



Association of Mexican American Educators Journal

A peer-reviewed, open access journal

Volume 12 Issue 1

2018

AMAΕ Open Issue

Editors

Patricia Sánchez

The University of Texas at San Antonio

Antonio J. Camacho

AMAΕ, Inc.

Associate Editors

Julie L. Figueroa

Sacramento State

Lucila D. Ek

The University of Texas at San Antonio

Repositioning Trends of Latina/o/x Student Enrollments in Community Colleges

Desiree D. Zerquera

University of San Francisco

Nancy Acevedo-Gil

California State University, San Bernardino

Elizabeth Flores

University of California, Davis

Patrick Marantal

University of San Francisco

Abstract

This study used descriptive statistics to complicate the national narrative of Latina/o/x student college-going trends and aims to provide directions for future research on Latina/o/x students in the community college. Taking a state-by-state perspective, this study examined whether Latina/o/x college students enrolled in community colleges at higher rates than four-year colleges. The data for this study derived primarily from the Integrated Postsecondary Education Data System (IPEDS) enrollment survey for all states and sectors of higher education for the 2012-2013 academic year. We used geographic information systems (GIS) to spatially analyze and compare proportions of Latina/o/x undergraduate enrollments between sectors within states, then across states. Our analysis disaggregated enrollment data by state to reveal important variations among Latina/o/x student enrollments at community colleges across the U.S. In so doing, we aim to inform the work of researchers, policy makers, administrators and educators in efforts to support the educational pathways of Latina/o/x students in the U.S.

DOI: <http://dx.doi.org/10.24974/amae.12.1.379>

Introduction

The community college system has been described as the “dominant educational vehicle” for Latina/o/x¹ students pursuing higher education in the United States (Martinez & Fernandez, 2004, p. 59). Recent data supports this characterization of national Latina/o/x college enrollment trends (Fry, 2002; Kurlaender, 2006; National Center for Educational Statistics, 2014; Rendon & Nora, 1989) as 56% of all Latina/o/x undergraduates across the United States were enrolled in community colleges in 2014, compared to a 42% concentration of enrollment by non-Latina/o/x counterparts (Ma & Baum, 2016). These data and the narrative they support are used to inform and rationalize research, policy, and practice surrounding Latina/o/x students and higher education. However, the use of national data to describe enrollment rates fails to account for how college going might vary drastically across different contexts.

Some research points to differing trends across state contexts. For instance, while national enrollment trends demonstrate high proportions of Latina/o/x students in community colleges, Gross and colleagues’ (2014) and Zerquera and Gross’ (2017) research in Indiana—a state where Latina/o/xs comprise just six percent of the overall state’s population and less than one percent of the entire US Latina/o/x population (Pew Research Center, 2016)—found higher concentrations of Latina/o/x students in regional universities. Simultaneously, high enrollments of Latina/o/x in community colleges remain true for California, where over 60% of Latina/o/x undergraduates are enrolled in the state’s 114 community colleges (Malcom-Piqueux, 2013; Moore & Schulock, 2010; The Campaign for College Opportunity, 2015). However, California’s Latina/o/x population makes up more than one-fourth of all Latina/o/xs in the U.S. (Krogstad & Lopez, 2015). From a data analyst perspective, we can see how national data trends would be influenced by trends in California in ways that would mask the distinct trends in states like Indiana that boast just 0.8 percent of the national population of Latina/o/x individuals.

The Latina/o/x educational experiences vary widely across the U.S., pending policies related to immigration status, institutional climate, and history, which influence outcomes within different student populations (Nuñez & Crisp, 2012; Nuñez, Hoover, Pickett, Stuart-Carruthers, & Vazquez, 2013; Nguyen et al., 2017). Additionally, policies and structures within higher

¹ Throughout this article, the authors intentionally employ the term *Latina/o/x* in effort to support inclusivity of all Latina/o/x-identified peoples regardless of gender identity or expression. For a detailed discussion regarding the use of the “x” signifier, see M. de Onis (2017).

education systems vary widely by state (Martinez & Fernandez, 2004) and influence Latina/o/x postsecondary enrollments (Romano, 2012). For instance, tuition costs for public higher education systems and the financial support available to students range by state (Baum, Ma, Pender, & Welch, 2016; Baum & Payea, 2013) and influence the accessibility of certain college pathways, for Latina/o/x students in particular (Cunningham & Santiago, 2008; Kim, 2004; Nuñez & Kim, 2012). Moreover, state planning and mission differentiation efforts to contribute to stratification by race across state systems (Bastedo & Gumport, 2003); and states have responded to serving shifting demographics through higher education in varying ways (Hatch, Uman, & Garcia, 2016). Thus, as research demonstrates, distinct state contexts shape access to educational opportunity for Latina/o/x communities; however, research predominantly maintains a decontextualized understanding of enrollment patterns across different states.

These differing contexts of Latina/o/x student experiences suggest that more nuance is needed in understanding Latina/o/x college-going trends. The masking of this diversity in the Latina/o/x experience has implications for the ways Latina/o/x students are supported and their pathways structured. A monolithic perspective of the Latina/o/x community poses challenges to determining adequate state-based and regional policies and practices that reflect the specific needs of the Latina/o/x community being served. As such, this work responds to a need for research to contextualize data in an examination of the extent to which community colleges are the *dominant vehicle* to higher education for Latina/o/x students across the nation. This study uses descriptive statistics to complicate the national narrative of Latina/o/x student college going and aims to provide directions for future research on Latina/o/x students in the community college.

First, we provide an overview of the Latina/o/x population in the U.S., highlighting demographic representation across states and contextualizing the growth and changes in the population in recent decades. Second, we discuss the shaping of higher education opportunity for Latina/o/x students in the U.S., highlighting key gaps in the capturing of more robust understandings of Latina/o/x college going across the U.S. We continue with an explanation of methods, presentation of findings, and discussion of findings in light of the literature that follows.

Latina/o/x Population in the U.S.

