

THE DETERMINANTS OF POSTSECONDARY ENROLLMENT:
EVIDENCE FROM THE AISD CLASS OF 2007



Austin Independent School District
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EXECUTIVE SUMMARY

The Austin Independent School District (AISD) strives to ensure that its graduates are prepared to transition successfully to a postsecondary institution. The intensification of these efforts corresponds to a rising share of American high school graduates aspiring to enter a postsecondary institution after graduation. In 1972, only 33.6% of high school seniors planned to enter a 4-year degree program. By 2004, however, the percentage of high school seniors aspiring to enter a 4-year program had risen to 61.2%, while the percentage aspiring to enter any type of postsecondary institution was 84.7%. Graduates from AISD exhibited similar trends.

Although these ambitions are encouraging, members of the AISD Class of 2007 faced difficulties meeting their postsecondary aspirations. Only 42% of seniors enrolled in a 4-year institution in the fall or spring after graduation, while 27% enrolled in a 2-year institution or a vocational school. This report aims to illuminate the myriad factors shaping students' postsecondary decisions. Several key findings were revealed:

- Hispanic graduates continue to lag behind their peers in postsecondary enrollment rates. Across most measures of college preparation analyzed in this report, Hispanic graduates did not satisfy many of the fundamental criteria needed to enroll in a 4-year college.
- Increasing GPA, although an important predictor of postsecondary enrollment, did not account for the application and enrollment gap between Hispanic graduates and their peers.
- While 91% of AISD graduates from the Class of 2007 planned to attend college in the year after graduation, only 73% enrolled in a 2-year or 4-year college. Importantly, whether graduates satisfied their post-graduation goals was mediated by several important factors, including ethnic group membership and academic performance in high school.
- Minimal differences appeared in students' desires to attend a postsecondary institution. For instance, approximately 80% of students in the bottom GPA quartile hoped to enroll in a postsecondary institution.
- Intensive involvement in the application process improved graduates' postsecondary enrollment chances. This involvement was particularly decisive for Hispanic graduates.

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INTRODUCTION

This report is an extension of the 2007 Austin Independent School District (AISD) report titled *Postsecondary Enrollment Summary Report: Classes of 2002–2007* (Garland, 2008). As in the previous study, student-level enrollment records from the National Student Clearinghouse (NSC) were the primary data source used to analyze postsecondary enrollment of AISD graduates. These data were augmented by individual-level enrollment counts at the University of Texas at Austin and the University of North Texas that were provided by the Ray Marshall Center (RMC). To broaden our understanding of the student and school-level variables associated with enrollment in a postsecondary institution, data from the 2007 AISD High School Exit Survey were linked to the postsecondary outcomes of the class of 2007. Furthermore, student and school-level variables were merged with these data to provide a detailed empirical account of the determinants of postsecondary enrollment. This research report is part of the district's ongoing efforts to boost the college-going rates of its graduates.

METHODOLOGY AND DIRECTION OF THE REPORT

The data used to calculate postsecondary enrollment rates came from two sources: the NSC and the RMC. The NSC is a nonprofit organization that helps school districts evaluate postsecondary programs by providing verified postsecondary enrollment data of 91% of all U.S. college students, spanning more than 3,100 colleges. Founded in 1970, the RMC is a public policy research institute and a research arm of the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin.

Of these two data sources, the NSC covers more 2-year and 4-year institutions. The NSC uses multiple components of a student's record to locate the student (e.g., social security number [SSN], last name, first name, middle name, birth date) and tracks every semester of enrollment. However, the NSC data are limited by the fact that some large institutions attended by AISD graduates do not participate in the NSC tracking system.

The RMC data were used in this study to supplement the postsecondary enrollment data the NSC was unable to provide. Specifically, these data included postsecondary enrollment for the University of Texas at Austin and the University of North Texas. The RMC data for the University of Texas at Austin substituted for the enrollment data that historically was provided by the Texas Higher Education Coordinating Board (THECB). The THECB data supplied to the district in the past, however, were somewhat incomplete because they included only those students who attended any Texas college during the fall semester and had valid SSNs when they graduated from high school. The RMC and the NSC data resolved this omission by providing unique enrollment data for all students for both the fall and spring semesters.

A variety of methodological approaches were adopted in each section of the report. Techniques to answer the research questions posed in each section ranged from simple

descriptive statistics to more advanced multivariate procedures designed to isolate how student and school characteristics are related to postsecondary aspirations, application, and enrollment after controlling for other factors related to these outcomes. Because the population and student outcome variable (e.g., whether a student applied or enrolled in a postsecondary institution) analyzed differed across sections, the multivariate statistical procedure for evaluating the meaningful student and school-level characteristics associated with whether a student applied, was accepted, or enrolled in a postsecondary institution varied. Due to the nested structure of the data (i.e., students within schools), where statistically appropriate, hierarchical generalized linear models (HGLM) were used to estimate the causal impact of a particular variable on the outcome of interest. These models were selected instead of standard hierarchical linear models (HLM) because of the construction of the dependent variable. Estimation procedures using ordinary least squares (OLS) in the presence of a dependent variable that has only two values jeopardizes the reliability of the standard errors that are the linchpin to ensuring the accuracy of the conclusions drawn from the analyses.

The statistical adequacy of a HGLM model relative to a standard logistic regression was evaluated using a likelihood ratio (LR) test that tested whether significant differences in student outcomes remained across the level-2 variable (high school) after controlling for student-level characteristics. In the final section, a multinomial logistic regression was used due to the categorical structure of the outcome variable. For all non-hierarchical models, including the multinomial logistic regression estimates, adjusted standard errors were calculated by campus to address the problem of non-independence of observations within schools (Primo, Jacobsmeier, & Milyo, 2007).

The report unfolds as follows. First, the actual postsecondary enrollment patterns of the AISD Class of 2007 are described. In general, this is a restatement of the findings from the previous report (Garland, 2008). Nonetheless, this is an important step because the enrollment numbers reported in subsequent sections differ from those reported in Garland (2008). The causes of these discrepancies are elaborated upon in the first section.

Second, the postsecondary aspirations and postsecondary preparation activities of members of the Class of 2007 are described using data from the 2007 AISD High School Exit Survey. These attitudes and behaviors were not uniform within the Class of 2007; rather, they were conditioned by a series of student and school-level factors. The meaningfulness of these conditioning variables was explored using multivariate inferential statistical techniques.

Last, having developed a framework for understanding why students aspire for and apply to a postsecondary institution, discussion focuses on student and school-level attributes that mediated the probability students would ultimately enroll in a postsecondary institution. This final section, in line with findings by Roderick, Nagaoka, Coca, and Moeller (2008), concentrates on identifying the barriers and difficulties Hispanic AISD graduates faced when

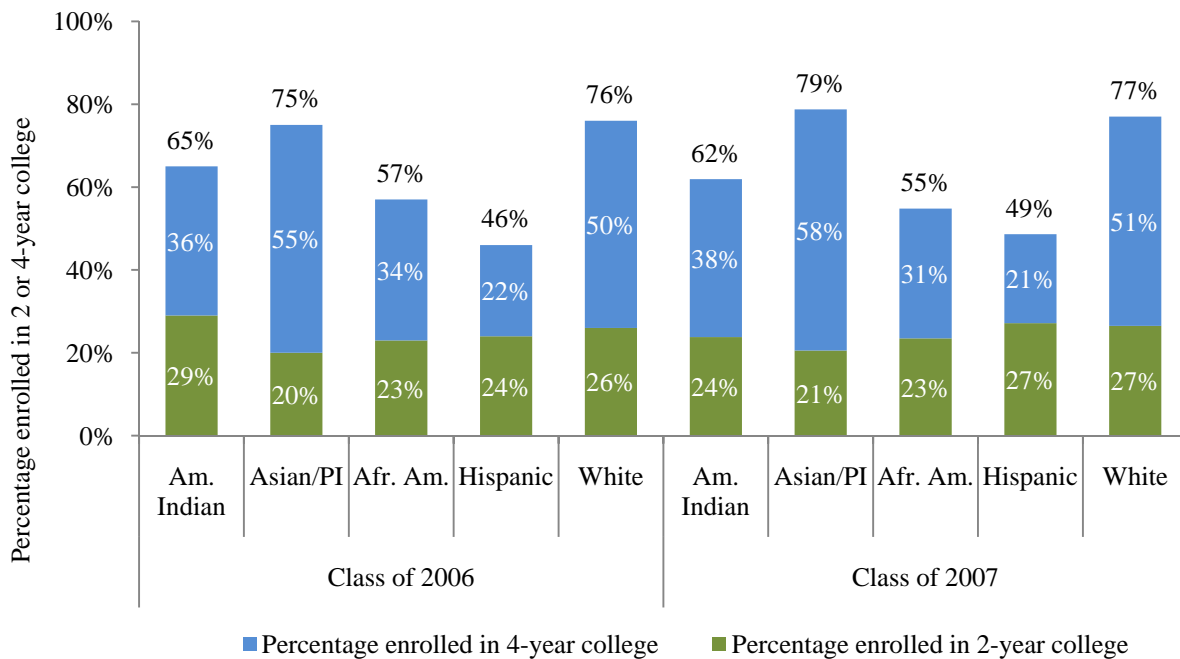
transitioning to a postsecondary institution because the misalignment between postsecondary aspirations and outcomes was more acute among Hispanic graduates than among other ethnic groups (Figure 5).

POSTSECONDARY ENROLLMENT PATTERNS OF 2007 AISD HIGH SCHOOL EXIT SURVEY RESPONDENTS

The enrollment rates and numbers presented in this section and those reported in remainder of this report differ slightly from those reported in the previous study (Garland, 2008). This is because only the enrollment patterns of High School Exit Survey respondents from the Class of 2007 are analyzed in this report, modifying the composition of the sample of students being investigated. To alleviate confusion, the overall postsecondary enrollment data from the previous study are presented.

The postsecondary enrollment rates for members of the Class of 2007 who completed the AISD 2007 High School Exit Survey are presented by race/ethnicity, economic disadvantage, and gender (Figures 1 and 2). The two groups with the highest enrollment rates in 2007 were Asian/Pacific Islander (79%) and White (77%) students. Both groups experienced a modest increase in postsecondary enrollment rates between 2006 and 2007 (4 percentage points and 1 percentage point, respectively).

Figure 1. Postsecondary Enrollment Rates, by Ethnicity, Economic Disadvantage, and Gender, Class of 2006 and 2007

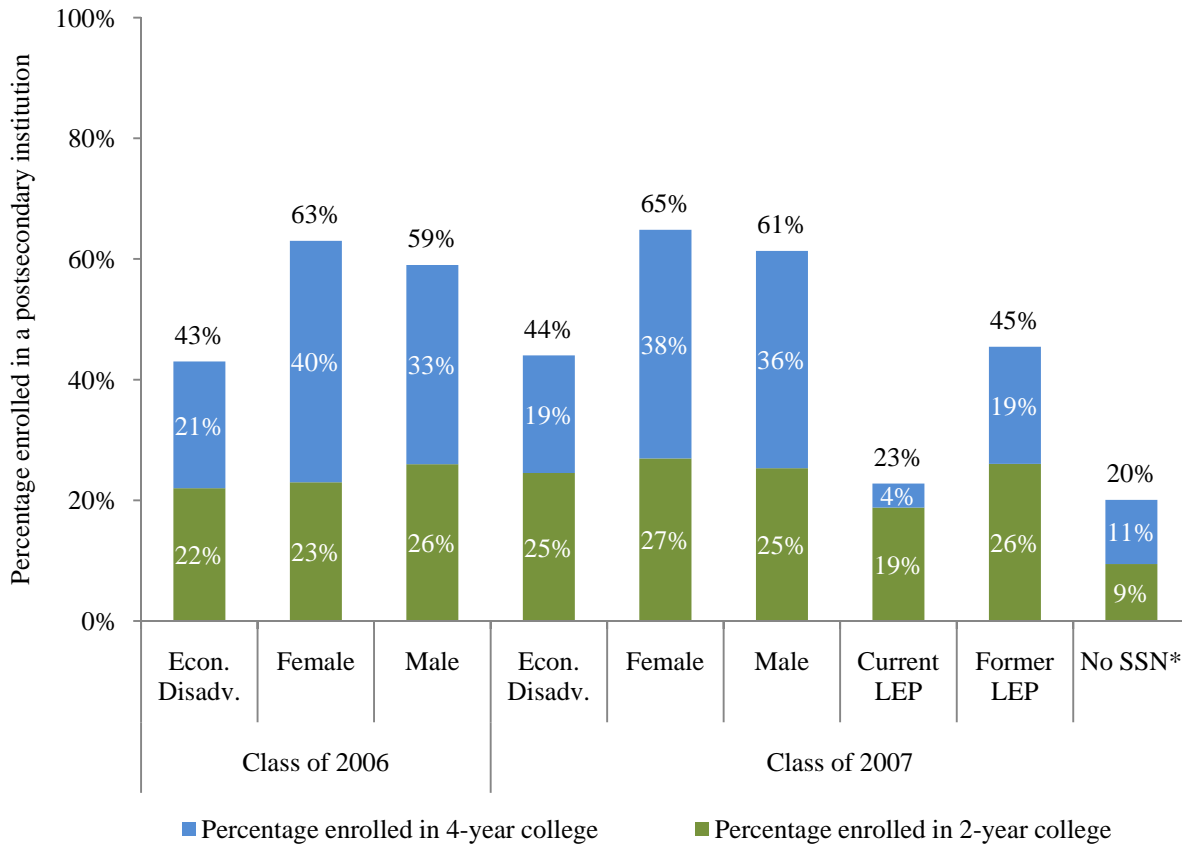


Source. The NSC, the RMC, October 2008

Note. Students who were concurrently enrolled in a 2-year and 4-year college were classified only as 4-year college enrollees and did not count toward the percentage enrolled in a 2-year college.

