JLER

Vol 8, No 2 Copyright 2022, CLEAR, INC. http://journals.sfu.ca/cvj/index.php/cvj/index

CULTIVATING THE CHICANO/LATINA/O/X FACULTY PIPELINE ACROSS HISPANIC SERVING INSTITUTIONS (HSI) SYSTEMS: THE POTENTIAL ROLE OF HSRIS IN TRANSFORMING THE PROFESSORIATE

Frances Contreras

University of California, Irvine

Samantha Prado Robledo and Valerie Gomez

University of California, San Diego

AUTHOR NOTE

Correspondence concerning this article should be addressed to Frances Contreras, School of Education, email: frances.contreras@uci.edu.

ABSTRACT

The production of Chicano/Latino faculty has remained stagnant over the past 20 years, in part due to limitations in the production of doctoral students, hiring Latino faculty, and uneven experiences in graduate school. This article provides important findings related to the production of Latinx doctoral students and faculty in California, at a time when all public systems of education are HSI systems in the state. Latinx ladder rank faculty remain below five percent and doctoral student enrollment has remained stagnant, between 9 to 11% since 1998. Implications and recommendations for improving Latinx graduate student outcomes are also presented.

Keywords: Latinx faculty, Latinx doctoral students

Introduction

The need to cultivate the next generation of Latinx leaders in higher education has never been more urgent or clear. The University of California is a major producer of the nation's faculty across disciplines, and prior to Proposition 209, was among the top five producers of faculty for California and the nation (Kidder & Gándara, 2015). Proposition 209 has been detrimental to the faculty

pipeline in California by narrowing the pipeline to the professoriate (Contreras, 2019; Garces, 2012; Kidder & Gandara, 2015). Since 1999, Chicano/Latino/x graduate students at UC have never exceeded 10%, with stagnant progress over a 20 year-period (Contreras, 2019). While the Latinx undergraduate population across the system is 25% of all students, the graduate student population lags far behind the percent of white graduate students across every subfield examined. The low levels of Latinx representation in graduate school narrows the potential pool of faculty for UC and the nation.

California is home to 174 Hispanic Serving Institutions and 46 Emerging HSIs (EHSIs) (Ed Excelencia, 2020). Nationally, over 37 states are now home to Hispanic Serving Institutions. While the majority of HSIs are in the community college sector, six out of nine undergraduate degree granting UCs are now Research I HSIs (RHSIs). California has witnessed a transformation of its premier public university system over the past 20 years, with Latinx students now constituting over 25% of undergraduates across the entire system. Yet, few systemic levers exist to understand whether these institutions are responsive to the Latinx student population (Contreras, 2019) in providing a foundation for them to academically thrive and progress beyond the baccalaureate degree. Latinx faculty remain less than 5% of all UC faculty, and this trend has spanned the past 30 years. Very little progress has been made to diversify the Latinx pool of ladderrank faculty, which ultimately has implications for the graduate student pipeline. This article addresses the policy context and systemic growth and trends in Latinx faculty and graduate students across the ten-campus UC system.

Relevant Literature

Scholars have argued that Proposition 209 (1998) would lead to a cascading effect, with high concentrations of Latinx students gaining access to moderately or less selective campuses (Contreras, 2005; Gándara, 2000; Orfield & Miller 1998) after the passage of Proposition 209 in California. While this may have been the initial effect of the anti-affirmative action policy (Kidder & Gandara 2015), college choice is now a much more complex decision with several factors beyond academic competitiveness or accessibility of the institution. The campus climate (or perceived campus climate), outreach efforts, proximity to family, and existing infrastructures to support Latinx students are also critical factors for college selection for Latinx students (Perez & Ceja, 2015; Pérez & McDonough, 2008). It is therefore likely that a combination of both selectivity and climate (among other factors) are influencing Latinx college choice. Regardless of such complexities, the UC system is now witnessing a larger critical mass of Latinx students.

Literature in the field of higher education is emerging with respect to HSIs, specifically, as it relates to Latinx student outcomes in select HSIs or their responsiveness to Latinx students (For examples, see Contreras, 2019; Contreras et al., 2008; Malcom et al., 2010; Núñez et al., 2015) and shifting identities as college campuses become Hispanic Serving Institutions (Garcia, 2016). Few researchers are examining the systemic responses to having the majority of their postsecondary institutions demographically transform into HSRIs in a state where the Latinx population is the largest ethnic population.

It is no secret that higher education facilitates the transference of knowledge, production of knowledge, innovation, and helps foster critical thinking and problem-solving skills across all key stakeholder groups. Higher education also represents a pathway to social and economic mobility for historically underserved and underrepresented communities. Faculty play a critical role in what knowledge is transferred and help to shape the climate for learning within universities (Hurtado, 2001; Hurtado et. al., 2008; Umbach, 2006). Many Latinx students are less likely to know what pathways are necessary for certain careers, particularly those requiring an advanced degree. Thus, Latinx undergraduates are less likely than their peers to pursue doctoral degrees despite comprising a critical mass of the UC system. As the doctoral student data showed, the percentage of doctoral students in the UC system has remained stagnant over the past 20 years.

