

Running Head: 2-YEAR HISPANIC-SERVING INSTITUTIONS

Hispanic Transfer in 2-year Hispanic-Serving Institutions

Anne-Marie Núñez

University of Texas at San Antonio

Gloria Crisp

University of Texas at San Antonio

Diane Elizondo

University of Texas at San Antonio

A White Paper for HACU

July 2012

Anne-Marie Núñez, Ph.D. (corresponding author)
Associate Professor, Educational Leadership and Policy Studies
University of Texas at San Antonio
One UTSA Circle
San Antonio, TX 78249-0654
OFFICE PHONE: (210) 458-7395
CELL PHONE: (210) 862-4847
FAX: (210) 458-5848
E-MAIL: annemarie.nunez@utsa.edu

Abstract

Community colleges offer Hispanic students a critical gateway to bachelor's degrees, but these institutions also have low transfer rates to four-year institutions. Some research suggests that Hispanic-Serving community colleges have higher Hispanic transfer rates. This paper examines transfer patterns of a national sample of Hispanic community college students who began their postsecondary education in a Hispanic-Serving community college during the 2003-4 academic year. These students' postsecondary experiences and outcomes were tracked six years later. In this white paper, we compare characteristics of Hispanic students' who began in Hispanic-Serving community colleges with those of Hispanic students who successfully transferred to a 4-year institution within six years. In addition, we evaluate the characteristics of the Hispanic-Serving community colleges of the whole group of Hispanic students compared with those who transferred within six years.

Community colleges offer Hispanic students a critical gateway to bachelor's degrees, but these institutions also have low transfer rates to four-year institutions (Melguizo, Kienzl, & Alfonso, 2011). Data from the National Center for Urban Partnerships indicate that the large majority (85%) of Hispanic students who attend community colleges view the institution as a first step to earning a four-year degree (Rendon & Nora, 1997). However, among a recent cohort of first-time beginning community college students who initially intended to transfer to a 4-year institution, only 15% had successfully transferred to a 4-year institution within three years of beginning college (Horn, 2009). One study found that among Hispanic students who began at a community college, six semesters later, just 9 percent had reached a set of criteria (including academic course requirements) to be ready to transfer to a 4-year institution, and just one-third had met at least one of these criteria (Hagedorn & Lester, 2006).

Nearly forty percent (39%) of Hispanic community college students in the US are enrolled in Hispanic-Serving community colleges (Nuñez, Sparks, & Hernandez, 2011). Meanwhile, half (51%) of students in Hispanic-Serving community colleges across the nation are Hispanic (Nuñez et al., 2011). Hispanic students who enroll at Hispanic-Serving community colleges are more likely than their Hispanic counterparts at non-Hispanic-Serving community colleges to express that they intend to transfer to a 4-year institution (Nuñez et al., 2011). Some research suggests that Hispanic students who attend Hispanic-Serving community colleges have higher Hispanic transfer rates (Hagedorn, Chi, Cepeda, & McLain, 2007; Laden, Hagedorn, & Perrakis, 2008). Clearly, Hispanic-Serving community colleges play a critical role in offering Hispanic students access to postsecondary education (Nuñez et al., 2011; Perna, Li, Walsh, & Raible, 2010) as well as access to a four-year degree.

In this white paper, we begin with a brief review of the literature about the individual and institutional factors related to Hispanic transfer. We continue by presenting results of a longitudinal study that tracked these factors in relation to Hispanic transfer at Hispanic-Serving Institutions (HSIs). We examine the transfer patterns of a national sample of Hispanic community college students who began their postsecondary education in a HSI community college during the 2003-4 academic year. These students' postsecondary experiences and outcomes were tracked six years later. We examine the individual characteristics of the general sample of Hispanic students who began in Hispanic-Serving community colleges and compare these characteristics with those of the subset of Hispanic students who had transferred to a 4-year institution (an outcome known as vertical transfer) within six years. In addition to comparing student characteristics, we compare the characteristics of the community colleges of the whole set of beginning Hispanic community college students and the subset of those who transferred within six years. We conclude with some conclusions that can be drawn from these results and implications for research, policy, and practice.

Literature Review

In this section, we first briefly discuss characteristics of Hispanics who enroll in Hispanic-Serving community colleges. We follow with a discussion of research about how sociodemographic, precollege, and college experiences could be related to transfer outcomes for Hispanic students. Finally, we address the relatively limited research that addresses institutional factors that may make a difference in Hispanic transfer from 2-year HSIs to 4-year institutions.

Hispanic students who enroll in Hispanic-Serving community colleges. As already noted, Hispanic-Serving community colleges enroll a sizeable proportion of Hispanic students, offering many Hispanic students access to a postsecondary education (Nuñez et al., 2011; Perna

et al., 2010). Moreover, there is some evidence that, holding other student sociodemographic and precollege characteristics constant, Hispanic males are more likely to be enrolled in Hispanic-Serving community colleges than in non-Hispanic-Serving community colleges (Nuñez & Bowers, 2011; Nuñez et al., 2011). This evidence suggests that, above and beyond their role in providing college access for Hispanics in general, Hispanic-Serving community colleges are providing college access for Hispanic males, who are particularly underrepresented in higher education (Saenz & Ponjuan, 2009).

Hispanics who choose HSI community colleges are influenced by their social networks; including family, friends, and sometimes faculty members; in their choice of an institution (Cejda, Casparis, Rhodes, & Seal-Nyman, 2008). Hispanics in HSI community colleges, compared with other Hispanic community college students, are also more likely to be the first in their family to attend college (Nuñez et al., 2011). These students could be less familiar with how to navigate the college environment than their counterparts whose parents have more education, and therefore rely more on institutional agents within the community college to educate them about the transfer process (Bensimon & Dowd, 2009).