Economically disadvantaged students' (Figure 2) postsecondary enrollment rates remained low compared with the rates of other groups despite the 1 percentage point increase from 2006. Females enrolled in postsecondary institutions at a slightly higher rate (65%) than did males (61%). This gap was present in the Class of 2006, as well. Postsecondary enrollment rates for the Class of 2007 are displayed for three additional student segments: current limited English proficiency (LEP) students; former LEP students; and Hispanic students without a reported, valid SSN who were born outside of the United States.

Figure 2. Postsecondary Enrollment Rates, by Economic Disadvantage, Gender, and Limited English Proficiency, Class of 2006 and 2007



Source. The NSC, the RMC, October 2008

Note. Students who were concurrently enrolled in a 2-year and 4-year college were categorized only as 4-year college enrollees and did not count toward the percentage enrolled in a 2-year college.

* Denotes a Hispanic graduate without a reported SSN.

POSTSECONDARY ASPIRATIONS VERSUS OUTCOMES

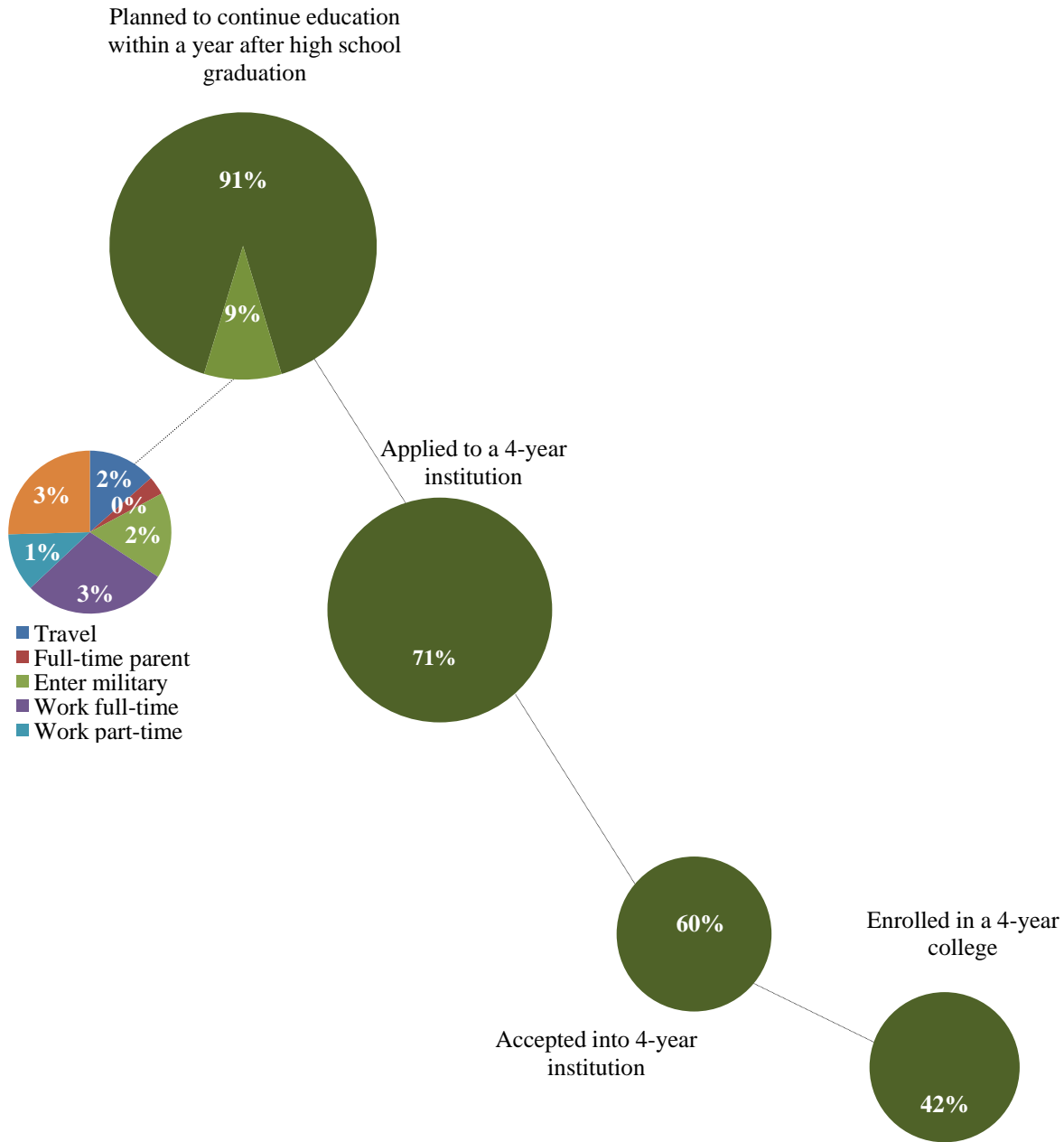
Increasingly, American high school graduates aspire to enter a postsecondary institution. In 1972, only 33.6% of high school seniors planned to enter a 4-year degree program. By 2004, however, the percentage of high school seniors aspiring to enter a 4-year program had risen to 61.2%, while the percentage aspiring to enter any type of postsecondary institution was 84.7% (National Center for Education Statistics [NCES], 2008).

In recent years, AISD graduates have exhibited similar trends. According to the 2004-2005 AISD High School Exit Survey results, 75% of seniors stated they planned to continue their education within a year of graduation (Cornetto, 2007). By 2007, 89% of seniors indicated that they intended to enroll in a postsecondary institution in the fall or spring after graduation.

Despite improvements in students' aspirations for postsecondary education, challenges remain. Disparities in both college aspirations and attendance persist across ethnic groups, family background, and economic status. In a national sample, Hispanic students showed far lower aspirations for attending a 4-year institution (46%) than did African American (62%) and White (64%) students (NCES, 2008). In addition, low socioeconomic status suppressed aspirations for transitions to a postsecondary institution. According to NCES, 81% of seniors within the highest socioeconomic status quartile planned to enroll in a postsecondary institution, whereas only 43% of students within the lowest socioeconomic status quartile enrolled. Recent research emerging from the Consortium on Chicago School Research (CCSR) supported these findings for Chicago Public Schools (CPS) graduates and demonstrated that the pathways and challenges to a postsecondary institution are shaped by student-level demographic and academic characteristics (Roderick et al., 2008).

The expectations of AISD graduates were comparable to those of their national peers. As shown in Figure 3, 91% of AISD's Class of 2007 expected to continue their education within a year of graduation. Although this high level of educational aspiration seems promising, seniors from the Class of 2007 encountered difficulties converting their aspirations into reality. Only 42% of seniors enrolled in a 4-year institution in the fall or spring after graduation, while 27% enrolled in a 2-year institution or a vocational school. Applying to and being accepted into a 4-year institution do not guarantee a student will enter a 4-year institution in the year after graduation. Subsequent sections aim to explain this gap between aspirations and outcomes by identifying how successfully graduates navigated the pathway to a postsecondary education.

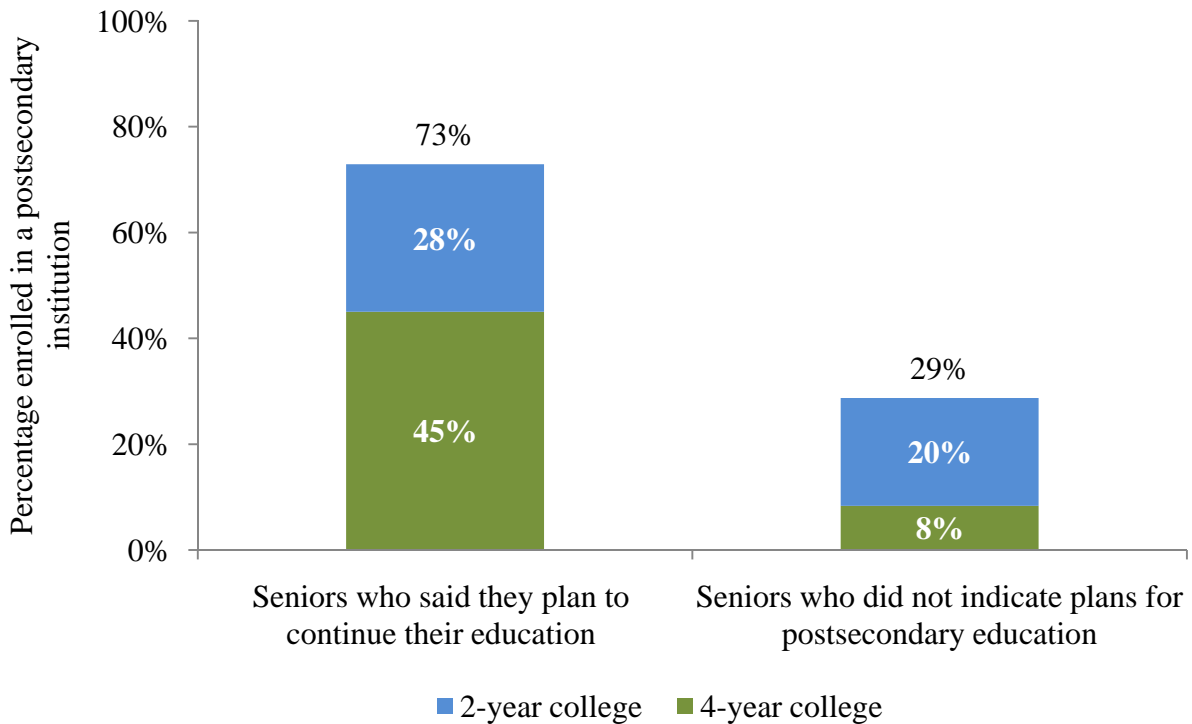
Figure 3. Pathways to 4-Year Postsecondary Institution Enrollment



Source. The NSC, the RMC, 2007 AISD High School Exit Survey, prepared by the Department of Program Evaluation (DPE), October 2008

The postsecondary enrollment records of graduates who indicated in the 2007 High School Exit Survey that they planned to pursue postsecondary education were examined to determine how closely their aspirations matched their post-graduation outcomes. Item 2 of the exit survey asked, “Within a year after graduating from high school, what do you plan to do?” Ninety-one percent of graduating seniors who responded to the exit survey reported they would “pursue postsecondary education.” Out of this group, almost three quarters actually enrolled in a postsecondary institution during the 2007–2008 school year (Figure 4). Of students who did not indicate an intention to pursue postsecondary education, 29% enrolled in a postsecondary institution.

Figure 4. Postsecondary Enrollment Rate, by Intention to Pursue Postsecondary Education, Class of 2007



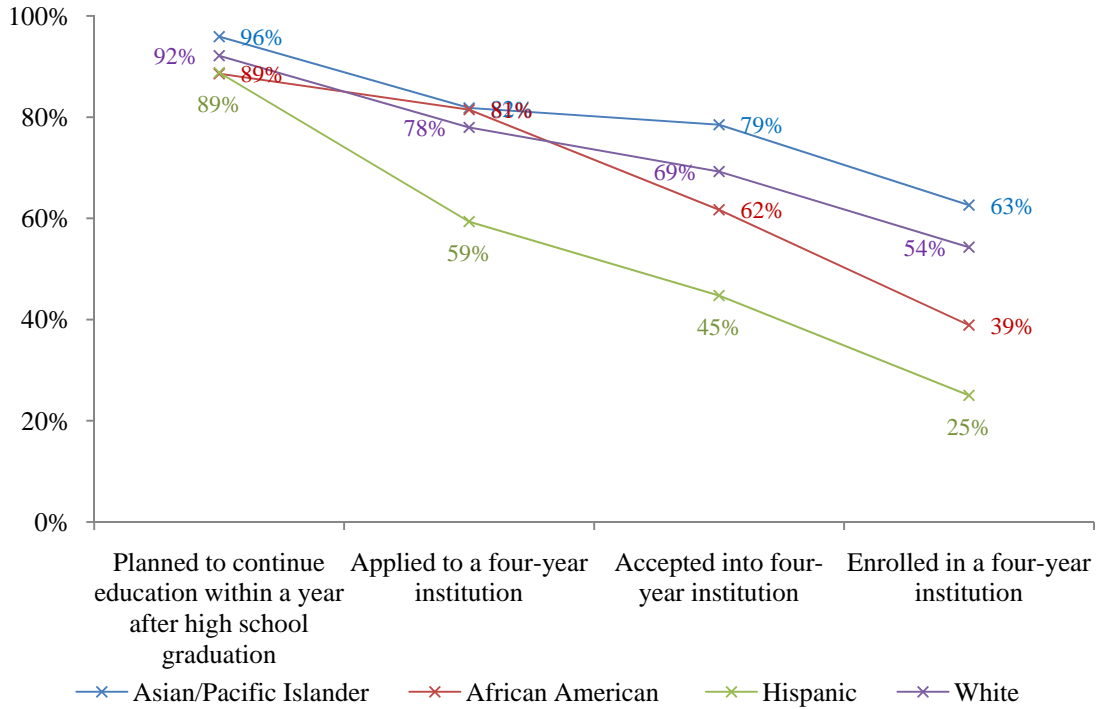
Sources. The NSC, the RMC, 2007 AISD High School Exit Survey, prepared by the DPE, October 2008

Note. Column percentages may not sum to total enrollment percentage due to rounding.