Nguyen and colleagues (2017) call for clarification of the heterogeneity among Latina/o/xs to inform research and policy, which includes diversity that reflects the geography of where they

are located in the U.S. As such, we situate our analysis of data within consideration of the varying state contexts that might shape Latina/o/x college-going trends. The majority of Latina/o/xs in the U.S. have historically resided in a handful of states and more than half of the 55 million Latina/o/x individuals reside in California, Texas, and Florida (U.S. Census Bureau, 2012). Over a quarter of all Latina/o/xs in the U.S. live in California alone and the Los Angeles region is home to six million Latina/o/xs (Pew Hispanic Research Center, 2016). Additional states such as New York, Illinois, and states in the Southwest also boast significant Latina/o/x populations (U.S. Census Bureau, 2012).

Though sometimes in much smaller numbers, Latina/o/x students reside in all states across the nation. The population growth over the past decade has drawn particular attention to some of the regions with lower Latina/o/x populations where growth has been particularly significant. While Latina/o/x population growth across the U.S. was about 10% between 2000 and 2010, specific states noted a surge in the Latina/o/x population (U.S. Census, 2012). For instance, some states in areas of the Midwest and South, such as Alabama and Indiana, saw increases by as much as 150% (U.S. Census, 2012). Latest Census figures support this trend of fast growth in these nontraditional regions, and highlight the Dakotas as another region of substantial growth (Stepler & Lopez, 2016). Although mathematically, smaller population numbers are more sensitive to change, 1,000 new Latina/o/x residents in South Dakota will have a larger proportional impact than 1,000 in California.

These population changes indicate a rapid influx of Latina/o/x students in certain states and regions, potentially faster than some states may be able to manage. At the same time that the overall Latina/o/x population is increasing, as is their growth in our nation's educational systems. Nationwide, Latina/o/x students represent one in four K-12 students (Excelencia in Education, 2015). The percent of Latina/o/x students who complete high school and enroll in college has also increased from 22% in 1993 to 35% in 2014 (Krogstad, 2016). Thus, amidst this growth many leaders and practitioners within schools and colleges across the country may be challenged with how to best support their emerging populations and turn to current research to inform their practice, which may be misaligned with the needs of the populations within their states (Nuñez et al., 2013).

Despite the differences between states, research on Latina/o/x students remains focused on the experiences of students primarily in California and Texas. This occurs in two ways:

intentionally as a site of study, which reflects the focus of policy makers and researchers residing within or who come from these regions (e.g., Hagedorn, Chi, Cepeda, & McLain, 2007; Solórzano, Datnow, Park & Watford, 2013); or as a function of national analyses in which numbers mask distinction among students in states with smaller numbers (e.g., Crisp & Nora, 2010; Kurlaender, 2006). This provides the crux of a need for our current study and is worth belaboring.

For instance, if a researcher conducts a national study of 1,000 Latina/o/x college students, reflective of the entire population in the U.S. Within this group, 271 would be from California and 181 from Texas, while three would be from Kentucky, two from Delaware, one each from the states of Montana, New Hampshire, and Mississippi. There would be no one from Vermont, Maine, or West Virginia; thus, the findings would not reflect the experiences of Latina/o/x students in those states. In essence, this approach sends a message to the 68,000 Latina/o/xs students living in Vermont, Maine, North Dakota, and West Virginia (analysis of IPEDS data by authors) that their postsecondary experiences are not significant enough to study. Such a study provides researchers and policy makers with the permission to advance policy decisions and practices that may be grossly misaligned with the needs of Latina/o/x students in their states. In examining state-level enrollment patterns, the following section highlights the limited research on Latina/o/x student college enrollments and provides additional contexts to consider.

Latina/o/x College Enrollments

Research within the traditional approaches described has found that Latina/o/x students are more likely than white students to enroll in less-selective and open-access institutions, despite variances in gender, costs, and financial resources (Fry, 2004; Kurlaender, 2006; O'Connor, 2009; Perna, 2000; Schudde & Goldrick-Rab, 2015; Tovar, 2015). These trends may be explained, at least in part, by Latina/o/x students' emphasis on attending institutions that are in close proximity to home. Colleges within proximity become convenient choices for enrollment, allowing students to stay or be near home for financial or personal reasons (López Turley, 2009). More than a cost-based decision, choosing colleges close to home reflects Latina/o/x cultural values to remain near family (Cejda, Casparis, Rhodes, & Kelly, 2008; Santiago, 2007), as parents play an important role in motivating and supporting Latina/o/x students in their educational pursuits (Ceja, 2004; Gándara, 1996; Sánchez, Reyes, & Singh, 2005). With community colleges situated in more accessible locations and offering a more inclusive campus environment (Hagedorn et al., 2007;

Jones, 2013; Levin, Haberler, Walker, & Jackson-Boothby, 2014), it makes sense that Latina/o/x students enroll in these institutions at higher rates.

High concentrations of Latina/o/x students in community colleges go beyond access and initial choice for institution of attendance. Notably, much research has found that Latina/o/x students enroll in community colleges with the intention of transferring to a four-year institution to earn a baccalaureate degree (Bailey, Jenkins, & Leinbach, 2007; Wang, 2012). However, studies find that 10% transfer to a four-year college (Solórzano, Villalpando, & Oseguera, 2005), while 14% complete a four-year degree (Radford, Berkner, Wheeless, & Shepherd, 2010). Nevertheless, a number of Latina/o/x students remain within community colleges for extended periods because of high and prolonged enrollment in developmental education courses, poor or inaccessible advising, and part-time attendance (Acevedo-Gil, Santos, & Solórzano, 2014; Grubb et al., 2011; Ornelas & Solórzano, 2004). Thus, given the institutional forces shaping Latina/o/x student experiences and the specific preferences and needs of Latina/o/x students, it is not surprising that research has consistently found the majority of Latina/o/x enrollments concentrated in community colleges (Fry, 2002; Kurlaender, 2006; Rendon & Nora, 1989).

While previous studies examine the large concentration of Latina/o/x students enrolled in community colleges (e.g., Heller, 1999; Kurlaender, 2006; Nuñez, Sparks, & Hernández, 2011; O'Connor, 2009), it is not without complication. Specifically, the majority of these studies focus on aggregated national data (e.g., Kurlaender, 2006), California-centric data (e.g., Hagedorn et al., 2007), and data that may no longer be timely enough to capture our current context of Latina/o/x educational experiences (e.g., Heller, 1999). These approaches raise questions as to what is actually reflected in national rates and how this national focus may mislead and misinform even the best of intentioned efforts.

