



Report

A PROJECT OF THE PEW CHARITABLE TRUSTS AND USC ANNENBERG SCHOOL FOR COMMUNICATION

LATINO YOUTH FINISHING COLLEGE: THE ROLE OF SELECTIVE PATHWAYS

by

Richard Fry

June 23, 2004

RICHARD FRY
SENIOR RESEARCH ASSOCIATE
PEW HISPANIC CENTER

Fry conducts empirical research on the education and labor market characteristics of U.S. racial and ethnic populations. Fry was a Senior Economist at the Educational Testing Service, where he focused on trends in U.S. college enrollment.

rfry@pewhispanic.org

The author thanks numerous individuals for their contributions to this report. Dr. Watson Scott Swail and the Educational Policy Institute generated the tabulations using the National Education Longitudinal Study of 1988 (NELS:88/2000) Postsecondary Transcript Files. Roberto Suro provided valuable feedback and collaboration throughout the project, including editing early drafts. Dulce Benavides assisted with the production of the figures.

The Pew Hispanic Center is supported by The Pew Charitable Trusts of Philadelphia. It is a project of the University of Southern California Annenberg School for Communication. Founded in 2001, the Center is a non-partisan research organization. Its mission is to improve understanding of the diverse Hispanic population in the United States and to chronicle Latinos' growing impact on the nation.

The opinions expressed in this report are those of the author and do not necessarily reflect the views of the Pew Charitable Trusts

EXECUTIVE SUMMARY

The gap in the number of Latino and white college students who graduate with a bachelor's degree is wider even than the very substantial differences in high school completion and constitutes the greatest disparity in educational outcomes between the nation's largest minority group and the white majority. This report assesses the dimensions of the gap in bachelor's degree completion between Latinos and whites and some of the factors that contribute to it by focusing on the differing fates of young people who graduate from high school with similar levels of academic preparation. It finds that at several key junctures Latinos fall behind whites with similar qualifications.

A lot of attention has focused on the very serious problems of high school dropout rates among Latinos and the comparatively poor preparation received by many Latino high school graduates. This report, using newly available data, focuses on Latinos who both complete high school and are prepared on graduation to embark on a post-secondary pathway that could lead to a bachelor's degree. It finds that the gap in white/Hispanic bachelor's degree completion could be substantially closed if these well-prepared Latino youth attended the same kind of colleges as similarly prepared whites and graduated at the same rate. Instead the study finds that well prepared Latinos attend post secondary institutions that are less selective and have lower BA completion rates than similarly prepared whites and that even when well-prepared Latinos go to the same kind of schools as their white peers, they have lower graduation rates.

In order to better understand the disparities in college attainment, the Pew Hispanic Center commissioned an analysis of newly available data from a U.S. Department of Education survey that tracked a nationally representative sample of some 25,000 youth from the time they were in the eighth grade in 1988 until 2000 when most were 26 years old. The National Educational Longitudinal Survey (NELS) collected detailed information from academic records so it is possible to assess the quality of the high school education that students received and then follow their performance through the college years. These data allow us to compare college outcomes for equally well-prepared high school youth of different racial and ethnic groups.

About half of young Latinos who enroll in college are at least minimally prepared academically to succeed in a four-year college. This report suggest that efforts to improve the Latino BA completion rate—a widely accepted public policy objective—could be targeted effectively at a large segment of Latino youth that is

finishing high school with the preparation necessary to get a bachelor's degree but is failing to do so for a variety of reasons.

Among those who are well prepared, Latino youth are at a disadvantage in the quest for a bachelor's degree because of two important factors: many enroll in different kinds of institutions that their white peers and they have different experiences than white students even when they enroll on the same campuses. Hispanic undergraduates disproportionately enroll on campuses that have low bachelor's degree completion rates, i.e., their pathways through post secondary education start on low trajectories. In addition, even when they are on the same college pathway as white youth, they are less likely than their white peers to graduate. The best prepared Latinos fare worse than white youth of equal preparation. Similarly, the least prepared Hispanics fare worse than their least prepared white peers.

The report's key findings include :

- Among the best prepared young college students, nearly 60 percent of Latinos attend non-selective colleges and universities, in comparison to 52 percent of white students. Among students who are less well prepared—those in the second to fourth quintile of high school academic intensity (the majority of both Hispanic and white students)—nearly 66 percent of Latinos initially enroll in “open-door” institutions. Less than 45 percent of similarly prepared white college students initially enroll at open-door institutions.
- Selectivity matters because college selectivity and college completion go hand-in-hand. Students that are initially enrolled at a more selective college or university are more likely to finish a bachelor's degree than those on the less selective college pathway. This applies to Hispanics as well as other undergraduates.
- In attainment of a bachelor's degree, disparities are evident across the spectrum of higher education. For example, white youth beginning at community colleges are nearly twice as likely as Hispanic youth beginning at community colleges to finish a bachelor's degree. Significant gaps in completion rates are evident among those starting in the four-year college sector as well. Comparing the best prepared white and Latino college students at non-selective colleges and universities, 81 percent of whites complete a bachelor's degree and 57 percent of Latinos.
- A notable exception to the disparities between Latinos and whites is the enrollment of the nation's best prepared Latino undergraduates at the nation's most selective colleges and universities, i.e., the pathway that links the best and the brightest to the very top of the undergraduate education pyramid. In this very limited universe, highly qualified Latinos enroll at top schools at the same rate as their white peers.
- At the other end of the spectrum, Hispanics at all levels of preparation show a greater propensity to enroll in “open-door” institutions than their white peers. However, there is a substantial gap in bachelor's degree

completion among these students. Among two-year college entrants that are “minimally qualified” for college, 16 percent of whites finished a bachelor’s degree versus only 7 percent of Hispanics.

- To illustrate the significance of these findings, the Pew Hispanic Center conducted a simulation analysis of possible outcomes for the 689,000 Latinos enrolled in 8th grade in October 2002. If they attended the same kind of colleges as similarly prepared whites in the NELS cohort, rather than the pathways followed by Latinos, the expected number of bachelor’s degrees to come from this class would increase by 20% from 125,000 to 150,000. Alternatively, if these Latinos pursue the same pathways as Latinos in the NELS cohort but graduate from college at the same rate as their white peers, BA completion jumps by 42% from 125,000 to 177,000.
- A broad variety of factors help determine Latinos’ pathways through post-secondary education and their bachelor’s degree completion rates. Some that distinguish them from white youth and that are examined in this report include, delayed enrollment in college, greater financial responsibility for family members, and living with family while in college rather than in campus housing.

TABLE OF CONTENTS

INTRODUCTION	1
I. HISPANIC PATHWAYS TO POSTSECONDARY EDUCATION	8
The Exception: Hispanic High-Achievers and the Nation's Top-Tier Four-Year Colleges	13
II. BEYOND THE PATHWAY: HISPANIC PERSISTENCE TO THE BACHELOR'S DEGREE	14
Initial Entrants to Community Colleges	15
Persistence Difficulties among Two-year and Four-Year College Students	16
CONCLUSIONS	17
REFERENCES	26
APPENDIX A	29
APPENDIX B	30

INTRODUCTION

One year ago today, on June 23, 2003, the U.S. Supreme Court held that the affirmative action admissions policy at the University of Michigan Law School met the constitutional test of a narrowly tailored use of race to further a compelling interest, which in this case was the educational benefit that flows from a diverse student body.¹ Writing for the majority in this landmark case, Justice Sandra Day O'Connor noted that the number of minority applicants with high grades and test scores had increased since the Court first approved affirmative action admissions policies 25 years earlier. With that, she expressed the hope that in another 25 years racial preferences would no longer be necessary. A prime barrier to achieving that goal is the gap between Latino and white college students in their rates of graduating with a bachelor's degree. This attainment gap is even wider than the substantial differences in high school completion and constitutes the greatest disparity in educational outcomes between the nation's largest minority group and the white majority. This report assesses the dimensions of the gap in bachelor's degree completion between Latinos and whites and some of the factors that contribute to it, by focusing on the differing fates of young people who graduate from high school with similar levels of academic preparation. It finds that at key junctures Latinos fall behind whites with similar qualifications.

The focus here on outcomes for undergraduates is not meant to diminish the importance of earlier difficulties facing Latino students, which can start with acquiring English in pre-school and take different forms at every stage. Certainly, the persistent high school dropout problem attracts deserved attention. According to the U.S. Department of Education's National Center for Education Statistics (NCES), 82 percent of white students complete high school on time, in comparison with 67 percent of Hispanic students (NCES, 2003a).² Those Latino students who do graduate from high school in many cases have completed a less rigorous curriculum. In the key area of mathematics preparation, 46 percent of Hispanic high school graduates have not completed Algebra 2 (a course most frequently taken in eleventh grade) or a higher mathematics course, compared to 28 percent of white graduates (NCES, 2002a).