Research conducted by Roderick et al. (2008) revealed that the pathways to 4-year enrollment differed across ethnic groups and student achievement. Similar patterns emerged among AISD Class of 2007 graduates (Figure 5). Hispanic students were less likely than were their White and Asian/Pacific Islander counterparts to aspire to continuing their education after graduation. This gap appeared across each stage of the college application process. Only 59% of Hispanic students applied to a 4-year institution, compared with 78% of White seniors, and only 25% ultimately enrolled in a 4-year institution in fall or spring after graduation. African

American seniors also showed distressing trends. Eighty-one percent of African American graduates applied to a 4-year institution; however, only 39% enrolled in a 4-year college in the fall or spring after graduation. This 42 percentage point gap between applying and attending a 4-year institution was the largest across all ethnic groups.

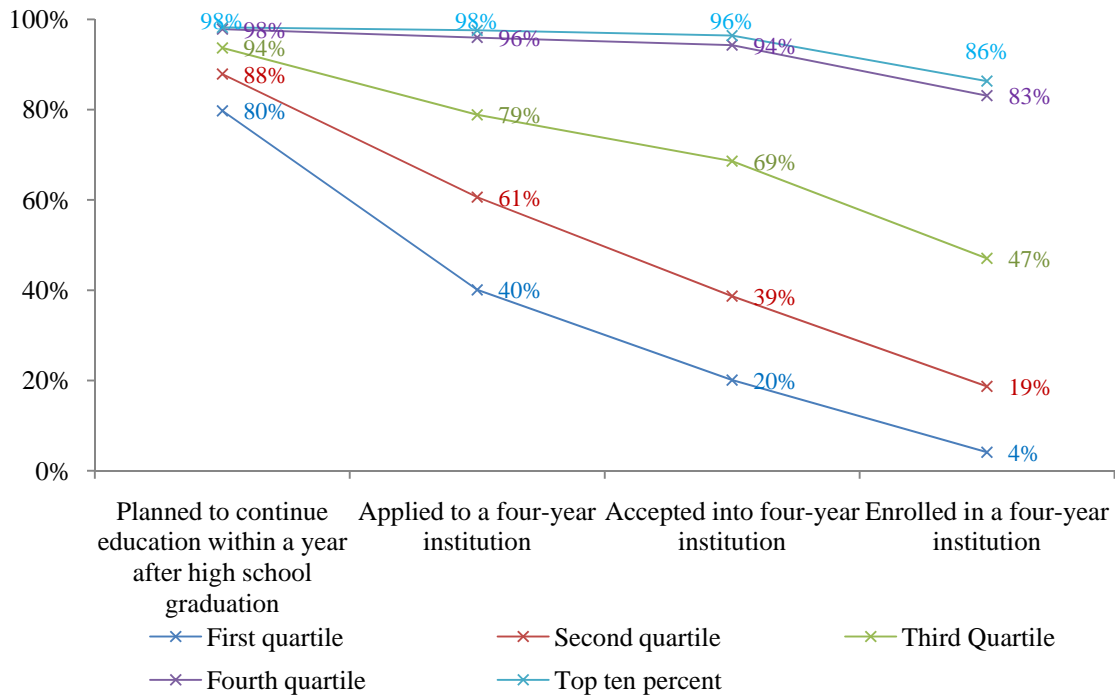
Figure 5. Differing Pathways to 4-Year Postsecondary Institution Enrollment, by Ethnicity



Source. The NSC, the RMC, 2007 AISD High School Exit Survey, prepared by the DPE, October 2008

Graduates with high grade point averages (GPAs) were more likely to plan to continue their education after graduation compared, with those with lower GPAs (98% for the highest quartile and 80% for the lowest quartile). Among students in the top GPA quartile, 96% applied to a 4-year institution, while 83% enrolled in a 4-year institution the year after high school graduation. Differences between aspirations and outcomes were substantially larger for students in the lowest GPA quartile than for other students; 40% of students in the lowest quartile applied to a 4-year institution, while only 4% of this group actually enrolled in the following year.

Figure 6. Differing Pathways to 4-Year Postsecondary Institution Enrollment, by Grade Point Average



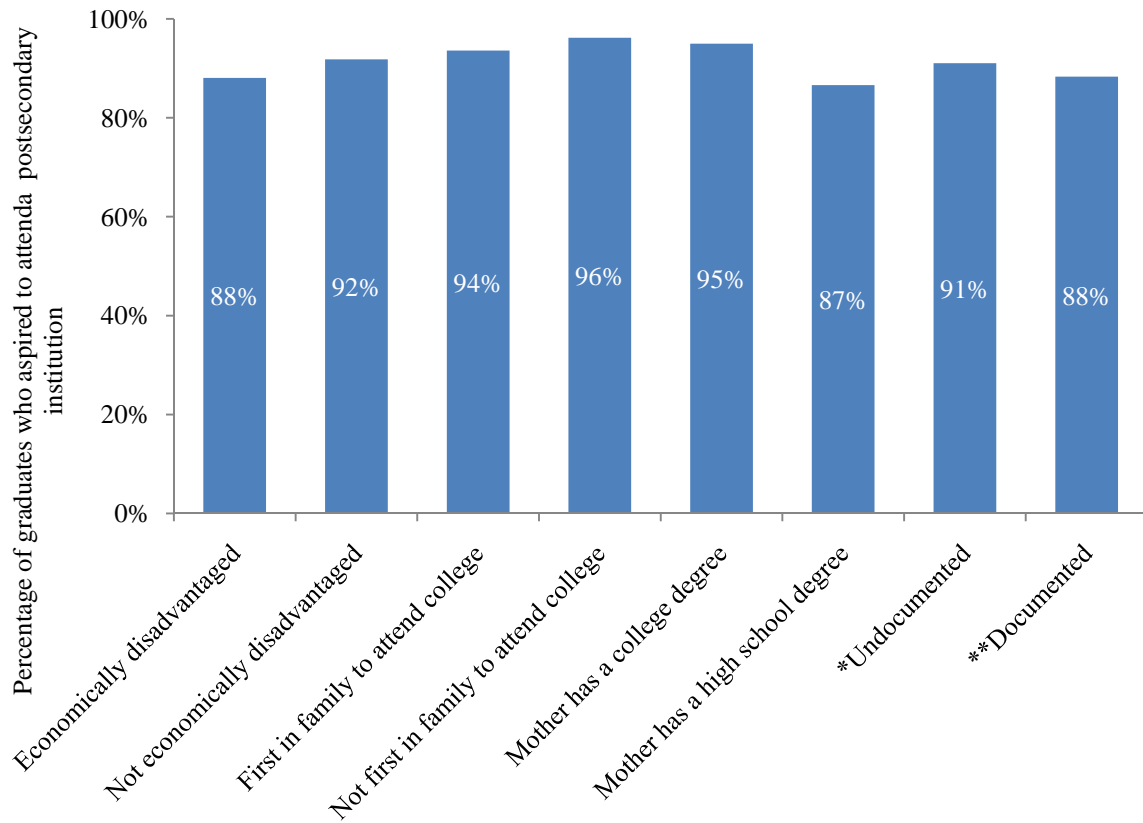
Source. The NSC, the RMC, 2007 AISD High School Exit Survey, prepared by the DPE, October 2008

Note. The GPA quartile classifications are as follows: first quartile, 0–2.077; second quartile, 2.078–2.691; third quartile, 2.692–3.302; fourth quartile, 3.303–4.715.

WHO ASPIRES TO ATTEND A POSTSECONDARY INSTITUTION AND WHY?

Class of 2007 graduates who were Hispanic were less likely to plan on attending a postsecondary institution after graduation than were graduates from other ethnic groups (Figure 3). Beyond ethnicity, however, other demographic and academic variables were associated with lower rates of postsecondary educational aspiration. Figure 7 segments graduates' self-reported postsecondary aspirations by multiple student-level characteristics. Differences in aspirations to attend a postsecondary institution are visible across these important student-level attributes. These differences are statistically meaningful, but they are small.

Figure 7. Graduates Who Aspired to Attend a Postsecondary Institution, Class of 2007



Source. AISD High School Exit Survey, prepared by the DPE, October 2008

Note. All differences observed between groups are statistically meaningful at the $p < .01$ level.

* Undocumented denotes a Hispanic student without a valid SSN.

** Documented indicates a Hispanic student with a verified SSN.

Despite the small variations in postsecondary aspirations across student demographic and background variables illustrated in Figure 7, some student-level attributes were statistically meaningful predictors of whether students planned to enroll in a postsecondary institution after graduation. Even though they were statistically meaningful, the magnitudes of the effects were slight. The absence of significant effects across many of the demographic variables that have been shown to condition students' access to postsecondary institutions is encouraging.

For instance, after controlling for other student-level factors, economically disadvantaged status did not depress the desire to attend a postsecondary institution, nor were Hispanic graduates less likely to aspire to attend a postsecondary institution, compared with White graduates. Graduates who accrued a large number of absences during the year of graduation were, however, less likely to express an interest in attending a postsecondary institution than were those with fewer absences ($p < .01$). GPA was a robust predictor of interest in enrolling in a postsecondary institution, although the relationship was weak ($p < .01$). Finally, students' linkages with a college counselor were statistically significant, but the magnitude of the relationship was modest and exhibited little variation across ethnic groups ($p > .05$).

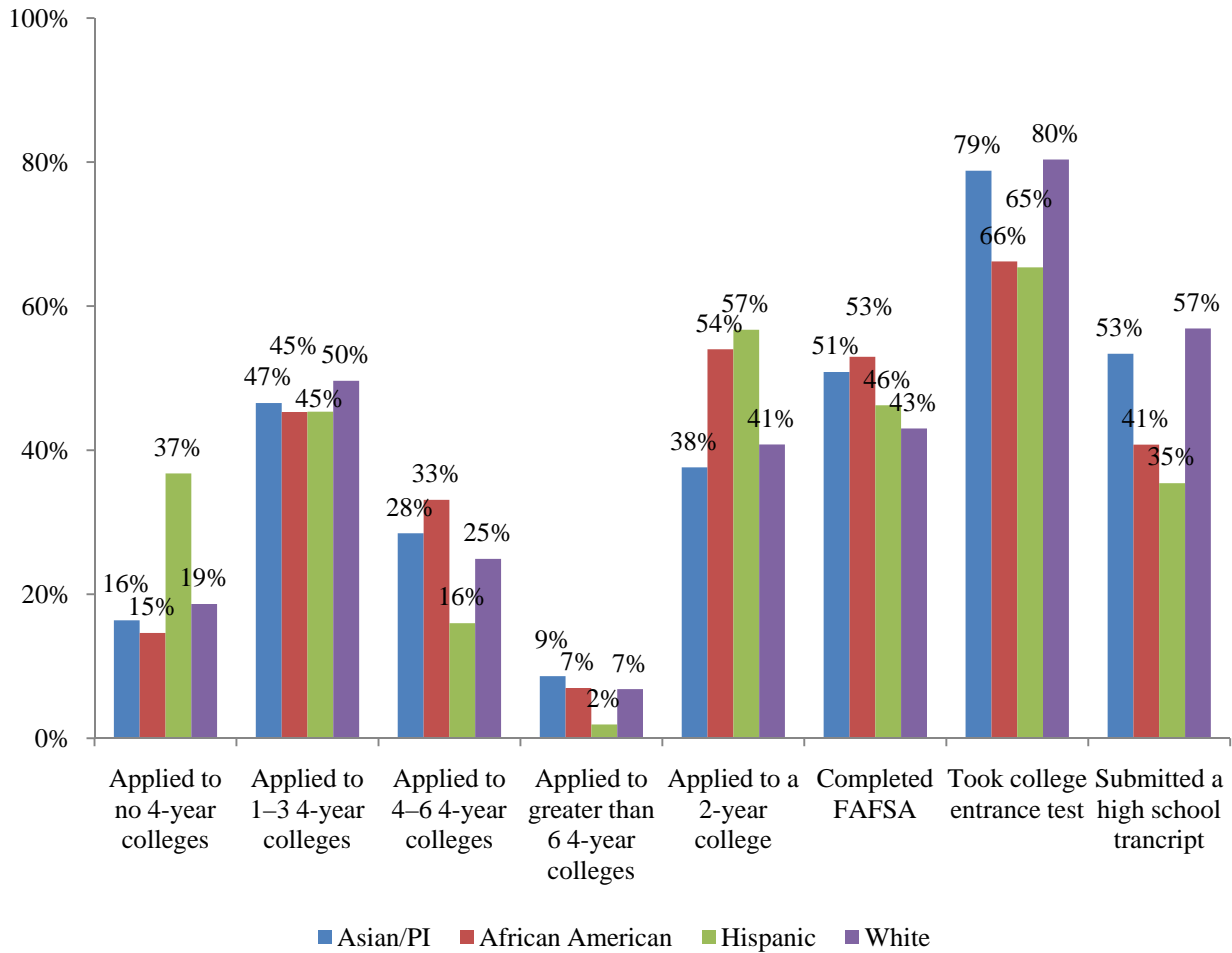
WHO APPLIED TO A POSTSECONDARY INSTITUTION?

Most Class of 2007 AISD graduates intended to enroll in a postsecondary institution after graduation. Although differences in aspirations were found across several student-level demographic characteristics, these differences were small (Figures 5, 6, and 7). Only 71% of graduates who aspired to enroll in a postsecondary institution actually applied to a 4-year institution (Figure 3). What impediments to translating their aspirations into affirmative steps toward enrollment in a postsecondary institution did graduates encounter? Did these impediments interfere with the aspirations of students differently across student-level characteristics?

A vital step to enrollment in a 4-year postsecondary institution is the completion of an application. Although 89% of Hispanic students aspired to enroll in a postsecondary institution within a year after graduation, 37% did not apply to a 4-year college (Figure 8). The percentage of Hispanic students who did not apply to any 4-year colleges was higher than the percentage for all other ethnic groups. Furthermore, only 18% of Hispanic graduates applied to more than four 4-year colleges, compared with 32% of White graduates and 40% of African American graduates who did so. Hispanic graduates, however, reported that they applied to 2-year colleges at a higher rate (57%) than did graduates from other ethnic groups.

