

Promoting Hispanic student retention in two Texas community colleges

Karissa R. Samuel
Mesquite, Texas ISD

Joyce A. Scott
Texas A&M University-Commerce

ABSTRACT

Texas' Hispanic population has increased dramatically since 2000 as have Hispanic enrollments in higher education (+118%). Despite having the largest spike in college enrollment, Hispanic students' completion rates remain the lowest among all ethnic groups. To identify institutional practices that might encourage Hispanic student retention, researchers surveyed 100 first-time students at two Hispanic-serving metropolitan community colleges in Texas during the 2012-2013 academic year. Survey response data were analyzed using a variety of statistical methods. Results indicated that Hispanic students chose to attend college because they wanted a better future (80%) or wanted to learn new skills (41%) and that the majority was paying for college with cash. In terms of institutional practices, students identified meal plans, on-campus child care, mandatory orientation, and work-study opportunities as most important campus services to help them balance academic and social obligations and stay in school. Institutional initiatives to build parental and peer support were valued as were non-traditional forms of financial aid such as book vouchers, supplemental education services, and club scholarships. Community colleges often attract students who are less prepared for college than those who attend 4-year institutions, and with the growth of the Hispanic student demographic, it is important for them to devise institutional practices that support these students' retention and completion.

Keywords: Hispanic students, retention/completion rates, institutional practices, community colleges, first-year students, Hispanic-serving institutions

INTRODUCTION

The United States has seen significant demographic change over the last few decades. Among the most striking change has been the steady growth of the Hispanic population. From 2000 to 2010, Hispanic citizens grew in number to 50.5 million nationally (16.3%) (U.S. Census Bureau, 2010). Similar but more dramatic shifts occurred in Texas, where Hispanic inhabitants increased by 37.6% from one census to the next.

Hispanic enrollment at colleges and universities has also increased nationally, surpassing the rate of Hispanic population growth. In Texas, Hispanic enrollments in higher education have risen dramatically. Between 2000 and 2013, Hispanic undergraduate enrollment grew by 118% overall, with the majority attending 2-year institutions. Despite this growth in access, Hispanic students have not fared well in college completion. According to Complete College America (2013), “most Hispanic and African American Texans start at 2-year colleges, and few graduate even when given three times longer” (p. 13).

The present study focused on first-time Hispanic students’ retention at two, metropolitan Hispanic-serving community colleges in Texas. The purpose of the study was to identify the institutional factors that they identified as supporting or deterring their retention and to ascertain the kinds of services these students valued or needed most .

BACKGROUND LITERATURE

With a current population of more than 50 million, Hispanics represent the largest minority group in America. However, Postsecondary Education Opportunity (2012) reported that “Hispanics are less committed to education than any other group (p. 2)” and leave the educational system to begin their adult lives earlier than any other ethnic group. Although Hispanic youth have constituted a steadily growing share of public high school graduates and college freshmen since 1995, their college completion rates remain low (Lumina Foundation, 2011). Overall, Hispanics are the least educated major racial or ethnic group. For example, only 11% of those over the age of 25 have a bachelor's degree compared to approximately 17% of Blacks, 27% of Whites, and 47% of Asian-American adults in the same age bracket. More than 40% of Hispanic adults over 25 never graduated from high school and more than 25% have less than a ninth grade education (Lumina Foundation, 2011). The implications of these data for the U.S. and Texas economies are ominous.

Over the years bachelor’s degrees awarded to Hispanic students have risen from about 2.3% to 6.2%, but several trends in higher education have made it difficult for Hispanics to receive a college education. Schmidt (2003) noted that state budget cuts have caused institutions to raise admissions standards and tuition, to cap enrollments, and to reduce student financial aid. Further, the shift in federal student financial aid from majority grant to majority loans has affected Hispanic students who avoid assuming debt. Finally, recent attacks on affirmative action and a lack of academic support programs for minority students have affected Hispanic enrollment.

Hispanic Students’ Challenges

Hispanic students must overcome many personal challenges to attend college: poor academic preparation, first-generation status, misinformation, and financial constraints.

