

Demographic Changes of Hispanic Populations and Hispanic Student Enrollment in Texas Community Colleges: A Literature Review

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In this literature review, Hispanic demographic changes in the United States and in Texas are examined. Hispanics have accounted for large changes in population, population change, and proportion of population. Accordingly, the literature was reviewed regarding Hispanic immigrants, both authorized and non-authorized immigrants. The issue of poverty related to Hispanics was addressed. Hispanics and college enrollment, along with the educational attainment patterns of Hispanics, were discussed. The Texas Closing the Gaps plan was examined, as it was related to Hispanic students. The over-representation of Hispanics in community colleges was addressed. Finally, implications of this review of the literature were provided.

Researchers have reported that a confluence of forces (i.e., divergent skills distribution, a changing economy, and projected demographic changes) could soon create a “perfect storm” (Kirsch, Braun, Yamamoto, & Sum, 2007, pp. 2-3) for the whole U. S. economy by leaving some members of society more economically vulnerable than other members of society. Similarly, Texas researchers have posited that the economic outlook for all Texans could be at risk if educational gaps continued among racial and ethnic groups (Murdock, 2011a; Texas Higher Education Coordinating Board, 2011b).

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In their foundation works, *The Texas Challenge: Population Change and the Future of Texas* (Murdock, Hoque, Michael, White, & Pecotte, 1997) and *The New Texas Challenge: Population Change and the Future of Texas* (Murdock, White, Hoque, Pecotte, You, & Balkan, 2003), Texas demographers documented related trends with respect to population growth in Texas. Two assertions emphasized within these trends was the population growth of non-Anglos, most notably, the growth of Hispanics, coupled with an aging, predominantly Anglo, baby boom population. Murdock et al. (1997, 2003) examined the implications of such trends including the impact on the Texas labor force, revenue base, and composition of traditional households. Murdock et al. (1997, 2003) posited that if educational gaps among non-Anglo and Anglo populations persisted, Texas would evolve into a poorer and less competitive state.

Purpose of the Literature Review

The purpose of this literature review was to survey the existing research on the Hispanic population change in Texas, as well as the Hispanic student enrollment change in Texas community colleges given that Hispanics represent a growing population in Texas and can impact its future labor force. As such, this review of the literature is separated into three general areas: (a) Hispanic demographic changes in Texas; (b) Hispanic immigrant, authorized and non-authorized ones; (c) Hispanics and poverty; (d) Hispanics and college enrollment; (e) Hispanics and educational attainment; (f) Hispanic students role in the Closing the Gaps plan; and (g) Hispanic presence in community colleges.

In reviewing the literature, a systematic approach was utilized. The Sam Houston State University Library Academic Search Complete online system was accessed, using the following search terms: Hispanic students; community colleges; Hispanic immigrants; Hispanic unauthorized immigrants; Hispanic educational attainment; and Hispanic population changes. An attempt was made to use the most up to date references possible so that this literature review would be reflective of the current state of affairs regarding Hispanics in Texas.

Demographic Changes of Hispanics in the United States and Texas

Hispanics come from 20 different nationalities, including descendants of early Spanish settlers and immigrants from Latin America (Tienda, 2009). In recent decades, births and immigration have alternated in driving population growth (Tienda, 2009). In the twenty-first century however, Hispanic births have surfaced once again as the primary determinant of population growth and by 2030, births will exceed immigration by 40%. Moreover, births from undereducated Hispanic women could continue the course of economic inequality for their offspring, as the children of undereducated Hispanic women will create increased numbers of students in the schools and workers in the labor market (Tienda, 2009).

Hispanics in the United States have experienced considerable growth in population, population change, and proportion during the last decade. From 2000 to 2010, the Hispanic population grew 43%, increasing from 35.3 million to 50.5 million in numeric growth, accounting for 56% of the nation's overall growth, representing 16.3% of the total population (Passel, Cohn, & Lopez, 2011). This statistic is striking compared to a White population growth change of 1.2%, increasing slightly from 194.5 million to 196.8 million in numeric growth, accounting for 8.3% of the nation's overall growth, and representing a decline from 69.1% to 63.7% of the total population (Murdock, 2011b). Moreover, although the increase in the

percentage of Hispanic growth within the last decade seems impressive, their percentage of growth change from the previous two decades (i.e., 53% in the 1980s) and (i.e., 58% in the 1990s) was even greater (Passel et al., 2011).