Hispanic graduates also satisfied other benchmarks necessary for enrolling in a 4-year institution at a lower rate than did their peers. For instance, only 35% of Hispanic graduates submitted a high school transcript to a postsecondary institution, while 65% reported having completed a college entrance test (e.g., Scholastic Aptitude Test (SAT) or ACT). In addition, a lower percentage of White graduates (43%) than of Hispanic graduates (46%) reported completing a Free Application for Student Aid (FAFSA).

Figure 8. Percentage of Graduates Satisfying Steps Necessary to Attend College, by Ethnicity

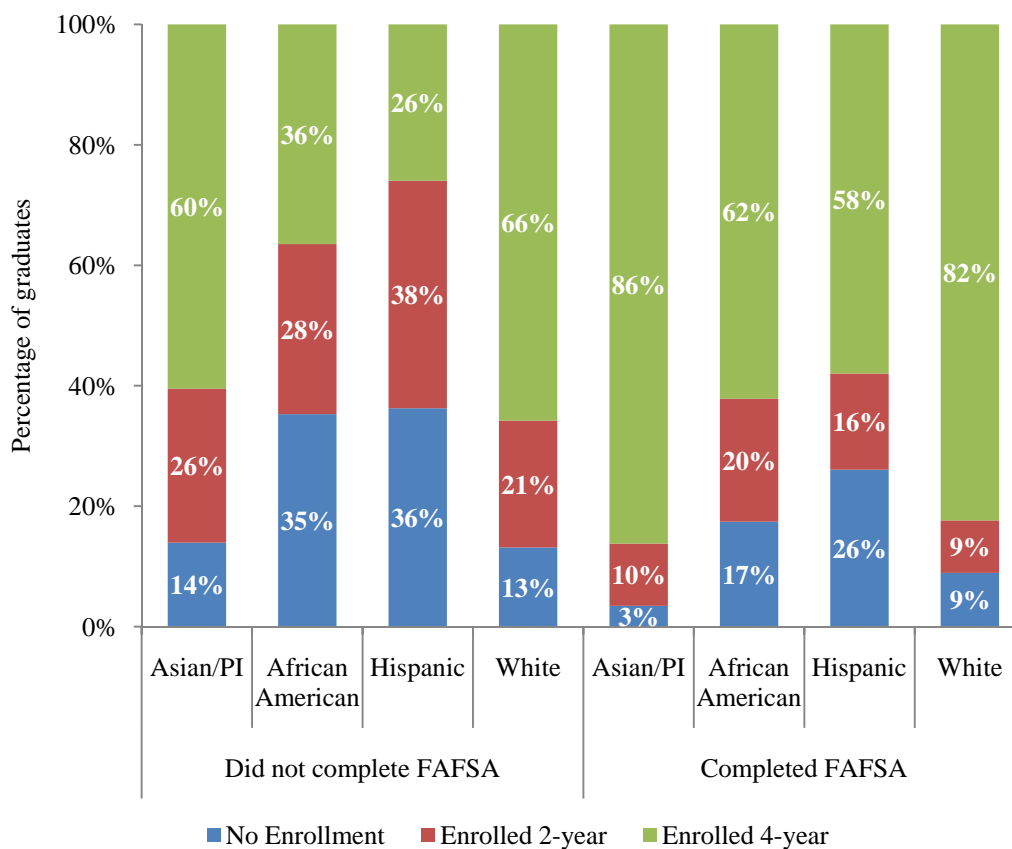


Source. 2007 AISD High School Exit Survey, prepared by the DPE, October 2008

Note. Only graduates who indicated on the High School Exit Survey that they intended to enroll in a postsecondary institution were included.

Roderick et al. (2008) found that completing a FAFSA application was a critical benchmark on the pathway to a postsecondary education for CPS graduates. Graduates who ultimately enrolled in a 4-year institution were far more likely to have completed a FAFSA than to have not. Moreover, these differences varied significantly across ethnic groups. Similar patterns existed among AISD Class of 2007 graduates. Hispanic graduates who indicated that they planned to enroll in a 4-year institution after graduation and who completed a FAFSA were far more likely to enroll in a 4-year institution within a year of graduation (58%) than were Hispanic graduates who did not complete a FAFSA application (26%) (Figure 9). A similar relationship appeared among other ethnic groups; however, the importance of completing a FAFSA was far more pronounced among Hispanic graduates than among their peers. The 2-year enrollment rates of Hispanic graduates who aspired to attend a 4-year college and who did not complete a FAFSA were considerably higher (38%) than were those of Asian/Pacific Island (26%), African American (28%), and White (21%) graduates.

Figure 9. Postsecondary Outcomes of Graduates, by Ethnicity and Free Application for Student Aid Completion Status



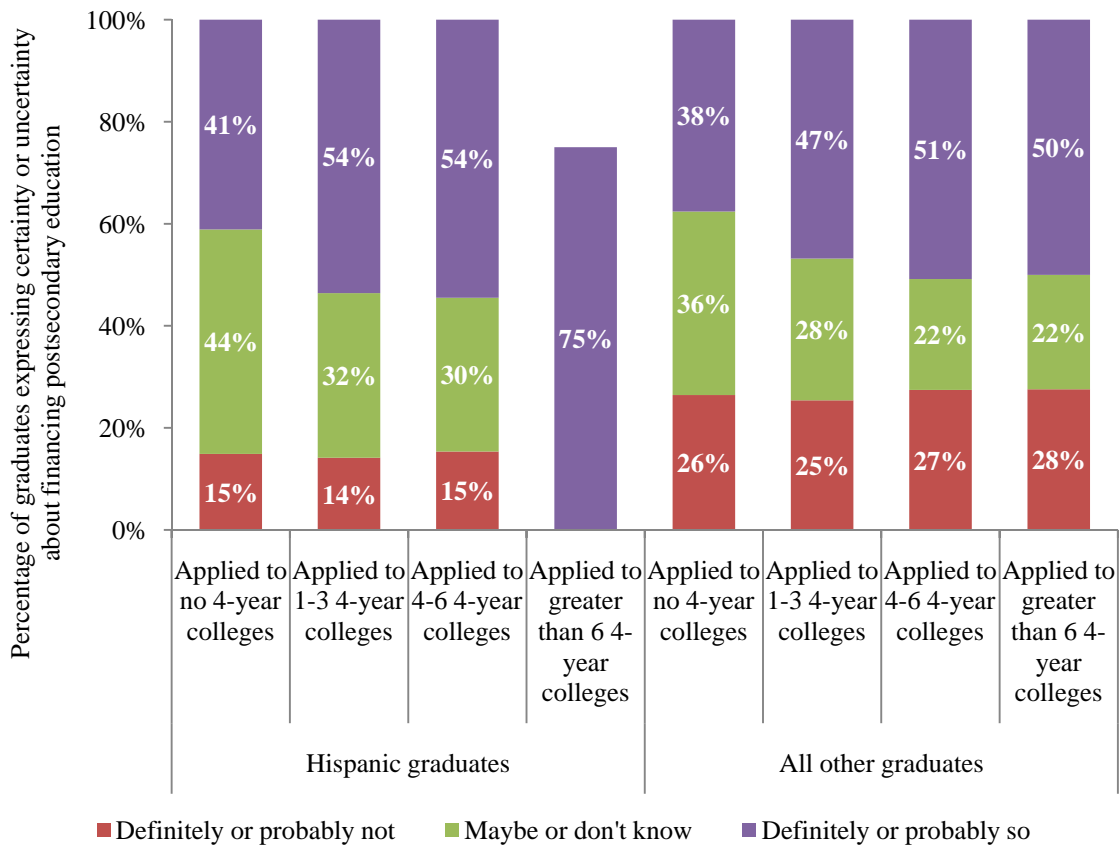
Source. 2007 AISD High School Exit Survey, the NSC, the RMC, prepared by the DPE, October 2008

Uncertainty about how to finance postsecondary education can influence the likelihood of applying to a postsecondary institution. This relationship also can operate in reverse. That is, the process of applying to a postsecondary institution can provide crucial information about the

availability of financial aid and the costs associated with postsecondary enrollment (Cabrera & La Nasa, 2001). Moreover, receiving financial aid offers has been shown to boost the likelihood of enrolling in a postsecondary institution, particularly among students with a low-socioeconomic status background (Jackson, 1978).

The data in Figure 10 explore this relationship. Graduates who expressed intentions to enroll in a postsecondary institution after graduation were disaggregated according to how many applications they submitted to 4-year institutions and by their intentions to borrow money to finance their postsecondary education. As the number of applications submitted to 4-year institutions rose, uncertainty about financing postsecondary education declined. However, the level of uncertainty among Hispanic students who intended to enroll in a postsecondary institution was higher than that of their peers across all levels of application submissions. For Hispanic graduates, uncertainty about borrowing to fund their postsecondary education was a statistically significant predictor of not applying to a 4-year institution, even after controlling for confounding student-level variables.

Figure 10. Postsecondary Outcomes of Graduates, by 4-Year Application Submission Intensity and Ethnicity



Source. 2007 AISD High School Exit Survey, the NSC, the RMC, prepared by the DPE, October 2008

Note. Fewer than 5 Hispanic graduates applied to more than 6 4-year colleges. These percentages were not reported to preserve anonymity.

Whether graduates apply to a 4-year institution can be conditioned by the types of support systems available at home and at school. Close, frequent interactions with school staff about their postsecondary options (e.g., with counselors or teachers) can encourage graduates to complete the requirements necessary for pursuing a college degree, including completing and submitting applications. The results from the multivariate analyses supported these contentions. How intensively graduates reported interacting with their guidance counselor was a consistent and robust predictor of the likelihood of applying to a 4-year institution. However, the effect of each variable differed by ethnicity.

The impact of variables found to exert a statistically significant effect on whether graduates applied to a 4-year institution were converted into predicted probabilities to ease comprehension and to better understand the relative importance of the factor. Graduate-counselor relationships exerted a much stronger influence over the

How to Interpret Predicted Probability Graphs

To illustrate the impact of specific variables on student outcomes, vertical bar graphs are displayed throughout the report. The taller the vertical bar, the more decisive the impact of the factor on the graduate's outcome.

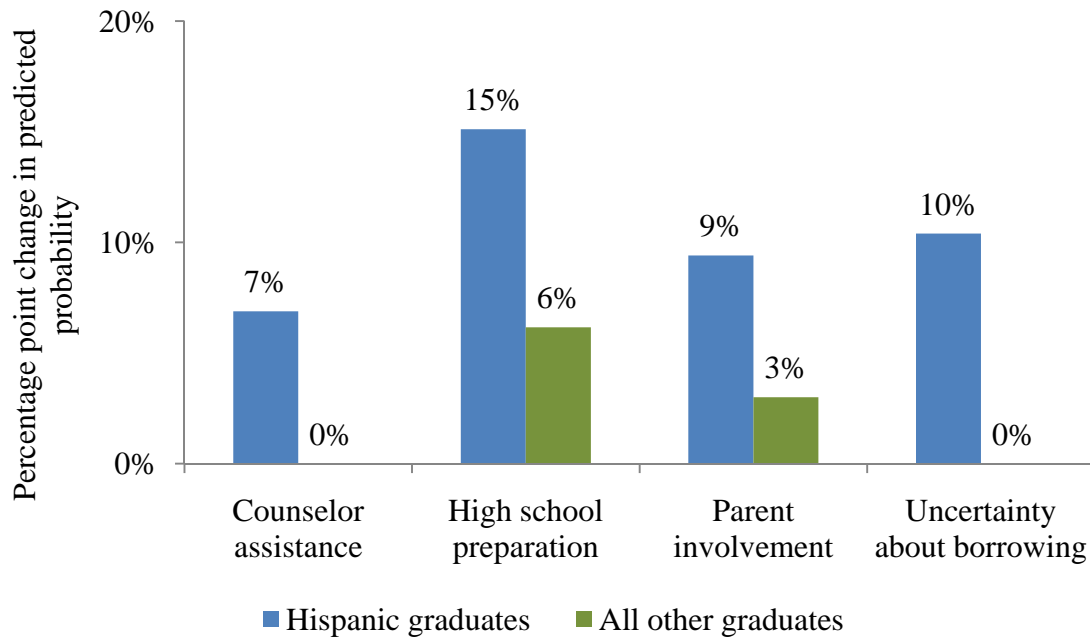
The height of the vertical bar is determined by comparing the difference in the likelihood of a student outcome between two students who are alike in most respects, but who show substantial differences in one characteristic. The size of the difference in this characteristic was calculated differently depending upon the type of measure used. For most measures, a low value was one standard deviation below the mean for that particular measure, while a high value was one standard deviation above the mean.

Using an example from Figure 11 below, Hispanic graduates who claimed to have received a high level of high school preparation in the postsecondary application process were 15 percentage points more likely to enroll in a 4-year college than Hispanic graduates who reported they received a low level of preparation.

probability Hispanic graduates would apply to a 4-year college than it did for other ethnic groups (Figure 11). For instance, Hispanic graduates who reported high levels of assistance from school counselors were 7 percentage points more likely to apply to a 4-year institution than were their peers. This relationship was strongest among Hispanic graduates and closely matched the differential effect reported by Roderick et al. (2008).