O'Banion (2011) identified three pertinent issues that affect the community college student: low-income, under-preparedness, and first-generation status. Hagedorn (2010b) also identified these issues as significant and urged that they be taken into account in devising strategies to promote Hispanic student success.

Studies show that finances are a primary cause of attrition among first-time Hispanic freshmen because many come from low-income families and need to work while attending college. (Santiago, 2010) In 2010, the median weekly earnings of Hispanic full-time wage and salary workers were \$535 (U.S. Bureau of Labor Statistics, 2010). Although the median income of Hispanic households has increased since 1980, Korzenny (2009) analyzed the U.S. Census Bureau's 2008 American Community Survey and found that the gap between median income in Hispanic households and that of all U.S. households was actually the largest since the 1990s.

From an academic responsibility standpoint, students do not take advantage of all available financial aid, do not transfer from 2-year to 4-year colleges, and often do not complete their 4-year degrees. More than half of all students who begin at 2-year institutions never achieve any type of postsecondary degree. According to Rendón and Garza (1996), "For Hispanic community college students, this trend is even more pronounced as their transfer and persistence rates are among the lowest" (Saenz, 2002, p. 2). As a result, some critics view the community college as an obstacle to educational attainment and, ultimately, as a way to perpetuate social stratification (Wilds & Wilson, 1998). Others argue that most Hispanic students choose community colleges out of necessity as it is often their only affordable option (Rendón & Garza, 1996). Saenz (2002) noted, "In general, it can be argued that community colleges facilitate postsecondary opportunities for those who might not otherwise attend college and thereby act as a pathway to the baccalaureate for a host of students" (p. 2).

The Role of Institutional Practices

In recent years, studies have shown that various institutional practices have detrimental effects on successful program completion among students of Hispanic descent. Hossler, Ziskin, Moore, and Wakhungu (2008) examined the role of institutional practices in college student persistence and identified eight policy levers in higher learning institutions (HLIs) that influence student retention. These included recruitment practices tuned to fulfilling student expectations of college life, anti-racism and prejudice measures, reasonable academic and administrative policies, nurturing course satisfaction among students, enhancing learning strategies in lectures, facilitating positive social interactions among students (especially in residential settings), and facilitating financial aid on an as-needed basis. These eight areas of interest provide an outline for institutional practices that may result in attrition among Hispanic community college students. Earlier studies identified three influences that researchers needed to address when analyzing the impact of colleges on students: 1) precollege characteristics in student demographics, 2) institutional structural characteristics, and 3) academic and non-academic student experiences (Pascarella, Pierson, Wolniak, & Terenzini, 2004).

Studies have shown that some practices within community colleges, such as extensive developmental education courses, lack of work-study opportunities, and inaccurate information from advisers, work against Hispanic student retention and completion (Barefoot et al., 2005). In addition, some institutional practices do not support students' persistence, resulting in high dropout and low completion rates. The combined effects of such practices discriminate exclusively on some students and are typically based on economic and academic groupings.

Boggs (2011) argued that the practice of tracking and restricting the placement of students in accordance with past academic performance discourages Hispanic students from aspiring to greater academic achievement and eventual degree acquisition.

Best Practices for Hispanic Success

Hispanics contribute to the nation's economic development, despite the lag in educational attainment; but the potential fiscal impact of Hispanics would be much greater if a larger proportion were able to complete higher education. Therefore, it is imperative that colleges find ways to assist first-year Hispanic students through work opportunities on campus, flexible class schedules, and culturally sensitive support staff. Without these measures, the gap in graduation rates will continue to grow. Toossi (2002) reported that, by 2050, Hispanics will make up nearly 25% of the U.S. workforce. The future development of the Hispanic community is of great importance as Hispanics continue to become an influential group in American society.

According to the Community College Survey of Student Engagement (CCSSE), several best practices contribute to retention: increased engagement between student and faculty members and student and institution; a committed academic advising team; informed financial aid staff; and early alerts (Center for Community College Student Engagement [CCCSE], 2012). For example, when community college students describe occasions when they considered dropping out, but did not, they typically refer to a strong early connection to someone at the college as their reason for continuing (Hamilton, 2012).