Young Hispanics accounted for large changes in population, population change, and proportion of population (Murdock, 2011b). From 2000 to 2010, among children ages 17 and under, Hispanics grew 38.8%, increasing from 12.3 million to 17.1 million in numeric growth, accounting for 253% of the nation's overall growth in this category and 17.1% to 23.1% of the total population in this category. In contrast, the population, population change, and proportion of White children ages 17 and under, decreased dramatically. White children in this age category experienced a decline in growth of 9.8%, decreasing in population from 44 million to 39.7 million, and accounting for -228% of growth and representing a total population decline from 60.9% to 53.5% in this category (Murdock, 2011b).

To appreciate the magnitude of growth change in Texas compared to the United States, Murdock (2011b) compared Texas and United States growth both historically and within the latest 10-year census count from 2000 to 2010. Since 1860, when the census first kept track of population changes, Texas has outpaced the United States in population percentage change in every 10-year count, the most recent year being a 20.6% change versus a 9.7% change. Of the 10 largest states in the United States by population size, Texas garnered the greatest increase in percentage change from 2000 to 2010. Texas also had the largest numeric change in population among all states from 2000 to 2010 (Murdock, 2011b).

Similar to Hispanic growth nationwide, Hispanics in Texas also have experienced growth in population, population change, and proportion. From 2000 to 2010, the Hispanic population grew 41.8%, increasing from 6.6 million to 9.4 million in numeric growth, while increasing from 32% to 37.6% of the total population (Murdock, 2011b). Of 9.4 million Hispanics, over 7.9 million were of Mexican origin, over 222,000 were of Salvadoran origin, and over 1.1 million represented other Hispanic origin populations (Ennis, Vargas, & Albert, 2011). In contrast, the White population experienced a population growth change of only 4.2%, increasing from 10.9 million to 11.4 million in numeric growth while decreasing from 52.4% to 45.3% of the total population (Murdock, 2011b). By 2015, researchers project Hispanics to become the largest population in Texas (Texas Higher Education Coordinating Board, 2011a).

Similar to Hispanic children at the national level, Hispanic children in Texas have also experienced impressive gains in population, population change, and proportion. From 2000 to 2010, among children 17 and under, the Hispanics population grew 39%, increasing from 2.3 million to 3.3 million in numeric growth, whereas the total percentage of the population of Hispanic children 17 and under grew from 40.5% to 48.3% (Murdock, 2011b). In contrast, the population, population change, and proportion of White children ages 17 and under again decreased dramatically. From 2000 to 2010, White children 17 and under in Texas declined 7.3%, decreasing from 2.5 million to 2.3 million in numeric growth, while the total percentage of the population of White children declined from 42.6% to 33.8% (Murdock, 2011b).

Fueling the increase in Hispanic population in Texas is the birth-to-death rate (Froeschle & Normington, 2010). For example, for every death of a White person, 1.5 White babies were born in Texas. In contrast, for every death of a Hispanic person, eight Hispanic babies were born in Texas (Froeschle & Normington, 2010). Additionally, the birthrate has also exceeded immigration as the primary source of Hispanic population growth (Murdock, 2011b) with the main recipient of both types of Hispanic growth being concentrated in metropolitan and suburban areas (Froeschle & Normington, 2010).

The projections of Hispanics in the United States and Texas show continued growth through the year 2050 (Murdock, 2011b). For example, from 2000 to 2050, the United States is projected to increase in total population to 439 million, with Whites accounting for 203.3 million, whereas Hispanics will account for 132.7 million. Murdock (2011b) projected from 2010 to 2040 Hispanics would account for 25.3 million and Whites would account for 10.9 million additional individuals.

Hispanic Immigrants

Immigration has a large influence on population growth and is a key factor toward the future size and composition of the United States (Toossi, 2009). Fifty-eight percent of Hispanics are immigrants (Ryu, 2010). Because of increased immigration and significantly higher fertility rates among Hispanics, their growth rates are projected to be much higher than other groups. Hispanic immigrants tend to have lower socioeconomic and educational attainment backgrounds than immigrants from other countries (Ryu, 2010). For example, Hispanic immigrants had the highest percentage without a high school credential compared to all other racial and ethnic groups (i.e., 20% United States born versus 50% immigrant). Hispanic immigrants also had the lowest percentage of postsecondary attainment (i.e., 14% held associate degrees or higher) compared to all other racial/ethnic groups (Ryu, 2010). Moreover, the low educational attainment of Hispanics may influence the educational attainment of their children.