Furthermore, graduates who reported that their high school did very well at preparing them for the postsecondary application process were more likely to apply to a 4-year institution than those who did not feel as prepared. Preparation activities exerted a more potent impact on Hispanic graduates' likelihood of applying, compared with the likelihood of graduates from other ethnic groups doing so. This finding underscores the importance of campuses having systems and staff in place to help guide and prepare students for navigating the postsecondary application process. This is particularly critical for Hispanic graduates. In addition, high levels of parental involvement were particularly important for Hispanic graduates. Last, and echoing the findings presented in Figures 8 and 9, Hispanic graduates who were probably or definitely intending to apply for federal financial assistance to cover postsecondary education expenses were 10 percentage points more likely to apply to a 4-year institution than those who were uncertain.

Figure 11. Change in Predicted Probabilities of Applying to a 4-Year Institution, by Levels of School and Parental Support, Borrowing Intentions, and Ethnicity

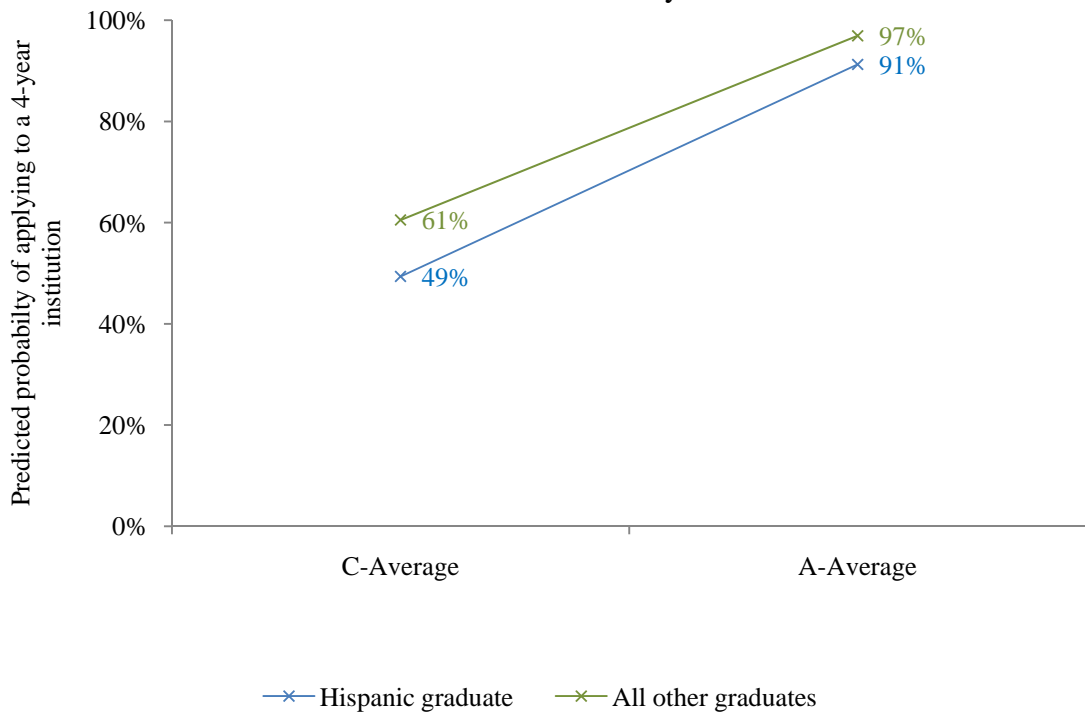


Source. 2007 AISD High School Exit Survey, the NSC, the RMC, prepared by the DPE, October 2008

Note. Predicted probabilities were derived from a multilevel logistic regression model. Value labels indicate the percentage point change in the predicted probability of applying to a 4-year college associated with a 1 standard deviation change above and below the mean for each variable presented, holding all other variables' values constant at their means. For the "Uncertainty about borrowing" variable, value label indicates the change in the predicted probability of applying to a 4-year college of students who are probably or most definitely going to borrow federal monies versus students who are unsure.

Student achievement, measured by a graduate's senior year cumulative GPA, was a consistently significant indicator of whether graduates applied to a 4-year institution. As GPA increased, so did the probability that a graduate applied to a 4-year institution (Figure 12). Both the strength of this relationship and the baseline probability exhibited differences across ethnic groups. Hispanic graduates, for instance, with a C average were 12 percentage points less likely to enroll in a 4-year college, compared with their peers. The gap narrowed considerably as GPA increased to an A average (6 percentage points). Nonetheless, a 6% point gap in the likelihood of enrolling in a 4-year college remained, even after controlling for student and school-level characteristics.

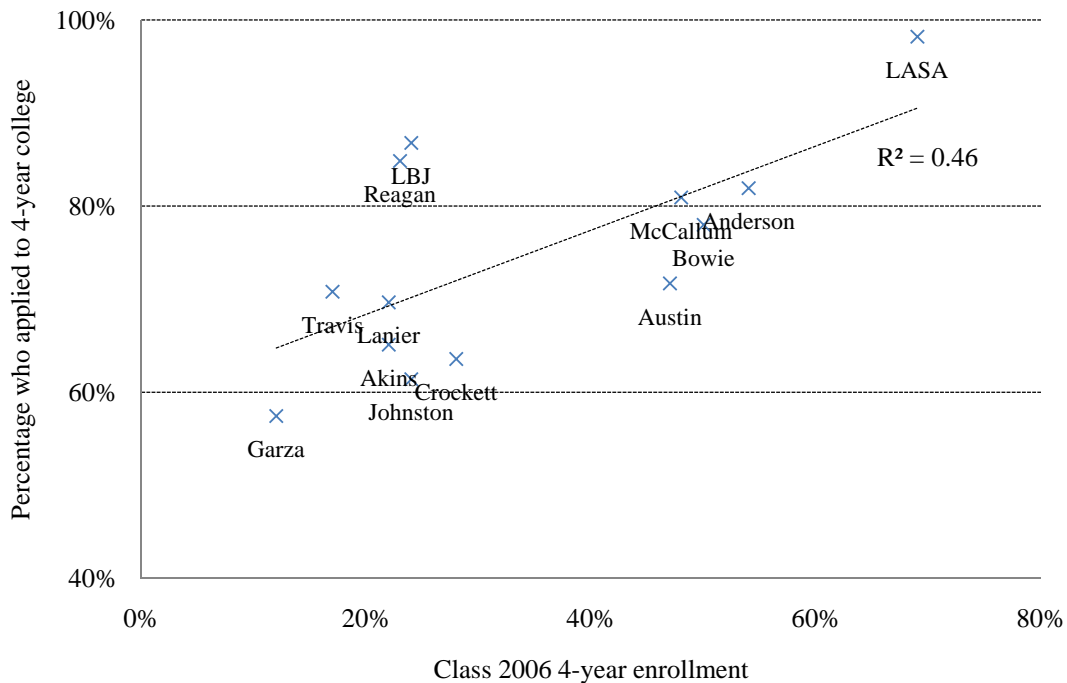
Figure 12. Predicted Probabilities of Applying to a 4-Year Institution, by Grade Point Average and Ethnicity



Source. The NSC, the RMC, 2007 AISD High School Exit Survey, prepared by the DPE, October 2008

How successfully graduates navigate the road to postsecondary enrollment may differ across high schools. For instance, Roderick et al. (2008) found that the prevalence of students applying to a postsecondary institution was shaped by the college-going culture of campuses. Campuses whose past graduates enrolled in 4-year institutions at high rates had more graduates in subsequent classes who applied to 4-year colleges than those with lower rates of past enrollment. In Figure 13, the campus-level, 4-year institution application rate of graduates who aspired to attend a 4-year institution was plotted against the 2006 4-year enrollment rates of AISD high schools. A clearly positive, linear trend was visible, indicating that students who aspired to attend a 4-year institution were more likely to apply to this type of institution if they had graduated from a high school whose past graduates enrolled in a 4-year college at a higher rate than those who attended schools with lower rates of 4-year enrollment ($R^2 = .46$).

Figure 13. Class 2007 4-year Application Rates, by High School and Class 2006 4-Year Enrollment Rate



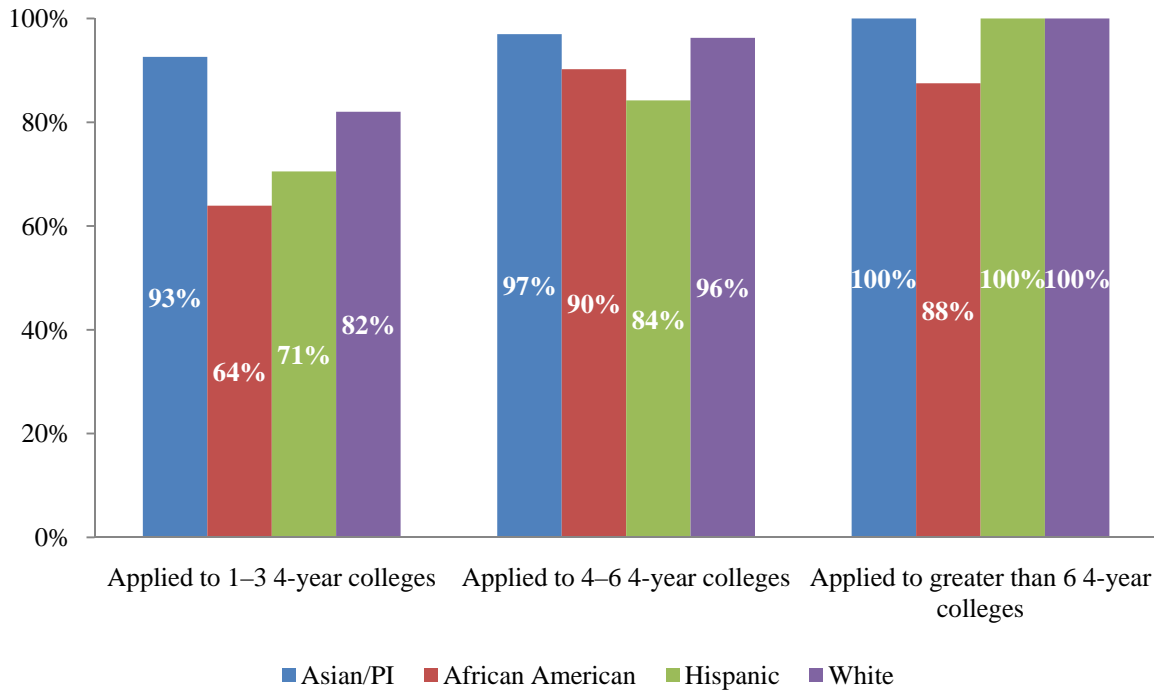
Source. The NSC, the RMC, 2007 AISD High School Exit Survey, data reported by Coneway, Schmitt, and Alderete (2007), prepared by the DPE, October 2008

WHO WAS ACCEPTED TO A POSTSECONDARY INSTITUTION?

The 2007 AISD High School Exit Survey asked graduates from how many and from what types of postsecondary institutions they had received acceptances. These responses were collapsed into a binary indicator denoting whether they had been accepted into a 4-year institution. The acceptance rates for each ethnic group, segmented by how many applications they submitted, are displayed in Figure 14. Across all ethnic groups, the number of applications submitted to a 4-year institution was strongly correlated with the likelihood of acceptance. These gains appeared even after controlling for students' GPA and whether they had met the standard

on their 8th grade math state assessment test. Although gaps existed across ethnic groups, graduates who aggressively applied to 4-year institutions dramatically raised their acceptance rates.

Figure 14. Self-Reported 4-Year Institution Acceptance Frequency, by Ethnicity and Number of Application Submissions



Source. 2007 AISD High School Exit Survey, prepared by the DPE, October 2008

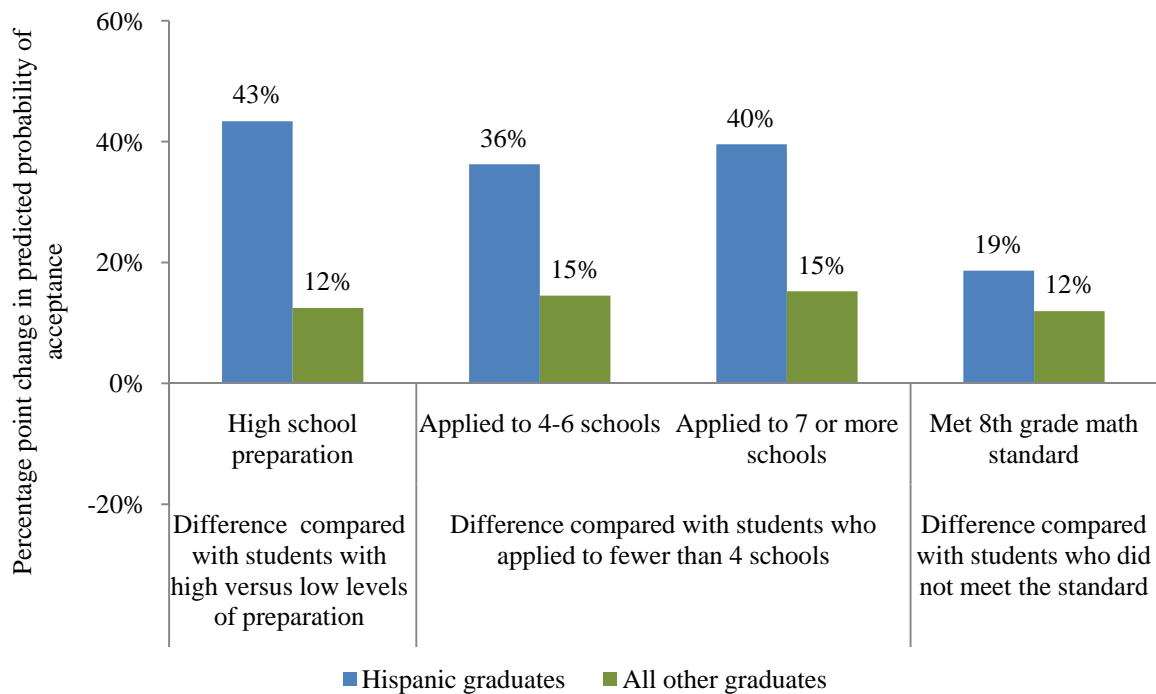
The evidence in Figure 14 provides tentative support to the claim that increasing the number of application submissions raises the likelihood of being accepted into a 4-year college. Multivariate analyses confirmed this finding, as well. Controlling for confounding student-level demographic and achievement attributes, increasing application submissions boosted graduates' chances of being accepted into a 4-year postsecondary institution.¹ However, the impact of this important step on the probability of acceptance differed across ethnicities (Figure 15). For instance, Hispanic students increased their likelihood of being accepted into a 4-year college by 36 percentage points if they applied to between 4 and 6 schools instead to fewer than 4

¹ Multilevel logistic regression models were estimated to account for contextual effects; however, statistical tests (Likelihood Ratio Test) assessing the adequacy of a 2-level model for the data indicated no important differences between a hierarchical and non-hierarchical model. This indicates that very little variance existed in the likelihood of being accepted to a 4-year college across schools, after student-level variables were incorporated. Thus, for computational simplicity, a student-level logistic regression, with clustered standard errors to account for the non-independence of within-school student data, was used for the estimates discussed in this section. Although this is a statistical formality, the finding of minimal between-school variance in the chance of being accepted carries substantive importance, as well, because substantial differences across schools might indicate deficiencies in school preparation and in application strategies and activities.

schools. This gain was approximately 21 percentage points higher than comparable gains for their peers in other ethnic groups.