The White House Initiative on Educational Excellence for Hispanic Americans has developed many strategies over 7 years to increase student success. To overcome the knowledge gap in the Hispanic community, U.S. Secretary of Education, Margaret Spellings, developed a range of educational information in English and Spanish about education. Additionally, the Partnership for Hispanic Family Learning significantly expanded the public-private partnership to encompass over 400 organizations. These organizations passed out The Tool Kit for Hispanic Families, a product of the U.S. Department of Education.

In academic preparation, subjects such as math and science are an important part of education reform (Harvey, 2002). This emphasis has been strengthened by the President's desire to improve America's competitiveness in science, technology, engineering, and mathematics (STEM). Hispanic-Serving Institutions (HSIs) develop Hispanic talent in the STEM fields and became the focus of a comprehensive conference that the White House Initiative convened in April 2007 at the University of Texas at El Paso (U.S. Department of Education, 2008).

Although there are many successful programs being implemented, another favorable and significant effort is that of federal research on early literacy and language development of children (birth to age 5). These efforts aim to produce high quality, research-based information to support early childhood education and care of English language learners (ELLs). The White House Initiative also supports a federal interagency effort to expand the base of scientific research and knowledge on early childhood education for ELLs to better inform parents, practitioners, and schools on the education needs of language minority children (Department of Education, 2008).

This review of the literature revealed growth of Hispanic-serving institutions and Hispanic student demographics in higher education. Noteworthy was the fact that first-time Hispanic students enrolling in community colleges, whether predominantly white or Hispanic-serving, experience difficulties in staying in school at the same rate as other groups. This means

that institutions need a “reality check” concerning their institutional practices to confirm that they support Hispanic students’ access, persistence, and graduation needs (Santiago, 2010).

Texas community colleges and 4-year institutions along the border have developed effective strategies to improve Hispanic student enrollment and degree completion. The present study built on this information to survey Hispanic community college students about their particular needs to be successful in two metropolitan HSIs. To explore the importance of institutional factors in the retention of first-time Hispanic community college enrollees, the present study addressed three issues: students’ demographic characteristics and reasons for attending college; their views of institutional services intended to support their retention; and differences in their assessment of institutional services by gender, age, enrollment status, and dependent status.

CONTEXT AND METHOD

The purpose of this study was to identify institutional practices that led to attrition or supported retention among a random sample of first-year, Hispanic students attending two community colleges in Texas. With this purpose in mind, researchers developed the following questions to guide the inquiry:

1. What are the demographic characteristics of first-time, Hispanic, community college students in Texas, including their reasons for attending college?
2. How do first-time, Hispanic, community college students rank the importance of institutional practices and services in supporting their retention?
3. Is there an association between gender and stop-out patterns?
4. Do differences exist in the rankings of institutional practices and services in support of retention by first-time, Hispanic community college students by gender, age, enrollment status, and dependent status?

Sample

Study participants included first-year, half- and full-time, male and female Hispanic students who graduated high school or obtained a GED between 2001 and 2011 and attended a Texas community college accredited by SACS for the first time during the 2012-2013 academic year. To be eligible for the study, an individual had to meet the following criteria:

1. List his or her race as Hispanic or Latino;
2. Be a first-time student at a community college during the 2012-2013 academic year;
3. Have graduated from high school or earned a GED between 2001-2011;
4. Be willing to participate in the study; and
5. Be at least 18 years of age or older.

To gather Hispanic students’ college-going perceptions and to frame the inquiry, researchers collected four types of data related to attrition and retention: demographics, educational background, employment history, and institutional practices.