In addition, Hispanics in Hispanic-Serving community colleges are more likely than those who are not in Hispanic-Serving community colleges to experience “environmental pull” characteristics (Bean, 1990; Nora, 2004) that could pull them away from their studies; such as being independent students, having dependents, working full-time, and/or enrolling part-time (Nuñez et al., 2011). At the same time, compared with their counterparts in non-HSI community colleges, Hispanics in Hispanic-Serving community colleges enter college with higher high school GPAs and higher intentions to transfer to a 4-year institution (Nuñez et al., 2011). The

overall portrait of Hispanics in HSI community colleges, then, is that of students who have higher hopes of transferring, but could also encounter more barriers in doing so.

There is less research about Hispanic community college students' academic and social experiences in Hispanic-Serving community colleges, but research suggests that Hispanic students who attend Hispanic-Serving community colleges are more likely than their Hispanic community college counterparts not at HSIs to transfer to a 4-year institution (Laden et al., 2008). This research is further supported by findings that Hispanics at community colleges with higher proportions of Hispanics (which are more likely to be HSIs) are also more likely to transfer to 4-year institutions (Hagedorn et al., 2007).

Individual and institutional factors related to Hispanic transfer. What are the factors that could influence transfer rates for Hispanic community college students at Hispanic-Serving community colleges? One framework often used to explore influences on transfer outcomes is Nora's (2004) student/institution engagement model (e.g., Arbona & Nora, 2007; Cabrera & Nora, 1994; Cabrera, Nora & Castaneda, 1993; Crisp & Nora, 2010; Nora, 2004; Nora & Cabrera, 1996). This framework emphasizes that the nature of the interaction between a community student and the institution holds a critical influence on transfer and related community college outcomes. More specifically, this theory postulates that, at the individual level, a student's sociodemographic characteristics, precollege preparation, environmental pull characteristics, educational plans, and academic and social experiences, collectively influence his or her likelihood of transferring.

Research has borne out that these student factors are related to transfer, both for community college students in general and Hispanic students in particular. Specifically, gender and ethnicity have consistently been found to be associated with vertical transfer (Grubb, 1991;

Lee & Frank, 1990; Surette, 2001; Velez & Javalgi, 1987). Among Hispanic community college students, being female is positively related to vertical transfer (Arbona & Nora, 2007). In general, a student's age also appears salient, as older students transfer at lower rates (e.g., Dougherty & Kienzl, 2006; Porchea, Allen, Robbins, & Phelps, 2010).

Among Hispanic community college students, those at HSIs are more likely than their counterparts not at HSIs to be the first in their families to go to college (Nuñez et al., 2011). Yet, for Hispanic community college students as well as community college students in general, coming from families with lower parental education can be related to lower vertical transfer rates, in part because students may not understand how to navigate transfer pathways (Alexander, Garcia, Gonzalez, Grimes, & O'Brien, 2007; Crisp & Nora, 2010; Porchea et al., 2010; Rendón & Valadez, 1993). Linguistic Minority status – having limited English language skills – can also be a hindrance to vertical transfer for Hispanic students, particularly when community college transfer policies and articulation policies are not clearly communicated (Alexander et al., 2007; Bunch & Endris, 2012; Perrakis & Hagedorn, 2010). Immigration status, which is linked with language skills, also merits consideration in understanding Hispanic community college transfer experiences. Students in Hispanic-Serving community colleges are about twice as likely (28%) as their counterparts in community colleges that are not Hispanic-Serving (13%) to be first-generation immigrants, and these students may be less familiar with the U.S. postsecondary system and navigating related transfer pathways (Nuñez et al., 2011).

Community college students with higher academic preparation – as measured by students' high school grade point average (GPA) (Lee & Frank, 1990; Velez & Javalgi, 1987) or math scores or coursetaking (Dougherty & Kienzl, 2006; Lee & Frank, 1990) – are more likely to transfer to 4-year institutions. This is the case among Hispanic students as well (Arbona &

Nora, 2007; Crisp & Nora, 2010; Suarez, 2003). Conversely, lack of academic preparation for college can also hinder Hispanic students' likelihood of transferring (Alexander et al., 2007).

Environmental pull factors are also related to the likelihood of vertical transfer for community college students in general. As noted previously, Hispanic students in HSI community colleges are more likely than those in non-HSIs to have these environmental pull factors (Nuñez et al., 2011). Having dependents and/or work commitments is negatively related to vertical transfer for community college students in general (Dougherty & Kienzl, 2006; Lee & Frank, 1990). An increased number of hours worked per week is negatively related to transfer for Hispanic community college students (Crisp & Nora, 2010). However, enrolling in community college full-time as opposed to part-time appears to positively predict vertical transfer for community college students in general (Dougherty & Kienzl, 2006; Doyle, 2009; Lee & Frank, 1990; McCormick, 1997; Porchea et al., 2010), and for Hispanic community college students in particular (Crisp & Nora, 2010). Moreover, limited access to financial resources can hinder vertical transfer for Hispanic students (Alexander et al., 2007), whereas increased access to income and financial aid is positively related to transfer for these students (Cejda & Rhodes, 2004; Crisp & Nora, 2010).

In addition to past educational experiences, future educational plans appear to be related to transfer. Higher educational aspirations or expectations are related to a higher likelihood of vertical transfer (Dougherty & Kienzl, 2006; Grubb, 2001; McCormick & Carroll, 1997; Porchea et al., 2010). This is also the case for Hispanic students in particular (Arbona & Nora, 2007).

Although many community college students do not necessarily receive personal guidance in the vertical transfer process (Bensimon & Dowd, 2009; Yoshimi & Nuñez, 2011), there is evidence that this type of guidance is particularly important for Latino students (Bensimon &

Dowd, 2009). Bensimon and Dowd (2009) call those institutional personnel who personally support students in the transfer process “transfer agents.” More generally, positive and attentive faculty-student interactions can facilitate academic engagement for Hispanic community college students (Cejda & Rhodes, 2004; Cejda et al., 2008; Cejda & Hoover, 2010-11). Participation in academic activities like study groups can also promote vertical transfer among community college students in general (Dougherty & Kienzl, 2006).

In addition to this academic support, social support for Hispanic community college students can also promote positive outcomes for these students. Such support includes culturally relevant programming (Perrakis & Hagedorn, 2010). Academic and social affirmation and encouragement of community college students, sometimes known as academic and interpersonal “validation” (Rendon, 1994; Rendon Linares & Muñoz, 2011), is positively related to academic engagement and persistence, and that validation is especially important for Hispanic students (Barnett, 2011a, 2011b; Suarez, 2003).

