**BACKGROUND**

California State University, Long Beach is the third largest campus (37,000 students) of the 23-school CSU system - one of the 3 systems of public higher education in California.

CSU System Demographics

- 23 campuses
- 447,000 students
- 45,000 faculty & staff
- Largest university system in the world
- Most diverse university system in the U.S.
- One of the most affordable universities in the U.S.

**OUR APPROACH**

combines data analytics, targeted social support programs embedded within curriculum, professional development for faculty and staff, high quality paid research experiences for undergraduate students, community building, and combating stereotype threat and implicit bias via growth mindset messaging in different contexts across students’ academic journey. These approaches are imbedded within institutional structure and are supported by senior administrators.

**INSTITUTIONAL COMMITMENT**

Inclusive excellence is one of the key CSULB Strategic Priorities 2017-2020 and is actively encouraged by top administrators.

“Inclusive excellence requires a paradigm shift in thinking about equity, diversity, student learning and community success. This paradigm shift requires the identification, examination, and dismantling of existing mindsets / norms / regulations in higher education that serve as catalysts for marginalization, inequity, and intolerance.”

CSULB President Jane Close Conoley

**STUDENT SUCCESS DATA ANALYTICS - INVESTIGATING AND SUPPORTING STUDENT TRANSITIONS**

CSULB Data Fellows Program engages faculty, staff, and administrators from across campus in fostering culture of data-informed decision making. Over the past two years, several of the college data teams examined factors that facilitate and impede timely graduation. Our findings suggest that promoting a sense of community/engagement and providing prescriptive academic advising (i.e., a focus on the courses needed and institutional requirements) are related to a greater probability of graduating in four years. Latent class analyses also indicate that certain groups of freshmen defined by a profile of characteristics (i.e., first generation status, undeclared major at college entry, attended a 2-year college, etc.) are less likely to graduate in four years and may represent prime targets of intervention. Our next series of analyses will focus on major-switching patterns and the relationship between migrating to other majors/colleges and timely graduation.

**GROWTH MINDSET INTERVENTIONS**

Research demonstrates that “thinking about intelligence as changeable and malleable, rather than stable and fixed, results in greater academic achievement.” The growth mindset concept is pertinent to specific psychological interventions as well as to a host of teaching methods, institutional policies and an overall “institutional culture”. Growth mindset approach is imbedded in curriculum, academic advising, peer mentor training, and faculty professional development.

**RESEARCH EXPERIENCES**

are intended to develop and sustain students’ curiosity, interest, and excitement about STEM. CSULB is a national leader in engaging undergraduate students in high-caliber research experiences leading to peer-reviewed publications and presentations at national and international conferences. Students are supported by individual faculty grants as well as by institutional training programs which also provide various forms of co-curricular engagement and mentoring.

**COMMUNITY BUILDING**

- Learning Communities bring together freshman taking a suite of foundational mathematics and chemistry courses together with freshman success class. Students are assigned individual upper-classmen peer mentor who works with them individually or in groups providing both tutoring in foundational classes and peer mentoring focused on challenges of transitioning to college.
- STEM-dedicated tutoring and study spaces
- Research Student Symposium, attended by more than 600 students and faculty annually, allows STEM students to connect and network, foster their professional development, and builds excitement about research careers.
- Summer Bridge and Orientation Programs
- Culturally-relevant experiences

**INTRUSIVE ACADEMIC ADVISING**

Students receive mandatory annual advising. E-advising tools are used to monitor students’ progress. Professional advising team identifies at-risk students mid-term and intervenes.

**BEARING INTERVENTIONS**

Social belonging interventions are focused on the two broad messages: (1) if you feel like you don’t belong in a new school, you (and other people like you) are not alone; and (2) if you feel this way, your experience will improve over time. These interventions are embedded in the freshman success class.

**WHERE DO THEY GO?**

(Data for 2005-11 Science Freshman Cohorts)

- Science Graduates: 795
- Science Freshman NURM: 1,785
- Liberal Arts Graduates: 616
- Health Science Graduates: 455
- Science Freshman URM: 1,280
- Business Graduates: 152
- Eng Graduates: 77
- Arts Graduates: 45
- Education Graduates: 36

**THE CHALLENGE**

There are persistent racial, gender, and first generation status opportunity gaps in retention and graduation rates. Currently 42% of freshman entering CSULB science and mathematics programs are underrepresented minorities (URM) but URM students constitute only 29% of the science graduating class. Moreover, majority of STEM entering freshman switch majors and graduate with a non-STEM degree.

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