Instrument

The instrument used for this non-experimental, quantitative study was refined through five stages of development. First, questions from the Center for Community College Student

Engagement survey (CCCSE) and The Survey of Entering Student Engagement (SENSE) that aligned with the four categories were assembled as a basis for generating similar questions. Second, institutional practices present on both campuses were collected along with three additional services emphasized in the CCCSE results: fast-track remedial education, on-campus childcare, and meal plans. In stages three and four, a pilot study was conducted with participants who partially met research criteria such as being male or female Hispanic students at a community college. These participants completed the initial survey and provided feedback on clarity and relevance. The pool of questions was refined and reviewed once more by pilot subjects visiting the writing center at another community college. Finally, four senior faculty members with experience in Hispanic college-going behavior, research instruments, and student access and success issues reviewed the instrument. The final two-part survey containing 23 questions was administered in both English and Spanish using a web-based survey instrument called KeySurvey®.

Collection and Treatment of Data

This study gathered data from first-time Hispanic students about their behaviors during their pursuit of an associate degree at a community college. Such practical information might impact the decisions and behaviors of individuals (Orcher, 2007) and provide community colleges with evidence about the needs of this demographic. With such information, colleges may make better decisions about what services to offer so that Hispanics' college experience will be successful.

With institutional data about first-time Hispanic students who enrolled during the fall semester of 2012, a researcher was on site at both campuses to solicit participation in the study. A table with three chairs and three laptops was set-up for students to participate, and potential participants were screened about race/ethnicity, high school or GED completion date, and first-time status before being allowed to participate in the survey. A total of 100 surveys were collected between both campuses.

After each returned survey was examined for omissions, data were tallied, transposed into numerical values, and coded using SPSS, Version 21. Information was grouped based on gender, age, enrollment status, and dependent status. To check for errors, an inspection of the frequencies for each variable was conducted. Descriptive statistics were used to analyze Research Questions 1 and 2. A non-parametric chi-square test for independence was used to examine Research Question 3. The Mann-Whitney U technique sought to identify differences for Research Question 4.

Although the study instrument was a quantitative survey, open-ended questions were also provided to identify factors that were minimally discussed or absent from the literature. Hence, the participants could comment in a way that might reveal new information.

For Research Questions 1 and 2, descriptive statistical analyses of the data were conducted. Descriptive statistics for categorical variables were analyzed to determine the number of participants, participants' responses, and gender. Research Question 3 addressed the association of gender to stop outs. The chi-square test for independence was used to explore relationships between the two categorical variables. Research Question 4 sought to identify differences so the Mann-Whitney U technique was followed to determine statistical significance of related hypotheses.

RESULTS

Study participants comprised 100 first-year, half- and full-time, male and female Hispanic students who graduated high school or obtained a GED between 2001 and 2012 and attended two Texas community colleges in the 2012-2013 academic year. Descriptive statistical analysis rendered the following participant profile: 100% Hispanic, 53% female; and 83% were between the ages of 18 and 24 ($M=1.26$, $SD=.613$) with the remaining 17% being older. Two-thirds of the respondents were United States citizens, but Spanish was the primary language spoken at home by 76% of them.

The majority (72%) of the participants did not have children. Only 43% were enrolled as full-time students while 41% worked part time, 34% did not work, and 25% worked full time. Over 91% of the students had obtained a high school diploma, but only 93 chose to address this question. More than 72.7% indicated that they were first-time students at their respective institutions.

Finally, subjects were asked to choose reasons for attending college and could choose more than one reason. Of all 100 participants, 79.8% reported that they attended college because they wanted to have a better future, 41.4% wanted to learn new skills, and 24% did it for the sake of the family. A large portion (85.8%) had never sat out of college during the semester or year, and 90.9% did not plan to do so within the upcoming year.

Research Question 2 sought to determine the importance of specific institutional practices in relation to retention and asked students to rate 10 dependent variables on a seven-point Likert scale ranging from extremely important to not important. Table 1 summarizes students' ratings.

