

Most young adult students who enter community college with the goal of transferring to a four-year college or university to earn a bachelor's degree do not realize this goal. This is particularly the case for African American and Latino students who transfer at rates significantly below those of whites and Asians. Among young adult students from a recent cohort of community college students in California who originally aspired to transfer, half (51.6%) of Asians, just under half (46.3%) of whites and one third of blacks and Latinos (33.1% and 33.2%, respectively) transferred to a four-year college within six years of their first community college semester. Due to their lower costs and higher accessibility, community colleges are disproportionately the route to higher education for minority and disadvantaged students. The higher proportions of minority students who do not realize their goal of using community colleges as a route to a four-year degree is worrisome and represents the squandering of much time, money, and human potential and a loss of human capital.

Students' early academic behavior and performance in community college are strong predictors of their likelihood of transferring to a four-year college. Students who take more courses that grant transfer credit in their first semester, particularly required math and English transfer courses, and earn high grades in those courses, are more likely to transfer within six years than those who take fewer such courses and earn lower grades. Prior to students' early college experiences and outcomes, the quality and environment of the high schools that they attend are significantly associated with their odds of transferring to a four-year college. Students who attended high schools with greater resources are more likely to leave high school better prepared for college work and thus to be academically successful in the future.

This study examines the relationships between both factors that describe the environment and quality of students' high schools and their initial academic behavior and performance, that is, their course-taking patterns and grades in their first semester, and their odds of transferring within six years. It poses the following questions:

1. What are the respective roles of the high school environments that students come from and their own academic performance once they enter community college in predicting their odds of transferring to a four-year college?
2. What roles do these sets of factors play in the racial/ethnic differences in transfer rates among community college students?
  - 2a. What are the racial/ethnic differences in high school factors and how much do these differences contribute to racial/ethnic differences in transfer rates?
  - 2b. What are the racial/ethnic differences in early college academic behavior and performance and how much do they contribute to racial/ethnic differences in transfer rates?

The data for this study come from longitudinal files on every individual, aged 17-20, who entered a community college in California for the first time in Fall, 1998. These data were supplied by the California Community Colleges Chancellor's Office (CCCCO). The files follow students for six consecutive years and contain information for each semester that students were enrolled in a community college anywhere in the state. Data on students' last high school were appended to each record as was information on transfer to four-year institutions. The study sample includes the students in this cohort who attended public high schools in California and

who chose transferring to a four-year college or university as their primary goal upon first enrolling in community college.

For the cohort of community college students in the study, significant racial/ethnic differences were found in factors that describe the quality and environment of the high schools they had attended. The racial/ethnic balance of high school student bodies varied by community college students' own race/ethnicity (Table 1). Overall, white students attended higher performing schools with more resources; African Americans and Latinos attended lower performing high schools with fewer resources. Whites attended schools that were, on average, majority white whereas blacks, Latinos and Asians attended schools that were roughly one-third white on average. The schools that whites attended had the highest average proportion of highly educated parents and credentialed teachers, followed by Asians, blacks and Latinos. The schools attended by whites had the highest mean test scores and state ranking followed by Asians. The mean performance measures of the schools blacks and Latinos attended were virtually identical and significantly lower than those of whites and Asians.

**Table 1. Racial/Ethnic Differences in High School Factors among Students Who Aspired to Transfer**

	% White	% Minority <sup>a</sup>	% Parents with BA or more	% Credentialed teachers	Academic Performance Index (API) <sup>b</sup>
Whites	61.9***	26.0***	48.1***	85.2***	678***
Blacks	31.1	52.4	36.7	75.5	588
Latinos	33.4	53.8	32.2	77.3	586
Asians	36.0	36.3	41.8	80.9	641

\*\*\*p ≤ 0.001

<sup>a</sup>African American and Latino students

<sup>b</sup>Scores range from 200-1000

White and Asian community college students also differed from African American and Latino students in their early academic behavior and performance (Table 2). Whites took more transfer classes than other students in their first semester, followed by Asians and blacks. Latinos took

**Table 2. First Semester Behavior and Performance by Race/Ethnicity among Students Who Aspired to Transfer**

	Means		Percentages	
	# Transfer Classes	Transfer GPA	Transfer Math	Transfer English
Whites	3.17***	2.4***	16.5***	28.0***
Blacks	2.72	2.10	6.9	18.6
Latinos	2.59	2.27	8.2	18.2
Asians	2.83	2.47	24.4	21.2

\*\*\*p ≤ 0.001

the fewest mean number of transfer courses. Asians and whites had the highest mean GPAs, followed by Latinos and then blacks. One quarter of Asians took a transfer math course in their first semester compared to one in six whites and less than one in ten blacks and Latinos. More than twice as many blacks and Latinos took an English transfer course as did one in five Asians and more than a quarter of whites.

Table 3 presents multivariate logistic regression models predicting the odds of transfer for the study sample. African Americans and Latinos were slightly more than half as likely to transfer as whites; Asians were more likely than whites to transfer. Net of the characteristics of the high schools students attended, blacks and Latinos were two thirds as likely as whites to transfer. This suggests that the more favorable average environments of whites' high schools accounts for a notable proportion of the difference in transfer rates. Controlling for students' early course-taking and GPAs narrowed the gap between blacks and Latinos and whites even more; they were three quarters as likely to transfer as whites net of first semester variables. This pattern indicates that lower grades and taking fewer transfer courses among blacks and Latinos accounts for some of the gap in the odds of transfer between them and whites.

**Table 3. Odds of Transferring to a Four-year School  
among Students Who Aspired to Transfer**

	Base Model	High School	First Semester	Full Model
Whites	1.00	1.00	1.00	1.00
African Americans	0.56***	0.66***	0.74***	0.84***
Latinos	0.57***	0.67***	0.72***	0.82***
Asians	1.29***	1.42***	1.39***	1.50***
<b>First Semester Behavior &amp; Performance</b>				
# transfer courses			1.11***	1.11***
Took transfer math			2.04***	2.02***
Took transfer English			1.46***	1.45***
Transfer GPA: none			1.01	1.01
Transfer GPA: 0.0-2.0			1.00	1.00
Transfer GPA: 2.1-3.0			2.32***	2.30***
Transfer GPA: 3.1-4.0			3.55***	3.54***
<b>High School Factors</b>				
High test scores		1.18***		1.17***
Majority white		1.04		1.02
High parental education		1.26***		1.24***
High % credentialed teachers		1.16***		1.10***
-2ll (df)	998.6 (5)	1500.1 (9)	7348.7 (11)	7767.9 (15)
N	52,004	51,951	51,311	51,261

\*\*\* $p \leq 0.001$

Students' odds of transferring were positively associated with their high schools' test scores, the proportion of highly educated parents and the proportion of credentialed teachers. Net of these factors, the racial/ethnic makeup of high schools' student bodies was not a predictor. Not surprisingly, taking transfer courses in the first semester and earning high grades in those courses are strongly positively associated with the odds of transfer.

When both sets of factors are held constant, blacks and Latinos were more than four-fifths as likely to transfer as whites. Asians were 50% more likely to transfer. The associations between first semester academic factors and the odds of transferring are not affected by controlling for high school factors; the reverse is also true. This indicates that each set of factors exerts an independent effect on the likelihood of transferring.

These analyses suggest that there are multiple sources for the racial/ethnic gap in transfer rates, in particular the lower rates among blacks and Latinos. If so, this also suggests that there are multiple points at which interventions can take place and that both high schools and community colleges can contribute to closing this gap.