Several factors adversely affect the education of Hispanic immigrants including country of origin, age of immigration, history of schooling prior to immigration, language, motivation for immigration and labor market mobility, and legal status (Ryu, 2010). For example, Mexican immigrants comprised 64% of Hispanic immigrants but were over-represented among individuals without a high school credential (i.e., 76%) and under-represented among those individuals with a college degree (i.e., 36%). In contrast, Cuban, Columbian, and Peruvian immigrants possessed similar educational attainment levels of U.S.-born Whites (Ryu, 2010).

In an analysis of data on Hispanic households, documented evidence of the occurrence of linguistic isolation wherein one in three Hispanics reported that they do not speak English or do not speak it well. Moreover, Spanish language use persisted in the home and community because of a preference to speak Spanish, even when one was fluent in English, and because Hispanics comprised a large segment of the population. However, although English language acquisition could affect academic achievement, children born in the United States to immigrant parents or children brought to the United States before the age of 12 could acquire the English language fairly well (Hurtado et al., 2010).

Unauthorized Hispanic Immigrants

Unauthorized and undocumented are used interchangeably in the research literature pertaining to demographic changes or educational attainment of immigrants. For the purposes of this literature review, the term unauthorized refers to immigrants who are foreign born non-citizens residing in the country without legal documentation. Nationally, three-quarters of unauthorized immigrants were Hispanic, and 59% were of Mexican origin. Unauthorized immigrants also comprised a large portion of the U.S. Hispanic population, workforce, and people who have U.S.-born children (Passel & Cohn, 2011).

Although unauthorized immigrants accounted for 4% of the total U.S. population, 8% of births were from unauthorized immigrants (Passel & Cohn, 2011). Interestingly, although the number of unauthorized immigrant children declined from 2000 to 2010, the number of U.S.-born children of unauthorized immigrants doubled in the same period (Passel & Cohn, 2011). Unauthorized immigrants of Mexican origin accounted for the majority (i.e., 70%) of these children, whereas unauthorized immigrants from other Latin American countries accounted for 17%.

Unauthorized immigrant settlement patterns also favored residing in the Southwest part of the United States. Although the settlement patterns of unauthorized immigrants showed a national decline from 2007 to 2010, Louisiana, Oklahoma, and Texas together, grew 240% from 1.5 million to 1.8 million. Texas had the third largest share of unauthorized immigrant population (i.e., 6.7% or 1.6 million out of 24.8 million) behind Nevada and California at 7.2% and 6.8% respectively. Of the total unauthorized immigrant population in Texas, between 60% and 76% were of Mexican origin (Passel & Cohn, 2011).

Hispanics and Poverty

Hispanics comprise close to 3 in 10 of the nation's poor (Lopez & Cohn, 2011). According to Kim (2007), Hispanic families are four times more likely to be poor than were White families. The Hispanic poverty rate also is the highest compared to all other racial and ethnic groups when using the new Census Bureau Supplemental Poverty Measure (Lopez & Cohn, 2011). This measure includes a variety of factors in determining poverty in the United States including: "medical expenses, tax credits, non-cash government benefits (e.g., food stamps, housing subsidies, school lunch programs), and cost of living adjustments for different geographic areas" (Lopez & Cohn, 2011, para. 2).

As of 2010, poverty among Hispanic children increased to record levels, driven by high birthrates of Hispanic immigrants (Lopez & Velasco, 2011). Over six million Hispanic children lived in poverty compared to 5 million White children and 4.4 million Black children. The poverty rate of Hispanic children was 35% overall, while the rate for Hispanic children of immigrant parents was 40% (Lopez & Velasco, 2011). In Texas, greater than 2.3 million Hispanics were living in poverty in 2009, accounting for 26.4% of the Hispanic population (Murdock, 2011b).

Educational attainment of parents also affected the poverty rate of Hispanic children. From 2007 to 2010, the U.S. poverty rate grew 9.7% for Hispanic children of parents who had a high school diploma or less, while the poverty rate grew 0.6% for Hispanic children who had at least one parent with a college degree (Lopez & Velasco, 2011). Overall, the poverty rate of Hispanic children whose parents had a high school degree or less was 79%, whereas the poverty rate was 16% and 4% respectively for Hispanic children whose parents had attained some college or a college degree (Lopez & Velasco, 2011).

Hispanics and College Enrollment

Recent data indicate spikes in Hispanic college enrollment. During the 2009-2010 period, Hispanic enrollment surged 24% or 350,000 (Fry, 2011). Of the 12.2 million overall enrollments in 2- and 4-year colleges, college-age Hispanics accounted for 1.8 million, or 15% (Fry, 2011). Forty-six percent or 830,000 of young Hispanics attending college were enrolled in community

colleges compared to 54% or one million enrolled at 4-year colleges (Fry, 2011). In Texas, Hispanics accounted for 27% of higher education enrollment (Ryu, 2010).