Table 1
First-time Hispanic Students Perception of Importance of Institutional Practices

Institutional Practice	Percentage	Min.	Max.	Mean	SD
Disability and mental services	51.0	1	7	2.69	2.11
Academic advising, counseling	51.0	1	7	2.57	2.01
Instructional support labs	44.9	1	7	2.67	2.01
Work study opportunities	44.9	1	7	2.91	2.20
Fast-track remedial education	42.4	1	7	2.68	1.90
Mandatory preparation training for academic placement exams	42.4	1	7	2.78	1.99
Mandatory orientation	40.8	1	7	2.85	1.95
Early academic warning system	38.7	1	7	2.77	1.93
Provides meal plans	37.3	1	7	3.21	2.25
On-campus childcare	29.1	1	7	3.24	2.01

Examining the responses in greater detail, researchers found that 40 students ranked mandatory orientation as the most important institutional practice while 38 students chose an early academic warning system as most important. Other services rated highest were supplemental instruction support labs (N=44), fast-track remediation (N=42), on-campus child care (N=28), meal plans (N=37), work study opportunities (N=44), academic advising (N=50), and disability, library or mental health support services (N=51).

Research Question 3 sought to determine if there was an association between gender and stop-out patterns for first-time Hispanic students. The majority (85.9%) of first-time students reported never taking a break whereas 14.1% reported stopping out at some point during the year. The assumption of chi-square was not violated as all of expected cell sizes were greater than 5, in this case greater than 6.65. This meant that the chi-square test for independence with Yates Continuity Correction indicated there is no significant association between gender and stop-outs since the significance value of 1.0 is larger than the alpha value of .05. $\chi^2(1, n=99) = .21, p = 1.0, \phi = .02$.

Research Question 4 sought to identify differences in first-time, Hispanic, community college students' rankings of institutional practices by gender, enrollment status, age, or dependent status. The mean response of each variable was taken and Mann Whitney U statistical analysis was done to make a comparison. A Mann-Whitney U test revealed no statistically significant difference in the ranking of institutional practices by gender or age since the significance level for each practice was not less than or equal to .05. However, some dependent variables were significant when compared to dependent status with the exception of mandatory orientation ($p=.06$) and work study ($p=.36$) whose significance levels were greater than .05. The following dependent variables were significant when compared to enrollment status: meal plan, work study, mandatory preparation, and academic advising. Each of these variables had significance levels less than or equal to .05 which indicated a statistically significant difference between groups.

CONCLUSION

As the student success and college completion agenda builds momentum nationally, there is a growing demand for useful information about effective educational practices. There is also emerging evidence of promising practices associated with student progress and success (Sherman et al., 2007). This study examined that collection of practices at two community colleges in Texas with regard to the success of Hispanic students. From the findings, it is clear that certain institutional practices do affect Hispanic students' success after taking into account their culture, financial status, and access to educational opportunities.

Despite having the largest spike in college enrollment, Hispanic students' completion rates remain the lowest among all ethnic groups. A 2008 College Board report stated, "While the population of Latinos in the United States is growing rapidly, exceeding rates of other racial and ethnic groups, a corresponding increase is not reflected in Latino college enrollment and completion rates" (p. iii). According to the 2008 Census figures, only 18.6% of Latinos between 25 and 64 years old held at least a 2-year degree.

Community colleges have a difficult retention challenge because they attract students who are less prepared for college than those who attend 4-year institutions (Hagedorn, 2010). Nevertheless, the literature does not offer substantial research about what strategies institutions may pursue to support and retain these students to graduation. The major problem under discussion here was retention at Hispanic-serving institutions and related institutional practices. The study aimed to discern how these practices affect Hispanic students' postsecondary completion.

Some institutional practices identified in this study that assisted in Hispanic students' retention included financial assistance in terms of grants, scholarships, and institutional or organizational financial assistance programs which are comprised of work-study, club

scholarships, writing center book vouchers, SES programs, etc. For almost all Hispanic students in community colleges, high tuition and fees are among the first reasons students cited for dropping out of college. For this reason, many institutions seeking to support Hispanic students need to establish some means of augmenting financial assistance on top of traditional student loans and institutional grants. According to Borg, et al. (2012), identifying and assisting financially at-risk students, mainly those from low-income households, is paramount in the fight to close the achievement gap between ethnic groups and to reduce the dropout rate amongst Hispanic students. This study confirms their conclusion that multiple and sometimes non-traditional means of financial assistance are needed to retain Hispanic students.