Additional student-level variables also improved graduates' likelihood of being accepted to a 4-year school. Again, these effects varied dramatically across ethnic group. Hispanic students who reported that their high school prepared them very well for college were far more likely (43%) to be accepted to 4-year school, compared with those who felt under prepared. Moreover, having satisfied the 8th grade math standard on the state standardized test was a particularly strong predictor of 4-year acceptance for Hispanic graduates.

Figure 15. Change in Predicted Probabilities of Acceptance to a 4-Year Institution, by Frequency of Application Submission, 8th Grade Standardized Test Performance, Level of High School Preparation, and Ethnicity

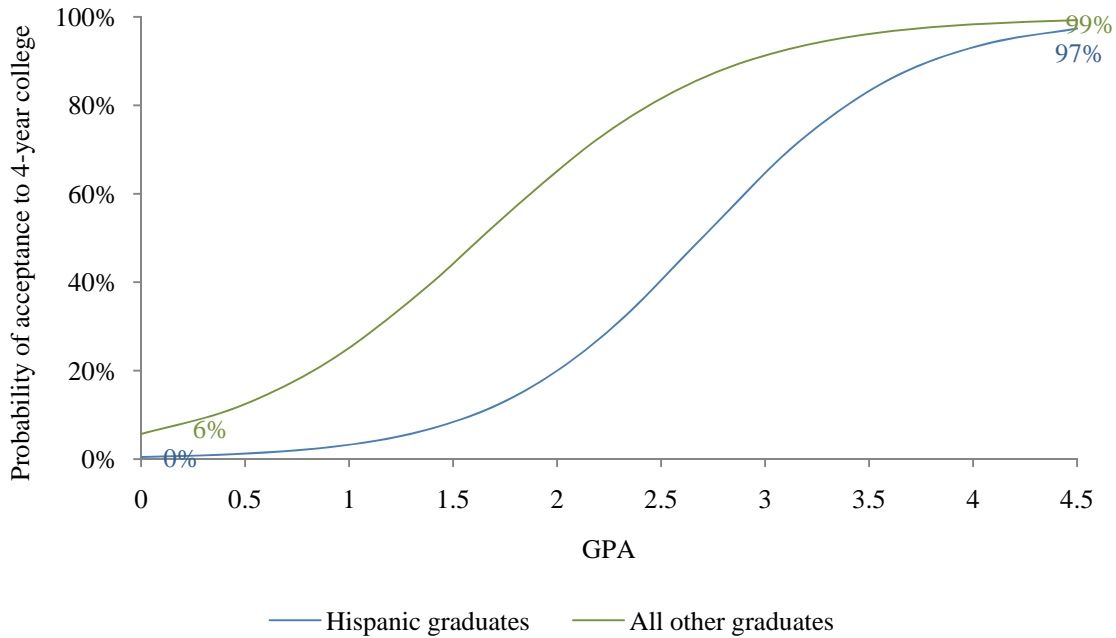


Source. 2007 AISD High School Exit Survey, the NSC, the RMC, prepared by the DPE, October 2008

Note. Predicted probabilities were derived from a logistic regression model. Value labels indicate the percentage point change in the predicted probability of acceptance to a 4-year college, holding all other values constant at their mean.

The strongest predictor of acceptance to a 4-year college was student GPA. Figure 16 plots the likelihood of being accepted to a 4-year institution according to a student's GPA and ethnicity, controlling for all other student-level variables. Although Hispanic students were able to narrow the acceptance gap compared to their counterparts by improving their academic performance, disparities persisted, particularly for students with a C average or below.

Figure 16. Probability of Acceptance to a 4-Year Institution, by Grade Point Average and Ethnicity

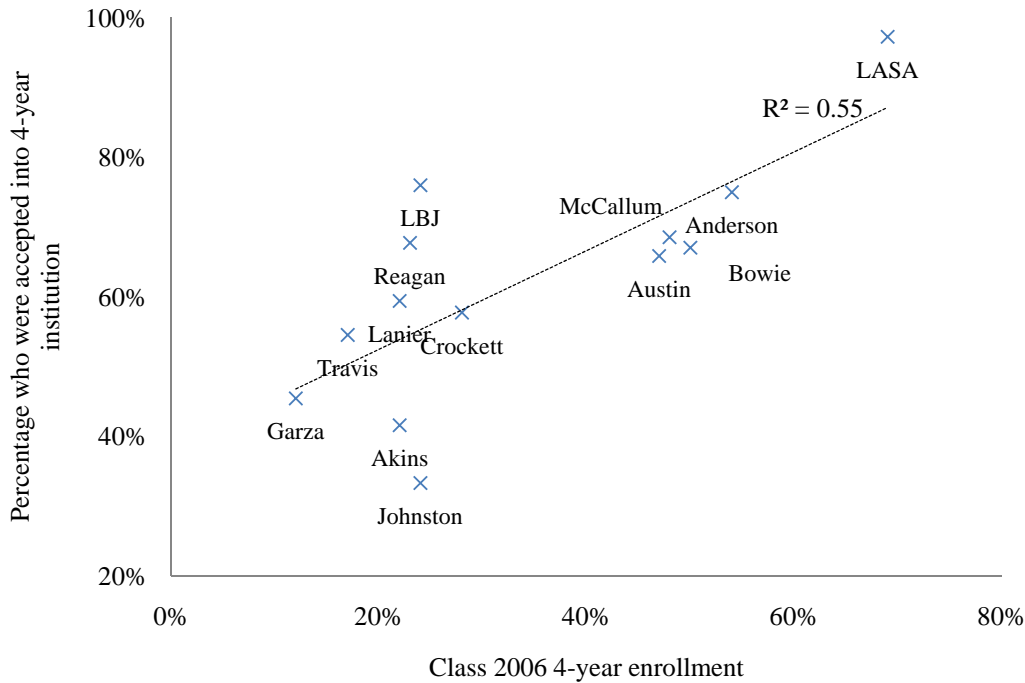


Source. 2007 AISD High School Exit Survey, the NSC, the RMC, AISD Student Records, prepared by the DPE, October 2008

Note. Predicted probabilities were derived from a logistic regression model, holding all other variables constant at their mean values.

Like Figure 13, Figure 17 depicts the relationship between high schools' previous year's 4-year enrollment rate and their students' 4-year acceptance rates. The relationship between 4-year institution acceptance rates and the previous year's 4-year institution enrollment rates is much stronger ($R^2 = .55$) than the relationship between past enrollment rates and 4-year application rates ($R^2 = .46$). But, as stated in footnote 1, after controlling for student-level characteristics, these cross-campus differences vanished.

Figure 17. Class of 2007 4-year Institution Acceptance Rates, by High School and Class of 2006 4-Year Enrollment Rate



Source. The NSC, the RMC, 2007 AISD High School Exit Survey, data reported by Coneway et al. (2007), prepared by the DPE, October 2008

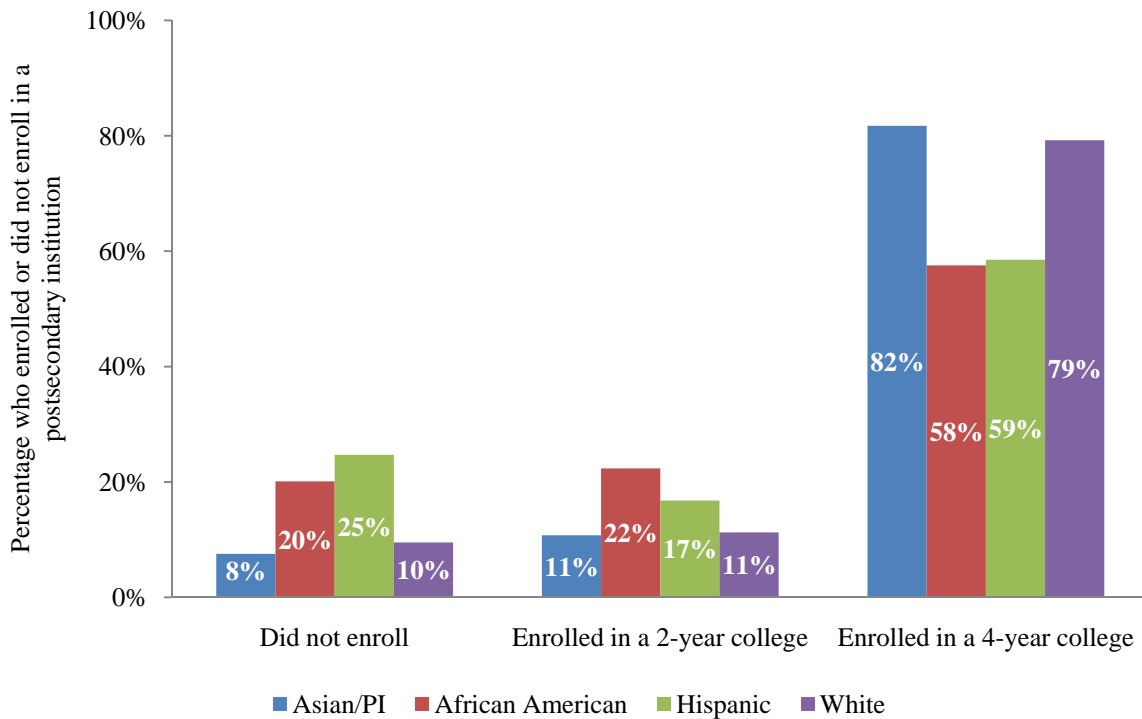
WHO ENROLLED IN A POSTSECONDARY INSTITUTION?

As Figure 5 illustrated, whether graduates followed the pathway to postsecondary enrollment varied across ethnicity. Hispanic and African American graduates were far less likely to enroll in a 4-year institution after graduation than were their White and Asian/Pacific Islander peers, despite expressing aspirations for postsecondary enrollment at rates equivalent to members of other ethnic groups. Furthermore, Hispanic graduates were particularly less likely to fulfill many of the benchmarks that were essential to enrolling in a postsecondary institution (Figure 8). For Hispanic graduates, the consequence of not meeting these requirements was 4-year college enrollment rates far below those of their peers (Figure 1).

Acceptance to a postsecondary institution is a necessary step to enrolling in college after graduation. Generally, those graduates who were accepted into a 4-year institution enrolled in a 4-year college after graduation (Figure 18). Approximately 79% of White graduates who were accepted by a 4-year institution enrolled in the year after graduation, compared with 82% of

Asian/Pacific Islander students who did so. Hispanic and African American graduates who were accepted by a 4-year institution, however, recorded 4-year college enrollment rates of 59% and 58%, respectively. In fact, one quarter of Hispanic graduates who were accepted into a 4-year institution did not enroll in any postsecondary institution in the year after graduation.