Even though many get left behind, a significant portion of Latino youth do complete high school prepared to pursue a college education and do enroll in some kind of postsecondary institution. Latino parents are as aware as any others that elementary and secondary education is becoming no more than a prerequisite

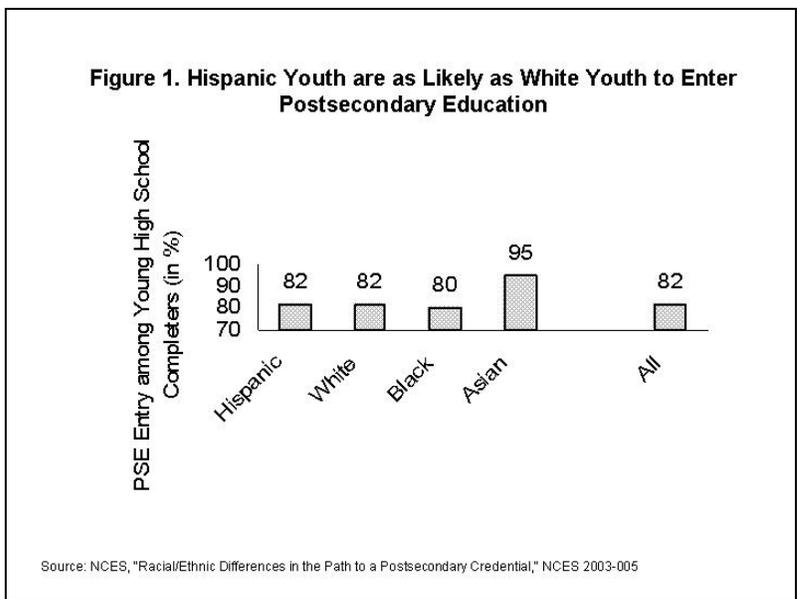
¹ *Grutter v. Bollinger et al.*, S. Supreme Court, No. 2-241U October Term 2002, decided June 23, 2003

² Throughout the report, the racial/ethnic designation "white" refers to non-Hispanic whites. The terms Hispanic or Latino are used interchangeably.

(Pew/Kaiser, 2004). Today, the vast majority of all youth go on to postsecondary education, and it is increasingly the disparities in degree completion at the college level that distinguish Hispanic youth from white youth.

In order to better understand those disparities the Pew Hispanic Center commissioned an analysis of newly available data from a U.S. Department of Education survey that tracked a nationally representative sample of some 25,000 individuals from the time they were in the eighth grade in 1988 until 2000, when most were 26 years old. The National Educational Longitudinal Survey (NELS) collected detailed information from academic records that makes it possible to assess the quality of the students' high school education and to follow their performance through the college years (see Appendix A). These data allow us to compare how equally well-prepared high school youth entered and fared in U.S. colleges. The data reveals the nature of the colleges the youth attended, so that we can examine the outcomes of similar youth at the same kinds of colleges.

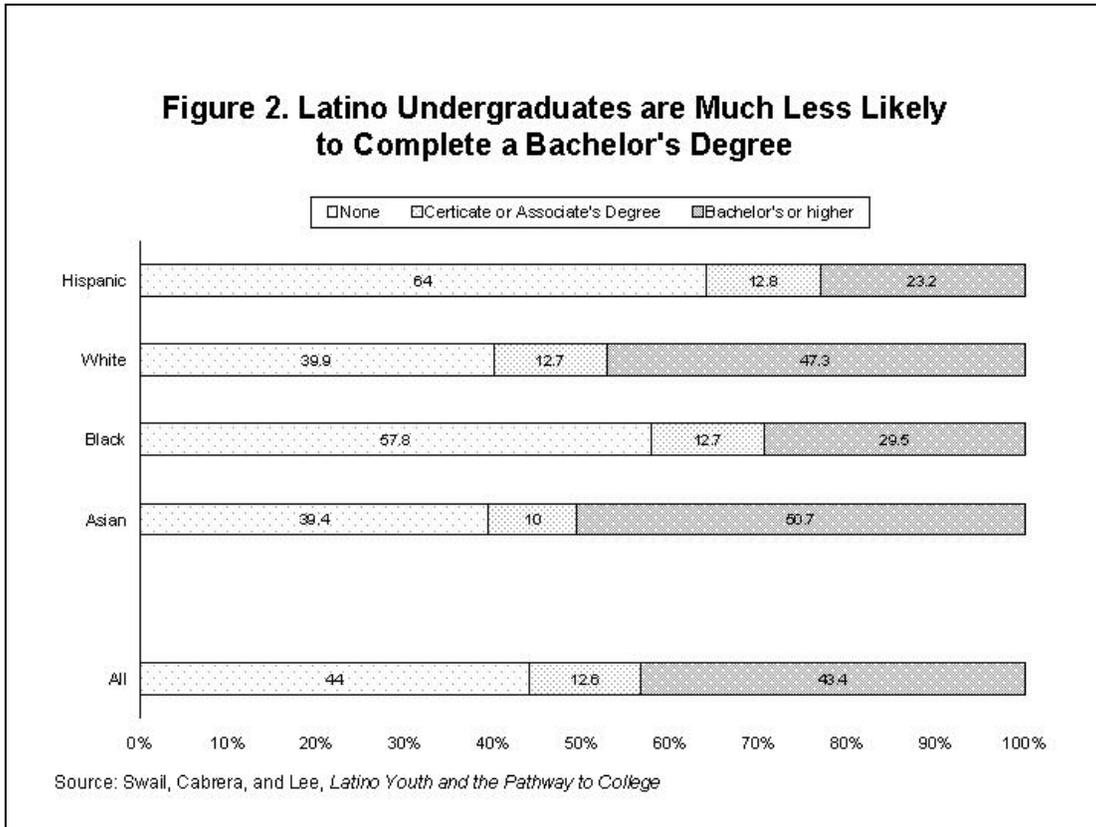
The Center's analysis of the NELS data was conducted by the Education Policy Institute (EPI), a Washington-based nonprofit, nongovernmental research



organization. That study reveals that two out of three Latino youth pursue postsecondary education by age 26 (Swail, Cabrera, and Lee, 2004). Among Latino youth that finish high school, more than 80 percent go on to college by age 26, the same rate as white high school completers (Figure 1).

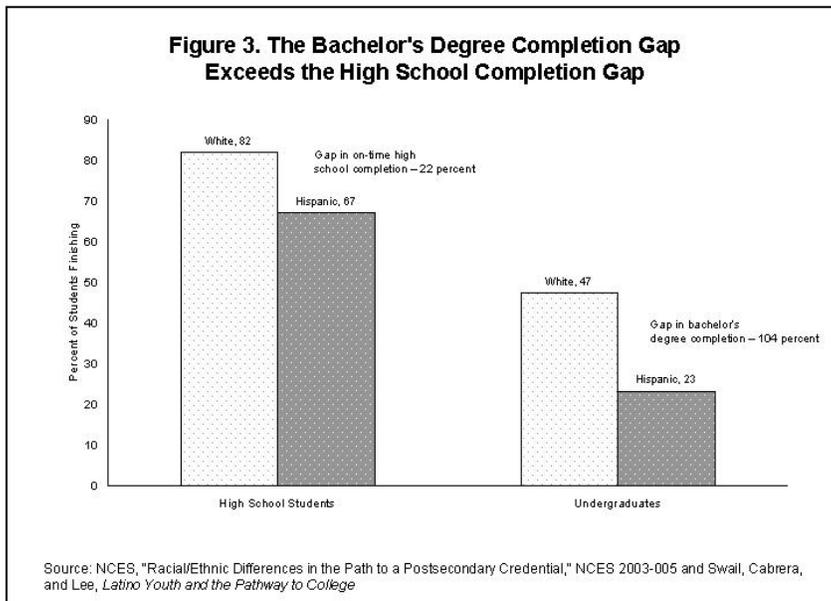
However, going to college is one thing, finishing college is another. Latino youth are far behind their white and Asian peers in completing bachelor's degrees. The NELS data shows that 47 percent of white postsecondary students complete a bachelor's degree by age 26, more than twice the rate of Latino postsecondary students (Figure 2). Less than one-quarter of young Latino entrants finish a bachelor's degree and nearly two-thirds end up with no postsecondary credential at all. Thus, the disparity between white and Latino college students in finishing a bachelor's degree is larger than the high school completion gap and is the largest

attainment gap facing Hispanic youth as they progress through the U.S. education



system (Figure 3).