Other findings identified culturally responsive and family-oriented institutional practices as important. Cultural sensitization of institutions assists Hispanic students to identify with each other and hence to fortify their resolve to assist each other through their respective courses (Walton & Cohen, 2011). In addition, cultural sensitization enhances students' sense of belonging to their institution.

Family-oriented institutional practices are those that that involve the student's family, effectively highlighting the importance of support for students outside the school (Rydell & Boucher, 2010). Furthermore, the practices incorporate prevailing situational conditions such as student-parents or students with dependents together with the academic demands on students. The study identified campus daycare centers and hiring students as institutional practices that could assist in Hispanic students' retention and successful transition into 4-year institutions.

The continued exploration of 2-year colleges and their impact on Hispanic students is imperative since a large proportion of them continue to enroll in these institutions; some because they do not meet the requirements of 4-year institutions, others because they cannot afford 4-year institutions. Lastly, more attention should now be given to parental and peer support as well as to self-motivation as it pertains to Hispanic students.

IMPLICATIONS

This study addresses directly the general debate concerning ways to address the widening gap in academic achievement between ethnic groups in the United States. The main implication is the resounding need for many types of financial aid or assistance to students from minority ethnic groups to further their education. Institutions with work-study programs, grants, and available student loans enhance retention probabilities since the main reason students cited for dropping out was the lack of tuition funds.

Another implication relates to how institutions may provide students with a means of meeting their social responsibilities without adversely affecting their education. Institutions that can help students balance social and academic demands and alleviate pressures from family obligations will find that their students will have higher retention and completion rates. Overall, institutional practices that support academic achievement, financial needs, and social obligations provide the best conditions for retention and completion of students from minority groups.

RECOMMENDATIONS FOR FURTHER RESEARCH

This study examined the views of first-year, Hispanic students about institutional practices at two Texas community colleges in both English and Spanish. Campuses could use this instrument or a similar one to assess minority student needs beyond the first-year experience.

Further, the research focused on whether provision of services, such as Spanish orientation, Spanish-speaking admission, advising, financial aid representatives, and instructors make a difference in establishing a sound intake process. A qualitative component could be added to explore how such provisions would increase retention and completion.

Among the subjects of this research, more than 80% had received a high school diploma, and 48% had graduated high school between 2011 and 2012 and immediately enrolled in college. More than 70% percent of respondents did not have dependents, 46% were enrolled at their respective community college full time, and almost 80% made the decision to attend college to have a better future. These data are quite hopeful and are a good indication that persistence, education, and perhaps school characteristics are becoming more impactful than background. A case study of “The New Face of Hispanic-Americans Graduating High School and Going to College” would benefit many postsecondary institutions especially Hispanic-serving ones.

The results of the study also revealed that almost 55% of students are paying for college with cash, which implies that students may be more financially savvy and may carry less debt than their predecessors. A study of cash-paying students and their academic success or lack thereof could help determine if financial stress affects their ability to succeed. These results could be used to explore creative ways to offer more work-study opportunities and on-campus part-time jobs.

Community colleges often attract students who are less prepared for college than those who attend 4-year institutions. With the growth of the Hispanic student demographic, it is important for colleges to devise institutional practices that support these students’ retention and completion and for the research community to continue pursuing this line of inquiry.

REFERENCES

- Barefoot, B. O., Gardner, J. N., Cutright, M., Morris, L., Schroeder, C. C., Schwartz, S. W., Swing, R. L. (2005). *Achieving and sustaining institutional excellence for the first year of college*. San Francisco, CA: Jossey-Bass.
- Boggs, G. R. (2011). Community colleges in the spotlight and under the microscope. *New Directions for Community Colleges*, 2011(156), 3-22. doi:10.1002/cc.462
- Borg, J. R., Borg, M. O., & Stranahan, H. A. (2012). Closing the achievement gap between high-poverty schools and low-poverty schools. *Research in Business and Economics Journal*. Retrieved from <http://www.aabri.com/manuscripts/111012.pdf>
- Center for Community College Student Engagement. (2012). *A matter of degrees: Promising practices for community college student success: A first look*. Austin, TX: Kay McClenney.
- College Board. (2008, January). *Winning the skills race and strengthening America’s middle class: An action agenda for community colleges*. Report of the National Commission on Community Colleges. Retrieved from www.collegeboard.com
- Complete College America (2013). *Complete college Texas: Is Texas utilizing game changer strategies to boost college completion? Not fully*. Washington, DC: Author.
- Hagedorn, L. S. (2010). Introduction to the issue: Community college retention--An old problem exacerbated in a new economy. *Journal of College Student Retention*, 12, 1-5.
- Hamilton, R. (2012, February 21). Kay McClenney: The TT Interview. *The Texas Tribune*, 1. Retrieved from www.texastribune.org