Population growth, greater Hispanic high school completion rates, and the Hispanic enrollment of college eligible students accounted for Hispanic college enrollment growth (Fry, 2011). Population growth of 18-24 year olds grew larger among Hispanics (i.e., 1.6 million) and doubled since 2000 versus White 18-24 year olds (i.e., 1.5 million) since 2000. From 2009 to 2010, the Hispanic share of 18-24 year olds grew 7% to account for 19% of the total 18-24 year old population. Additionally, the share of Hispanics 18-24 who had completed high school rose to 73% in 2010, up from 70% in 2009 (Fry, 2011).

Some researchers have interpreted Hispanic enrollment growth with caution (Ryu, 2010; Villalpando, 2010). Villalpando (2010) reported that while the college-age 18-24 year-old population continued to increase, this group did not see similar proportions in college enrollment and graduation. Ryu (2010) documented that although college enrollment rates for traditional-college age populations 18-24 years rose for all racial and ethnic groups from 1988 to 2008, enrollment gaps widened by race and ethnicity with Hispanics lagging behind at 28%, versus Asian Americans 63%, Whites 45%, and Blacks 34%.

Zarate and Burciaga (2010) documented several factors contributing to widening enrollment gaps between Hispanics and other racial and ethnic groups. Factors included high Hispanic high school dropout rates, lower likelihood for Latinos to take the college prep curriculum, Hispanic males' underrepresentation in college, de facto segregation, unequal resources, less prepared teachers, less access to Advanced Placement courses, less access to financial aid, and lack of timely college financial aid knowledge to Hispanic families. Cejda and Short (2008) reported about Hispanic family perceptions and attitudes of loans and resistance to borrowing or incurring debt to finance college as influences on college attendance rates. Finally, Zeidenberg (2008) cited three key challenges faced by community colleges in dealing with surging enrollments: (a) unprepared students in need of remedial coursework, (b) limited funding that resulted in cost cutting measures, and (c) poor student outcomes.

Gender differences exist in college enrollment data. The gender composition of enrollments began to reverse in the 1970s and early 1980s as more Hispanic and White women began to enroll in college in larger rates than men did (Villalpando, 2010). In 2008, Hispanic enrollment rates for young Hispanic women were 33% versus 23% for young Hispanic men (Ryu, 2010). This statistic represented a gender gap second to African-Americans. As of 2007, Hispanic women represented 59% of Hispanic enrollments compared to 41% for men (Ryu, 2010). Zarate and Burciaga (2010) cited enrollment gap differences between Hispanic males and Hispanic females including (a) higher salary returns from college for females, (b) literacy performance by family socialization practices, (c) school engagement, and (d) interaction with school agents.

Saenz and Ponjuan (2009) voiced particular concern regarding declining numbers in the college enrollment of Hispanic males. Saenz and Ponjuan (2009) reported early learning experiences and socio-cultural factors that detracted Hispanic males from college including maintaining the "machismo" (p. 59) archetype and a value of "familismo" (p. 62). In the machismo archetype, boys maintained a strong and independent persona that hid a lack of academic confidence (Saenz & Ponjuan, 2009). Hispanic males also possessed a value of familismo, which helped to define gender roles and led to sacrificing individual needs for the sake of family needs.

Hispanics and Educational Attainment

The United States graduates approximately 65,000 unauthorized immigrant students every year (Hurtado et al., 2010). Moreover, college enrollment by unauthorized populations is increasing. For example, Jauregui, Slate, and Stallone-Brown (2011) examined the unauthorized student population in Texas community colleges for 2001 to 2006 and cited evidence of yearly increases in proportion to overall student enrollment. Similarly, Zarate and Burciaga (2010) documented that college enrollment of unauthorized Hispanics has increased in states allowing in-state tuition. Furthermore, under the 2012 Deferred Action for Childhood Arrivals (DACA) policy, community colleges will continue to be the foremost higher education setting that provides access and affordability to unauthorized immigrant students (Gardezi, 2012). As much as 1.76 million are estimated to find relief from deportation under DACA with half of this number in school (K-12) and a quarter, high school graduates (Gardezi, 2012).