The trouble young Latino students have in finishing college is not just a



legacy of poor elementary and secondary school education. Several studies have indicated that a majority of the 200,000 or so Latinos beginning college each fall are adequately prepared academically to succeed in a

four-year college. The Department of Education constructed a composite measure of academic qualification for four-year college work based on high school grade-point

average (GPA), senior class rank, Scholastic Achievement Test (SAT) and American College Test (ACT) scores, academic coursework, and aptitude test scores (NCES, 1997). According to that measure 53 percent of Hispanics who graduated high school in 1992 were at least minimally qualified to do four-year college work (NCES, 1997). The NELS data suggest that 57 percent of young Hispanic postsecondary entrants are at least minimally qualified using the same college qualification index (Swail, Cabrera, and Lee, 2004).

Among those who are well prepared, Latino youth are at a disadvantage in the quest for a bachelor’s degree because of two important factors: many enroll in different kinds of institutions than their white peers, and their experiences differ from those of white students even when they enroll on the same campuses. Hispanic undergraduates disproportionately enroll on campuses that have low bachelor’s degree completion rates, so that their pathway through postsecondary education starts on a low trajectory. In addition, even when they are on the same college pathway as white youth, they are less likely than their white peers to graduate.

The NELS reveals that young Hispanic college students do not fare similarly to young whites of equal preparation. The best-prepared Latinos fare worse than whites of equal preparation. The least-prepared Hispanics fare worse than their least-prepared white peers. The problem goes beyond the well-known fact that Latinos are more likely than whites or students of any other racial or ethnic group to initially enroll in community colleges (Ganderton and Santos, 1995). Those

Figure 4. Distribution of Four-year Colleges by Barron’s Selectivity Classification

Selectivity	Acceptance Rate	Median Freshman Exam Score		Number of Colleges
		SAT 1	ACT	
1 Most competitive	> 33%	655 to 800	29 and above	73
2 Highly competitive	> 50%	620 and above	27 and above	99
3 Very competitive	> 75%	573 and above	24 to 26	257
4 Competitive	> 85 %	500 and above	21 and above	659
5 Less Competitive	> 100%	below 500	below 21	331
6 Non-Competitive	evidence of hs graduation			109
7 Special				96

Source: Barron’s Profile of American Colleges, 25th Edition

Hispanics who do initially enroll in four-year colleges, a minority of the college-going cohort, also pursue paths that diminish their chances of completing a bachelor’s degree. And whatever postsecondary path Latinos pursue they do not get as far as whites with the same preparation on the same path.

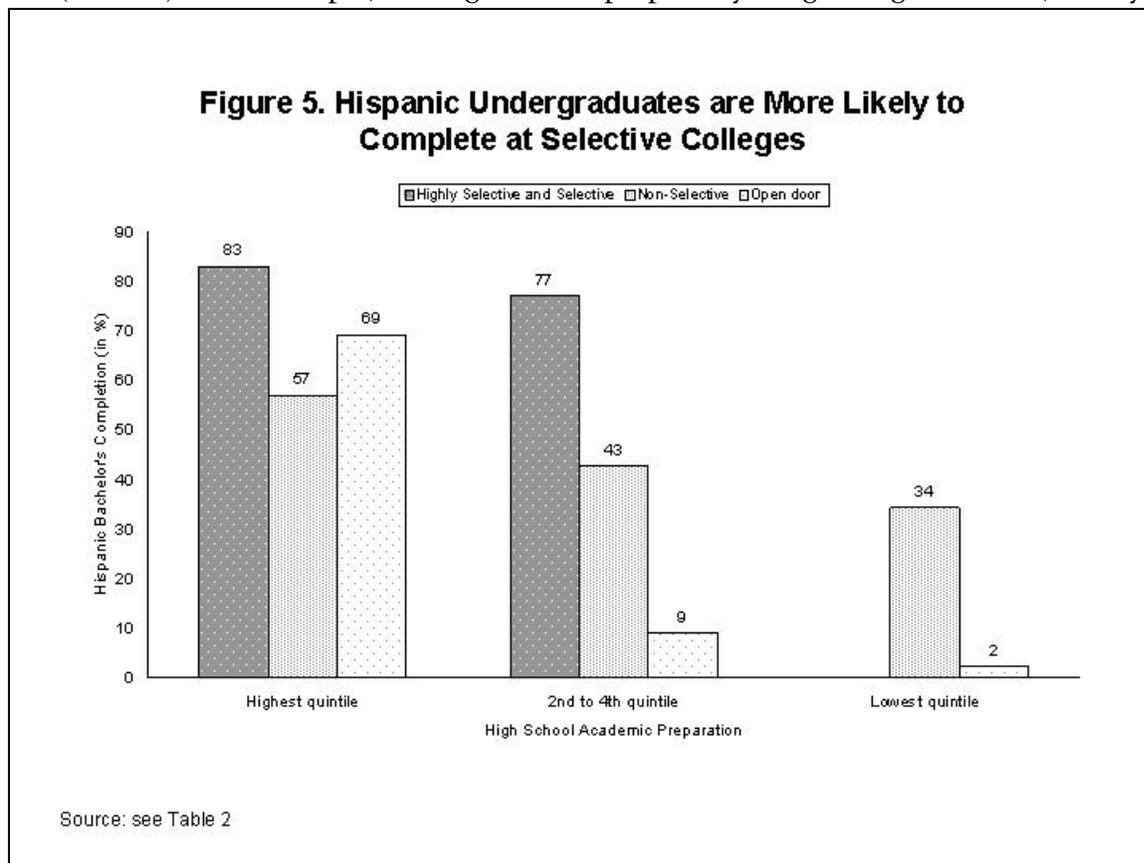
There are over 4,000 degree-granting

postsecondary institutions in the United States, including over 1,500 accredited colleges and universities that confer bachelor’s degrees. The nation’s colleges and universities use a variety of criteria (some academic, some not) to choose among applicants and each college admissions office weights the criteria differently.

Colleges can be distinguished on the basis of their admissions selectivity, i.e., the proportion of their applicants accepted for admissions (Figure 4). Highly selective colleges accept less than half their applicants. The least selective four-year colleges accept more than 85 percent of their applicants.

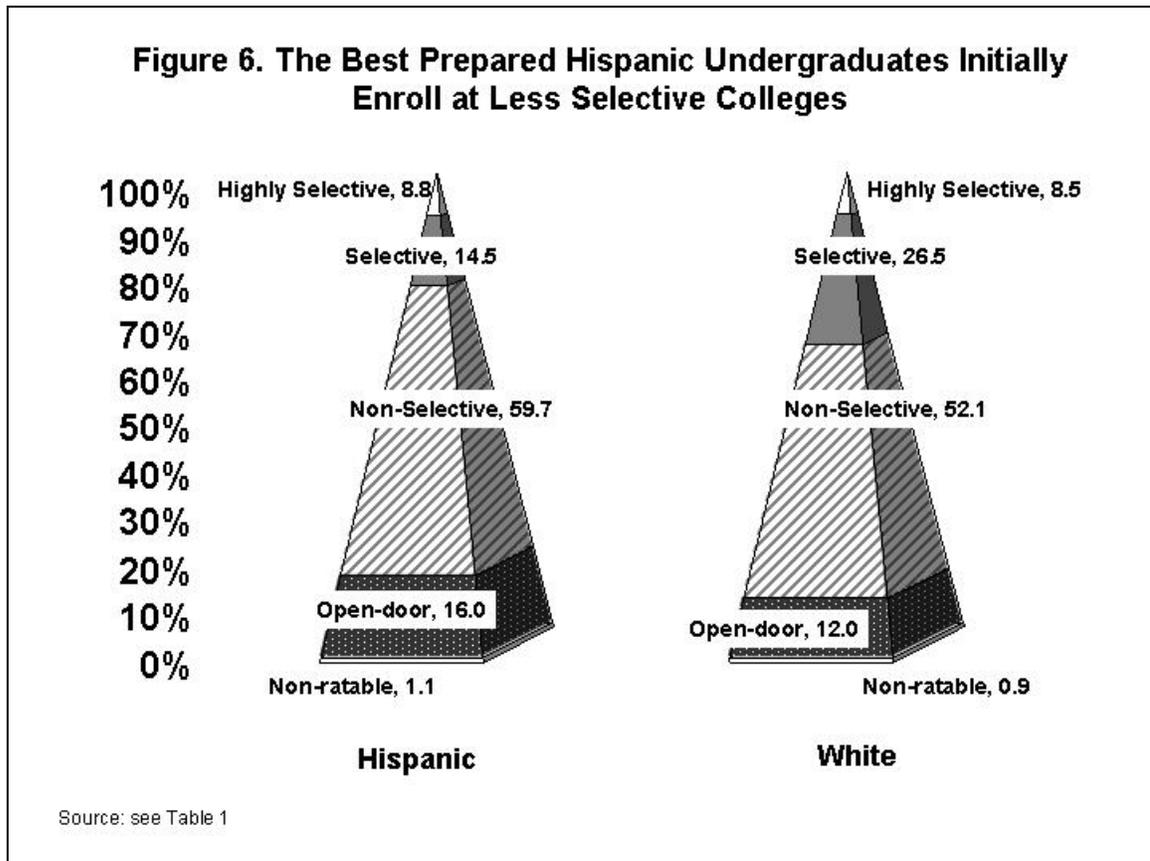
Selectivity matters because college selectivity and college completion go hand in hand. Hispanic college students who are initially on the more selective college pathway (attend a more selective college or university) are more likely to finish a bachelor’s degree than Hispanic college students on the less selective college pathway. This is not just because Latinos at more selective colleges tend to be smarter or better-prepared and therefore more likely to complete no matter where they went. Selectivity matters in and of itself, and Latino youth with similar academic preparation are more likely to finish if they attend a more selective college rather than a less selective college (Figure 5).