Some exceptions that help address a need for more nuance in understanding Latina/o/x educational experiences include Gross and colleagues' (2013, 2014, 2017) work in Indiana which notably highlights the distinct college-going patterns of Latina/o/x students who enroll in regional-serving universities in greater numbers than they do in the state's community colleges. In a national study, Hatch, Uman, and Garcia (2016) examined state-by-state differences in the achievement of equity across the nation, noting that this achievement varied across states in keeping up with population growth. In a different approach, Torres and Zerquera (2012) examined institutional readiness to serve Latina/o/x students in rapid population growth regions,

centering the challenge on colleges and universities to be aware of the distinct needs of their diversifying populations and advancing a need for research to do the same.

Each of these studies highlight the importance of pushing Latina/o/x student research to account for variation across the U.S. The state context of Latina/o/xs' educational experiences must be considered to better serve this population largely marginalized by the educational system. Through an aggregated, national perspective, the majority of Latina/o/x college students are enrolled in the community college, disaggregating their enrollment patterns may help anticipate needs in future research, policy, and practice. The current study aims to provide a nuanced discussion surrounding where Latina/o/x students enroll across different state contexts to address missed opportunities for policy, practice, and research on Latina/o/x pathways into and across community colleges.

Methods

This study sought to offer a contextualized understanding of postsecondary pathways by examining the concentrations of Latina/o/x students in higher education sectors on a state-by-state basis. In this effort, the following research question structured our examination: taking a state-by-state perspective, are Latina/o/x college students enrolled in community colleges at higher rates than they are at four-year colleges?

Data

The data for this study derived primarily from the Integrated Postsecondary Education Data System (IPEDS) enrollment survey for all states and sectors of higher education for the 2012-2013 academic year. All accredited, degree-granting institutions in the U.S. (excluding U.S. territories) were included in this analysis. Degree-seeking undergraduates enrolled during the 2012-2013 academic year at these institutions were included in the analysis. Despite using enrollment data, we acknowledge that that student enrollment was not a one-time occurrence, but a decision that students made every day and every semester. Thus, we did not limit our consideration of enrollment to first-time decisions, but tried to capture the continuous decisions of students to enter and stay in higher education and the sectors of higher education that were answering this call. As such, enrollment data for all 2012-2013 undergraduates were collected

by racial categories at the institutional level, then aggregated to the state level by sector for analysis.

Analysis

We used geographic information systems (GIS) to spatially analyze and compare proportions of Latina/o/x undergraduate enrollments between sectors within states, then across states. GIS helped strengthen existing data into tools that illuminate structures and systems shaping the distribution of college opportunity contextualizing statistical data (Pacheco & Velez, 2009). Further, this approach could better facilitate a deeper understanding of data often presented as tables and numbers to assess how space mediated educational outcomes (Gulson & Symes, 2007). Therefore, we integrated GIS spatial analysis as a means to apply our descriptive analysis of enrollments and illuminate patterns across state contexts.

As researchers, we made intentional decisions about the ways to determine proportions of enrollment and draw comparisons between these enrollment figures. In the literature, many different ways of computing proportions are determined and comparisons drawn in effort to reflect the dominance of community college enrollments among Latina/o/x students. We center Latina/o/x students as the key group of analysis and focused on their enrollments without comparing them to a separate group.

As such, we determined the enrollment data for Latina/o/x undergraduate students within the following sectors: (1) public, four-year institutions, (2) private not-for-profit four-year institutions, (3) for-profit institutions (including two- and four-year institutions), and (4) community colleges (all institutions classified as public, two-year institutions). After determining these calculations, we examined enrollments of Latina/o/x students by comparing across the four higher education sectors to determine what sector(s) enrolled the greatest proportions of Latina/o/x students to address our research question—are Latina/o/x college students enrolled in community colleges at higher rates in comparison to four-year colleges? We present the findings in the following section.

Findings

To situate the data in the national perspective, we first considered the overall enrollment rates for Latina/o/x undergraduates nationwide. Based on the analysis of IPEDS data, dominant

understandings are maintained because, nationally, greater proportions of Latina/o/x students in higher education were enrolled in community colleges than in other sectors. In the 2012-2013 academic year, over 42% of degree-seeking Latina/o/x undergraduates enrolled in higher education were at community colleges, 36% at public four-year colleges, 16% at private colleges, and nine percent at for-profits.

Figure 1 considers this question dichotomously examining whether or not Latina/o/x students were enrolled in community colleges at higher rates than four-year colleges and universities (i.e., public and private, not-for-profit sector enrollments) within their state. Shades of yellow and blue reflect dominant enrollment patterns. When the majority of Latina/o/x students were enrolled in community colleges across all institutions, the state is shaded in yellow and shaded in blue when the majority of Latina/o/x students in the state were enrolled in four-year public or private colleges.

As demonstrated in Figure 1, higher concentrations of enrollments in community colleges by Latina/o/x students were demonstrated in 22 states, primarily in regions of the west, southwest, and some of the midwest. As expected, California was within this grouping of states, as were other Latina/o/x-populated states including Texas, Illinois, Washington, and other states in the southwest (e.g., Arizona and New Mexico). Among this group were other states with growing but smaller Latina/o/x populations, such as Nebraska, Kansas, the Carolinas, and Minnesota. Notably, across a number of these states, the differences in enrollment between sectors was comparable: proportional differences in enrollment across sectors were within a five-percentage point margin across six states—Maine, Michigan, Wisconsin, Oklahoma, Kentucky, and Colorado. So while Latina/o/x undergraduates were primarily enrolled in community colleges in these states, similar proportions of students were enrolled in four-year institutions.