A good portion of Latinx faculty in academia were first-generation students and can relate to being the first in their family to attend college. In a study of 50 high achieving Latina/os, Gándara (1995) found that successful Latinos and Latinas in her sample were driven by their desire to give back to the next generation. Faculty, therefore, play an important role in mentoring undergraduate and graduate research, which provides early exposure to academia and the field of research. System-wide UCUES data (2018) further show Latinx undergraduate students with limited experience in conducting undergraduate research with a faculty member. In 2018, only 19% of Latinx students had conducted research with a faculty member, while 81% (out of 15,473 Latinx respondents) reported "no" when asked if they had ever conducted research with a faculty member. Twenty-six percent of white students and 24% of Asian American students reported conducting research with a faculty member. These data suggest a need for undergraduate research opportunities for all students, particularly underrepresented and first-generation students that are more likely to have limited access to professional networks in their home and community contexts.

Because graduate students represent a pool of future faculty for the UC System and the nation, it is also critical to understand the production of new Ph.Ds. Graduate school is a critical turning point for emerging scholars as they explore entering academia following degree completion. Therefore, this article also explores the results of a system-wide survey of Chicano/Latino doctoral students and their experiences in their graduate program. Utilizing a faculty system-wide survey and graduate student data helps us to further unpack the experiences and navigational processes of these key stakeholders. We seek to utilize the results to answer the following research questions:

- 1. What are the faculty and graduate student trends at emerging and designated HSRIs in California?
- 2. What are some of the factors that contribute to these trends for doctoral students within the UC system, as measured by the UC Doctoral experience survey?

While the authors realize secondary data and trends are somewhat limited in unpacking the totality of the experiences or systemic microaggressions experienced across UC campuses, there are select data points and trends that tell their own story and call for greater attention and investment to enhance doctoral student and faculty diversity. This article provides important and relevant findings for the nation and postsecondary systems that will need to be increasingly

relevant and responsive to the needs of Latino students (Contreras, 2019) and communities as the nation's demography continues to shift and diversify.

Methods

This article offers a critical examination of Latinx faculty and graduate student trends across 10¹ UC campuses. We utilize secondary data from the UC Information Center on Latinx faculty and graduate student trends by campus. In addition, these system and institutional data allow for a critical policy and systemic analysis of Latinx composition by field and discipline. We also utilize data from UC's doctoral experience survey maintained through the UC Information Data Center. For the doctoral student survey data, 12% of respondents were Latino. Together, these data allow for a comprehensive overview of the shifts that have occurred across the system in undergraduate composition (30% of all UC Enrollment in Fall 2021) but have remained stagnant for Latinx faculty and doctoral students. For example, Latinx faculty constitute a mere five percent of the UC System's domestic Latino faculty, while Latinx doctoral students comprise 11.8% (UC Information Center, 2021).

Demography & Policy Context

Over the past fifty years, the United States has experienced sizeable shifts in the racial and ethnic distribution of residents, with the Latinx population growing from 4.8% of the U.S. population in 1970 to over 18% in 2018 (U.S. Census Bureau, 2018). California has also witnessed dramatic shifts in the demographic growth of the Latinx population, with Latina/o residents growing from 12% of the population in 1970 (accounting for 2.4 million residents) to 39% in 2018 (15.5 million residents). Latinx residents are expected to increase to 43% of the state's population by 2030, while the white population will constitute 34% of the state's population (PPIC, 2016). This demographic growth stems from a combination of birth rates, migration, and immigration.

With the consistently changing demographic landscape of the state, however, educational attainment has remained relatively low among Latinx residents compared to other racial/ethnic groups. This is in part due to a combination of systemic inequities, limited opportunities to learn, and the lack of postsecondary investment in Latinx students historically and presently (Valenzuela, 1999; Tienda & Mitchell, 2006; Gándara & Contreras, 2009). As a result, Latinx generational progress has stalled among Latinos and poverty rates remain high (Telles & Ortiz, 2008; Gándara & Contreras, 2009) as Latinos are concentrated in lower-wage jobs with limited mobility. Census data for California residents provides a snapshot of the differences in educational attainment between groups, with only 13% of Latinos earning a bachelor's degree or higher compared to 44% of whites, 26% of African Americans, 53% of Asian Americans, and 14% of American Indians in the state (American Community Survey, 2018). Latinos experienced the lowest levels of educational attainment in the state at a time when they represent over 55% of the K-12 system and 40% of the state population (American Community Survey, 2018).

Despite the fact that Latinos are 40% of the state's population, they represent only 13% of those with a bachelor's degree or greater in 2018. Herein lies the challenge and opportunity for the

University of California system—to emerge as a systemic leader for raising educational attainment rates among Latinx residents, thereby reshaping communities and contributing to generational progress.

Transformed Public Education Systems in California

The Latinx community has altered the landscape of public education systems in California over the past twenty-five years, with Latinx students representing a large base of its student population. Figure 1 shows the transformation of UC into an HSRI system, with the majority of UCs now classified as HSIs and greater than 25% Latinx enrollment.

Table 1UC Latinx Enrollment, by Campus, Fall 2018 (Percent)

UC CAMPUS	LATINX	HSI Designation	Year
	ENROLLMENT		Achieved
	FALL 2018		Status
BERKELEY	15	Emerging HSI	NA
DAVIS	25	HSI	2019
IRVINE	25.7	HSI	2017
LOS ANGELES	21.3	Emerging HSI	NA
MERCED	51.6	HSI	2010
RIVERSIDE	39.2	HSI	2008
SAN DIEGO	21	Emerging HSI	NA
SANTA	25.6	HSI	2015
BARBARA			
SANTA CRUZ	27.6	HSI	2012

Note: The source of this table is UC Information Center.