Equally well-prepared white and Latino college-going youth do not go to the same kinds of colleges and universities — Latinos enroll in less selective institutions (Table 1). For example, among the best prepared young college students, nearly 60



percent of Latinos attend nonselective colleges and universities, compared to 52 percent of white students (Figure 6).

Similar enrollment patterns are evident among the college students that are not among the best prepared. Among students in the second to fourth quintile of high school academic preparation (the majority of both Hispanic and white students), nearly 66 percent of Latinos initially enroll in “open-door” institutions. Less than 45 percent of similarly-prepared white college students initially enroll at

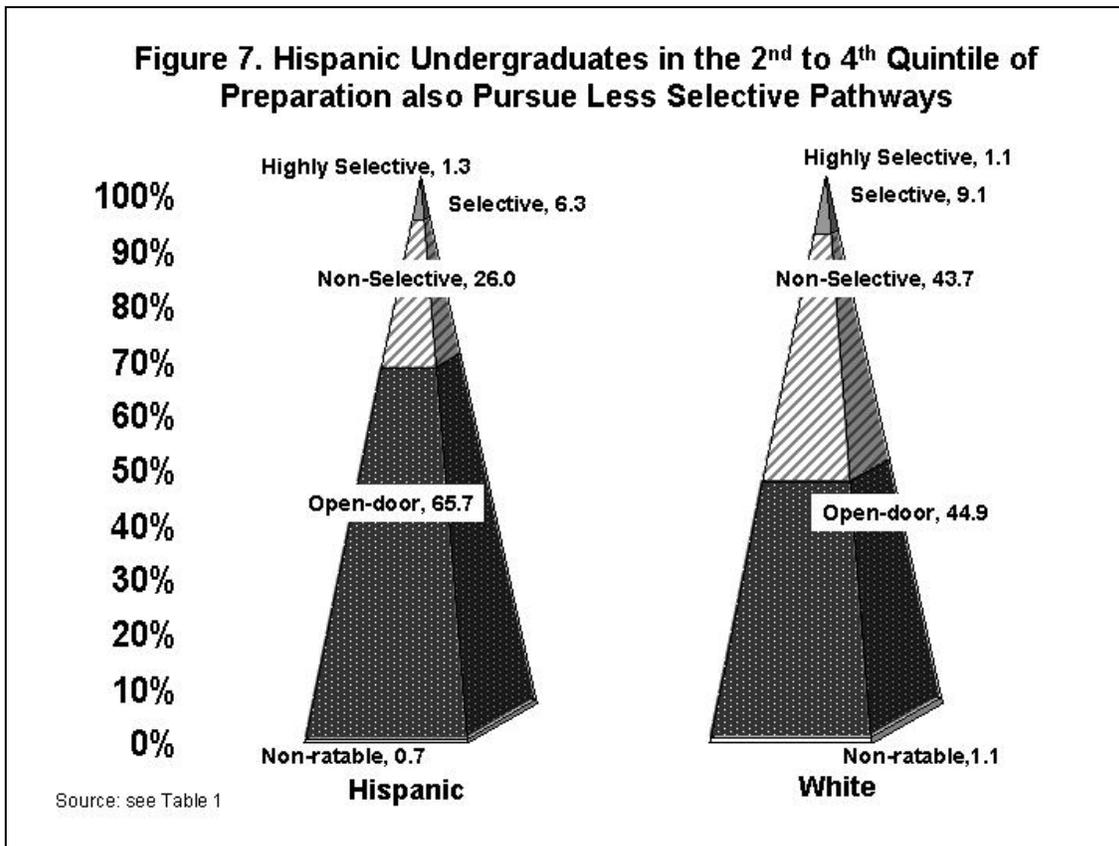


open-door institutions (Figure 7).

However, the headwinds confronting young Latino college students go beyond the different college pathways they embark on. The NELS data allow us to compare white and Latino college students with similar levels of high school preparation who attend the same kind of colleges. Even when Latino youth of equal preparation are on the same pathway as white youth their completion rates lag.

In attainment of a bachelor’s degree, disparities are evident across the spectrum of higher education. For example, white youth beginning at community colleges are nearly twice as likely as Hispanic youth beginning at community colleges to finish a bachelor’s degree (Swail, Cabrera, and Lee, 2004). Significant gaps in completion rates are evident among those starting in four-year colleges as well. Comparing the best-prepared white and Latino college students at

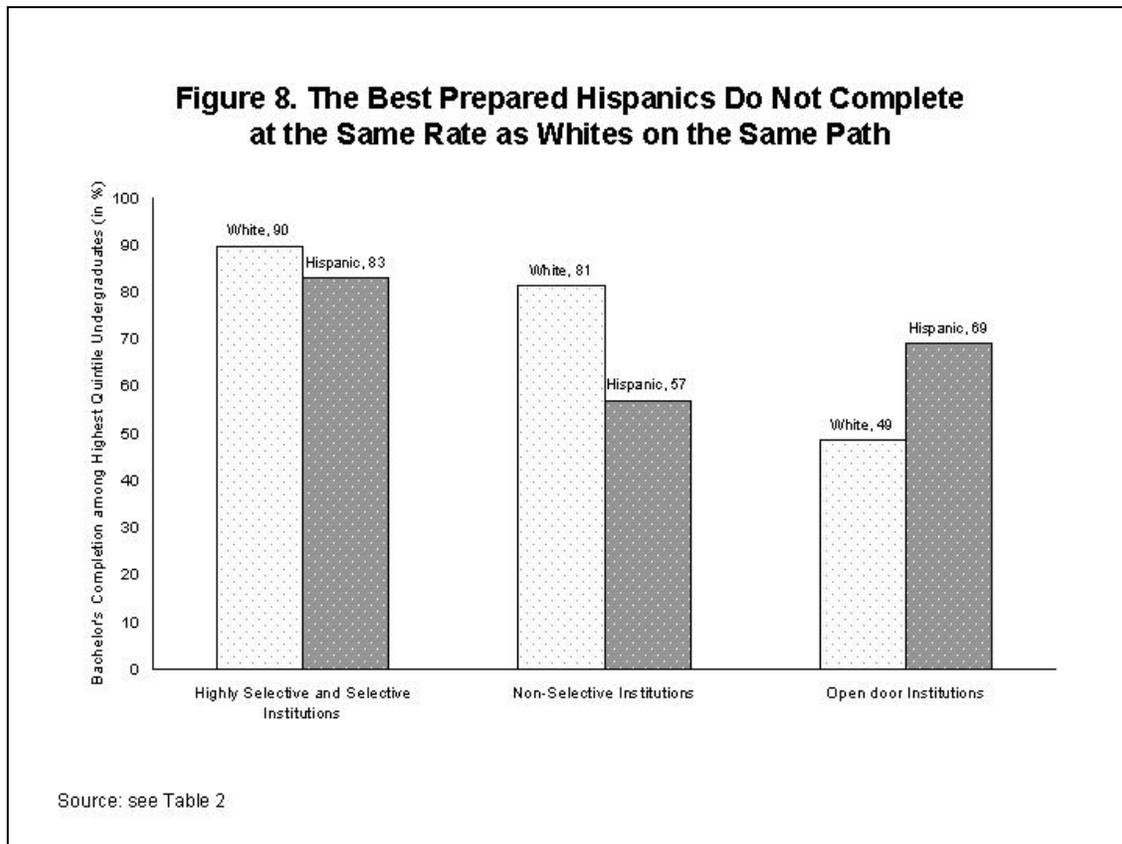
nonselective colleges and universities, 81 percent of whites and 57 percent of Latinos complete a bachelor's degree (Figure 8 and Table 2).