Ryu (2010) reported that from 1997 to 2007, the number of associate degrees awarded to Hispanics doubled from 42,000 to 85,000, in addition, the number of bachelor's degrees awarded to Hispanics doubled from 64,000 to 120,000. Fry (2011) documented that Hispanics continued to be the least educated racial or ethnic group citing 13% of Hispanics 25-29 years old had completed a bachelor's degree. Similarly, Tienda (2009) documented that although Hispanic college graduation rates have increased from 5% to 12% for persons 25 and over, the college completion gap has widened between Hispanic and White, Black, and Asian groups during the same period. For example, Ryu (2010) documented that in 2007, Hispanics received 11.6 undergraduate degrees per every 100 Hispanics enrolled in college. In contrast, Whites and Asian Americans received 16.9 and 15.1 degrees respectfully per every 100 students of their ethnicity enrolled in college. Moreover, Kelly, Schneider, and Carey (2010) documented that Hispanic graduation rates lag the graduation rates of Whites at all levels of admission selectivity at 4-year institutions. Furthermore, a larger educational discrepancy exists when disaggregating Latinos into ethnic-origin subgroups with Cuban-Americans having the highest educational outcomes among Hispanics, whereas Mexican and Salvadoran-Americans having the lowest educational outcomes (Villalpando, 2010).

Researchers have analyzed educational enrollment in sub-baccalaureate programs (Alfonso, 2006). Utilizing the Beginning Postsecondary Student Longitudinal Study of 1989-1994 (BPS89), Alfonso (2006) analyzed a nationally representative sample of 5,940 first-time postsecondary students establishing that Hispanics were slightly over-represented among associate degree seekers (i.e., 70% associate goals, 21 % certificate goals, 9% no stated goal). However, associate degree seekers were more likely to be employed more hours, enrolled in college part-time, and interrupt enrollment in their studies. Similarly, they were less likely to enroll in occupation programs, more likely to enroll part-time, more likely to interrupt enrollment in their studies, more likely to work more, and less likely to reach their goals than students identifying themselves as certificate seekers (Alfonso, 2006).

In contrast, certificate degree seekers were more likely to be female, older, married, have family responsibilities, have children, come from disadvantaged backgrounds, and be first generation students. Moreover, Hispanics had the same statistical probability of their White peers as completing a certificate, transferring to a 4-year program and completing a higher degree (Alfonso, 2006). Based on descriptive analysis, Hispanics were relatively successful at reaching their sub-baccalaureate goals particularly when compared to their Black peers (Alfonso, 2006).

Other circumstances were present that place Hispanic students at risk for not completing college. For example, Alfonso (2006) cited that Hispanic students are more independent, depending less on their parents' income, compared to White students (Alfonso, 2006). Tienda (2009) documented that Hispanics were more likely to attend larger, segregated, underperforming and urban schools. Cejda and Short (2008) observed that Hispanics held negative self-perceptions of not considering oneself college material, and that they maintained a reluctance to finance education through borrowing and incurring debt. Finally, O'Connor, Hammack, and Scott (2009) remarked that college-qualified Hispanic students were less likely than White or Black college-qualified students to build sufficient social capital in order to obtain necessary information about college.

Tienda (2009) mentioned three circumstances that differentiated Hispanics from their White peers in higher education attainment. First, Hispanics were less likely to graduate high school, college ready. For example, Hispanics trailed their White peers in completion of advanced math and science in high school. Second, Hispanics held a higher propensity to attend community colleges. For example, one in three Hispanic high school graduates who were college ready enrolled in 2-year institutions compared to less than a fourth of their White peers (Tienda, 2009). Lastly, Hispanics had several other risk factors that were barriers to college success.

Alon, Domina, and Tienda (2010) documented intergenerational transmission deficits as other factors contributing to racial and ethnic educational attainment gaps. Alon et al. (2010) documented that 19% of White high school graduates had parents who lacked college education versus more than half of Hispanic high school graduates having parents with no college experience. Conversely, more than half of White high school graduates had a least one parent with a bachelor's degree, whereas only 19% of parents of Hispanic high school graduates had similar college backgrounds. Alon et al. (2010) explained Hispanic-White gaps in postsecondary educational attainment because of population composition and unequal ability on behalf of Hispanics to transfer educational advantages to their children. Moreover, the ethnic gap in parental education between White and Hispanic students widened between 1982 and 2004.

Texas data indicated an even wider ethnic gap in parental educational attainment. Among students with college-educated parents, White students were twice as likely to earn a college degree (Alon et al., 2010). Moreover, enrollment gaps existing between White students with college-educated parents and Hispanic students with college-educated parents existed for 2-year, 4-year, and competitive 4-year colleges for four cohorts of students (Alon et al., 2010). Similarly, in a Texas survey of high school seniors, Hispanic students were significantly more likely than were White, Black, and Asian peers to respond that they had first started thinking about attending college during high school (Tienda, 2009).