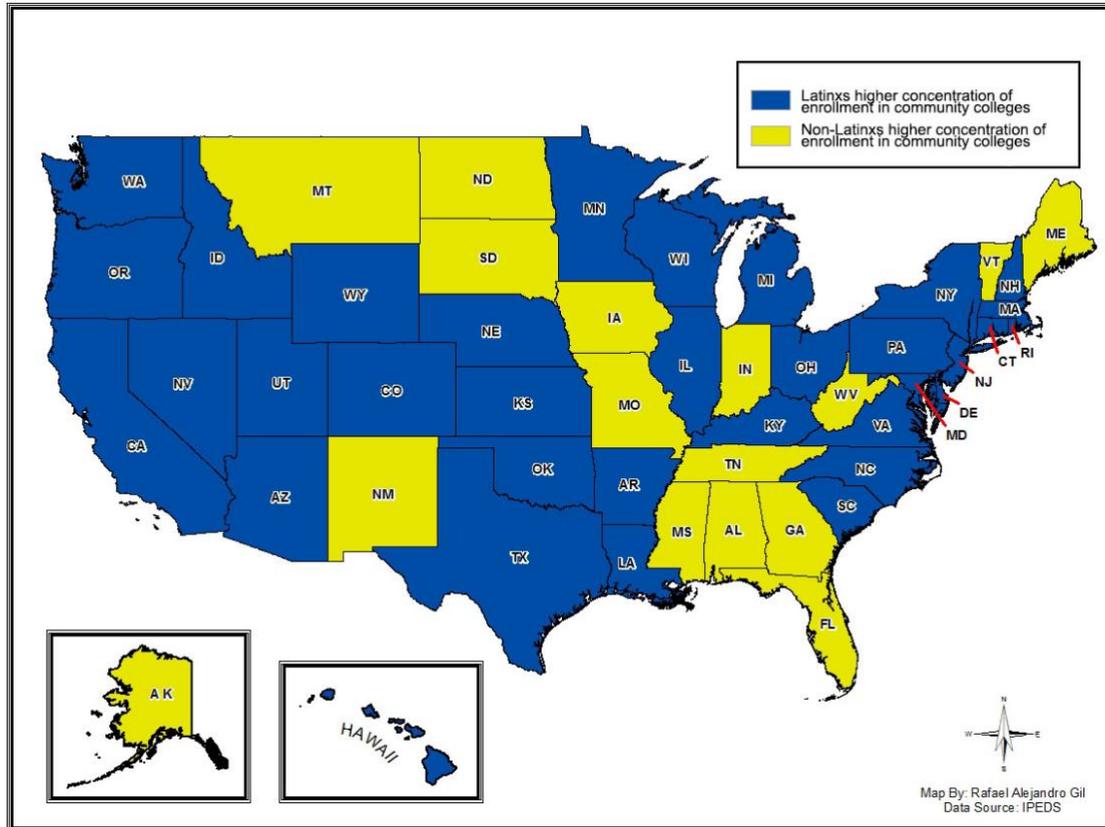


Figure 1. Latina/o/x 2012-2013 postsecondary enrollments, disaggregated by state.

Challenging the dominant narrative of the role of the community college sector nationwide in the enrollment of Latina/o/xs, in more than half of the states ($n=28$) Latina/o/x students were enrolled in four-year colleges at higher rates than they were enrolled in community colleges. The higher rates in the four-year sector were distributed primarily in the southeast and northeast regions of the U.S., with similar trends across some of the Great Plains states. States like Florida and New York, where large proportions of the U.S. Latina/o/x population lived, had more Latina/o/x college students pursuing degrees within public and private colleges than were enrolled across the states' community college systems. The same is true for Latina/o/x students in Alabama and Mississippi, states that had considerable growth in its Latina/o/x populations across the past decade.

In sum, Figure 1 depicts that while the majority of Latina/o/x students were largely enrolled in community colleges within many states, the narrative fails to account for enrollment trends across more than half of the nation. These findings point to ways that data disaggregation

illuminate distinct trends in the context of Latina/o/x enrollments nationwide that necessitate further consideration.

To further examine the four-year sector and capture differences in pathways for Latina/o/x enrollment, Figure 2 illustrates disaggregated data by institution type and compares whether Latina/o/x enrollment was defined by enrollment in public two-year (yellow), public four-year (blue), private four-year, non-profit (green) or for-profit (not pictured) colleges. Considering not just sector but also type helps in examining and illuminating where key differences in enrollments lie and may point to distinct state-level experiences within higher education.

As demonstrated by Figure 2, after disaggregating by institutional type, the majority of states had higher concentrations of Latina/o/x students in community colleges over the disaggregated view of other institution types across the four-year sector, reflecting national trends of enrollment. These comparisons holding, it was notable that Latina/o/x students were concentrated in the public four-year sector at higher rates in 16 states, or about one-third of the nation. This included states with large Latina/o/x populations, such as Florida and Nevada, and states with reported high levels of growth in their Latina/o/x populations, like Alabama, Indiana and Tennessee. Further, in three states (Maine, Missouri, and New Hampshire) Latina/o/x students were concentrated in private four-year colleges at higher rates than other sectors, highlighting distinct and somewhat surprising trends for students in these states. No state had highest concentrations of Latina/o/x students in for-profit institutions across their enrollments.

The analysis in Figure 2 essentially divides the four-year sector's numbers by private and public. Thus, states like Louisiana, for instance, where 51% of Latina/o/x students were enrolled in the four-year non-profit sector and 43% in the two-year sector, had greater proportions of Latina/o/x students in the two-year sector overall. However, when considering institution type, 39% of all Latina/o/x students were in public four-years and 12% in private four-years, relative to that same 43% in the community college. The data reflected similar trends in a number of states such as Maryland, New York, Pennsylvania, and Ohio. This finding illuminated the relatively and much larger proportional enrollments of Latina/o/x students in the four-year sector across the nation in states like Florida, the Dakotas, Vermont, Utah, Indiana, and Georgia. The findings and possible explanations are discussed in the following section.