The type of academic pathway a community college student pursues is also related to the likelihood of transfer, with vocational (in comparison to transfer-oriented) pathways being negatively related to transfer (Alfonso, Bailey, & Scott, 2005; Dougherty & Kienzl, 2006; Grubb, 1991). Crisp and Nuñez (2011) found that, holding a battery of critical student and institutional factors constant, being enrolled in a vocational program was a negative predictor of transfer for Hispanic and Black students.

Many Hispanic students enrolled in community colleges enroll in developmental coursework (Crisp & Nora, 2010). Taking developmental coursework has been found to influence the likelihood of vertical transfer for community college students (Dougherty & Kienzl, 2006). Further, although not specific to vertical transfer, findings by Crisp and Nora

(2010) suggest that enrolling in one or more developmental education courses during the first year of college may serve to increase Hispanic students' odds of persisting in college to the end of the second year.

What happens in the community college classroom also is related to vertical transfer. College academic performance measured by higher college grades is positively related to vertical transfer for community college students in general (Velez & Javalgi, 1987), and the same applies to Hispanic students (Crisp & Nora, 2010). However, for community college students in general, taking an online course may be negatively related to vertical transfer (Xu & Jaggars, 2011).

Although less examined in the research literature, institutional factors also are related to transfer (Bensimon & Malcom, 2012). Some studies have addressed the role of an institution's academic and social environment in transfer. Others have examined how aggregate sociodemographic characteristics of an institution are related to transfer. Most studies that have examined the relationship between community college institutional characteristics and transfer have not focused specifically on Hispanic students, with the exception of a few studies focusing on Hispanics at high Hispanic-enrolling community colleges (e.g., Hagedorn et al., 2007; Laden et al., 2008).

Institutional characteristics of larger enrollment size, as well as increased percentages of: (a) part-time students, (b) underrepresented minority students, and (c) female students, have been found to be negatively related to transfer for community college students in general (Bailey, Calcagno, Jenkins, Kienzl, & Leinbach, 2005; Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006). The percentage of part-time or full-time faculty can also be related to transfer, with increased proportions of part-time faculty being related to lower vertical transfer rates (Bailey et al., 2005; Porchea et al., 2010). Other research has found that community colleges with higher

proportions of traditionally aged students, lower proportions of underrepresented minority students, higher levels of SES, higher levels of academic preparation, and greater emphasis on transfer programs have higher transfer rates for students who were tracked within six years of beginning their community college education (Wassmer, Moore, & Shulock, 2004). There is some evidence that greater in-state tuition is positively related to community college transfer rates (Porchea et al., 2010). Students in community colleges, regardless of race, appear to benefit from being taught by an instructor who is also from their race (Fairlie, Hoffman, & Oreopoulos, 2011).

However, there is evidence that institutional characteristics may not influence Hispanic transfer rates in the same way as for community college students in general. Most research has not disaggregated transfer outcomes by race/ethnicity (Dowd et al., 2009). Hagedorn and her colleagues (2007) found that an increased percentage of Hispanic students at a community college was actually positively associated with transfer rates for Hispanic students, which is consistent with Laden and colleagues' (2008) finding that HSI community colleges see higher transfer rates for Hispanics than other HSIs. These findings could be related to increased presence of role models through Hispanic faculty and other Hispanic students, as well as more culturally sensitive curricula and programs targeting Hispanics (Hagedorn et al., 2007; Hagedorn, 2010; Laden, 2001). Therefore, the individual and institutional factors that are related to Hispanic transfer at HSI community colleges merit attention.

Description of Transfer among Hispanic Students Attending Two-Year HSIs

The following section provides a national profile of Hispanic students who participated in the Beginning Postsecondary Students Longitudinal Study (BPS). The BPS study collects data specific to transfer patterns, enrollment, persistence, and degree attainment over six academic

years (2003-04 to 2008-09). The sample of Hispanic students was limited to the 310 students who were less than 24 years of age and who first enrolled at one of 95 two-year Hispanic Serving Institutions during the 2003-04 academic year. The sample excluded non-traditional aged students, because certain data elements thought to be critical (such as high school GPA) were not available in the dataset for students over 24 years of age. BPS data were merged with data from the Integrated Postsecondary Education Data System (IPEDS) fall 2003 surveys to provide data regarding institutional characteristics. Various individual and institutional characteristics of Hispanic community college students at Hispanic-Serving community colleges were examined in the analysis, and are displayed in the following tables.

Table 1 describes various characteristics of Hispanic students who began at a two-year Hispanic Serving Institution, based on the aforementioned research literature. Comparative data are shown for those students who successfully transferred to a four-year institution within six academic years. Among the national sample of Hispanic students who began college at HSI community colleges in the 2003-04 academic year, the majority of students were female (59%). Only 14 percent of students had a parent who had earned a bachelor's degree or higher, and the majority of students (59%) had parents who had never attended any postsecondary education. Additionally, over half (53%) of the students who began their postsecondary education at a two-year HSI had incomes in the lowest quartile. Moreover, 40 percent of the sample did not grow up speaking English as the primary language in the home. Over three-fourths (78%) of the students were classified as second or third generation citizens.

In terms of high school experiences, nearly half (44%) of the Hispanic students who attended a two-year HSI earned a cumulative grade point average (GPA) lower than 3.0 during high school. Moreover, only 17 percent of the sample took a pre-calculus or calculus course

during high school and nearly half (46%) did not take a course higher than Algebra II prior to attending college. It is also notable that 30 percent of the sample did not immediately enroll in college after high school.

The sample of Hispanic students who began at HSI community colleges had several outside factors serving to “pull” them away from campus and their studies. Roughly a third (29%) did not receive any form of financial aid support during the first year of college and another half (48%) received less than 5,000 dollars. Sixty one percent of the students were employed off-campus, and 51 percent worked 20 or more hours per week. It is not surprising then, that nearly half (47%) of the students did not attend college exclusively on a full-time basis and 33 percent stopped out of college at least one semester.