The one area of parity is among young community college entrants attaining postsecondary credentials below the bachelor's degree. Regardless of race/ethnicity, students initially enrolling at community colleges attain vocational certificates and associate's degrees at equally low rates.

While Tables 1 and 2 demonstrate that there are disparities between white and Latino undergraduates in the kinds of colleges they attend and in their BA completion rates, how much do these disparities matter? We can quantify their importance by performing some simulations. For example, how many Hispanic youth would attain bachelor's degrees if they attend the same colleges and universities in the same proportions and with the same completion rates as the NELS cohort? Census Bureau figures indicate that there are now an estimated 689,000 Hispanics in the eighth grade. If they attend college at the same rate as the Hispanics in the NELS cohort, about 450,000 of them will attend postsecondary education and roughly 125,000 will attain bachelor's degrees (Table 3). To gauge the importance of pathways, suppose those 450,000 Hispanic undergraduates complete college at the same rate as the Hispanics in the NELS cohort, but attend the kinds of colleges that white undergraduates attend. This first scenario would

yield 150,000 Hispanics with bachelor's degrees, a 20 percent improvement. Alternatively, suppose those 450,000 Hispanic undergraduates have the same



distribution across types of institutions as the Hispanics in the NELS cohort, but they complete college at the same rates as white undergraduates. In this second scenario, 177,000 Hispanics would attain bachelor's degrees, a 42 percent improvement. This exercise suggests that both the pathways Hispanics take into undergraduate education and the disparities in college completion rates among students on the same pathway are factors that must be considered in order to improve the rate at which young Hispanics attain bachelor's degrees.

I. HISPANIC PATHWAYS TO POSTSECONDARY EDUCATION

A major reason that Hispanic undergraduates wind up less educated than white undergraduates has to do with the kinds of colleges they initially attend. In order to understand how college-bound youth are distributed across the spectrum of higher education, one must investigate both the spectrum of students' capabilities and the hierarchy among U.S. institutions of higher education. Around 2 million youth begin college each year, but not all colleges are alike and neither are all undergraduates. Colleges differ in their admissions selectivity and in their

students' success in bachelor's degree completion. Hispanic undergraduates are more likely to finish at certain kinds of colleges. The ultimate disparity at the end of postsecondary education as to which youth have a bachelor's degree lies partly in which youth initially attend the high bachelor's degree producing colleges or the productive pathways.

College-bound youth differ in their high school preparation and their ability to think critically and to perform college-level studies. There are numerous ways to measure the academic preparation of college students. Perhaps the best-known (and most controversial) measures are the aptitude test scores used in four-year college admission processes, the SAT and ACT test scores. Other measures include high school class rank and the rigor of a student's high school course-taking. There is considerable disparity in the opportunities available to students at different high schools to complete the more rigorous courses such as calculus and advanced chemistry and physics that result in strong analytical and problem-solving skills.

An influential U.S. Department of Education study has shown that the rigor of high school curriculum, high school GPA or class rank, and test scores are highly correlated but that the rigor of the youth's high school curriculum is the strongest determinant of bachelor's degree completion (Adelman, 1999). This analysis of postsecondary pathways therefore categorizes college students on the basis of the rigor of their high school curriculum (Table 1). The measure "high school academic intensity" captures the academic intensity and quality of the student's high school instruction based on mathematics credits, highest level of math, total advanced placement courses, English credits, foreign language credits, science credits, core laboratory science credits, social science credits, and computer science credits (NCES, 2003b). The detailed version of the transcript measure specifies 32 levels of intensity, but we report outcomes based on the quintile version.

Students each year enroll in colleges and universities running the gamut of admissions selectivity and instructional resources. American higher education can be visualized as a pyramid. At the top of the pyramid are the coveted seats at the "highly selective" institutions. At the nation's top 50 most competitive colleges and universities (enrolling about 50,000 freshman each year) students will typically be from the top 20 percent of their high school class and have scored 1310 or higher on the SAT I, or 29 or higher on the ACT.³ Although the nation's highly selective colleges and universities receive much attention and scrutiny, it is

³ The widely known Barron's classification of four-year colleges differentiates nine selectivity levels, running from "most competitive" to "noncompetitive." Our "high selective" category includes students initially enrolling at Barron's "most competitive" college and universities, but is likely narrower than Barron's "most competitive" and "highly competitive" categories cumulated. Barron's "most competitive" and "highly competitive" colleges educate about 8 percent of the nation's full-time, first-year enrollment (Carnevale and Rose, 2003).

important to recognize their very limited reach. The highly selective institutions educate only 3 percent of the nation's undergraduates and an even smaller share of Hispanic undergraduates.

At the bottom of the hierarchy are the nation's "open door" and "not ratable" institutions. The open door category includes public two-year colleges and area vocational-technical institutes.⁴ These institutions' admissions standards only require evidence that the student has completed all high school requirements.

The pyramid of American postsecondary education is often measured in terms of admissions selectivity and prestige, but it is also closely aligned with the amount of instructional resources the institution spends per student. That is, the most selective colleges and universities have the largest endowments and provide the highest-quality education in terms of spending per student (Winston, 1999). Moreover, the pyramid also corresponds to costs so that the stated undiscounted tuition and fees charged by the institution (or the "list price") generally increase with the selectivity of the institution. However, out-of-pocket costs are different, particularly at the top of the pyramid and particularly for students with low family incomes. Richly endowed, more selective colleges and universities are not necessarily more expensive to attend because once highly-capable low-income students are admitted they often receive more financial aid than they would at a less selective college. All undergraduates are subsidized, but the subsidies are greatest at the more selective institutions, so that the colleges and universities that spend more per student do not necessarily cost more to attend.

Latino college students definitely enter less selective college and universities than their white peers. This partly reflects academic preparation, but the NELS data and other evidence show clearly that the cause is more far-reaching. At almost all levels of college selectivity, Hispanic college students are less likely than equally-prepared white college students to enroll at the more selective colleges and universities (Table 1). For example, among the best prepared Latinos, 60 percent attend non-selective colleges in comparison to 52 percent of whites. Open-door institutions attract 16 percent of well-prepared Latinos, in comparison to 12 percent of whites.

The consequences of this trend are straightforward: on average, Latino college students are less likely to persist to a bachelor's degree. A growing social science literature shows that college selectivity in and of itself is an important determinant of college completion. More selective institutions have higher graduation rates. Selectivity enhances completion not simply because selective institutions on average have better-prepared students. Studies that control for a variety of student background factors thought to influence college completion

⁴ The not-ratable category includes foreign institutions, sub-baccalaureate vocational schools, and specialized degree-granting institutions (e.g., colleges of art & design).

indicate that otherwise similar college students are more likely to obtain a bachelor's degree if they attend a more selective institution (Kane, 1998; Alon and Tienda, 2003; Light and Strayer, 2000).