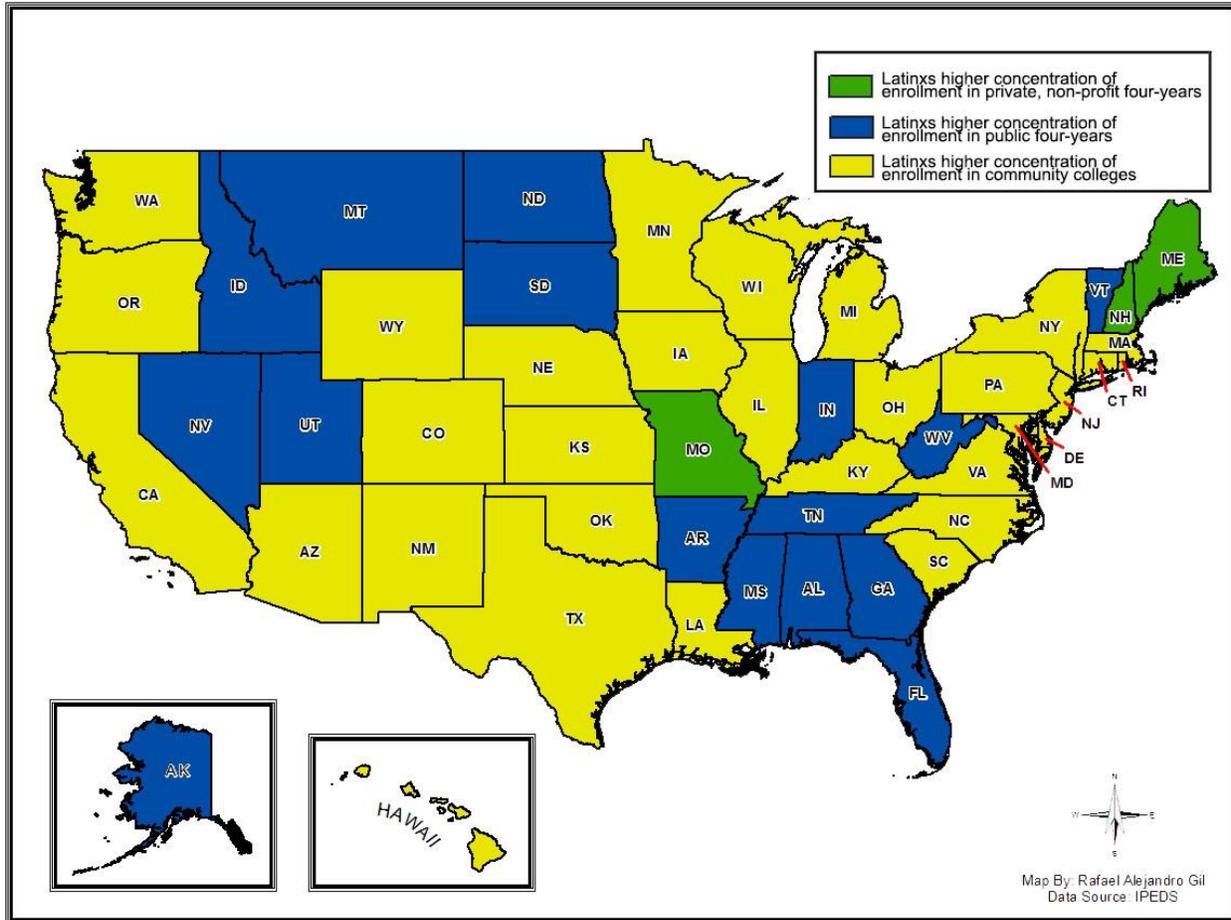


Figure 2. Latina/o/x 2012-2013 postsecondary enrollments, disaggregated by state and sector.

Discussion and Implications for Future Research

This study aims to complicate dominant understandings of the postsecondary enrollments of Latina/o/x students by centering the variation across state enrollments. These findings reposition commonly reported statistics about Latina/o/x postsecondary enrollments, pointing to where trends of community college enrollment may be misleading and influence researchers and policy makers to overlook distinct patterns in enrollment. Our findings show that despite national reports (e.g., Fry, 2002, 2011) Latina/o/x college-going is not necessarily characterized by community college enrollment. In more than half of the nation, Latina/o/x students enroll in the four-year sector at much higher rates than they enroll in the community college. By focusing on national trends alone, research glazes over these key differences in college enrollments and leaves the narrative of Latina/o/x college students as incomplete.

The state-by-state disaggregation and GIS approach to the data allows this story to emerge in ways that national calculations and data tables might otherwise mask. The findings represent an emergence of trends within certain regions of the U.S. For instance, despite the presence of strongly-developed community college systems, Latina/o/x students in many states in the South enroll in four-year institutions at higher rates than they are in two-year colleges. On the other hand, many of the plains states maintain higher community college enrollments. What explains these trends? In what ways might institutional type, state policies, demographic variations, and the Latina/o/x populations within these states shape Latina/o/x postsecondary pathways?

Current research points to a few potential explanations. For instance, research has found that as a result of intersectional issues related to privilege and oppression around immigration, race, and class, certain ethnic groups generally have higher educational attainment rates than others (Covarrubias, 2011; Covarrubias & Lara, 2015; Nuñez et al., 2013; Pérez Huber, Malagón, Ramirez, Camargo Gonzalez, Jimenez, & Velez, 2015). For example, Cubans over the age of 25 hold bachelor's degrees at rates double that of Mexicans. While Cubans make up significantly less of the overall population of the U.S. than those of Mexican ethnicity—3.7 percent of all Latina/o/xs in the U.S. as compared to the 65% of Latina/o/xs from Mexican backgrounds (Motel & Patten, 2012)—their population is the most concentrated of all Latina/o/x ethnic groups, largely residing in Florida (Motel & Patten, 2012). That Florida reflects larger concentrations of Latina/o/xs in the four-year sector is not a causal inference, but echoes calls for greater nuance needed in examining the Latina/o/x population and what explains differences in pathways across the nation. Nationality and ethnic background of Latina/o/x students has to a very limited extent been accounted for in research studies in the community college (e.g., Hagedorn & Maxwell, 1999). Given the way ethnic groups are dispersed across the U.S. (Motel & Patten, 2012), more research should incorporate this lens that accounts for ethnic differences within Latina/o/x students.

Another area of research that may potentially help explain these trends is related to the educational policies present within certain states. Many of the Latina/o/x students captured in the data here did not only begin their educational careers at the community college, but have also remained in the community college despite baccalaureate aspirations (Bailey, Jenkins, & Leinbach, 2007; Wang, 2012). Further, many may have ended up in the community college along their pathway in higher education as Latina/o/x students have the highest rates of reverse-transfer

relative to non-Latina/o/xs (i.e., transferring from a four-year college to a two-year college) (Ruiz Alvarado, 2014). Statewide transfer and articulation policies have been found to be effective in supporting community college student transfer to baccalaureate-granting institutions (Anderson, Sun, & Alfonso, 2006). Of note, many states that do not have state-level community college transfer policies (Education Commission of the States, 2016) were found in our study to have high concentrations of Latina/o/x students in the community college (e.g., California, Texas, Nebraska, and South Carolina). The strength of this relationship, particularly as it relates to Latina/o/x student pathways, warrants deeper, causal analysis to inform best practices for states to support their Latina/o/x and other populations.