A third of Hispanic students who began their college education at a HSI community college enrolled in a developmental mathematics course during the first year of college. Although 85 percent of the students expected to earn a bachelor’s degree or higher, only 60 percent planned to transfer to a four-year institution. At the same time, a slightly higher percentage (69%) of Hispanic students who first enrolled at a two-year HSI were formally enrolled in an academic transfer program at the community college. Despite these students’ expectations and plans, only 23 percent of these students successfully transferred to a four-year institution within six academic years.

Table 1.

Comparison of Student Characteristics of Hispanic Students Who Began at an HSI and Those Who Began at an HSI and Successfully Transferred to 4-year Institution

	All who began at a HSI CC (n=310 ¹)	Those who transferred to a 4-year (n=70)	Sig. ²
<i>Socio-demographic Variables</i>			
Female	59%	64%	
Parental Education			
Did not attend college	59%	51%	
Less than a 4-year degree	27%	29%	
4-year degree	8%	13%	
More than a 4-year degree	6%	7%	
Income Quartile			
Low	53%	49%	
Low middle	29%	26%	
High middle	13%	17%	
High	6%	9%	
English was primary language spoken in home	60%	56%	
Immigration status (time in US)			
Non-citizen or student w/visa	14%	14%	
First generation citizen	8%	6%	
Second generation citizen	40%	47%	
Third generation or later citizen	38%	33%	
<i>Precollege Factors</i>			
High school GPA			*
2.4 or less	21%	18%	
2.5 to 2.9	23%	14%	
3.0 to 3.4	48%	50%	
3.5 to 4.0	9%	17%	
Highest math course taken			**
Other	22%	13%	
Algebra II	46%	40%	
Trig and Algebra II	15%	14%	
Precalculus	11%	19%	
Calculus	6%	14%	
Earned non-language college credit	11%	14%	
Delayed enrollment into college	30%	26%	
<i>Environmental Pull Factors</i>			
Did not have children	88%	93%	
Hours worked			

	All who began at a HSI CC (n=310 ¹)	Those who transferred to a 4-year (n=70)	Sig. ²
20 or more hours per week	51%	44%	
Less than 20 hours per week	10%	16%	
Did not work	38%	40%	
Financial aid amount received			*
Did not receive aid	29%	36%	
Less than 2,500 dollars	23%	14%	
Between 2,500 and 4,999 dollars	25%	30%	
Between 5,000 and 9,999 dollars	13%	16%	
More than 10,000 dollars	11%	4%	
Did not exclusively attend full-time	47%	44%	
Stopped out	33%	23%	*
<i>Educational Plans/Expectations</i>			
Planned to transfer to a 4-year institution	60%	70%	*
Highest degree expected			*
Less than a bachelor's degree	15%	9%	
Bachelor's degree	37%	30%	
Master's degree or certificate	34%	39%	
Doctoral or professional degree	15%	23%	
<i>Academic and Social Experiences</i>			
Frequency of support from "transfer agent"	.698	.828	
Frequency of faculty-student interaction	.535	.692	*
Frequency of social support	.281	.414	*
Program type (transfer)			**
Vocational/technical program	31%	14%	
Transfer program	69%	86%	
Took developmental math course	33%	34%	
First year GPA	2.74	2.92	*
Took distance education course	8%	14%	*

* $p < .05$, ** $p < .01$, *** $p < .001$

¹Data are rounded to the nearest 10th per IES guidelines.

²Represents results of chi square or t -tests identifying significant relationship between the student level variable and student transfer.

³Percentages may not add to 100 due to rounding.

Table 2 represents institutional characteristics among Hispanic students who began at a two-year HSI in the 2003-04 academic year, with comparisons to those students who successfully transferred to a four-year institution. Among all students who began college at a HSI community college, the average enrollment size of the college attended was 12,389. The average percentage of full-time faculty who were Hispanic was 20 percent. The national sample of Hispanic students at Hispanic-Serving community colleges attended institutions where less than half (47%) of the instructional staff were employed full-time. The mean tuition and fee revenues per full-time student were just over 2,000 dollars. Further, the average student attended a community college that awarded substantially more associate's degrees than other degrees or certificates (68%). The average percentage of students who transferred to another institution within 150 percent of normal time to completion among Hispanic students enrolled at two-year HSIs was only 16 percent. Given the location of HSIs, it is not surprising that the large majority of students attended two-year HSIs that were located in the West or Rocky Mountain area or Southern states (87%), all geographic areas which serve the largest percentages of Hispanic postsecondary students in the country.

Table 2.

Comparison of Institutional Characteristics of Hispanic Students Who Began at an HSI and Those Who Began at an HSI and Transferred to 4-Year Institution

	All who began at a HSI CC (n=310)	Those who transferred to a 4-year (n=70)	Sig. ²
<i>Academic and social environment</i>			
Average total enrollment at the institution	12,389	14,816	*
Average % of full-time faculty who are Hispanic	20%	19%	
Average % of instructional staff who are classified as full-time	47%	50%	
Average tuition and fee revenues per full-time equivalent (FTE)	\$2,117	\$1,636	
Average academic support expenses per FTE	\$574	\$575	
Average instruction expenses per FTE	\$2,928	\$2,990	
Average student services expenses per FTE	\$708	\$740	
Average state and local government appropriation revenues per FTE	\$3,886	\$4,175	
Average % of total awards that are Associate's degrees	68%	71%	
Average transfer rate	16%	18%	
<i>Location</i>			
West or Rocky Mountains	40%	30%	
Central	4%	4%	
South	47%	49%	
East	10%	16%	
<i>Aggregate socio-demographics</i>			
Average % Hispanic students	54%	50%	
Average % Female students	58%	57%	
Average % Students received federal aid	48%	38%	*

* $p < .05$, ** $p < .01$, *** $p < .001$

¹Data are rounded to the nearest 10th per IES guidelines.

²Represents results of chi square or *t*-tests identifying significant relationship between the institutional variable and student transfer.

³Percentages may not add to 100 due to rounding.