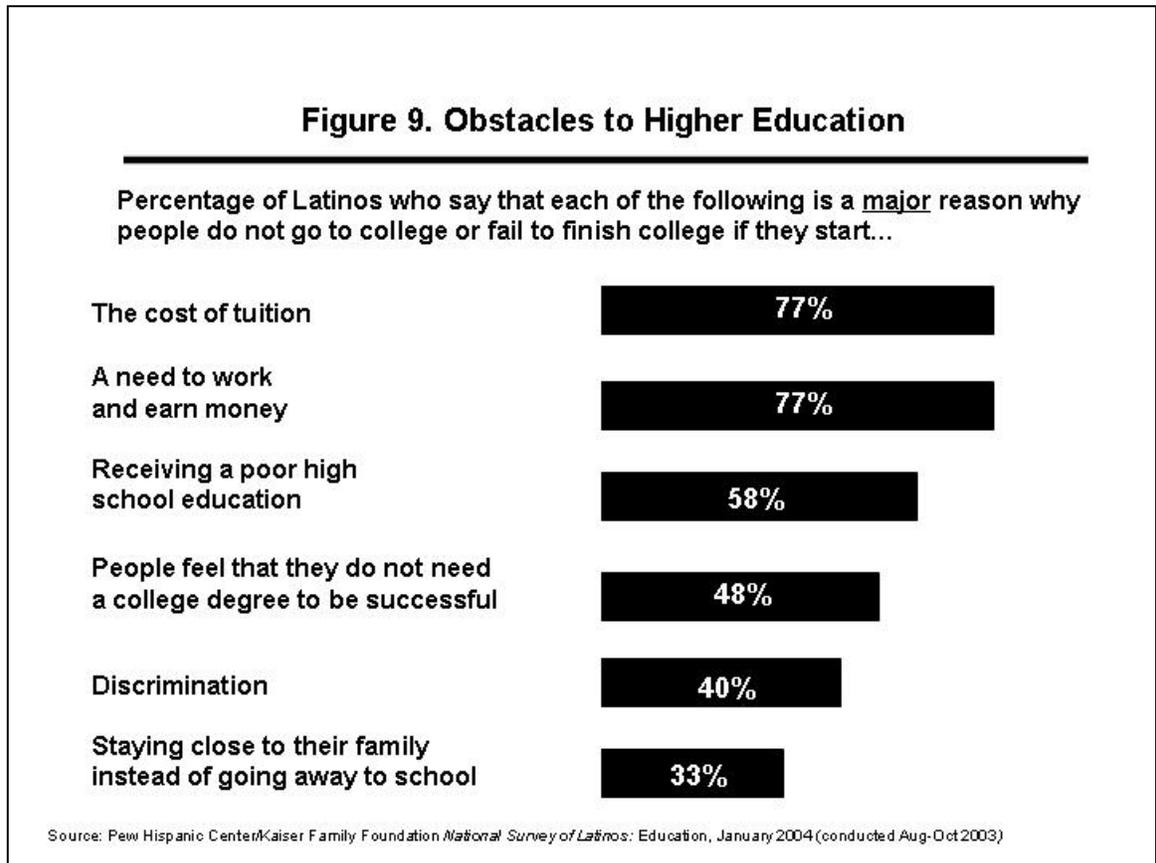
There is no clear consensus as to why selectivity increases the odds of graduation and a variety of factors seems to be at play. Alon and Tienda (2003), for example, show that more selective institutions award their students more financial aid and provide stronger mentoring for their students. Nonetheless, there is little doubt that college selectivity enhances completion. Kane (1998) finds that enrolling at a more selective institution is associated with a 3 percent increase in the likelihood of graduating, and that the effect of selectivity is about the same for minority and non-minority college students. A Latino undergraduate, indeed any undergraduate, will simply be more likely to finish his/her studies if he/she initially enrolls at a more selective college or university.

In a similar vein, while community colleges offer many valuable services and are an appropriate choice for many youth, the propensity among Hispanics to enroll in community colleges decreases their level of bachelor's degree completion. Over 60 percent of young Hispanic undergraduates begin their studies at two-year colleges, compared to 42 percent of whites. This phenomenon is examined in greater detail below, but it bears emphasis that the broad pathway to community colleges followed by Latinos leads to a reduced number of bachelor's degrees. A national study using detailed longitudinal information on the educational progress of Hispanic undergraduates in the 1980's concludes that "the chances of graduating with a four year degree are increased by enrolling [in] a four year program directly after graduating high school. Delaying entry, and enrolling initially in a two year program will hinder a student in achieving a four year degree. Unfortunately many Hispanic high school graduates follow this path (Ganderton and Santos, 1995)."

A second, less measurable consequence of not enrolling in more selective colleges and universities is that attendance at less selective institutions may actually dampen the student's learning process and development of new skills. This is more difficult to gauge because there are no systematic measures of educational achievement among college students. But the inputs to the educational process are clearly greater at more selective institutions. Educational spending per student is much greater at more selective college and universities (Winston, 1999). Furthermore, the measured "smarts" of the undergraduate's peers are greater at more selective institutions. Undergraduates educate each other and more selective institutions feature beneficial "peer effects." The fact of the matter is that undergraduate student body quality is a prominent measure of college quality.

No single factor explains why Latino youth enroll at less selective colleges than their white peers, and indeed it appears that a range of factors acting in combination are likely the cause. When asked in a recent nationwide survey

conducted by the Pew Hispanic Center and the Kaiser Family Foundation, over three-quarters of Latino respondents agreed that “the cost of tuition” and “a need to work and earn money” are major reasons why people do not go to college or fail to finish college (Figure 9). More than a majority of respondents cited poor high school education. White and African-American respondents gave similar answers when asked about these factors. One-third of Latino adults, twice the percentage of



white adults, indicated that proximity to home and family is an important factor.

Significant numbers of Latino youth are likely not enrolling at more selective colleges and universities because they are not even applying. College admission test information and other evidence suggest that Latino students are not even pursuing admission to selective schools. Nearly 300,000 Hispanics graduated from public high schools in 2000, about 11 percent of the graduating class, yet only 8 percent of students who took the SAT I that year were Hispanic (Table 4).⁵ Latino youth do not seem to be taking the necessary steps to be admitted to selective colleges and universities.

⁵ Some colleges and universities require the ACT test for college admission, rather than the SAT I. Hispanic students are an even smaller proportion of ACT test takers, since ACT colleges tend to be in the heartland of the nation rather than the coastal states where Latino youth are concentrated (Nettles, Millett, and Einarson, 2000).

We have nationally representative information on the application and college entrance exam behavior of the 1992 high school graduates (the NELS cohort). The U.S. Department of Education has examined the admission steps taken by the “college-qualified” portion of the 1992 high school class (Table 5). Among Latino students most likely to succeed in higher education, only 61 percent took college boards and applied to a four-year college or university. Over 73 percent of similar white high school graduates took the needed steps. Latinos that have succeeded in high school cannot leverage their accomplishments if they do not seize the opportunity to seek admission to more selective colleges and universities, particularly four-year institutions.

A recent survey of Latino parents concludes that the level of “college knowledge” among Latino parents is “objectively low” (Tornatzky, Cutler, and Lee 2002). Since the survey did not include a comparison sample of non-Hispanics, this study does not lead to conclusions concerning whether Hispanic parents are less informed about the process than white or African-American parents. Nonetheless, the survey indicates that college knowledge deficits are larger among Hispanic immigrant than Hispanic native-born parents. This finding is not consistent with the demonstrated behavior of their children. U.S.-educated Hispanic immigrant students are just as likely as their native-born peers to pursue postsecondary education (NCES, 1998), and there are no differences between native-born and foreign-born Hispanics in community college enrollment (NCES 1998; Fry 2002). Parents’ knowledge may only modestly affect the way their children approach the college admissions process.

The Exception: Hispanic High-Achievers and the Nation’s Top-Tier Four-Year Colleges

As a general rule, Hispanic college entrants are poorly positioned within the higher education hierarchy. They are less likely to enroll in more selective institutions than their white peers, and this is apparent when comparing white and Latino college entrants with similar high school academic preparation. There is, however, a notable exception: the enrollment of the nation’s best prepared Latino undergraduates and the nation’s highly selective colleges and universities, i.e., the pathway that links the best and the brightest to the very top of the undergraduate education pyramid. Hispanic undergraduates with the strongest preparation do enter the top of the pyramid in similar measure to whites. However, even the best-prepared Hispanics enroll in “open-door” institutions at a greater rate than whites, so there are disparities in pathways among the best-prepared Latinos and whites.

Three pieces of evidence suggest that the top Latino high school students enroll at the nation’s highly selective institutions in equal measure to similarly-prepared white youth.

First, NELS data reveal that 9 percent of both Hispanic and white undergraduates from the highest quintile of academic intensity enroll in highly selective colleges and universities (Table 1).

Second, students typically submit their college admissions scores to several institutions. Table 6 shows the average selectivity level of the colleges and universities to which students with high SATs have their scores sent. High-scoring Hispanics tend to send their scores to more selective colleges and universities than high-scoring white students.

Third, some weight has to be placed on the distribution of SAT scores. Each year about 9,000 Hispanic undergraduates matriculate at the nation's 140 most selective colleges (classified as either "most competitive" or "highly competitive" by Barron's), but fewer than 3,000 Hispanics each year score above 1300 on the SAT (Table 7).⁶ So high-scoring Latinos appear to have the opportunity to apply for admission at the very top of the pyramid.

While the most stellar Latino undergraduates enroll at the nation's most prestigious universities in similar fashion to their white peers, the impact on overall outcomes should not be overemphasized, because the top of the pyramid is very small. The nation's highly selective colleges educate only 3 percent of the nation's entering undergraduates (Table 1), and even smaller percentage of the nation's Latino undergraduates. As the Supreme Court found in the Grutter decision, admission and enrollment patterns at the most selective institutions are important because these schools contribute significantly to the ranks of the nation's decision-makers, but in measuring the educational progress of the population as a whole this sector is clearly an exception, not the rule.

II. BEYOND THE PATHWAY: HISPANIC PERSISTENCE TO THE BACHELOR'S DEGREE

The difficulties Latino college students face go beyond academic preparation and the postsecondary pathways that they pursue. Equally well-prepared Hispanic and white college students attending similarly selective colleges and universities do not complete bachelor's degrees at similar rates. The difficulties are evident in both the two-year and four-year sector.