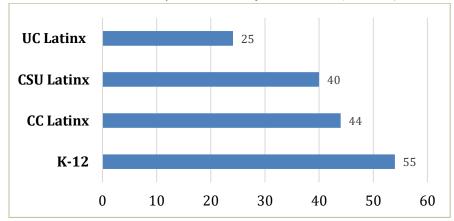
However, having a critical mass of Latinx students has not resulted in "Latinx responsive" institutions (Contreras, 2019), or those that elevate the "servingness" aspect of the HSI identity (Cuellar, 2014; Garcia, 2016; Garcia et al., 2019). The first HSRI in the UC system was UC, Riverside, meeting the requirements for federal designation in 2008. The most recent HSRI is UC, Davis. The transformation of the UC system into an HSRI system is notable and represents an opportunity for the campuses to cultivate greater numbers of undergraduates to pursue graduate school and specifically doctoral degrees.

However, despite having a critical mass of Latinx students in schools, colleges, and universities, it is important not to conflate critical mass with student success, or assume that all Latinx students are no longer minoritized, do not experience microaggressions, or do not face inequities in their schooling experiences. Even though the student population has dramatically

increased, those who teach Latinx students, from teachers and graduate students to faculty and staff, have not changed dramatically over the past 25 years.

The demographic shifts in California, predicted by early Latino demographers, such as Leo Estrada, has led to reshaping all public systems of education into HSI systems in the state (Figure 1), a terminology relatively new within the UC system. At the K-12 level, Latinx students represent over 55% of all K-12 students in 2019. And Latinx undergraduate students represent 44% of California's community colleges, 40% of California State University (CSU) students, and 25% of undergraduates enrolled in a UC campus. A systemic perspective on the role each public system of K-12 and postsecondary education has in educating this critical mass of California residents is essential to ensuring the state is responsive to Latinx students at all levels (Contreras, 2019).

Figure 1
Latinos in K-20 Public Systems in California, 2019 (Percent)



Note: The source of this figure is UC Information Center, CSU Office of Institutional Research and Analysis, California Community College Chancellor's Office, California Department of Education, 2020.

Undergraduate Student Outcomes

Undergraduate student representation in large public systems of higher education like the University of California system have witnessed a steady increase in Latinx students, irrespective of the Proposition 209 policy context. Yet, this critical mass of students has not translated into equitable outcomes and suggests the need for greater attention to a growing proportion of UC campuses.

According to the UC information center, the Latinx student 4-year graduation rates for first-time first-generation freshmen are below the average four-year graduation rates for all students (52% compared to 66% from 1996-2013. The Latinx two-year graduation rate among transfer students represents a smaller gap from 1996-2015 between Latinx students and the overall average, and the three-year graduation rates among transfer students rose considerably when using three- and four-year graduation rates. While the three-year graduation rate for Latinx transfer students in 2014 was over 82%, the graduation rates among Latinx first-time freshmen and transfer

students show the need for improvement across UC campuses to graduate more first-time freshmen and transfer students with their bachelor's degree in a shorter time frame (2 and 4 years). The longer a student takes to graduate college, the greater the risk of attrition (Ishanti, 2006; Lee et al., 2011; Contreras et al., 2011).

The trend data further convey the need for a concerted effort to raise four-year Latinx completion rates through a range of academic supports, planning, and financial supports. College completion agendas are not new to postsecondary systems, or the nonprofit sector, as seen in the efforts to raise college completion systemically (CSU, 2009), establish a statewide Latinx College Completion agenda (Georgia in 2013), or launch a national Latinx college completion agenda (College Board, 2011). When college completion is a challenge for Latinx students, graduate school enrollment is compromised.

Doctoral Student Outcomes

Graduate students represent a pool of future faculty for the UC System and the nation. Graduate school is a critical turning point for emerging scholars as they explore entering academia, industry, or other government and non-profit sectors following doctoral degree completion. The University of California is a major producer of the nation's faculty across disciplines, and prior to Proposition 209, was among the top five producers of faculty for California and the country (Kidder & Gándara, 2015). Kidder & Gándara (2015) concluded that Proposition 209 has been detrimental to the faculty pipeline in California by narrowing the pipeline to the professoriate. Graduate school represents a significant stepping stone along the pathway to the doctorate and, ultimately, to the professoriate. Latinx representation in graduate studies is critical for increasing the number of future Latinx faculty. Given the limited body of empirical research exploring racial and ethnic disparities in graduate education, very little is known about the factors that impede the success of Latinx graduate students.

Garces (2012) examined the impact of bans on affirmative action across four states with such bans (California, Washington, Texas, and Florida) and found that affirmative action bans adversely impacted graduate school representation of underrepresented students across all fields examined (engineering, business, natural sciences, social sciences, education, and humanities) with the greatest reductions occurring in engineering, natural sciences, and social sciences. While the undergraduate population across the system is nearly a quarter of all students, the graduate student population lags far behind the percent of white graduate students across every subfield examined below. The low levels of Latinx representation in graduate school do in fact narrow the potential pool of faculty for UC and the nation.