Relationship between Student and Institutional Variables and Transfer

The right hand columns of Tables 1 and 2 identify student and institutional variables that were found using chi-square and *t*-tests to be significantly related to student transfer. Overall, the data suggest that the relatively small percentage of students who successfully transferred to a four-year institution were in many respects representative of the broader sample of students who began college at a two-year HSI. Similarly, there was little relationship found between institutional characteristics and an individual students' transfer behavior. However, there were a few notable relationships. On the whole, Hispanic students who successfully vertically transferred within six years were more likely to:

- ✓ Be more academically prepared (i.e., high school GPA and level of math preparation)
- ✓ Receive higher amounts of financial support
- ✓ Remain continuously enrolled
- ✓ Have plans to vertically transfer
- ✓ Hold higher degree expectations
- ✓ Have had informal or social contact with faculty or talked with faculty about academic matters outside of class
- ✓ Participate in school clubs, school sports, and/or study groups
- ✓ Enroll in an academic transfer program
- ✓ Earn a higher GPA during the first year of college
- ✓ Enroll in one or more distance education classes
- ✓ Attend a large community college
- ✓ Attend a community college with a relatively lower percentage of students receiving financial aid

Discussion

Hispanic-Serving community colleges play a critical role in Hispanic community college enrollment. In this white paper, we have explored and compared the characteristics of Hispanic-Serving community college students who begin at, and, those who transfer to, a 4-year institution. These characteristics include individual and institutional factors related to the Hispanic students and the Hispanic-Serving community colleges that they attend. While Hispanic students who transferred and those who did not transfer from Hispanic-Serving community colleges shared many similar characteristics, they also exhibited some differences which are worth discussing.

We found that sociodemographic characteristics did not appear to differentiate between Hispanic community colleges at HSIs who transferred and those who did not transfer. This suggests that these background characteristics could be less influential than pre-college characteristics, educational plans, college academic and social experiences, and institutional characteristics in influencing transfer.

High school academic preparation appears to differentiate between Hispanic students who transfer and those who do not. In particular, higher performance in high school, as measured by GPA and higher level of math preparation, distinguishes between the transfers and non-transfers. This finding extends other research suggesting the importance of pre-college academic preparation in Hispanic transfer (Arbona & Nora, 2007; Crisp & Nora, 2010; Suarez, 2003) to the specific institutional context of Hispanic-Serving community colleges.

This study indicates that certain environmental pull characteristics also differentiate between Hispanics enrolled in Hispanic-Serving community colleges who transfer and those who do not transfer. Namely, receiving higher amounts of financial support, in the form of financial

aid, is positively related to transfer for these Hispanic community college students. Similarly, when understanding transfer, financial support is significant for Hispanic community college students in general (Cejda & Rhodes, 2004; Crisp & Nora, 2010). Remaining continuously enrolled in community college is also positively related to transfer for these Hispanic students, consistent with Hispanic students in general (Crisp & Nora, 2010). Minimizing these environmental pull characteristics could enable Hispanic students at these institutions to devote more time to their studies and eventually transfer.

Initial educational plans also appear to be related to transfer for Hispanic students at Hispanic-Serving community colleges. Those students who anticipate progressing further in their postsecondary education are more likely to transfer than those who do not. This finding supports other research indicating the importance of continuous enrollment in promoting the transfer process for Hispanic students at all community colleges (Crisp & Nora, 2010).

Several college academic and social experiences differentiate between students who transfer and those who do not. Students who transfer are more likely to report having informal or social contact with faculty about academic matters outside of class. This finding reinforces the importance of the quantity and quality of interactions between community college faculty and Hispanic students at Hispanic-Serving community colleges (Cejda & Rhodes, 2004; Cejda, Casparis, & Rhodes, 2008; Cejda & Hoover, 2010-11). In particular, faculty validation (Rendon, 1994; Rendón Linares & Muñoz, 2011) of Hispanic students' capabilities and encouragement to develop academic skills can play a positive role in the academic engagement, sense of belonging, persistence, and transfer of Hispanic community college students at HSIs (Barnett, 2011a, 2011b; Suarez, 2003).

In general, community colleges offer fewer opportunities for social involvement than 4-year institutions. Yet, social support, through engagement in school clubs, school sports, and/or study groups, also is positively related to transfer for this group of Hispanic community college students. These kinds of social involvement could contribute to positive outcomes like a sense of belonging in the community college environment, which could in turn affect persistence and transfer (Allison, 1999; Barnett, 2011a, 2011b).

This study also indicates the importance of the type of program in which Hispanic community college students at a Hispanic-Serving Institution are initially placed in, particularly because these students are more likely than their Hispanic counterparts in non-HSIs to intend to transfer or earn a 4-year degree (Nuñez et al., 2011). Namely, being enrolled in a transfer, as compared to vocational/technical, program is positively related to transfer for Hispanic students in HSI community colleges. Unfortunately, another national study suggests that beginning Hispanic community college students who initially intend to transfer are less likely than their White counterparts to be placed in transfer programs, and that this can have an adverse effect on Hispanics' likelihood of transferring within six years (Crisp & Nuñez, 2011).

Academic performance once a student arrives in college, as measured by first-year college GPA, is also related to transfer likelihood for these students. The same is true for Hispanic students at all community colleges (Crisp & Nora, 2010). In contrast to other research on community college students in general (Xu & Jaggars, 2011), taking a distance education course is positively related to transfer for Hispanic community college students at HSIs. It is not clear why this might be the case. One possible explanation is that Latino students in HSI community colleges experience a higher level of environmental pull factors, such as working and taking care of dependents, than even their Hispanic counterparts in other community colleges

(Nuñez et al., 2011). Hispanic students in HSI community colleges, particularly those who experience environmental pull factors, could therefore find that taking a more flexibly scheduled distance education course allows them to more easily balance their different academic, work, and family, responsibilities; and in turn, enables them to perform better in their studies and to eventually transfer to a 4-year institution.

Hispanic college students at Hispanic-Serving community colleges are more likely to transfer if they attend a large community college. This finding is consistent with research on community college students in general (Bailey et al., 2005; Bailey et al., 2006). This may be related to increased flexibility and programming options for students at larger community colleges.