Other state differences that impact Latina/o/x students disproportionately and may be of interest to pursue are related to mission differentiation efforts (Bastedo & Gumpert, 2003; Longanecker, 2008), undocumented student policies (Covarrubias, 2011; Pérez Huber et al., 2015), state funding and tuition costs (Baum et al., 2016; Baum & Payea, 2013), and shifting state demographics (Hatch, Uman, & Garcia, 2016). Future research should draw from this exploration using causal inference and longitudinal data techniques, particularly during these times of rapid growth in the Latina/o/x population in the U.S., to capture the impact of shifts in policy and practice on enrollments to offer a more complete and informed story of what influences Latina/o/x pathways in higher education. Qualitative research should center on the Latina/o/x experiences within state contexts that are understudied to highlight the distinct experiences of Latina/o/x students in these regions. Both approaches to future research need to be better used by policy makers and practitioners as they are making decisions about how to best support Latina/o/x students in their own states.

Finally, previous research in California finds that higher concentrations of Latina/o/x student enrollments in a community college influence and encourage Latina/o/x students to perform academically (Hagedorn et al., 2007). The present study highlights the need for more research to examine the community college contexts and experiences of Latina/o/x students in states that maintain low concentrations of Latina/o/x community college students. If previous research finds that Latina/o/x students in California Community Colleges (Solórzano et al., 2013)—where they represent 43% of students—experience various obstacles to completing a degree, there is also a need for research to examine the particular experiences of Latina/o/x

students in the 16 states where Latina/o/x community college students represent less than five percent of the student population and do not have the same sources of support.

While we begin to contextualize the answer to these questions earlier in this manuscript, it is beyond the scope of this study to examine these potential influences directly. In many ways, these findings raise more questions than are answered. However, this work establishes a first step in effort to bring research on Latina/o/x students in the community college to contextualize these students' college-going trends through a more nuanced lens that reflects their context.

Recommendations for Policy and Practice

While in many ways the findings of our work raise more questions than they answer, they do point to meaningful takeaways for policymakers and practitioners. Previous studies find that high school counselors are more likely to steer Latina/o/x students into the community college due to misinformed perceptions about preferred college costs and pathways (McDonough & Calderone, 2006; Mitkos & Bragg, 2008). There is a danger in misperception of preference, particularly in states with newly established Latina/o/x populations, where higher education administrators and practitioners may be struggling to establish a culture that supports these students. Promoting options and opportunity for Latina/o/x students across the many types of higher education institutions available is important. Additionally, practitioners in both community colleges and four-year institutions have an important role to play in terms of transfer support. Particularly in states with high community college concentrations, statewide conversations between practitioners in both sectors should center on how to promote effective transfer pathways for students.

Conclusion

Latinas/os/xs make up a large proportion of our nation's population and of the students in our educational systems. While much attention is given to students within community colleges, this work offers a more nuanced perspective to examine the extent to which community colleges are the primary higher education pathway for Latina/o/x students across the nation. By disaggregating enrollment data by state, our analysis reveals important variations among the postsecondary enrollments of Latina/o/x students across the U.S.

By providing a more accurate understanding of Latina/o/x enrollment concentrations in each state, we establish the need to continue examining previous findings as they relate to Latina/o/x college pathways and provide a baseline to inform institutional leaders so they may be better prepared to adequately serve the Latina/o/x students within their own states. This work calls for an increase in research that contextualizes the Latina/o/x student experience within each state to avoid over-simplistic narratives about enrollment pathways that could lead to misinformed public policy or practice. Moreover, the findings highlight considerations for enrollment management professionals to complicate their understandings about Latina/o/x community college enrollment.

This study points to dominant understandings that generally may not hold for Latina/o/x students. The belief that the community college is the *dominant vehicle* for Latina/o/x students may have an oppressive utility towards Latina/o/x opportunity through education. If used to inform decision-making at the state level, these decisions may ill-serve Latina/o/x students in the state and perpetuate notions of students' needs that do not fit their realities. This can no longer be the norm in efforts to examine and eradicate inequity in educational opportunity. This analysis hopes to advance an alternative narrative moving forward and push for greater nuance in our study of Latina/o/xs. Further, this work demonstrates that how researchers ask and answer questions matters. Generalized responses to simplified questions will not sufficiently inform policy and practice to better serve our students. More complex perspectives are needed to challenge commonly-held beliefs and shift our focus to the experiences and realities of Latina/o/x students.

Acknowledgements: The authors wish to thank Mr. Rafael Alejandro Gil for his support in developing the images to accompany our analysis in this article. Your creativity, diligence, and efforts made the analysis and this manuscript possible.

References

- Acevedo-Gil, N., Santos, R., & Solórzano, D. (2014). Examining a rupture in the Latina/o college pipeline: Developmental education in the California Community College system. *Perspectivas: Issues in higher education policy and practice*. American Association of Hispanics in Higher Education, Educational Testing Services, and University of Texas San Antonio.
- Anderson, G. M., Sun, J. C., & Alfonso, M. (2006). Effectiveness of statewide articulation agreements on the probability of transfer: A preliminary policy analysis. *Review of Higher Education, 29*, 261–291.
- Bailey, T., Jenkins, D., & Leinbach, D. T. (2007). *The effect of student goals on community college performance measures*. (CCRC Brief No. 33). New York, NY: Columbia University, Community College Research Center.
- Bastedo, M. N., & Gumpert, P. J. (2003). Access to what? Mission differentiation and academic stratification in U.S. public higher education. *Higher Education, 46*, 341-359.
- Baum, S., Ma, J., Pender, M., & Welch, M. (2016). *Trends in student aid 2016*. New York, NY: The College Board. Retrieved from https://trends.collegeboard.org/sites/default/files/2016-trends-student-aid_0.pdf.
- Baum, S., & Payea, K. (2013). *Trends in student aid*. New York, NY: The College Board.
- Ceja, M. (2004). Chicana college aspirations and the role of parents: Developing educational resiliency. *The Journal of Hispanic Higher Education, 3*(4), 1-25.
- Cejda, B. D., Casparis, C. A., Rhodes, J. H., & Kelly, S. N. (2008). The role of social capital in the educational decisions of Latina/o/x students attending Latina/o/x-serving community colleges. *Enrollment Management Journal, 2*(1), 32-59.
- Covarrubias, A. (2011). Quantitative intersectionality: A critical race analysis of the Chicana/o educational pipeline. *Journal of Latinos and Education, 10*(2), 86-105.
- Covarrubias, A., & Lara, A. (2014). The undocumented (im) migrant educational pipeline: The influence of citizenship status on educational attainment for people of Mexican origin. *Urban Education, 49*(1), 75-110.
- Crisp, G., & Nora, A. (2010). Hispanic student success: Factors influencing the persistence and transfer decisions of Latino community college students enrolled in developmental education. *Research in Higher Education, 51*(2), 175-194.
- Cunningham, A. F., & Santiago, D. A. (2008). *Student aversion to borrowing: Who borrows and who doesn't*. Washington, DC: Institute for Higher Education Policy
- Education Commission of the States (2016, April). Transfer and articulation: Statewide guaranteed transfer of an associate degree. Author. Retrieved from <http://ecs.force.com/mbdata/MBquest3RTA?Rep=TR1603>
- Excelencia in Education. (2015). *The Condition of Latinos in Education: 2015 Factbook*. Washington, D.C.: Excelencia in Education. Retrieved from <https://www.edexcelencia.org/research>.
- Fry, R. (2011). *Hispanic college enrollment spikes, narrowing gaps with other groups*. Washington, DC: Pew Hispanic Center.