What has perhaps been the most devastating outcome of Proposition 209 in California, is the stagnant growth of doctoral students over the past two decades. Because doctoral admissions are highly dependent on the advisor, a long-standing pattern of exclusion and gatekeeping exists for Latinx folks pursuing doctoral programs (Posselt, 2016). Julie Posselt (2016) describes how faculty gatekeeping in graduate admissions ultimately impacts diversity in doctoral student cohorts admitted. In Fall 2019 in the UC system, Latinx doctoral students represented 10% of the 28,447

students enrolled in academic doctorate programs (University of California Information Center, 2020). When examining doctorate degree completion rates, a similar trend emerges. During the 2018-2019 academic year, only 326 of 4,098 (7.9%) doctorate degrees were awarded to Latinx students (University of California Information Center, 2020). The data reveal stark racial and ethnic disparities in doctoral enrollment and completion rates throughout the UC system. This phenomenon, however, is not unique to the UC system. Latinx students are grossly underrepresented in graduate education throughout the U.S. According to the National Science Foundation Survey of Earned Doctorates (2019), only seven percent of all doctorate degrees were awarded to Latinx students. Tables 2 and 3 show the graduate student composition by select disciplines.

Table 2 *UC Graduate Students by Select Disciplines, 2015, (Percent)*

Grad Acad	African	American	Asian/	Domestic	Latino	Internati	
Groups	American	Indian	Pac Isl	Unknown	(a)x	onal	White
Phys Sci, Eng & CS	1.29	0.58	12.58	4.89	5.02	45.25	30.38
Life Sciences Social	2.77	1.05	16.88	6.92	8.89	16.29	47.19
Sciences/Psych ology	5.19	1.46	11.11	6.81	11.13	21.30	43.00
Arts & Humanities	3.86	1.20	9.48	8.14	11.38	13.01	52.93

Note: The source of this table is UC Information Center Data Warehouse, 2020.

The presence of Latinx graduate students in professional schools tells a story of limited representation across fields (Tables 2 and 3). Latino/a/x students are far below the percent of white graduate students in professional schools across the UC system. Interestingly, white students also represent the largest proportion of graduate students across disciplines (Table 2). For example, white students represent six times more students than Latinx graduate students in physical sciences, engineering, and computer science graduate programs. White students also represent approximately four times the percentage of Latinx students in social sciences/psychology fields as well as the arts & humanities. Underrepresentation is therefore not simply a feature of the field or select fields, Latinx underrepresentation is a pervasive phenomenon in graduate programs across disciplines. These data suggest that selectivity and exclusion, as noted in Posselt's research (2016), are consistent issues across UC schools.

Table 3UC Graduate Students in Professional Schools, Select disciplines, Fall 2015 (Percent)

Grad Prof	African	American	Latino	Asian/Pac		Domestic	Internat
Group	American	Indian	(a)x	Isl	White	Unknown	ional
Business	2.11	0.85	4.04	25.84	29.40	9.88	27.87
Law	4.70	1.40	11.31	19.26	51.90	8.06	3.36
Education	5.40	1.21	28.19	19.26	38.70	4.47	2.79
Other Prof	4.53	0.65	10.18	15.32	33.03	5.83	30.45
Medicine	8.08	0.39	11.42	29.40	23.63	26.87	0.21
Other							
Health	4.59	0.83	9.76	33.63	30.71	15.74	4.75
Science							

Note: The source of this table is UC Information Center Data Warehouse, 2020.

Latinx graduate students in professional schools lag far behind their white and Asian American peers, even as Latinx undergraduate enrollment and representation continue to increase. For example, a troubling data point is the stagnant progress of Latinx graduate students in medicine, despite the expansion of UC medical schools and the health science enterprise across the UC system. In a study conducted by David Hayes-Bautista et al., (2000), the study authors warned the field about the Latinx physician shortage at a time when the Latinx population in California was poised for dramatic and continuous growth and patients were becoming more diverse, bilingual, and urged the field to address the limited medical/clinical research agendas focused on the Latinx population. Using recent data on Latinx graduate students in medical school, Sanchez and colleagues replicated the seminal study on Latinx physicians in California (Hayes-Bautista et al., 2000), and showed that no progress has been made in the production of Latinx folks in the medical field in California in over 30 years (Sanchez et. al., 2015). Sanchez and colleagues (2015) argue that the Latinx physician shortage has worsened over the past 30 years, with California expecting to witness a shortage of primary care providers by 2030 (Spetz et al., 2017). The UC system has the opportunity to both meet the state's demand for physicians and diversify the pool of doctors in the process.

In addition to the field of medicine showing stagnant progress, the representation of Latinx graduate students in business has witnessed very little progress over the fifteen years examined, slightly over three percent in 2000 to four percent in 2015. The one field that has experienced considerable growth in the number of graduate students over time, is the field of education in the UC system. Education has seen the greatest growth in Latinx graduate student representation, ranging from 16.7% in 2000 to over 28.2% in 2015 across the UC campuses (Contreras, 2018). Colleges and schools and departments of education have also grown over the past two decades in the UC system, in the size of their faculty, the scope of academic programs, and the development of undergraduate majors in the field of education.

While looking at enrollments is important over time, it is perhaps even more critical to assess the experiences of Latinx graduate students enrolled in the UC system, as doctoral student socialization influences student persistence and transition into academia. According to the UC doctoral experience survey, 32% of Latinx graduate students are less satisfied with the level of mentorship they are receiving in their program and 47% are less satisfied with the career support they are receiving in their doctoral program (UC Information Center, 2019). That is close to half of the respondents, which is highly disconcerting.

While research on the implications of race and ethnicity in doctoral education is limited, a study exploring the everyday experiences of Latina/o and Black doctoral students found that dehumanizing practices and racialized aggressions were pervasive in the doctoral socialization process of the participants (Gildersleeve et al., 2011). In their qualitative study of 22 doctoral students, Gildersleeve et al. (2011) found that race and ethnicity played "salient roles in [students'] interactions" with faculty, supervisors, and peers (p. 101). Their participants noted that limited departmental and institutional resources for Graduate Students of Color, pressure to be the voice for their racial or ethnic group in classroom discussions, and experiences with racism and racial and ethnic slurs resulted in self-censorship and assimilation. The experiences of Latina/o and Black doctoral students also pushed them to seek support from their peers. Forming peer support networks provided students with spaces that affirmed their identities and a community of support in which they felt comfortable sharing their experiences (Gildersleeve et al., 2011).