Among this group of students, attending an institution with a relatively lower proportion of students receiving financial aid is associated with an increased likelihood of transfer. The proportion of students receiving financial aid may be an indicator of the collective SES of the student body at the community college, and students from higher SES backgrounds likely receive less financial aid. Therefore, this finding is consistent with findings that any community college students who attend higher SES community colleges are more likely to transfer (Wassmer et al., 2004). It appears that not only at the individual, but at the institutional level, the financial support that Hispanic students at Hispanic-Serving community colleges receive makes a difference in their likelihood of transferring.

Conclusion

This study identifies several individual and institutional factors that are related to transfer for Hispanic students at Hispanic-Serving community colleges. It can serve as a departure point to enhance how to understand and how to address the needs of these students. Here, we discuss

implications for research, policy, and practice on Hispanic students at Hispanic-Serving community colleges.

Future research on students in these types of institutions can employ multivariate techniques such as logistic regression and hierarchical linear modeling to hold other factors constant when examining the association between a factor of interest and the outcome of transfer for Hispanic community college students (Crisp & Nuñez, 2011; Nuñez et al., 2011). Because our study found a discrepancy in the number of students who expressed an intention to transfer and those who expressed an intention to earn a 4-year degree, more research is warranted to examine how beginning community college students in general, and Hispanic students at Hispanic-Serving community colleges in particular, make sense of transfer and the process of attaining a baccalaureate degree. We found that few institutional characteristics distinguished between students who transferred and those who did not transfer. Exploring in more depth the organizational culture at these Hispanic-Serving community colleges, including whether administrators, faculty, and staff develop a “transfer culture” (Bensimon & Dowd, 2009; Perez & Ceja, 2010; Wassmer et al., 2004; Wolf-Wendel, Twombly, Morphew, & Sopcich, 2004), would provide further insights about what these institutions can do to support Hispanic transfer.

With respect to policy and practice, this study underscores the importance of high school academic preparation in promoting Hispanic transfer. Yet, Hispanic students tend to attend less well-resourced high schools than other students, with fewer opportunities to take college preparatory courses (Gandara & Contreras, 2009; Oakes, Rogers, Silver, Valladares, Terriquez, McDonough, 2006). One way to strengthen academic preparation for college is through P-20 partnerships that can connect community colleges with local K-12 schools, 4-year universities, and/or state and federal efforts to align K-12 education preparation with higher education’s

demands (Nuñez & Oliva, 2009; Santiago et al., 2004) as well as educate high school students about policies and procedures about how to transfer (i.e. using articulation agreements) (Rendón & Valadez, 1993). Such partnerships, particularly those between 2-year and 4-year institutions, can also facilitate the transfer function for Hispanic students (Wolf-Wendel et al., 2004). On a programmatic level, the Puente program, a culturally relevant academic preparation program which operates in both high schools and community colleges in California, has been found to foster positive postsecondary outcomes such as academic engagement and performance, both of which are important to promote transfer (Gandara, 2002).

This study also suggests that minimizing environmental pull characteristics can support Hispanic students at Hispanic-Serving community colleges in transferring. Yet, Hispanic community college students in HSIs are even more likely than their counterparts not in HSIs to have environmental pull characteristics (Nuñez et al., 2011). Access to financial aid is especially important for Hispanic students in promoting successful outcomes (Crisp & Nora, 2010; Perrakis & Hagedorn, 2010; Rendón & Valadez, 1993; Suarez, 2003). Yet, federal Pell grants for low-income students to pursue college are consistently in danger of being eliminated. It is important that the federal government maintain Pell grant awards and increase the amount of these awards proportionately with the increase in college costs (Haycock, 2006) so that they offer meaningful support to low-income students, many of whom are Hispanic students at Hispanic-Serving community colleges.

Hispanic students at Hispanic-Serving community college students are more likely to intend to transfer when they begin their postsecondary education (Nuñez et al., 2011). Such educational plans also are positively related to transfer, but the discrepancy between students who say they intend to transfer versus those who intend earn a baccalaureate degree indicates

that there may be a disconnect in these students' understanding of how to navigate transfer and the pathway to a 4-year degree, as well as limited access to clear and updated information about the institutional mechanisms meant to help students transfer (e.g. articulation agreements) (Bensimon & Dowd, 2009; Hagedorn, 2010; Yoshimi & Nuñez, 2011). Therefore, connecting students with institutional agents (Stanton-Salazar, 1997; 2001) in K-12 through P-20 partnerships (Jarsky, McDonough, & Nuñez, 2009; Santiago et al., 2004) can help students access the college knowledge (Conley, 2005) necessary to help actualize intentions to earn a baccalaureate degree, particularly when many Hispanic students do not even begin their postsecondary education at 4-year institutions. Once students arrive in college, transfer agents can encourage Hispanic students and provide them with information necessary to pursue transfer (Bensimon & Dowd, 2009) and a validating strong support system (Rendón Linares & Muñoz, 2011; Rendón & Valadez, 1993; Suarez, 2003). It is also critical that Hispanic students who begin college intending to transfer are placed into transfer, rather than vocational, programs (Crisp & Nuñez, 2011). Therefore, intrusive academic advising to guide Hispanic students into and through transfer programs is critical (Hagedorn, 2010).

Finally, this research supports other research suggesting that a holistic approach that addresses both academic and social support for Hispanic students at Hispanic-Serving community colleges contributes positively to transfer (Santiago, Andrade, & Brown, 2004; Suarez, 2003). One way to think about this is that these students benefit from academic and interpersonal validation of their skills and experiences (Barnett, 2011a, 2011b; Rendón Linares & Muñoz, 2011). Local programs such as Puente, which combines academic skill development, culturally relevant curricula and mentoring (Gandara, 2002), and federal programs, such as

Student Support Services (Chaney, Muraskin, Cahalan, & Goodwin, 1998), can promote academic and social engagement for Hispanic community college students.