- Fry, R. (2002). *Latina/o/x students in higher education: Many enroll, too few graduate*. Washington, DC: Pew Hispanic Center.
- Fry, R. (2004). *Latino youth finishing college: The role of selective pathways*. Washington, DC: Pew Hispanic Center.
- Gándara, P. (1996). Chicanas in higher education: Implications for policy. In A. Hurtado, R. Figueroa, & E. E. Garcia (Eds.), *Strategic interventions in education: Expanding the Latina/ Latino pipeline* (pp. 167–197). Santa Cruz, CA: University of California.
- Gerald, D., & Haycock, K. (2006). *Engines of inequality: Diminishing equity in the nation's premier public universities*. Washington, DC: The Education Trust.
- Gross, J., Torres, V., & Zerquera, D. (2013). Financial aid and attainment among students in a state with changing demographics. *Research in Higher Education*, 54(4), 383-406.
- Gross, J., Zerquera, D., Berry, M. S., & Inge, B. (2014). Latino associate degree completion: Effects of financial aid over time. *Journal of Hispanic Higher Education*, 13(3), 177-190.
- Grubb, N., Boner, E., Frankel, K., Parker, L., Patterson, D., Gabriner, R., & Wilson, S. (2011). *Understanding the "crisis" in basic skills: Framing the issues in community colleges (Basic Skills Instruction in California Community Colleges, Working Paper No. 1)*. Stanford, CA: Policy Analysis for California Education.
- Gulson, K., & Symes, C. (2007). *Knowing one's place: educational theory, policy, and the spatial turn*. New York, NY: Routledge.
- Hagedorn, L. S., Chi, W. Y., Cepeda, R. M., & McLain, M. (2007). An investigation of critical mass: The role of Latino representation in the success of urban community college students. *Research in Higher Education*, 48(1), 73-91.
- Hagedorn, L. S., & Maxwell, W. (1999). *Research on urban community college transfer and retention: The Los Angeles TRUCCS project*.
- Hatch, D. K., Uman, N. M., & Garcia, C. E. (2016). Variation within the "New Latino Diaspora": A decade of changes across the United States in the equitable participation of Latina/os in higher education. *Journal of Hispanic Higher Education*, 15(4), 358-385.
- Heller, D. E. (1999). The effects of tuition and state financial aid on public college enrollment. *The Review of Higher Education*, 23(1), 65-89.
- Jones, W. A. (2013). The relationship between student body racial composition and the normative environment toward diversity at community colleges. *Community College Review*, 41(3), 249-265.
- Karabel, J. (2005). *The chosen: The hidden history of admission and exclusion at Harvard, Yale, and Princeton*. Boston, MA: Houghton Mifflin.
- Kim, D. (2004). The effect of financial aid on students' college choice: Differences by racial groups. *Research in Higher Education*, 45, 43-70.
- Kincheloe, J. L., & McLaren, P. L. (1994). Rethinking critical theory and qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 138–157). Thousand Oaks, CA: Sage.

- Krogstad, J. M. (2016, July). Five facts about Latinos and education. Washington, DC: Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2016/07/28/5-facts-about-latinos-and-education/>
- Krogstad, J. M., & Lopez, M. H. (2015, June). Hispanic population reaches record 55 million, but growth has cooled. Washington, DC: Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2015/06/25/u-s-hispanic-population-growth-surge-cools/>
- Kurlaender, M. (2006). Choosing community college: Factors affecting Latino college choice. *New Directions for Community Colleges*, 133, 7-16.
- Levin, J. S., Haberler, Z., Walker, L., & Jackson-Boothby, A. (2014). Community college culture and faculty of color. *Community College Review*, 42(1), 55-74.
- López Turley, R. N. (2009). College proximity: Mapping access to opportunity. *Sociology of Education*, 82, 126-146.
- M. de Onis, C. (2017). What's in an 'x'? An exchange about the politics of 'Latina/o/x.' *Chiricu Journal*, 1(2), 78-91.
- Ma, J., & Baum, S. (2016, April). *Trends in community colleges: Enrollment, prices, student debt, and completion (College Board Research Brief)*. New York, NY: The College Board. Retrieved from <http://trends.collegeboard.org/sites/default/files/trends-in-community-colleges-research-brief.pdf>
- Martinez, M., & Fernandez, E. (2004). Latinos at community colleges. *New Directions for Student Services*, 105, 51-62.
- McDonough, P.M., & Calderone, S. (2006). The meaning of money: Perceptual differences between college counselors and low-income families about college costs and financial aid. *American Behavioral Scientist*, 1703-1718. DOI: 10.1177/0002764206289140
- Mitkos, Y.M., & Bragg, D.D. (2008). Perceptions of the community college of high school counselors and advisors. *Community College Journal of Research and Practice*, 32(4), 375-390.
- Moore, C., & Schullock, N. (2010). *Divided we fail: Improving completion and closing racial gaps in California community colleges*. Sacramento, CA: California State University, Sacramento, Institute for Higher Education Leadership and Policy.
- Motel, S., & Patten, E. (2012, June). The 10 largest Hispanic origin groups: Characteristics, rankings, top counties. *Pew Hispanic Center*. Retrieved from <http://www.pewhispanic.org/2012/06/27/the-10-largest-hispanic-origin-groups-characteristics-rankings-top-counties/>.
- Nguyen, B. M. D., Alcantar, C. M., Curammeng, E. R., Hernandez, E., Kim, V., Paredes, A. D., Freeman, R., Nguyen, M. H., & Teranishi, R. (2017). *The racial heterogeneity project: implications for educational research, practice, and policy*. Iowa City, IA: ACT, Inc. Retrieved from <http://www.act.org/content/dam/act/unsecured/documents/R1641-racial-heterogeneity-project-2017-06.pdf>