Latina/o graduate students experience various challenges throughout their doctoral programs. In a study exploring the academic socialization experiences of Latina doctoral students, Gonzalez (2006) found that many of his participants experienced marginalization, cultural isolation, and "discrimination based on race, gender, and class" (p. 358). In addition to navigating hostile academic climates, many of Gonzalez's (2006) participants described the challenges of balancing familial expectations with the demands of their doctoral programs. In response, Latina doctoral students asserted their identities, sought support from like-minded mentors and peers, and utilized their research as a form of activism for themselves and their communities. Latina doctoral students who were not successful in navigating the academic socialization process often felt exploited and marginalized.

The doctoral experience survey (where Latinx students represent approximately 11% of respondents) shows Latinx students with varied experiences in their doctoral programs (Figure 2), with 32% of students slightly to strongly disagreeing with the statement that their academic advisor is "a real mentor." In addition, 44% of Latinx doctoral students slightly to strongly disagreed with the statement that their academic advisor is "aware and supportive of [their] financial well-being." This is highly problematic for less than half of the Latino/a doctoral students to feel that their advisor is an asset to their development. Because Latinx faculty represent less than six percent of faculty systemwide, there are few Latinx faculty available to mentor and support doctoral students in their respective campuses and fields. This data point, in particular, points to the challenges Latinx doctoral students may be experiencing with their advisors in terms of mentorship and advising. In addition, only 26% of students noted their academic advisor as an asset to their

academic career and professional development. These data are concerning, and it suggests the need for targeted efforts to improve the overall experiences of Latinx doctoral students. If doctoral students lack mentorship in graduate school or are exposed to "toxic ivory towers" (Zambrana, 2018), they are less likely to consider academia and ladder rank pathways. Mentorship, therefore, has the potential to transform the experiences and pathways of Latinx doctoral students (Turner et. al., 2015).

Figure 2
Latinx Doctoral Experience Survey, 2019

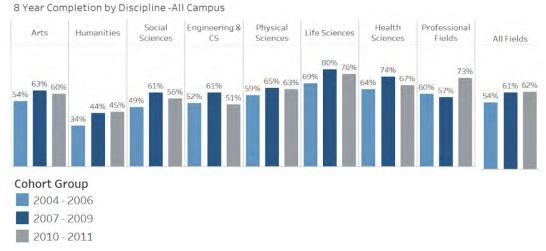


Note: The source of this figure is UC Information Center, Doctoral Experience Survey, 2019.

Completion Rates

Completion rates vary among Latinx doctoral students, however, on average there is significant room for improvement. The data in Figure 6 show low completion rates across all fields for Latinx doctoral students for three different cohorts examined. The lowest 8-year completion rates appear to occur in the humanities, social sciences and engineering.

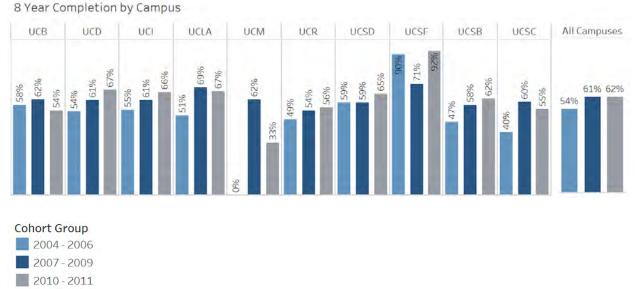
Figure 3Latinx Doctoral Completion by Field, 8-year



Note: The source of this figure is UC Information Center, 2020.

The Latinx completion rates by campus show low rates of completion for Latinx doctoral students across all of the UC campuses. What is most concerning, beyond low levels of representation, is the fact that approximately 40% of Latinx doctoral students do not complete their doctoral degree once they begin at the University of California (the range across all campuses is 38% to 46% for the cohorts included in the 8-year rate). While there may be various factors contributing to high departure rates, this high proportion of attrition exemplifies systemic failure to retain a base of future faculty, thought leaders, and institutional leaders.

Figure 4
Latinx Doctoral Degree Completion Rates by Campus



Note: The source of this figure is UC Information Center, 2020.

The completion rates by campus show the systemic nature of failure to support Latinx doctoral students to the point of degree completion. With the exception of UC San Francisco, which is a graduate degree granting institution, the majority of campuses are losing well over a third of doctoral students prior to earning the doctorate.

The data for gender further show disparities by gender with Latinas being less represented in doctoral degree earners across fields for 2018-2019. These data convey a story of limited opportunities for successful transition to the professoriate particularly for Latinas, with underrepresentation of Latinx doctoral student degree earners in 2019 across the majority of fields examined. This is particularly troubling, given the larger proportions of Latinas accessing higher education.