This white paper advances our knowledge on Hispanic students' experiences and outcomes in Hispanic-Serving community colleges. However, it is only a beginning to develop a better understanding of the experiences of the significant proportion of Hispanic students who begin their postsecondary careers in these types of institutions. We hope that this paper offers researchers, policymakers, and practitioners ideas of what directions to pursue in serving this critical population of students.

References

- Alexander, B. C., Garcia, V., Gonzalez, L., Grimes, G., & O'Brien, D. (2007). Barriers in the transfer process for Hispanic and Hispanic immigrant students. *Journal of Hispanic Higher Education, 6*(2), 174-184.
- Alfonso, M., Bailey, T. R., & Scott, M. (2005). The educational outcomes of occupational sub-baccalaureate students: Evidence from the 1990s. *Economics of Education Review, 24*, 197-212.
- Allison, L. M. (1999). *The impact of integrative experiences on persistence: A study of non-traditional students*. (Ph.D. dissertation). University of Michigan, Ann Arbor, MI.
- Arbona, C., & Nora, A. (2007). The influence of academic and environmental factors on Hispanic college degree attainment. *The Review of Higher Education, 30*(3), 247-270.
- Bailey, T., Calcagno, J. C., Jenkins, D., Kienzl, G., & Leinbach, T. (2005). *Community college student success: What institutional characteristics make a difference?* New York: Columbia University, Teachers College, Community College Research Center.
- Bailey, T., Calcagno, J. C., Jenkins, D., Leinbach, T., & Kienzl, G. (2006). Is student-right-to-know all you should know? An analysis of community college graduation rates. *Research in Higher Education, 47*(5), 491-519. doi: 10.1007/s11162-005-9005-0
- Barnett, E. (2011a). Faculty validation and persistence among nontraditional community college students. *Enrollment Management Journal, 5*(2), 97-117.
- Barnett, E. (2011b). Validation experiences and persistence among nontraditional community college students. *Review of Higher Education, 34*(2), 193-220.

- Bean, J. (1990). Why students leave: insights from research. In D. Hossler, J. P. Bean, & Associates (Eds.), *The strategic management of college enrollments* (pp. 147-169). San Francisco: Jossey-Bass.
- Bensimon, E. M., & Dowd, A. (2009). Dimensions of the transfer choice gap: Experiences of Latina and Latino students who navigated transfer pathways. *Harvard Educational Review, 79*(4), 632-658.
- Bensimon, E. M., & Malcom, L. (2012). *Confronting equity issues on campus: Implementing the equity scorecard in theory and in practice*. Sterling, VA: Stylus Publishing.
- Bunch, G. C., & Endris, A. (2012). Navigating 'open access' community colleges: Matriculation policies and practices for U.S.-educated language minority students. In Y. Kanno & L. Harklau (Eds.), *Linguistic minority students go to college: Preparation, access, and persistence* (pp. 165-183). New York, NY: Routledge.
- Cabrera, A. F., & Nora, A. (1994). College students' perceptions of prejudice and discrimination and their feelings of alienation: A construct validation approach. *The Review of Education/Pedagogy/Cultural Studies, 16*(3-4), 387-409.
- Cabrera, A. F., Nora, A., & Castaneda, M. B. (1993). College persistence: Structural equation modeling test of an integrated model of student retention. *Journal of Higher Education, 64*(2), 123-137.
- Cejda, B. D., & Rhodes, J. H. (2004). Through the pipeline: The role of faculty in promoting associate degree completion among Hispanic students. *Community College Journal of Research and Practice, 28*(3), 249-262.

- Cejda, B. D., Casparis, C., Rhodes, J., & Seal-Nyman, I. (2008). The role of social capital in the educational decisions of Hispanic students attending Hispanic-Serving community colleges. *Enrollment Management Journal*, 2(1), 32-59.
- Cejda, B. D., & Hoover, R. E. (2010-2011). Strategies for faculty-student engagement: How community college faculty engage Latino students. *Journal of College Student Retention: Research, Theory and Practice*, 12, 135-153.
- Chaney, B., Muraskin, L. D., Cahalan, M. W., & Goodwin, D. (1998). Helping the progress of disadvantaged students in higher education: The federal Student Support Services program. *Educational Evaluation and Policy Analysis*, 20(3), 197-215.
- Conley, D. T. (2005). *College Knowledge: What it Really Takes for Students to Succeed and What We Can Do to Get Them Ready*. San Francisco: Jossey-Bass.
- 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. doi: 10.1007/s11162-009-9151-x
- Crisp, G., & Nuñez, A.-M. (2011, November). *Modeling transfer among underrepresented minority and non-minority community college students pursuing a 4-year degree*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Charlotte, NC.
- Dougherty, K. J., & Kienzl, G. S. (2006). It's not enough to get through the open door: Inequalities by social background in transfer from community colleges to four-year colleges. *Teachers College Record* 108(3), 452-487.
- Doyle, W. R. (2009). Impact of increased academic intensity on transfer rates: An application of

- matching estimators to student-unit record data. *Research in Higher Education*, 50(1), 52-72.
- Fairlie, R., Hoffman, F., & Oreopoulos, P. (2011). *A community college instructor like me: Race and ethnicity interactions in the classroom*. Cambridge, MA: National Bureau of Economic Research.
- Gandara, P. (2002). A study of high school Puente: What have we learned about preparing Latino youth for postsecondary education. *Educational Policy*, 16(4), 474-495.
- Gandara, P. , & Contreras, F. (2009). *The Latino educational crisis*. New York, NY: Teachers College Press.
- Grubb, W. N. (1991). The decline of community college transfer rates: Evidence from national longitudinal surveys. *The Journal of Higher Education*, 62(2), 194–222.
- Hagedorn, L. S. (2010). The pursuit of student success: The directions and challenges facing community colleges. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research*, (Vol. 25, pp. 181-218). Netherlands: Springer Netherland.
- Hagedorn, L. S., Chi, W., 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. doi: 10.1007/s11162-006-9024-5
- Haycock, K. (2006, August). *Promise abandoned: How policy choices and institutional practices restrict college opportunities*. Washington, D.C.: The Education Trust.
- Horn, L. (2009). *On track to complete? A taxonomy of beginning community college students and their outcomes 3 years after enrolling: 2003-04 through 2006*. Washington, DC: National Center for Education Statistics.