- Harvey, W. (2002). *Minorities in higher education: Nineteenth annual status report*. Washington, DC: American Council on Education.
- Hossler, D., Ziskin, M., Moore, J. V., & Wakhungu, P. K. (2008). *The role of institutional practices in college student persistence: Results from a policy-oriented pilot study*. Paper Presented at the 2008 Annual Forum of the Association for Institutional Research (AIR), Seattle, WA.
- Korzenny, F. (2009, November 17). Hispanic income trends: Implications for marketing [Web log]. Retrieved from <http://juantornoe.blogs.com>
- Lumina Foundation. (2011, May 20). Latino student success: A convening of funders. Retrieved from <http://www.luminafoundation.org>
- O'Banion, T. (2011). *Pathways to student success and completion* (PowerPoint). Retrieved from <http://mus.edu>
- Orcher, L. T. (2007). *Conducting a survey: Techniques for a term project*. Glendale, CA: Pyrczak.
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 75(3), 249-284. doi:10.1353/jhe.2004.0016
- Postsecondary Education Opportunity. (October 2012). Hispanics and higher education. (244). Oskaloosa, IA: Author
- Rendón, L. I., & Garza, H. (1996). Closing the gap between two- and four-year institutions. In L. I. Rendón & R. O. Hope (Eds.). *Educating a new majority: Transforming America's educational system for diversity* (pp. 289-308). San Francisco, CA: Jossey-Bass.
- Rydell, R. J., & Boucher K. L. (2010). Capitalizing on Multiple Social Identities to Prevent Stereotype Threat: The Moderating Role of Self-Esteem. *Personality and Social Psychology Bulletin*. 36(2), 239-250.
- Saenz, V. B. (2002). *Hispanic students and community colleges: A critical point for intervention*. (ED477908)
- Santiago, D. A. (2010). *Reality check: Hispanic serving institutions on the Texas border strategizing financial aid*. *Excelencia in Education*. (ED516295)
- Schmidt, P. (2003, November). Academe's Hispanic future (online). *The Chronicle of Higher Education*. Retrieved from www.chronicle.com
- Sherman, D. K., Kinias, Z., Major, B., Kim, H. S., & Prenovost, M. (2007). The Group as a Resource: Reducing Biased Attributions for Group Success and Failure via Group Affirmation. *Personality and Social Psychology Bulletin*. 33(8), 1100-1112.
- Toossi, M. (2002, May). A century of change: The U.S. labor force, 1950-2050. *Monthly Labor Review*, 125(5), 15-28.
- U.S. Bureau of Labor Statistics. (2010). Labor force characteristics by race and ethnicity (Report). Washington, DC: Author.
- U.S. Census Bureau. (2008). *Current population reports. Educational attainment in the United States, March 2008*. Retrieved from <http://www.census.gov>
- U.S. Census Bureau. (2010). *The Hispanic Population: The 2010 Census Briefs*. Retrieved from <http://www.census.gov>
- U.S. Department of Education. (2008). A summary of activities, accomplishments and Hispanic education attainment: 2001-08. Washington, DC: Author.
- Walton, G. M., & Cohen, G. L. (2011). A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students. *Science*. 331(6023), 1447-1451.

Wilds, D. J., & Wilson, R. (1998). *Minorities in higher education: Sixteenth annual status report*. Washington, DC: American Council on Education.