⁶ Some of the elite Hispanic high school graduates may not need to take the SAT I, because they have taken the ACT instead. This fact does not alter the distribution — fewer than 1,000 Latinos who take the ACT score above 29 and fewer than 2 percent of all those who score above 29 are Latino.

Initial Entrants to Community Colleges

Many youth that begin postsecondary education at community colleges do not complete a postsecondary credential.⁷ Fairly small percentages of both white and Latino community college entrants complete associate's degrees and vocational certificates (Table 8).⁸ The only racial/ethnic disparity in degree completion among initial community college entrants is in bachelor's degrees. Latino community college students significantly trail their white peers in finishing bachelor's degrees.

Less than 13 percent of Hispanic students who begin at community college complete a bachelor's degree, compared to 23 percent of their white peers. Assuming that promoting degree completion for qualified students is a worthy objective, it might be argued that community colleges have "succeeded" if they facilitate the successful transfer of students to four-year colleges. Examining the propensity to transfer, however, does not alter the discrepancy — less than 25 percent of Hispanic community college students finish a bachelor's or transfer to a 4-year college, compared to 36 percent of white community college students.

One explanation might be that Hispanic two-year college entrants are less academically well-prepared than their white counterparts. The NELS data shows that 35 percent of white entrants to community colleges are academically qualified to attend a four-year college versus 21 percent of Hispanic entrants (Swail, Cabrera, and Lee, 2004). This difference, however, cannot fully account for the divergence in bachelor's degree completion rates. Our analysis of the NELS data controls for the academic preparation of two-year college entrants (Swail, Cabrera, and Lee, 2004) and finds that equally well-prepared Latinos are less likely to complete a bachelor's degree than whites. For example, among two-year college entrants that are "minimally qualified" for college, 16 percent of whites but only 7 percent of Hispanics finished a bachelor's degree.

One of the difficulties facing young Latinos at two-year colleges is their relatively low rates of full-time enrollment. Full-time students complete their degree programs quicker, and part-time enrollment is associated with failure to finish degrees (NCES, 1995a). Less than half of young Hispanics in two-year colleges pursue their education on a full-time basis over the entire academic year (Table 9), significantly below the rate for white students.

⁷ Accounting for the degree intentions of community college entrants does not radically alter the conclusion. Among 1992 high school graduates who first enrolled in community college by 1994 and sought a vocational certificate, 56 percent had obtained a formal credential by 2000. Among those seeking an associate's degree, 28 percent had obtained either an associate's degree or a bachelor's degree by 2000 (NCES, 2003c).

⁸ Other researchers also find that Hispanic community college students fare no worse than white community college students below the baccalaureate level. "In conclusion, this paper has found that Hispanics fare relatively well in subbaccalaureate education. They are neither underachievers nor overachievers, compared to whites (Alfonso, 2003)."

Persistence Difficulties among Two-year and Four-Year College Students

More than four out of five U.S.-educated young Hispanics who finish high school go on to postsecondary education, but that good news is tempered by the fact that Hispanic youth enter postsecondary education differently than white youth. We have already seen that they pursue different pathways. Furthermore, many Latino youth delay in getting on the path, i.e., many young Hispanic college entrants delay entry into postsecondary education. Among young four-year college students, 19 percent of Hispanics waited more than a year after high school graduation to start college, compared to 12 percent of white four-year undergraduates (Table 10). Delayed enrollment is more pervasive in two-year institutions, where almost 40 percent of young Hispanics delay enrollment, compared to 32 percent of white two-year students.

The delayed timing of Latino undergraduates relative to white undergraduates undercuts their success in college. Delayed entry is clearly associated with a diminished likelihood of completing a bachelor's degree. The U.S. Department of Education unequivocally asserts the importance of timing: "A key finding was that the odds of earning a bachelor's degree or higher change when entry into postsecondary education is delayed... Furthermore, the longer students delayed their entry into postsecondary education, the lower their average levels of educational attainment (NCES, 1995b)." In the race to a bachelor's degree, many Latino youth are slow to leave the gate, diminishing their chances of success.

Young Hispanic undergraduates also possess different family responsibilities than their white peers. They are nearly twice as likely as whites to have children or elderly dependents, and are more likely than white undergraduates to be single parents. The additional family responsibilities adversely affect college completion. Having financial dependents and single parent status are college persistence risk factors (NCES, 1995a).

Undergraduates who did not graduate high school with a regular high school diploma but obtained a General Educational Development (GED) or some other form of high school equivalency are also less likely to complete their degree. However, at least among young undergraduates, Hispanic students are not substantially more likely to lack a regular high school diploma. Nearly all young four-year undergraduates are regular high school graduates, regardless of race/ethnicity.

The college persistence literature consistently finds that residing on campus enhances the probability of completion (Astin, 1993). This may be because students who live on campus are more socially engaged and integrated into college life, fostering a sense of belonging. Although there are few differences among

young two-year undergraduates, Hispanic four-year undergraduates are much more likely to reside with their parents than their white peers. Almost half of Hispanic four-year students reside with their parents, compared to fewer than one-fifth of their white peers (Table 11).

CONCLUSIONS

Each year nearly 300,000 young Hispanics graduate from high school. Many of these youth will go on to postsecondary education. Fewer than 60,000 will complete a bachelor's degree.

Thousands of talented and prepared Hispanic college students are not realizing their potential. While many Latino youth are not academically prepared for college, many are. The NELS data indicate that 57 percent of Hispanic postsecondary students are at least "minimally qualified" for four-year college studies.⁹ The problem is that many of them are not completing any postsecondary credential, let alone a bachelor's degree. Over one-quarter of the best-prepared Latino college students end up with no postsecondary credential whatsoever, let alone a bachelor's degree (Table 12). Less than half of all academically qualified Hispanic college students will complete a bachelor's degree by age 26. As noted above, if the Latinos who are enrolled in eighth grade simply followed the same pathways through post secondary education as their white peers with no changes in their college graduation rates, one could expect a 20 percent increase in the number of Latinos receiving bachelor's degrees.

Hispanic college students are not leveraging the college admissions system to their advantage. Colleges differ in how well they assist and motivate their students to graduate; selective colleges have higher completion rates for all students, including Hispanics, than less selective colleges. Unfortunately, Latino college students are on low-trajectory paths. Nearly 60 percent of Latino students entering postsecondary education initially enroll in "open door" colleges and universities. As we have seen, this is only partly due to differences in academic preparation. Too many Latinos who are qualified for more demanding studies enter through the open door.

The problem of low completion rates extends beyond the pathway pursued. Well-prepared Latino college students do not do as well as well-prepared white college students even when they begin on the same path. The problem is particularly acute among nonselective colleges and universities. Over 80 percent of well-prepared white students at these colleges go on to a bachelor's degree as compared to less than 60 percent of identically prepared Hispanics. Colleges and

⁹ 32 percent are either "somewhat," "very," or "highly qualified" for four-year college work.

universities are simply not succeeding with Hispanic students to the extent that they are with white students, and inadequate secondary school preparation is not to blame.

Table 1: Distribution of 1988 Eighth Graders who went on to postsecondary education by the selectivity of the true first postsecondary institution, by race/ethnicity and high school academic intensity (in percent)

Race/ethnicity	High School Academic Intensity	Highly Selective	Selective	Non-Selective	Open door	Not ratable	Total
Hispanic or Latino	Highest quintile	8.8	14.5	59.7	16.0	1.1	100.0
	2nd quintile to 4th quintile	1.3	6.3	26.0	65.7	0.7	100.0
	Lowest quintile	-	1.4	17.6	78.9	2.0	100.0
	All	2.3	7.0	30.5	59.2	0.9	100.0
White, not Hispanic	Highest quintile	8.5	26.5	52.1	12.0	0.9	100.0
	2nd quintile to 4th quintile	1.1	9.1	43.7	44.9	1.1	100.0
	Lowest quintile	-	2.7	24.5	71.9	1.0	100.0
	All	3.0	13.2	43.9	38.8	1.1	100.0
Black, not Hispanic	Highest quintile	3.0	18.7	58.1	20.3	-	100.0
	2nd quintile to 4th quintile	0.8	5.1	46.9	46.9	0.4	100.0
	Lowest quintile	-	0.9	16.8	82.4	-	100.0
	All	1.1	7.4	45.0	46.2	0.3	100.0
Asian or Pacific Islander	Highest quintile	26.3	31.7	29.8	11.6	0.5	100.0
	2nd quintile to 4th quintile	5.5	13.3	35.2	45.6	0.5	100.0
	Lowest quintile	-	-	31.7	68.3	-	100.0
	All	13.7	20.0	32.7	33.2	0.5	100.0
All	Highest quintile	9.5	25.7	51.3	12.7	0.8	100.0
	2nd quintile to 4th quintile	1.3	8.7	41.9	47.1	1.0	100.0
	Lowest quintile	-	2.3	23.1	73.7	1.0	100.0
	All	3.3	12.5	42.3	40.9	1.0	100.0