- Jarsky, K., McDonough, P., & Nunez, A-M. (2009). Establishing a college culture in secondary school through P-20 collaboration: A case study. *Journal of Hispanic Higher Education*, 8(4), 357-373.
- Laden, B. V. (2001). Hispanic Serving Institutions: Myths and realities. *Peabody Journal of Education*, 76(1), 73-92.
- Laden, B. V., Hagedorn, L. S., & Perrakis, A. (2008). Donde estan los hombres?: Examining success of Latino male students at Hispanic serving community colleges. In B. B. M. Gasman, & C.S.V. Turner (Ed.), *Understanding Minority-Serving Institutions* (pp. pp. 127-140). Albany: SUNY Press.
- Lee, V. E., & Frank, K. A. (1990). Students characteristics that facilitate the transfer from 2-year to 4-year colleges. *Sociology of Education*, 63(3), 178–193.
- McCormick, A. C., & Carroll, C. D. (1997, June). *Transfer behavior among beginning postsecondary students: 1989-94. Postsecondary education descriptive analysis reports. Statistical analysis report*. Retrieved from <http://nces.ed.gov/pubs97/97266.pdf>
- Melguizo, T., Kienzl, G., & Alfonso, M. (2011). Comparing the educational attainment of community college students and four-year college rising juniors using propensity score matching methods. *Journal of Higher Education*, 82(3), 265-291.
- Nora, A. (2004). The role of habitus and cultural capital in choosing a college, transitioning from high school to higher education, and persisting in college among minority and non-minority students. *Journal of Hispanic Higher Education*, 3(2), 180-208.
- Nora, A., & Cabrera, A. F. (1996). The role of perceptions of prejudice and discrimination on the adjustment of minority students to college. *Journal of Higher Education*, 67(2), 120–148.

- Núñez, A.-M., & Bowers, A. J. (2011). Exploring what leads high school students to enroll in Hispanic-serving institutions. *American Educational Research Journal*, 48(6), 1286-1313. doi: 10.3102/0002831211408061
- Núñez, A.-M., & Oliva, M. (2009). Organizational collaboration to promote college access: A P-20 framework. *Journal of Hispanic Higher Education*, 8(4), 322-339.
- 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.
- Oakes, J., Rogers, J., Silver, D., Valladares, S., Terriquez, V., McDonough, P., Renée, M., & Lipton, M. (2006, November). *Removing the roadblocks: Fair college opportunities for all California students*. Los Angeles, CA: UC All Campus Consortium for Research on Diversity and UCLA Institute for Democracy, Education, and Access.
- Pérez, P. A., & Ceja, M. (2010). Building a Latina/o student transfer culture: Best practices and outcomes in transfer to universities. *Journal of Hispanic Higher Education*, 9(1), 6-21. doi: 10.1177/1538192709350073
- Perna, L. W., Li, C., Walsh, E., & Raible, S. (2010). The status of equity for Hispanics in public higher education in Florida and Texas. *Journal of Hispanic Higher Education*, 9(2), 145-166.
- Perrakis, A. H., & Hagedorn, L. S. (2010). Latino/a student success in community colleges and Hispanic-Serving Institution status. *Community College Journal of Research and Practice*, 34(10), 797-813.
- Porchea, S. F., Allen, J., Robbins, S., & Phelps, R. P. (2010). Predictors of long-term enrollment and degree outcomes for community college students: Integrating academic,

- psychosocial, socio-demographic and situational factors. *The Journal of Higher Education*, 81(6), 750-778.
- Rendon, L. I. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*, 19(1), 33-51.
- Rendon, L., & Nora, A. (1997). Student academic progress: Key trends. Report prepared for the national center for urban partnerships. New York: Ford Foundation.
- Rendón, L. I., & Valadez, J. R. (1993). Qualitative indicators of Hispanic student transfer. *Community College Review*, 20, 27-37. doi: 10.1177/009155219302000404
- Saenz, V. B., & Ponjuan, L. (2009). The vanishing Latino male in higher education. *Journal of Hispanic Higher Education*, 8(1), 54-89. doi: 10.1177/1538192708326995
- Santiago, D. A., Andrade, S. J., & Brown, S. E. (2004). *Latino student success at Hispanic-Serving Institutions findings from a demonstration project*. Washington, DC: Excelencia in Education.
- Stanton-Salazar, R. (1997). A social capital framework for understanding the socialization of racial minority children and youth. *Harvard Educational Review*, 67(1), 1-39.
- Stanton-Salazar, R. (2001). *Manufacturing Despair*. New York: Teachers College Press.
- Suarez, A. L. (2003). Forward transfer: Strengthening the educational pipeline for Latino community college students. *Community College Journal of Research and Practice*, 27(2), 95-117. doi: 10.1080/713838110
- Surette, B. J. (2001). Transfer from 2-year to 4-year college: An analysis of gender differences. *Economics of Education Review*, 20(2), 151-163.
- Velez, W. & Javalgi, R. G. (1987). Two year college to four-year college: The likelihood of transfer. *American Journal of Education*, 96(1), 81-94.

- Wassmer, R., Moore, C., & Shulock, N. (2004). Effect of racial/ethnic composition on transfer rates in community colleges: Implications for policy and practice. *Research in Higher Education, 45*(6), 651-672.
- Wolf-Wendel, L., Twombly, S., & Morpew, C. (2004). From the barrio to the bucolic: The student transfer experience from HSIs to Smith College. *Community College Journal of Research and Practice, 28*(3), 213-231. doi: 10.1080/10668920490256408
- Xu, D. & Jaggars, S. S. (2011). The effectiveness of distance education across Virginia's community colleges: Evidence from introductory college-level math and English courses. *Educational Evaluation and Policy Analysis, 33*(3), 306-377.
- Yoshimi, J., & Nuñez, A.-M. (2011). *A phenomenology of transfer*. A paper presented at the annual meeting of the Association for the Study of Higher Education, Charlotte, NC.