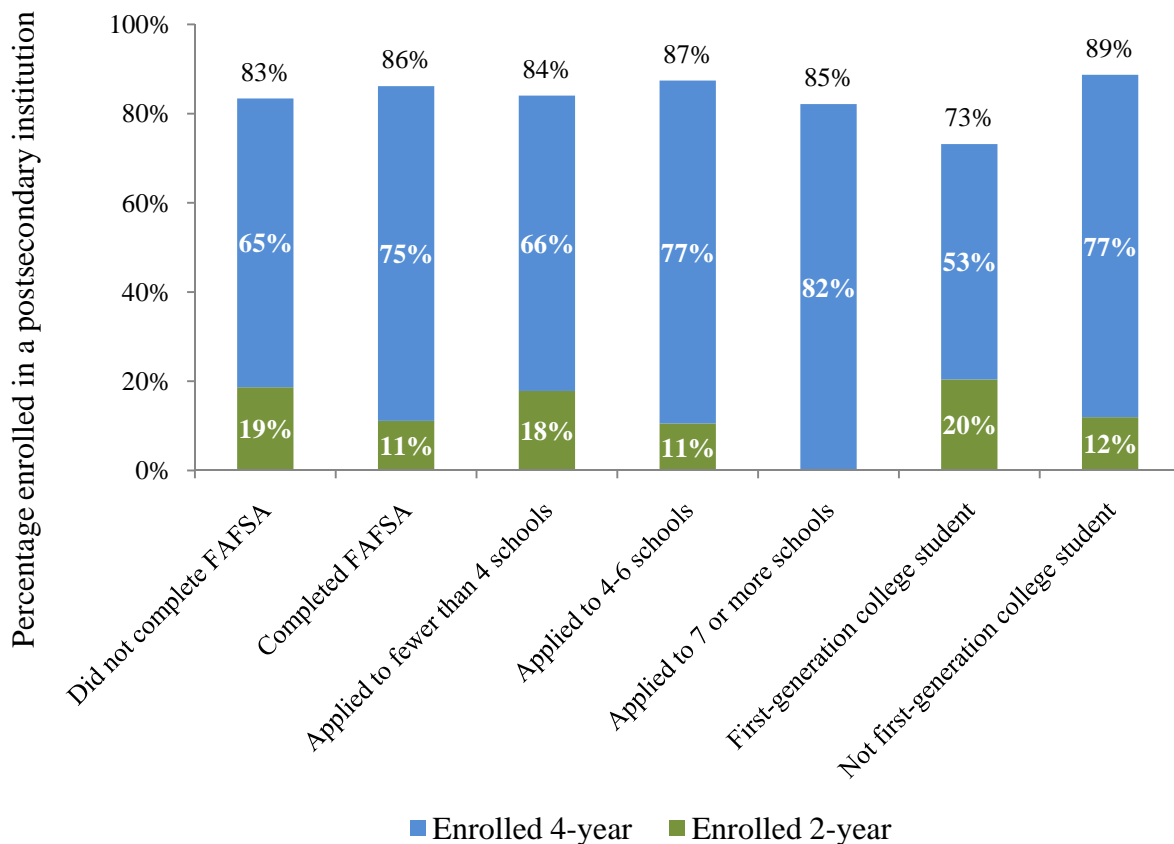
Figure 18. Enrollment Rates of Graduates Accepted to a 4-Year Institution, by Type of Postsecondary Institution and Ethnicity



Source. 2007 AISD High School Exit Survey, the NSC, the RMC, prepared by the DPE, October 2008

Acceptance to a 4-year institution, although a required step to 4-year college enrollment, was not the sole predictor of whether accepted graduates ultimately enrolled in a 4-year institution. Among graduates accepted to a 4-year postsecondary institution, those who completed a FAFSA were 10 percentage points more likely to enroll in a 4-year college after graduation than were those graduates who did not (Figure 19). Multiple application submissions to 4-year colleges also bolstered graduates' chances of enrolling. Confirming the findings of NCES (2000) and Roderick et al. (2008), this study found that being a prospective first-generation college student sharply reduced the likelihood of enrolling in a 4-year college, despite having been accepted to a 4-year institution. Only 53% of first-generation college students who had been accepted to a 4-year college enrolled in this type of institution after graduation. Completing a FAFSA, however, improved first-generation college students' enrollment rates. Of those first-generation college students accepted to a 4-year college who ultimately enrolled in a 4-year institution, 76% had completed a FAFSA application.

Figure 19. Enrollment Rates of Graduates Accepted to a 4-Year Institution, by Type of Postsecondary Enrollment, Preparation Activities, and First-Generation College Student Status



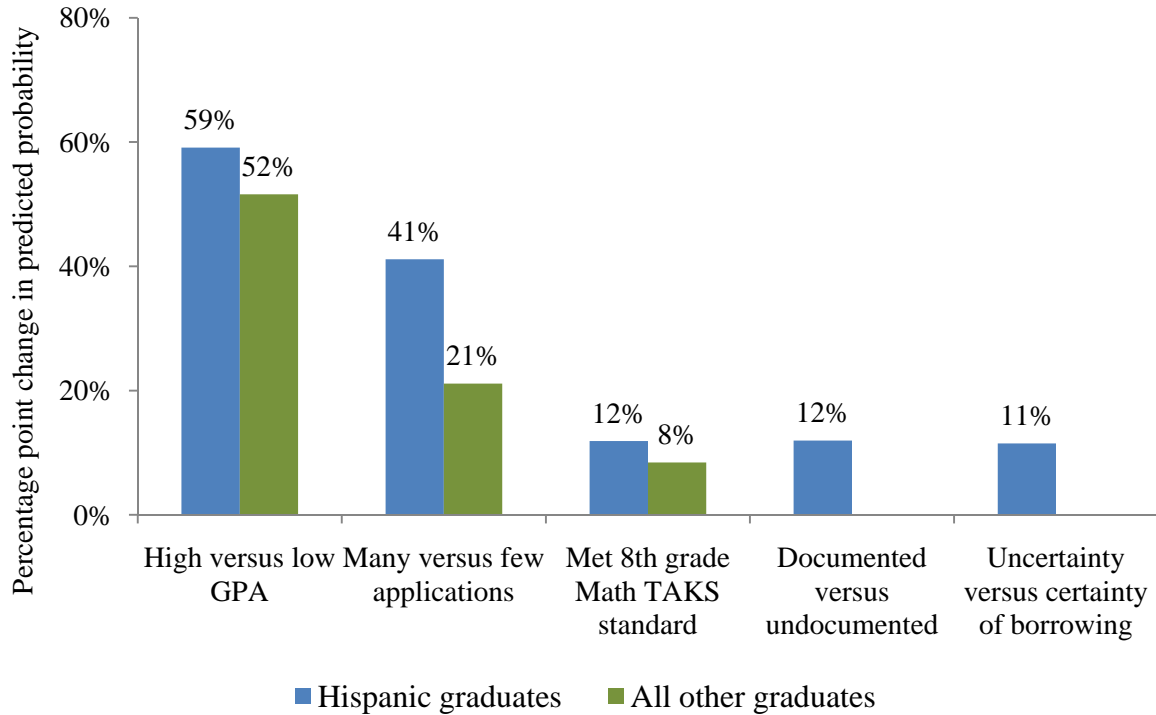
Source. 2007 AISD High School Exit Survey, the NSC, the RMC, prepared by the DPE, October 2008

Because we were trying to determine the likelihood of enrolling in a postsecondary institution, we examined the following three variables: 2-year, 4-year, and no enrollment record. Students with different backgrounds can exhibit different pathways to postsecondary enrollment. That is, some high-achieving students who do not qualify for free or reduced price lunches transition directly to a 4-year institution, while some students who do qualify for this program but also have strong GPAs begin their postsecondary education in a 2-year institution due to financial considerations. For questions such as these, we estimated how likely a student with particular attributes was to enroll in a specific type of postsecondary institution, relative to the likelihood of not enrolling at all, using multinomial logistic regression.

One of the strongest predictors of enrollment in a 4-year institution was GPA, although its impact varied across ethnicity. As Figure 20 shows, increasing a Hispanic graduate's GPA from a C average to an A average increased the likelihood of enrolling in a 4-year college by 59 percentage points, exceeding the gain estimated for other graduates (52 percentage points). Aggressively applying to 4-year colleges also raised the likelihood of acceptance for graduates; this strategy was particularly important for Hispanic graduates. In addition to and supporting the descriptive data presented in Figure 10, Hispanic graduates who were uncertain about whether they would borrow money to finance their postsecondary education were found to be less likely to enroll in a 4-year institution, compared with those who were confident they would borrow.

Last, as Garland (2007) noted, few Hispanic graduates from the class of 2006 who did not have a valid SSN on file enrolled in a postsecondary institution after graduation. Although undocumented status poses barriers to postsecondary enrollment (Roderick et al., 2008), this variable does not sufficiently explain the continued gap in postsecondary enrollment rates between Hispanic graduates and other ethnic groups. The analyses performed on AISD graduates supported this finding; that is, gaps in enrollment persisted even after controlling for SSN status. Nonetheless, not having a valid SSN strongly depressed the likelihood of enrolling in a 4-year institution (12 percentage points).

Figure 20. Change in Predicted Probabilities of Enrollment in a 4-Year Institution by Grade Point Average, Frequency of Application Submission, Documentation Status, and Ethnicity

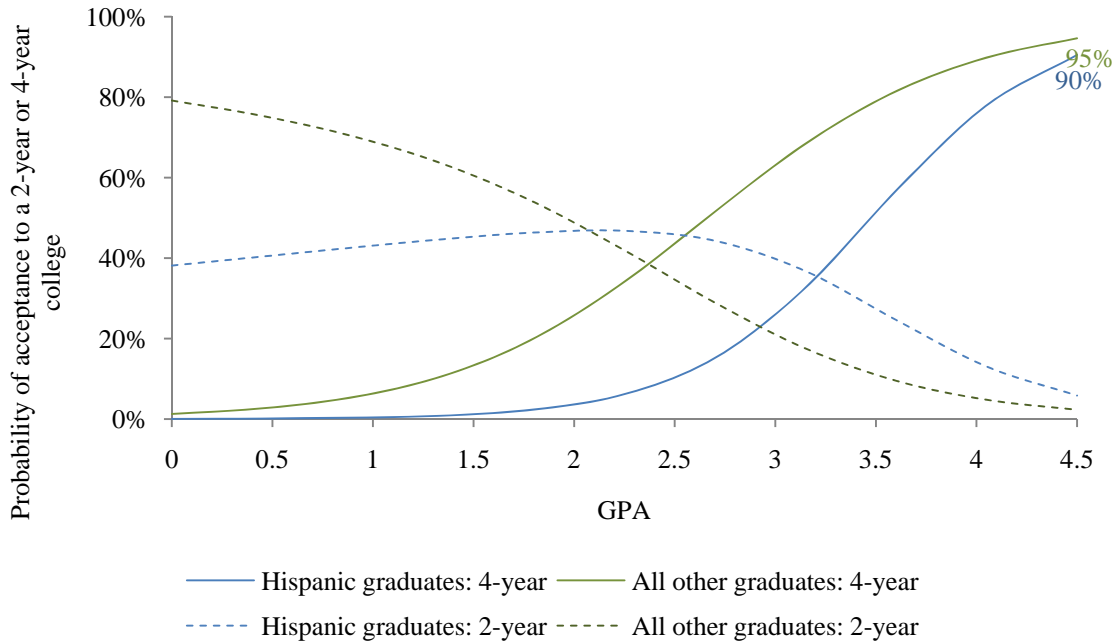


Source. 2007 AISD High School Exit Survey, the NSC, the RMC, prepared by the DPE, October 2008

Note. Predicted probabilities were derived from a multinomial logistic regression model. Value labels indicate the percentage point change in the predicted probability of enrolling in a 4-year college, holding all other variables at their mean value. A low GPA was defined as 1 standard deviation below the mean, and a high GPA was defined as 1 standard deviation above the mean. Few applications denoted 1 to 3 application submissions. Many applications denoted 4 to 6 application submissions. Undocumented Hispanic graduates were operationalized as not having a valid 9-digit SSN on file and as having been born outside of the United States. Uncertainty about borrowing to finance their postsecondary education was defined as having indicated on the High School Exit Survey that they did not know or they might borrow money.

The role of ethnicity in the likelihood of acceptance to a 4-year institution was demonstrated to be mediated by GPA (Figure 16). Disparities in acceptance between Hispanic students and their peers narrowed rapidly as GPA rose. Similarly, gaps in the probability of 4-year college enrollment among Hispanic graduates diminished as GPA increased (Figure 21). Substantively, this means that even after controlling for student characteristics, including student achievement, Hispanic graduates were less likely than were their peers to enroll in a 4-year institution. This finding was also revealed by Roderick et al. (2008) in the analysis of CPS graduates. Moreover, although the probability of Hispanic graduates enrolling in a 2-year institution rose minimally as GPA increased, beyond a GPA of 2.5 the likelihood of their entering a 2-year institution eroded sharply. Even with comparable GPAs, Hispanic graduates who had a GPA of 2.5 or higher enrolled in 2-year institutions at higher rates than did other graduates.

Figure 21. Probability of Acceptance to a 2-Year or 4-Year Institution, by Grade Point Average and Ethnicity



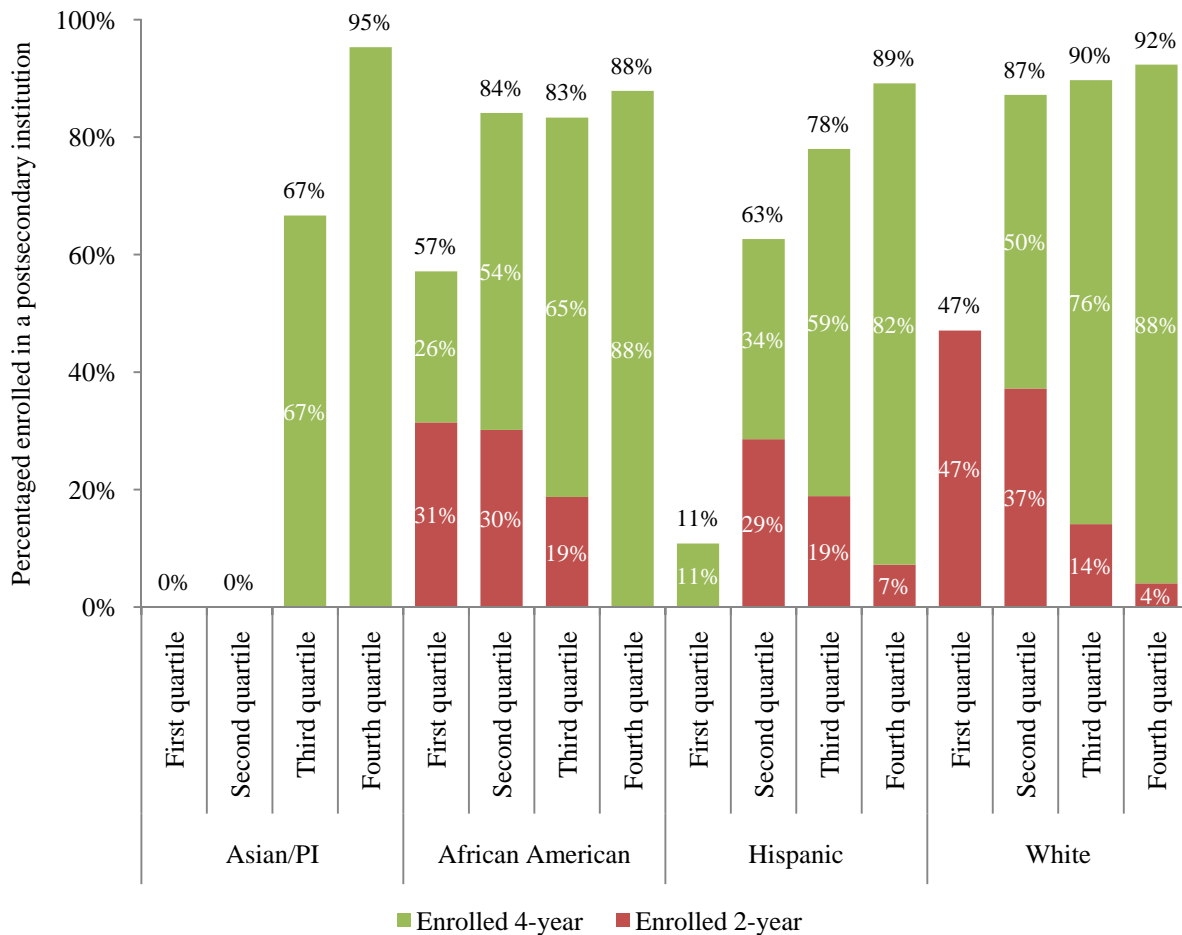
Source. 2007 AISD High School Exit Survey, the NSC, the RMC, AISD Student Records, prepared by the DPE, October 2008

Note. Predicted probabilities were derived from a logistic regression model, holding all other variables constant at their mean values.