- Núñez, A., & Crisp, G. (2012). Ethnic diversity and Latino/a college access: A comparison of Mexican American and Puerto Rican beginning college students. *Journal of Diversity in Higher Education*, 5(2), 78-95. DOI:10.1037/a0026810.
- Núñez, A. M., Hoover, R. E., Pickett, K., Stuart-Carruthers, A. C., & Vazquez, M. (2013). *Latinos in higher education: Creating conditions for student success: ASHE Higher Education Report (Vol.38, Issue 1)*. San Francisco, CA: Jossey-Bass.
- Núñez, A. M., & Kim, D. (2012). Building a multicontextual model of Latino college enrollment: Student, school, and state-level effects. *The Review of Higher Education*, 35, 237-263.
- Núñez, A. M., Sparks, P. J., & Hernandez, E. A. (2011). Latino access to community colleges and Hispanic-serving institutions: A national study. *Journal of Hispanic Higher Education*, 10(1), 18-40.
- O'Connor, N. (2009). Hispanic origin, socio-economic status, and community college enrollment. *Journal of Higher Education*, 80, 121-145.
- Ornelas, A., & Solórzano, D. G. (2004). Transfer conditions of Latina/o/x community college students: A single institution case study. *Community College Journal of Research and Practice*, 28, 233-248.
- Pacheco, D., & Velez, V. (2009). Maps, map-making, and critical pedagogy: Exploring GIS and maps as a teaching tool for social change. *Seattle University Law Review*, 8(1), 273-302.
- Pérez Huber, L., Malagón, M., Ramirez, B., R., Camargo Gonzalez, L., Jimenez, A., & Velez, V., N. (2015). *Still falling through the cracks: Revisiting the Latina/o education pipeline*. Los Angeles, CA: University of California, Los Angeles, Chicano Studies Research Center.
- Perna, L. W. (2000). Differences in the decision to attend college among African Americans, Hispanics, and whites. *The Journal of Higher Education*, 71(2), 117-141.
- Pew Hispanic Research Center. (2016, September). *Hispanic population and origin in select U.S. metropolitan areas, 2014*. Washington, DC: Author.
- Radford, A. W., Berkner, L., Wheelless, B., & Shepherd, B. (2010). *Persistence and attainment of 2003-4 beginning postsecondary students: After 6 years (NCES 2011-151)*. U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Rendon, L., & Nora, A. (1989). A synthesis and application of research on Hispanic students in community colleges. *Community College Review*, 17(1), 79- 85.
- Romano, R. M. (2012). Looking behind community college budgets for future policy considerations. *Community College Review*, 40(2), 165-189.
- Ruiz Alvarado, A. (2014). *Latina/o pathways through college: Characteristics of mobile students and the institutional networks they create*. Doctoral dissertation, University of California, Los Angeles.
- Sánchez, B., Reyes, O. & Singh, J. (2005). Makin' it in college: The value of significant individuals in the lives of Mexican-American adolescents. *Journal of Hispanic Higher Education*, 5(1), 48-67.

- Santiago, D. A. (2007). *Choosing Latina/o/x-serving institutions: A closer look at Latino students' college choices*. Washington, DC: Excelencia in Education. Retrieved from <http://www2.ed.gov/programs/idea/idea5/legislation.pdf>
- Schudde, L., & Goldrick-Rab, S. (2015). On second chances and stratification: How sociologists think about community colleges. *Community College Review*, 43(1), 27-45.
- Solórzano, D., Datnow, A., Park, V., & Watford, T. (2013). *Pathways to Postsecondary Success: Maximizing Opportunities for Youth in Poverty*. Final Report of the Pathways to Postsecondary Success Project at UC/ACCORD (All Campus Consortium on Research for Diversity), University of California, Los Angeles. Retrieved from <http://pathways.gseis.ucla.edu/publications/PathwaysReport.pdf>
- Solórzano, D. G., Villalpando, O., & Oseguera, L. (2005). Educational inequities and Latina/o/x undergraduate students in the United States: A critical race analysis of their educational progress. *Journal of Hispanic Higher Education*, 4(3), 272-294.
- Stepler, R., & Lopez, M. H. (2016). *U.S. Latino population growth and dispersion has slowed since the onset of the Great Recession*. Washington, DC: Pew Research Center. Retrieved from <http://www.pewhispanic.org/2016/09/08/latino-population-growth-and-dispersion-has-slowed-since-the-onset-of-the-great-recession/>.
- The Campaign for College Opportunity. (2015, April). *The state of higher education in California*. Los Angeles and Sacramento: Authors.
- Tovar, E. (2015). The role of faculty counselors, and support programs on Latino/a community college students' success and intent to persist. *Community College Review*, 43(1), 46-71.
- Torres, V., & Zerquera, D. (2012). Hispanic-serving institutions: Patterns, predictions, and implications for informing policy discussions. *Journal of Hispanic Higher Education*, 11(3), 259-278.
- U.S. Census Bureau. (2012, March). *Overview of race and Hispanic origin: 2010 census brief*. Washington, DC: U.S. Census Bureau.
- U.S. Census Bureau. (2012). *The Hispanic population in the United States*. Washington, DC: Author. Retrieved from <http://www.census.gov/population/hispanic/data/2012.html>.
- Wang, X. (2012). Factors contributing to the upward transfer of baccalaureate aspirants beginning at community colleges. *The Journal of Higher Education*, 83, 851-875.
- Zerquera, D., & Gross, J. P. K. (2017). Context matters: A critical consideration of Latino student success outcomes within different institutional contexts. *Journal of Hispanic Higher Education*, 16(3), 209-231.