Educational gaps in college completion also exist among White, native born, and foreign-born Hispanics (Villalpando, 2010). For example, White adults 25 to 34 years of age outnumber native-born Hispanic adults in college completion by 2 to 1, and foreign-born Hispanic adults by 3 to 1. Additionally, associate and bachelor's degree attainment levels were higher for second- and third-generation Latinos than for foreign-born immigrants, suggesting that the current large populations of Hispanic youth immigrants enrolled in the K-12 educational system may continue to find challenges in their own level of educational attainment (Villalpando, 2010).

The Texas Closing the Gaps Plan for Participation and Success for Hispanic Students

The *Closing the Gaps* goal for participation is to increase the overall participation rate for students in public and independent higher education institutions from 5% in 2000 to 5.7% by 2015 (Texas Higher Education Coordinating Board, 2011a). An analysis of the 2010 participation rate revealed the overall participation rate as “well above target” at 5.9%, leaving another 145,000 students to meet the 2015 participation goal of 630,483 (Texas Higher Education Coordinating Board, 2011a, p. 10). Public 2-year institutions accounted for a majority of the growth in participation from 2000 to 2010 with a total of 295,254 or 60.8% of all students (Texas Higher Education Coordinating Board, 2011a).

The participation target for Hispanic students is to increase the overall participation rate for the Hispanic population from 3.7% in 2000 to 5.7% in 2015 (Texas Higher Education Coordinating Board, 2011a). Although Hispanic enrollment increased faster than any of the three major racial/ethnic groups from 2000 through 2010, Hispanic enrollment was “well below target” or 12.2% below the target enrollment number of 236,606 for 2010 (Texas Higher Education Coordinating Board, 2011a, p. 13). Hispanic participation will need to increase another 230,917, up from 207,789, to meet the 2015 Hispanic participation goal of 438,706 (Texas Higher Education Coordinating Board, 2011a).

The *Closing the Gaps* goal for success is to increase the overall number of bachelor’s associates, and certificates (BACs) to 171,000 by 2000 and to 210,000 by 2015 (Texas Higher Education Coordinating Board, 2011a). An analysis of BACs awarded by Texas public and independent institutions was “somewhat above target” (Texas Higher Education Coordinating Board, 2011a, p. 19) having awarded 176,604 BACs for 2010 and needing another 33,000 BACs to meet the 2015 goal. The overall goal of students completing associate degrees in Texas public and independent institutions by 2015 is 55,500 (Texas Higher Education Coordinating Board, 2011b). An analysis of the number of associate degrees obtained in 2010 revealed an actual number of associate degrees of 48,851 degrees as being “well above target” (Texas Higher Education Coordinating Board, 2011a, p. 21) compared to the target number of 44,400.

The success target for Hispanic students is to increase the attainment of BACs to 67,000 by 2015. In contrast to the overall number of BACs awarded in 2010, BACs awarded to Hispanics, (i.e., 47,750) was “somewhat below target” (Texas Higher Education Coordinating Board, 2011a, p. 24) of the target number of 50,000. Public 2-year institutions in Texas awarded over half of the BACs to Hispanics in 2010 (Texas Higher Education Coordinating Board, 2011a).

Hispanic Presence in Community Colleges

Several researchers have documented the over-representation of Hispanics in community colleges (Kurlaender, 2006; O’Connor, 2009; O’Connor et al., 2009; Villalpando, 2010). Villalpando (2010) reported disproportionate representation among first-generation Hispanic college-goers in community colleges that were more likely to work while going to school. Similarly, Kurlaender (2006) contended that Hispanic students were more likely than Black students and White students to choose to attend a community college over a 4-year institution. O’Connor (2010) examined the relationship between geography and community college enrollment. Hispanic students aspiring to obtain a bachelor’s degree were more likely to enroll in community colleges compared to White or Black students aspiring to obtain a bachelor’s

degree, with the exception of Hispanic students living in states with a strong Hispanic presence. In this case, Hispanic students were equally likely to attend community colleges and 4-year institutions.

Hagedorn, Chi, Cepeda, and McLain (2006) explored the relationship of critical mass or proportional representation and Latino student success in a community college. Critical mass brings about comfort, familiarity, and an alignment with the dominant campus culture that led to retention and persistence, as opposed to a traditional path of marginalization, isolation, and loneliness from a lack of proportional representation. Both a critical mass of Hispanic students and Hispanic faculty significantly predicted success for Hispanic students.