Regardless of a graduate’s ethnic background, moving from a lower GPA quartile to a higher GPA quartile improved the chances that they enrolled in a 4-year college (Figure 22). The gains in the likelihood of enrollment associated with improvements in GPA were much greater for Hispanic graduates compared with African American or White graduates.

It is unclear, however, why GPA influenced enrollment after students had satisfied the entrance requirements and gained acceptance to a postsecondary institution. One potential explanation is that accepted graduates with higher GPAs may have qualified for additional scholarships or achievement-based assistance. This assistance may have helped them overcome financial impediments to enrollment.

Figure 22. Postsecondary Enrollment Rates Among Graduates Accepted to a 4-Year Institution, by Grade Point Average and Ethnicity



Source. 2007 AISD High School Exit Survey, the NSC, the RMC, prepared by the DPE, October 2008

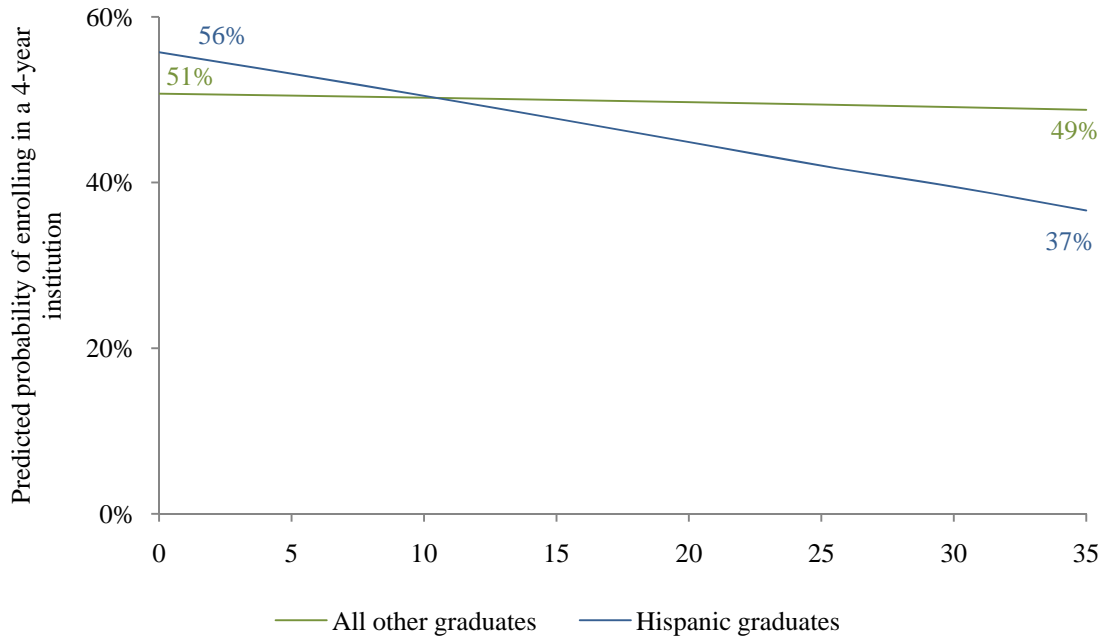
Note. Several enrollment categories contained fewer than 5 student observations. Enrollment data were not reported for these categories to preserve anonymity.

Much of the research that identifies and champions the importance of school-level variables in shaping students' pathways to a postsecondary education assumes students are present at school to receive this support. A robust and consistently strong negative correlate of postsecondary enrollment (i.e., both 2-year and 4-year) was the accumulation of a large number of absences. Figure 23 plots the predicted probability of enrollment in a 4-year institution for both Hispanic and other graduates.

Two interesting student attendance patterns were found. For non-Hispanic graduates, the effect of incurring more absences in high school did not dramatically reduce the likelihood of enrolling in a 4-year college after graduation. However, among Hispanic graduates, increasing the number of absences sharply reduced the likelihood of enrolling in a 4-year college (19 percentage points). This observation occurred even after controlling for other contributing variables (e.g., student demographic and achievement factors). Research suggests and the findings presented in this report indicate that Hispanic students disproportionately benefit from the college preparation activities and support networks available at schools (Perna & Titus, 2005; Roderick et al., 2008). Frequent absences may disrupt these support channels or prevent them from being established initially.

Furthermore, according to AISD High School Exit Survey results, a higher share of Hispanic graduates reported working 16 or more hours per week (41%) during their senior year than members of any other ethnic group. In a related finding, Garland (2008) reported that Hispanic graduates, irrespective of whether they enrolled in a postsecondary institution, earned higher median wages after high school than African American, White, or Asian graduates. The accrual of considerable absences during the school year may be a byproduct of labor market entry and activity, which may interfere with the college preparation and application process.

Figure 23. Probability of Enrollment in a 4-Year Institution, by Number of Absences During Senior Year and Ethnicity



Source. AISD Student Records, the NSC, the RMC, AISD Student Records, prepared by the DPE, October 2008

Note. Predicted probabilities were derived from a multinomial logistic regression model, holding all other variables constant at their mean values.

To contextualize the results presented above, and to illustrate the academic and behavioral profile of students who were identified as the most likely to enroll in a 2-year or 4-year college, the likelihood of a student enrolling in a postsecondary institution was generated from the multivariate models discussed above (Table 1). This was determined by comparing the student and school-level characteristics of students who enrolled in a 2-year or 4-year institution to those who did not. Achievement data and High School Exit Survey responses of four graduates from the Class of 2007 who were deemed to have the highest likelihood of enrolling in 2 and 4-year year institution were selected for concision. Only characteristics that were statistically significant ($p < .05$) in the multinomial logistic regression model are displayed.

Several interesting patterns across the two modes of postsecondary enrollment emerged. First, the graduates who were likely to enroll in a 2-year institution had considerably more absences than did those who did not. Second, and confirming the findings of Garland (2008), graduates who worked more than 11 hours were far more likely to enroll in a 2-year institution than to enroll in a 4-year college or not to enroll at all. Third, each student who enrolled in a 2-year institution indicated he or she probably would not borrow money for postsecondary education, while 3 out of 4 graduates who enrolled in a 4-year college stated they would borrow. This finding is intuitive because graduates may be enrolling in a 2-year institution to defray the costs of postsecondary institution. In conjunction with the finding that these graduates were more likely to work many hours, this finding sheds light on the considerations shaping the decision to

enroll in a 2-year college. Last, and confirming the findings presented in Figure 20, each graduate in Table 1 applied to more than 6 colleges.

Table 1. Characteristics of Graduates Most Likely to Enroll in a 2 or 4-Year Institution

	Direction of relationship	Student 1	Student 2	Student 3	Student 4	
2-year enrollment	Probability of enrollment	n/a	81%	82%	83%	84%
	Reasons seen a counselor	(-)	1	3	16	6
	Absences	(-)	7	5	17	4
	Documentation status	(-)	Valid SSN	Valid SSN	Valid SSN	Valid SSN
	Parental involvement	(+)	3	2	4	3
	Hours worked	(+)	4	4	3	4
	Borrowing intention	(-)	Probably not	Probably not	Probably not	Probably not
	First generation college student	(-)	No	No	No	No
4-year enrollment	Probability of enrollment	n/a	100%	100%	100%	100%
	Absences	(-)	7	2	2	8
	Economically disadvantaged	(-)	No	No	No	No
	Documentation Status	(-)	Valid SSN	Valid SSN	Valid SSN	Valid SSN
	Cumulative GPA	(+)	4.43	4.49	4.63	4.28
	Borrowing intentions	(-)	Probably will	Probably not	Probably not	Probably will
	First generation college student	(-)	No	No	No	No
	Completed FAFSA	(+)	Yes	Yes	No	Yes
	Met math standard on 8th grade TAKS	(+)	Yes	Yes	Yes	Yes
	Number of applications submitted	(+)	More than 6	More than 6	More than 6	More than 6

Source. AISD Student Records, the NSC, the RMC, AISD Student Records, prepared by the DPE, October 2008

Note. Probabilities were derived from a multinomial logistic regression model. Parental involvement measured the extent to which parents were involved in school-related events. The values were 1 = never; 2 = rarely, 3 = occasionally, 4 = often, 5 = consistently. Values for the number of hours worked were 3 = 11–15 hours, 4 = 16 or more.

IMPLICATIONS FOR DISTRICT PRACTICES

- Hispanic graduates continue to lag behind their peers in postsecondary enrollment rates. Across most measures of college preparation analyzed in this report, Hispanic graduates did not satisfy many of the fundamental criteria needed to enroll in a 4-year college. Resources should be devoted to ensure all college aspirants fulfill the requirements necessary to meet their goals, including submitting transcripts and college applications, completing FAFSA applications, and taking college entrance exams.
- Many of the variables correlated with boosting 4-year enrollment rates yielded different effects for Hispanic graduates, underscoring the need for and importance of school support staff. Hispanic graduates who received intensive support from counselors, and those who felt they were prepared for the college application process, were likely to apply to a 4-year college. The impact was larger for Hispanic graduates than for other students. Collectively, these findings point to the critical role played by campus and district staff tasked with ensuring students are provided the resources necessary to help them navigate the postsecondary application and enrollment process.
- Increasing GPA, although an important predictor of postsecondary enrollment, did not account for the application and enrollment gap between Hispanic graduates and their peers. Hispanic graduates with an A average continue to trail their peers with similar achievement levels in their application and enrollment rates to 4-year colleges.
- Increasing the number of absences during their senior year exhibited differential effects for Hispanic and other graduates. Absences were a significant negative predictor of 4-year enrollment among Hispanic graduates. Among all other graduates, absences did not attain statistical significance. This may be a consequence of more widespread and frequent employment among Hispanic graduates. Mindful of this, interventions to lower congenital absence problems may be particularly important for Hispanic graduates but may not sufficiently address the factors precipitating the decision to miss school.

REFERENCES

- Cabrera, A. F., & La Nasa, S. M. (2001). On the path to college: Three critical tasks facing America's disadvantaged. *Research in Higher Education*, 42 (2), 119–150.
- Cornetto, K. (2007). *Results of the AISD High School Exit Survey: Class of 2007* (Publication No. 06.19). Austin, TX: Austin Independent School District.
- Coneway, C, Schmitt, L., & Alderete, K. (2007). *Postsecondary enrollment summary report: Classes of 2002–2006* (Publication No. 06.18). Austin, TX: Austin Independent School District.
- Garland, M. W. (2008). *Postsecondary enrollment summary report: Classes of 2002–2007*. Austin, TX: Austin Independent School District.
- Hurtado, S., Inkelas, K. K., Briggs, C., & Rhee, B. S. (1997). Differences in college access and choice among racial/ethnic groups: Identifying continuing barriers. *Research in Higher Education*, 38(1), 43–75.
- Jackson, G. (1978). Financial aid and student enrollment. *Journal of Higher Education*, 49(6), 548–574.
- National Center for Education Statistics. (2008). *Trends among high school seniors, 1972–2004* (NCES Publication No. NCES 2008-320). Retrieved October 23, 2008, from <http://nces.ed.gov/pubs2008/2008320.pdf>
- Perna, L. W., & Titus, M. A. (2005). The relationship between parental involvement as social capital and college enrollment: An examination of racial/ethnic group differences. *The Journal of Higher Education*, 76(5), 485–518.
- Primo, D. M., Jacobsmeier, M. L., & Milyo, J. (2007). Estimating the impact of state policies and institutions with mixed-level data. *State Politics and Policy Quarterly*, 7(4), 446–459.
- Roderick, M., Nagaoka, J., Coca, V., & Moeller, E. (2008). *From high school to the future: Potholes on the road to college*. Consortium on Chicago School Research. Retrieved October 23, 2008, from http://ccsr.uchicago.edu/downloads/1835ccsr_potholes_summary.pdf

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