Table 4
Doctoral Degree Earned by Gender, 2018-19
AY 2018-19

	A1 2010	5-19	
	N	%	
Architecture			
All	18	100%	
Latinos	0	0%	
Latinas	0	0%	
Humanities			
All	432	100%	
Latinos	47	11%	
Latinas	26	6%	
Business			
All	29	100%	
Latinos	1	3%	
Latinas	0	0%	
Education			
All	182	100%	
Latinos	41	23%	
Latinas	27	15%	
Engineering C/S			
All	991	100%	
Latinos	36	4%	
Latinas	12	1%	
Interdisciplinary			
All	39	100%	

Latinos	0	0%
Latinas	0	0%
Life Sciences		
All	857	100%
Latinos	73	9%
Latinas	36	4%
Other Health Science		
All	91	100%
Latinos	10	11%
Latinas	9	10%
Other Professional		
All	68	100%
Latinos	2	3%
Latinas	1	1%
Physical Sciences		
All	821	100%
Latinos	51	6%
Latinas	14	2%
Public Administration		
All	13	100%
Latino	1	8%
Latinas	1	8%
Social Sciences		
All	557	100%
Latino	64	11%
Latinas	41	7%

Note: The source of this table is UC Information Center, 2020.

Ladder Rank Faculty

If Latinx faculty are not represented in the Academic Senate, (a governing body comprised of faculty from ladder rank positions) then the likelihood of Latinx scholars assuming leadership roles within and across UC is diminished. Ladder-rank faculty are in the most secure position within universities because faculty in these positions may earn tenure. The data on Latinx faculty and in leadership positions is, therefore, perhaps the most troubling to present, largely because limited progress has been made in the presence of Latinx ladder rank faculty from 2001-2018. Perhaps the greatest and understudied impact of Proposition 209 in California has been on UC ladder-rank faculty. While the literature documents that hyper-implementation of Proposition 209 has occurred over the past 20 years (Contreras et. al., 2015), where individual actors within

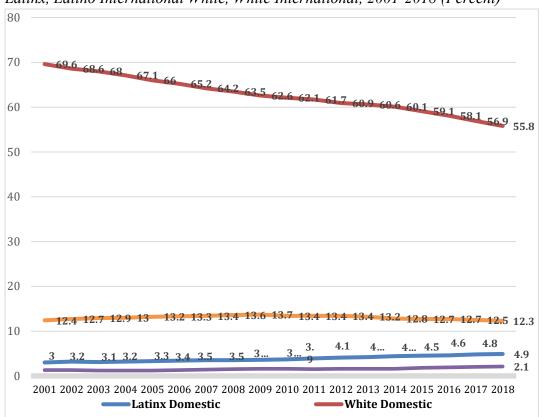
campuses interpret and utilize Proposition 209 to thwart diversity efforts, it appears to be most salient when looking at ladder rank Latinx faculty trends. The ladder rank faculty trends for domestic Latinx faculty over time show stalled progress since 2001. Latinx domestic ladder-rank faculty has ranged between three percent with incremental growth over a seventeen-year period to nearly five percent across the UC System. Latinx international ladder rank faculty has ranged between 1.3% in 2001 to 2.1% in 2018.

During this same period, the proportion of white faculty has witnessed a decline from 69.6% to 55.8%, but still remains the largest proportion of ladder rank faculty in the UC system. However, white international ladder-rank faculty have remained stagnant between 12% to 13.7% over the same time frame. White international faculty comprised more than three times the percent of Latinx domestic ladder-rank faculty until 2015 and more than two times the percentage of Latinx domestic faculty from 2016-2018. These data call for urgent attention, given the large proportion of Latinx undergraduates, the fact that the majority of UC campuses are now HSIs, and the responsibility UC has to serve its growing base of Latinx students.

Figure 5

UC Ladder Rank Faculty

Latinx, Latino International White, White International, 2001-2018 (Percent)



Note: The source of this figure is UC Information Center, Data Warehouse.

Underrepresented faculty are also more likely than their non-diverse peers to mentor undergraduate Students of Color (Milem, 2003), engage in campus service, teach diversity content in their courses, teach emerging theories that apply to diverse communities, equity or social issues, and be engaged in the local community (Turner et al., 2008; Zambrana, 2015, 2018). In addition, underrepresented faculty bring strong interdisciplinary perspectives that inform their teaching (Zambrana, 2018), which benefits all students in higher education.

However, researchers urge higher education leaders such as deans and department chairs to support and mentor Faculty of Color (Rockquemore, 2004; Zambrana, 2015, 2018), and consider cluster hire initiatives that create a critical mass of diverse facultly to combat isolation and fosters collaboration. It has been well documented that Faculty of Color are more likely to experience microaggressions from their peers, high demands, and work-related stress and tension within their academic departments Turner et. Al., 2008; Zambrana, 2015). Because the proportion of ladder-rank Latinx faculty remains alarmingly small across the UC system, these faculty may also be more likely to experience isolation within their academic departments (Zambrana, 2015). Therefore, concerted efforts to increase the critical mass of Latinx faculty may help to counter isolation, service burdens, and demands. The following recommendations are intended to inform institutional and systemic efforts to increase the number of Latinx doctoral students and faculty and improve the overall experiences of these key stakeholders in academia.