Conclusion

First, community college administrators may utilize this information toward gaining a better understanding on how a future Texas workforce will consist of a growing Hispanic population. Given this, opportunities exist for colleges to increase recruitment and retention efforts of Hispanic students through culturally sensitive programming that appeal to first generation and immigrant populations. As noted above, the Hispanic immigrant populations in Texas are some of the least educated. Hispanic males have also been documented as missing in higher education (Saenz & Ponjuan, 2009). Culturally sensitive programming might entail communicating essential information to students and their families in their native language regarding the importance of attaining a college education at the sub-baccalaureate level and higher in order to compete for meaningful employment opportunities. Other essential programming would entail creating greater opportunities for financial assistance to students that may not necessarily qualify for assistance due to lack of citizenship status.

Second, Texas employers may utilize this information to initiate programs that prepare Hispanics toward gainful employment in a future Texas workforce that requires higher levels of technical skills. A particular concern of Texas human resource managers is the lack of Hispanics completing degrees in science, technology, engineering, and math (STEM) fields, with Hispanics currently accounting for only 20% of STEM graduates (Froeschle & Normington, 2010). Texas employers also acknowledge “knowledge transfer” (Froeschle & Normington, 2010, p. 19) as an important step in maintaining a ready workforce after baby-boomers decide to retire. Programming that could be initiated would consist of specialized recruitment, internships, and mentoring programs for Hispanic populations from grade school to graduate school level.

Lastly, Texas Hispanics, especially first generation and immigrant populations, may utilize this information to understand the economic benefits of educational attainment, including at the sub-baccalaureate level, that lead to plentiful employment opportunities that a Texas workforce will offer. This will entail schools, state governmental agencies, and employers working together to convey this message to Hispanic students and their families (Froeschle & Normington, 2010).

References

- Alfonso, M. (2006). Hispanic educational attainment in sub-baccalaureate programs. *New Directions for Community Colleges*, 133, 17-25. doi:10.1002/cc.224
- Alon, S., Domina, T., & Tienda, M. (2010). Stymied mobility or temporary lull? The puzzle of lagging Hispanic college degree attainment. *Social Forces*, 88(4), 1807-1832. doi:10.1353/sof.2010.0017
- Cejda, B. D., & Short, M. (2008). Influencing the college attendance rates of Hispanics in Texas. *Community College Journal of Research & Practice*, 32(4-6), 347-361. doi:10.1080/10668920701884455
- Ennis, S. R., Vargas, M. R., & Albert, N. G. (2011). *The Hispanic population: 2010*. (Report No. C2010BR-04). Retrieved from U.S. Census Bureau: <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>
- Froeschle, R. C., & Normington, M. (2010). *Working Texas style: Think globally, plan regionally*. Retrieved from <http://www.lmci.state.tx.us/shared/workingtexasstyle/>
- Fry, R. (2011). *Hispanic college enrollment spikes, narrowing gaps with other groups*. Retrieved from Pew Hispanic Center website: <http://www.pewhispanic.org/2011/08/25/hispanic-college-enrollment-spikes-narrowing-gaps-with-other-groups/>
- Gardezi, A. (2012). Chasing the dream. *Diverse: Issues in higher education*, 29(23), 31-33.
- Hagedorn, L. S., Chi, W., Cepeda, R. M., & McLain, M. (2006). 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. doi:10.1007/s11162-006-9024-5
- Hurtado, A., Cervantez, K., & Eccleston, M. (2010). Infinite possibilities, many obstacles: Language, culture, identity, and Latino/a educational achievement. In E. G. Murillo, Jr., S. A. Villenas, R. T. Galvan, J. S. Munoz, C. Martinez, & M. Machado-Casas (Eds.), *Handbook of Latinos and education* (pp. 284-300). New York, NY: Routledge.
- Jauregui, J. A., Slate, J. R., & Stallone-Brown, M. (2011). Texas community colleges and characteristics of a growing undocumented student population. *Journal of Hispanic Higher Education*, 7(4), 346-355. doi:10.1177/1538192708321651
- Kelly, A., Schneider, M., & Carey, K. (2010). *Rising to the challenge: Hispanic college graduation rates as a national priority*. (American Enterprise Institute). Retrieved from <http://www.aei.org/files/2010/03/18/Rising-to-the-Challenge.pdf>
- Kim, M. (2007). Racial economic disparities in the twenty-first century. In M. Kim (Ed.), *Race and economic opportunity in the twenty-first century* (pp. 1-26). New York, NY: Routledge.
- Kirsch, I., Braun, H., Yamamoto, K., & Sum, A. (2007). *America's perfect storm: Three forces changing our nation's future*. ETS Policy Brief. Princeton, NJ: Educational Testing Service. Retrieved from http://www.ets.org/Media/Education_Topics/pdf/AmericasPerfectStorm.pdf
- Kurlaender, M. (2006). Choosing community college: Factors affecting Latino college choice. *New Directions for Community Colleges*, 133, 7-16. doi:10.1002/cc.223
- Lopez, M. H., & Cohn, D. (2011). *Hispanic poverty rate highest in new supplemental census measure*. Retrieved from Pew Hispanic Center website: <http://www.pewhispanic.org/2011/11/08/hispanic-poverty-rate-highest-in-new-supplemental-census-measure/>

