are working on a proposal for state-funded support for workforce, education and training for public health that will incorporate industry alignment along with research opportunities for students and faculty.

In supporting the system's mission of public service, the CSU also has participated in hosting vaccination clinics statewide to help end the pandemic. These efforts also complement the CSU's planned vaccination policy for fall 2021. As of May 2021, 14 of the 23 California State University campuses across the state are serving as COVID-19 vaccine distribution sites, and more are expected to join in the near future.

Whether in partnership with county health agencies, third-party health vendors or the federal government, the CSU is committed to protecting the health and well-being of its students, staff and the communities in which campuses serve. With many campuses located in regions of high need, the CSU has committed itself to provide these critical services with many faculty and health profession students volunteering as staff for these vaccination events. In addition, these sites have allowed the unique opportunity for many academic programs to provide students clinical credit as a way to ensure students are meeting their learning outcomes with their participation.

Professional and Continuing Education

Any envisioning of the future of academic programming must include a broadening of focus to allow for both a diversity in students – both degree seekers and non-degree seekers – and in types of offerings. The shifts in the workforce, impacted by the pandemic, changes in demographics and innovations in the marketplace, invite the CSU to be more nimble, creative and responsive. One area in which this is taking place already is CSU's Professional and Continuing Education (PaCE). Considered by some as the system's "innovation and entrepreneurial" unit, PaCE conducts market research to identify ways the CSU can help displaced workers upskill, reskill and reengage with the workforce. In addition, it identifies ways employers can develop the talent that will drive the

state's recovery and diversify the workforce at all levels. The Commission on the Extended University, a systemwide advisory group to the chancellor, has identified strategic priorities for PaCE in responding to the current trends and preparing for the future.

Short-Term Courses, Modules and Programs: PaCE has shifted its emphasis to develop online and blended non-degree and degree courses and programs, focusing on short-term learning opportunities (e.g., programs ranging from a few weeks to less than a year). Deliverables include certificates and stackable modules in partnership with employers and workforce partners.

Professional and Program Development: This program maximizes shared resources, information and supports professional development opportunities for faculty teaching online courses who are seeking external funding for program development and employer engagement. PaCE encouraged and incentivized program development using data-driven and evidenced-based models and metrics to address local, regional and statewide workforce needs in partnership with employers.

Centers of Excellence and High-Quality Shared Services: PaCE encouraged the development of virtual centers of excellence, expanding and leveraging shared services models to include master enabling and consortia agreements. This includes creating virtual centers of excellence regionally by industry sector. Also, PaCE identified shared services agreements in support of local, regional and statewide shared services efforts, and eliminated operational practices and processes that perpetuated duplication of effort and inefficiencies, increased costs or decreased the quality of services to students.

Essential Industry Employer Partnerships: PaCE has partnered with essential California industry sectors including the life sciences and fire service who have urgent and emerging workforce needs. These industry sectors are seeking our assistance in training their incumbent and future statewide workforce. While each industry has unique needs, the synergies that emerged from multiple conversations solidified the basic premise that continuing education is the key to success. Campuses are aligning their interests and resources with one or more of the industry sectors, and PaCE is making good progress with industry sector partners.

Degree Completion Initiative: Twenty-eight California institutions of higher education have been participating in *Degrees When Due*, a national project led by the Institute for Higher Education Policy (IHEP), primarily funded by the Lumina Foundation and coordinated through California State University, Sacramento. The multi-year project is an effort to help institutions look at their own data and identify ways to move students who started, but dropped out or stopped out, through to completion of a degree at the associate or baccalaureate degree level. Early results show primary solutions are degree reclamation, adult re-engagement and reverse transfer. The pandemic has impacted timelines and resources for the work in twenty-three states and this promising program has the potential to eventually serve as a model for the entire CSU system.

Credit for Prior Learning: As the CSU finalizes revisions to the Credit for Prior Learning policy (formerly known as Executive Order 1036), PaCE is engaging with the Council on Adult and Experiential Learning (CAEL) as a partner in awareness raising, professional development training in Prior Learning Assessment (PLA) and identifying best practices for campus implementation. According to a recent CAEL/WICHE national survey of 72 institutions, students who utilize PLA tend to persist in their educational studies, and can, on average, gain a semester of study.

Conclusion

Through a steadfast commitment to student success and fostering recovery that is equitable to all students, the CSU is positioned to emerge more resilient and innovative in envisioning the future that lies ahead. The experiences of the pandemic, economic downturn and racial and social justice movements have highlighted and accelerated opportunities for innovation and responsive academic programs in the CSU. The importance of ongoing investment in faculty development, academic technology and student services that contribute to student success and well-being is essential to ensure the system can build on best practices and innovations forged during the pandemic and continue to make progress in eliminating equity gaps. This overview of post-pandemic CSU academic programs will be complemented by subsequent sessions on online education and the post-pandemic CSU student experience. As California's Recovery with Equity Taskforce Report stated: "Working together, Californians can change the trajectory of the state so that all its residents have the support they need to qualify for the high-wage, high-quality, high-demand jobs that will drive California's economy. The potential in California is limited only by the talent and skills of its people."