Recommendations

- 1. <u>Emphasis on graduate student support</u> (academic, financial & personal). In public institutions, on average, doctoral student support is lagging behind private research-intensive universities (Ma and Pender, 2021). Supporting graduate students throughout their trajectory is critical in the form of competitive fellowships, HSI scholars, etc.
- 2. <u>Consistently examine doctoral experiences through surveys or focus groups to better understand the challenges to persistence and completion.</u> These data can inform ongoing intervention and department approaches for admitting Latinx doctoral students (consider cluster recruitments at the doctoral student level).
- 3. <u>Increase the number of Latinx faculty across disciplines through targeted efforts such as cluster hires</u>. The proportion of Latinx remains alarmingly low and in need of intervention.
- 4. <u>Create infrastructures that support Latinx research and scholarship</u>. Investing in research centers that focus on examining the Latinx experience in society (across disciplines) will signal to faculty and doctoral students that the university (and system) values this research and is investing in cultivating the next generation of Latinx academicians and leaders.
- 5. Examine pay equity for Latinx faculty. This is an area for further research and is beyond the scope of the analysis included in this article. On average, compensation for Faculty of Color and Latinx faculty is lower than their white peers in research-intensive institutions. Because data are not readily available on this topic, examining disparities in pay is an important next step to understanding departure and challenges to faculty retention.

Consistently examining pay equity by race/ethnicity will shed light on inequities and adjustments that need to be made.

Conclusion

The Latinx community has the opportunity to meet the needs of the state to address projected shortfalls in the workforce, raise college completion rates, and contribute to a thriving economy. The implications of limited representation are far reaching, particularly as the majority of the UCs are already classified as Hispanic Serving Institutions. Yet, with limited Latinx faculty diversity, the likelihood of changing the professoriate in the next decade is tenuous. Thus, the UC system has the unique opportunity to transform the social and economic infrastructure of the state of California by investing in Latinx students at all levels, particularly the graduate level, and through concerted efforts to diversify the UC faculty, staff, and its leadership. The UC System also has the opportunity to emerge as a leading HSI system in the nation, by producing greater numbers of Latinx doctoral students and future faculty across fields, and diversifying both its faculty and leadership within the UC campuses. Cultivating the next generation of Latinx scholars and leaders within UC calls for a sense of urgency, tangible investment, and intentionality by key stakeholders as well as senior system and campus leaders. Investments made today in the Latinx population will ultimately help to determine the social, health and economic prosperity of California in the near future.

Notes

¹ UC San Francisco is a graduate institution and therefore adds to the overall total number of UC campuses in the University of California System. There are nine undergraduate degree granting universities in the system.

REFERENCES

- American Community Survey (2018). United States Census Bureau. https://www.census.gov/programs-surveys/acs/news/data-releases/2018/release.html
- Campaign for College Opportunity (2018). Left out. How exclusion in our California's colleges and universities hurts our values, our students and our economy.
- Contreras F. (2005). The Reconstruction of Merit Post-Proposition 209. *Educational Policy*. 2005; 19(2):371-395. https://doi.org/10.1177/0895904804274055
- Contreras, F. E., Malcom, L. E., & Bensimon, E. M. (2008). Hispanic-serving institutions: Closeted identity and the production of equitable outcomes for Latino/a students. In M. Gasman, B. Baez, & C. S. V. Turner (Eds.), *Understanding minority serving institutions* (pp. 71–90). New York: SUNY Press.
- Contreras, F., Chapman, T., Comeaux, E., Martinez, E., Rodriguez, G., & Hutson, M. (2018). African American college choice post Proposition 209. *International Journal of Qualitative Research in Education*, 31(8), 747-768. https://doi.org/10.1080/09518398.2018.1478153
- Contreras, F. (2018). Cultivating the Next Generation of Latinx Leadership at the University of California. Report Prepared for the UC Chicanx/Latinx Leadership Summit, UC Office of

- the President.
- Contreras, F. (2019). Becoming "Latinx responsive": Raising consciousness & capacity in California's HSIs. Washington, D.C.: American Council on Education.
- Cuellar, M. (2014). The impact of Hispanic-Serving Institutions (HSIs), emerging HSIs, and non-HSIs on Latina/o academic self-concept. *The Review of Higher Education*, *37*(4), 499–530. https://doi.org/10.1353/rhe.2014.0032
- Ed Excelencia (2020). List of Hispanic Serving Institutions, 2019. Washington D.C. https://www.edexcelencia.org/research/hispanic-serving-institutions-hsis
- Gándara, P. (1995). Over the Ivy walls. New York: SUNY Press.
- Gándara, P. (2002). A study of high school Puente: What we have learned about preparing Latino youth for postsecondary education. *Educational Policy*, 16(4), 474–495. https://doi.org/10.1177/0895904802164002
- Gándara, P., & Contreras, F. (2009). *The Latino education crisis*. Cambridge, MA: Harvard University Press.
- Garces, L. M. (2012). Racial diversity, legitimacy, and the citizenry: The impact of affirmative action bans on graduate school enrollment. *The Review of Higher Education*, *36*(1), 93–132. https://doi.org/10.3102/0002831212470483
- Garces, L. M. (2013). Understanding the impact of affirmative action bans in different graduate fields of study. *American Educational Research Journal*, 50(2), 251–284. https://doi.org/10.3102/0002831212470483
- Garcia, G. (2016). Complicating a Latina/o serving identity at a Hispanic Serving Institution. *Review of Higher Education*, 40(1), 117-143. https://doi.org/10.1353/rhe.2016.0040
- Garcia, G. A., Núñez, A., & Sansone, V. A. (2019). Toward a multidimensional conceptual framework for understanding 'servingness' in Hispanic-Serving Institutions: A synthesis of the research. *Review of Educational Research*. https://doi.org/10.3102%2F0034654319864591.
- Gildersleeve, R. E., Croom, N. N., & Vasquez, P. L. (2011). "Am I going crazy?!": A critical race analysis of doctoral education. *Equity & Excellence in Education*, 44(1), 93-114. https://doi.org/10.1080/10665684.2011.539472
- Hayes-Bautista, D.E., Hsu, P., Hayes-Bautista, M., Stein, R. M., Dowling, P., Beltran, R., & Villagomez, J. (2000). Latino physician supply in California: sources, locations, and projections. <u>Academic Medicine</u> 75(7), 727-736. https://doi.org/10.1097/00001888-200007000-00018
- Hurtado, S., Milem, J. F., Clayton-Pederson, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *The Review of Higher Education*, 21, 279 –302. *Project MUSE*, https://doi.org/10.1353/rhe.1998.0003.
- Hurtado, S. (2001). Linking Diversity and Educational Purpose: How Diversity Affects the Classroom Environment and Student Development.
- Hurtado, S., & Ponjuan, L. (2005). Latino educational outcomes and the campus climate. *Journal of Hispanic Higher Education*, 4(3), 235–251. https://doi.org/10.1177/1538192705276548
- Ishanti, T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *The Journal of Higher Education*, 77(5), 861-885. https://doi.org/10.1080/00221546.2006.11778947
- Johnson, H., Mejia, M., & Bohn, S. (2015). *Will California run out of college graduates?* Public Policy Institute of California.
- Kidder, W., & Gándara, P. (2015). Two decades after the affirmative action ban: Evaluating the