- Lopez, M. H., & Velasco, G. (2011). *The toll of the great recession: Poverty among Hispanics sets record, leads nation*. Retrieved from Pew Hispanic Center: <http://www.pewhispanic.org/2011/09/28/childhood-poverty-among-hispanics-sets-record-leads-nation/>
- Murdock, S. H. (2011a). *Change in Texas: Implications of the 2010 Census*. *New Day Rising Symposium*. Symposium conducted at the Texas Tribune events series, Austin, TX. Retrieved from http://www.youtube.com/watch?v=_BYo_N5Dack
- Murdock, S. H. (2011b). *Population change in Texas: Implications for the labor force, education and economic development*. Symposium conducted for the Texas Workforce Commission, Houston, Texas. Retrieved from <http://hobbycenter.rice.edu/Content.aspx?id=2147484115>
- Murdock, S. H., Hoque, M. N., Michael, M., White, S., & Pecotte, B. (1997). *The Texas challenge: Population change and the future of Texas*. College Station, TX: Texas A&M University Press.
- Murdock, S. H., White, S., Hoque, M. N., Pecotte, B., You, X., & Balkan, J. (2003). *The new Texas challenge: Population change and the future of Texas*. College Station, TX: Texas A&M University Press.
- O'Connor, N. (2009). Hispanic origin, socio-economic status, and community college enrollment. *Journal of Higher Education*, 80(2), 121-145.
- O'Connor, N. (2010). Geography and Hispanic community college enrollment. *Community College Journal of Research and Practice*, 34, 814-832. doi:10.1080/10668921003744892
- O'Connor, N., Hammack, F. M., & Scott, M. A. (2009). Social capital, financial knowledge, and Hispanic student college choice. *Research in Higher Education*, 51, 195-219. doi:10.1007/s11162-009-9153-8
- Passel, J. S., & Cohn, D. (2011). *Unauthorized immigrant population: National and state trends, 2010*. Retrieved from Pew Hispanic Center website: <http://www.pewhispanic.org/files/reports/133.pdf>
- Passel, J. S., Cohn, D., & Lopez, M. H. (2011). *Census 2010: 50 million Latinos. Hispanics account for more than half of nation's growth in past decade*. Retrieved from Pew Hispanic Center website: <http://www.pewhispanic.org/files/reports/140.pdf>
- Ryu, M. (2010). *Minorities in higher education: Twenty-fourth status report*. Washington, DC: American Council on Education.
- Saenz, V. B., & Ponjuan, L. (2009). The vanishing Latino male in higher education. *Journal of Hispanic Higher Education*, 8(1), 54-89.
- Texas Higher Education Coordinating Board. (2011a). *Closing the Gaps: Progress Report 2011*. Retrieved from <http://www.thecb.state.tx.us/reports/PDF/2357.PDF?CFID=5597283&CFTOKEN=45022669>
- Texas Higher Education Coordinating Board. (2011b). *Closing the Gaps: The Texas Higher Education Plan*. Retrieved from <http://www.thecb.state.tx.us/reports/PDF/0379.PDF?CFID=5597283&CFTOKEN=45022669>
- Tienda, M. (2009, March). *Hispanicity and educational inequality: Risks, opportunities and the nation's future*. The 25th Tomas Rivera Lecture Presented at the Annual Conference of the American Association of Hispanics in Higher Education (AAHHE), San Antonio, TX.

- Toossi, M. (2009). Labor force projections to 2018: Older workers staying more active. *Monthly Labor Review*, 132(11), 30-51.
- Villalpando, O. (2010). Latinas/os in higher education: Eligibility, enrollment, and educational attainment. In E. G. Murillo, Jr. et al. (Eds.), *Handbook of Latinos and education: Theory, research, and practice* (pp. 232-249). New York, NY: Routledge.
- Zarate, E., & Burciaga, R. (2010). Latinos and college access: Trends and future directions. *Journal of College Admission*, 209, 24-29.
- Zeidenberg, M. (2008, Summer). Community colleges under stress. *Issues in Science and Technology*, 24, 53-58.