- University of California's race-neutral efforts. The Educational Testing Service.
- Ma, J. Pender, M. (2021). Trends in College Pricing and Student Aid 2021. New York: The College Board.
- Milem, J. F. (2003). The educational benefits of diversity: Evidence from multiple sectors. In J. Mitchell, M. J. Chang, D. Witt, J. Jones, & K. Hakuta, (Eds.), Compelling interest: Examining the evidence on racial dynamics in higher education (pp. 126–169). Stanford University Press.
- Núñez, A. M., Hurtado, S., & Calderon Galdeano, E., (2015). *Hispanic Serving Institutions*. Routledge.
- Orfield, G. and Miller, J. (1998). Chilling Admissions. Cambridge, MA. Harvard Education Press. Perez, P. and Ceja, M. (2015). Higher Education Access and Choice for Latino Students Critical

Findings and Theoretical Perspectives. San Francisco: Routledge.

- Perez, M. (2018). The UC president's and chancellor's postdoctoral fellowship programs, draft status update report. UC San Diego Center for Faculty Diversity & Inclusion.
- Pérez, P. A., & McDonough, P. M. (2008). Understanding Latina and Latino college choice: A social capital and chain migration analysis. *Journal of Hispanic Higher Education*, 7(3), 249–265. https://doi.org/10.1177/1538192708317620
- Posselt, J. (2016). Inside graduate admissions: Merit, diversity and faculty gatekeeping. Harvard University Press.
- Rockquemore, K. A., & Laszloffy, T. (2008). *The Black academic's guide to winning tenure without losing your soul*. Lynn Rienner Press.
- Sanchez, G., Nevarez, T., Schink, W., & Hayes-Bautista, D. (2015). Latino physicians in the United States, 1980–2010: A thirty-year overview from the censuses. *Academic Medicine*, 90(7), 906–912.
- Santos, J., L., & Acevedo-Gil, N. (2013). A report card on Latina/o Leadership in California's public universities: A trend analysis of faculty, students, and executives in the CSU and UC Systems. *Journal of Hispanic Higher Education*, *12*(2), 174–200. https://doi.org/10.1177/1538192712470844
- Santos, S., & Reigadas, E. T. (2004). Understanding the student-faculty mentoring process: Its effects on at-risk university students. *Journal of College Student Retention: Research, Theory & Practice*, 6(3), 337. https://doi.org/10.2190/KGVC-7218-DPER-RMBC
- Spetz, J., Coffman, J., & Geyn, I. (2017). *California's primary care workforce: Forecasted supply, demand, and pipeline of trainees, 2016-2030.* Healthforce Center at University of California, San Francisco.
- Telles, E., & Ortiz, V. (2008). *Generations of exclusion: Mexican Americans, assimilation, and race.* Russell Sage Foundation.
- Trejo, S. J. (2003). Intergenerational progress of Mexican-origin workers in the U.S. labor market. *Journal of Human Resources*, 38(3), 467-489. https://doi.org/10.3368/jhr.XXXVIII.3.467
- Turner, C. S., González, J. C., & Wood, J. L. (2008). Faculty of Color in academe: What 20 years of literature tells us. *Journal of Diversity in Higher Education*, 1(3), 139-168.
- Turner, C.S. (2015). Lessons from the Field: Cultivating Nurturing Environments in Higher Education. *The Review of Higher Education* 38(3), 333-358. https://doi.org/10.1353/rhe.2015.0023.
- UC Information Center, CSU Office of Institutional Research and Analysis, California Community College Chancellor's Office, California Department of Education, 2020.
- Umbach, P. (2006). The contribution of faculty of Color in higher education. Research in Higher

Education,47(3). https://doi.org/10.1007/s11162-005-9391-3

Valenzuela, A., (1999). Subtractive Schooling: U.S. Mexican Youth and the Politics of Caring. New York: SUNY Press.

Zambrana, R. E., Ray, R., Espino, M. M., Castro, C., Cohen, B. D., & Eliason, J. (2015). "Don't leave us behind": The importance of mentoring for underrepresented minority faculty. *American Educational Research Journal*, 52(1), 40–72. https://doi.org/10.3102/0002831214563063

Zambrana, R. E. (2018). Toxic ivory towers. Rutgers University Press.