Notes: The source is Educational Policy Institute tabulations of the NELS postsecondary transcripts file (NELS 2003-402). Universe is made up of 1988th graders that participated in both the base year and the fourth follow up and whose first true postsecondary institution attended was either a 2-year or a 4-year institution. Accordingly, the 2000 panel weight F4BYPNWT was used as well as the college-transcript derived variable TRUFIRST. Cases with missing values were excluded

Table 2: Percentage of NELS postsecondary participants who earned a bachelor's degree by 2000, by selectivity of first institution attended and high school academic intensity

High School Academic Intensity	Highly Selective and Selective	Non-Selective	Open door
Highest quintile			
Hispanic or Latino	83.0	57	69.2
White, not Hispanic	89.8	81.4	48.7
Black, not Hispanic	77.1	52.1	85.2
Asian or Pacific Islande	94.3	71.2	70.5
All	89.7	77.5	55
2nd quintile to 4th quintile			
Hispanic or Latino	77.0	42.7	9
White, not Hispanic	82.8	62.4	20.3
Black, not Hispanic	50.1	45	3.8
Asian or Pacific Islande	64.3	63.4	16.4
All	79.4	59.6	17.3
Lowest quintile			
Hispanic or Latino		34.3	2.2
White, not Hispanic		30.3	8.7
Black, not Hispanic		34.4	0
Asian or Pacific Islander		2.6	1.5
All		29.8	6.8

Notes: The source is Educational Policy Institute tabulations of the NELS postsecondary transcripts file (NELS 2003-402). The 2000 panel weight F4BYPNWT was used to estimate the number of 8th graders in the population that participated in both the base year and the fourth followed up that took place 12 years later (approximately 2.9 million). Highest PSE degree completed is based on college transcripts (HDEG).

Table 3: Simulation of the effect of pathway and completion rates on Hispanic bachelor's degree completion

Assume 451,984 Hispanic postsecondary entrants

Baseline: Hispanic college selectivity distribution and Hispanic college completion rates

High School Academic Intensity	Highly Selective and Selective	Non-Selective	Open door	Total
Highest quintile	14,066	24,763	8,057	
2nd quintile to 4th quintile	18,455	35,025	18,655	
Lowest quintile		3,847	1,106	
All	32,521	63,635	27,818	123,974
Simulation 1: White college selectivity distribution and Hispanic college completion rates				
Highest quintile	21,129	21,610	6,043	
2nd quintile to 4th quintile	24,769	58,869	12,749	
Lowest quintile		5,356	1,008	
All	45,898	85,835	19,800	151,532
Simulation 2: Hispanic college selectivity distribution and White college completion rates				
Highest quintile	15,225	35,363	5,670	
2nd quintile to 4th quintile	19,847	51,184	42,077	
Lowest quintile		3,399	4,375	
All	35,072	89,946	52,121	177,139

Table 4: Racial/Ethnic Distribution of High School Graduates and SAT Test Takers, 2000

	Hispanic or Latino	White, not Hispanic	Black, not Hispanic	Asian or Pacific Islander	American Indian or Alaska Native	Other	No Response	All
High School Graduates	282,610	1,785,866	328,182	122,759	25,337			2,544,754
Row %	11	70	13	5	1			100
SAT 1 Test Takers	97,872	712,105	119,591	96,717	7,658	38,634	187,701	1,260,278
Row %	8	57	9	8	1	3	15	100

Source: 1999-2000 public high school graduates from NCES, (2003d), SAT Test Takers from College Board, 2000 *College-Bound Seniors, National Report*

Table 5: Steps taken toward four-year admission by "college-qualified" high school graduates (in percent)

Race/ethnicity	Took test, applied	Took test, did not apply	Applied, did not take test	Did neither step
Hispanic or Latino	61.4	15.8	2.2	20.5
White, not Hispanic	73.2	15.5	0.8	10.5
Black, not Hispanic	74.4	8	3.4	14.1
Asian or Pacific Islander	80.1	11.6	0.6	7.8
All	72.6	14.9	1.1	11.4

Source: NCES, *Access to Postsecondary Education for the 1992 High School Graduates*, NCES 98-105

Table 6: Mean of Median Selectivity of Colleges sent SAT Test Scores by Race, 1999

Race/ethnicity	SAT score	
	1300-1390	1400 and above
Hispanic or Latino	7.98	8.78
White, not Hispanic	7.45	8.47
Black, not Hispanic	8.3	9.1
Asian or Pacific Islander	8.25	9.14
American Indian or Alaska Native	7.45	8.43
All	7.64	8.65

Source: Nettles, Millett, and Einarson (2000)

Notes: College selectivity is based on *Barron's Profile of American Colleges*.

This classification has 10 categories ranging from "most competitive" colleges (assigned a 10) to "Noncompetitive four year" colleges (a 2) and two-year colleges (a 1).

Table 7: Racial/Ethnic Distribution of 1999 High Achieving SAT I Test Takers

	Hispanic or Latino	White, not Hispanic	Black, not Hispanic	Asian or Pacific Islander	American Indian or Alaska Native	Other Citizen	Non-Citizen	All
Scored 1300 to 1390	1,884	48,333	1,037	5,825	287	2,321	5,334	65,021
Row %	3	74	2	9	0	4	8	100
Scored 1400 and above	840	28,222	382	5,204	125	1,523	3,712	40,008
Row %	2	71	1	13	0	4	9	100

Source: Nettles, Millett, and Einarson (2000)

Table 8: Degree Attainment of 1992 High School Graduates that Initially Enrolled in Community Colleges, as of 2000 (in percent)

Race/ethnicity	Highest Degree Earned				No Degree Attained, Attended 4-year
	None	Certificate as highest	Associate's as highest	Bachelor's or higher	
Hispanic or Latino	64.0	8.3	15.0	12.7	11.3
White, not Hispanic	47.0	12.6	17.9	22.5	13.2
Black, not Hispanic	56.8	16.6	18.5	8.1	7.9
Asian or Pacific Islander	56.5	7.4	6.6	29.5	14
American Indian or Alaska Native	70.9	19.3	9.8	0	6.7
All	50.5	12.4	17.0	20.1	12.5

Source: NCES (2003). The table depicts the outcomes of 1992 high school graduates that first enrolled in community colleges by December 1994.

Table 9. 18-to-24 Year Old Two-Year College Undergraduate Full-time Enrollment Status, 1999-2000 (in percent)

Race/ethnicity	Exclusively full-time	Mixed full-time and part-time	Exclusively part-time	Total
Hispanic or Latino	40.3	11.7	47.9	100.0
White, not Hispanic	52.1	13.1	34.8	100.0
Black, not Hispanic	58.2	10.1	31.7	100.0
Asian	58.9	11.0	30.2	100.0

Source: 1999-2000 National Postsecondary Student Aid Study (NPSAS: 2000) Data Analysis System

Notes: Based on the NPSAS variable ATTNPTRN. "Exclusively full-time" means the undergraduate is enrolled full-time during all months enrolled in college.

Table 10. 18-to-24 Year Old Undergraduate Factors affecting Persistence, 1999-2000 (in percent)

Race/ethnicity	Delayed postsecondary enrollment	Has dependents	Single parent	Did not graduate high school
4-year Institution Enrollment				
Hispanic or Latino	19.0	10.7	7.0	3.1
White, not Hispanic	11.8	3.3	1.8	0.9
Black, not Hispanic	15.4	13.0	11.9	2.0
Asian	16.1	2.3	1.8	6.0
2-year Institution Enrollment				
Hispanic or Latino	37.6	17.9	11.0	7.8
White, not Hispanic	31.7	9.7	6.3	6.2
Black, not Hispanic	39.5	32.4	28.9	6.8
Asian	43.9	6.6	6.6	9.9

Source: 1999-2000 National Postsecondary Student Aid Study (NPSAS: 2000) Data Analysis System

Notes: Undergraduates that earned GEDs are considered as not having "graduated" high school.

Table 11. 18-to-24 Year Old Undergraduate Living Arrangements, 1999-2000 (in percent)

Race/ethnicity	Local Residence while Enrolled			Total
	On campus	Off campus	Living with parents	
4-year Institution Enrollment				
Hispanic or Latino	16.9	34.3	48.8	100.0
White, not Hispanic	38.3	42.5	19.2	100.0
Black, not Hispanic	49.0	27.8	23.2	100.0
Asian	33.4	42.4	24.2	100.0
2-year Institution Enrollment				
Hispanic or Latino	2.0	35.2	62.9	100.0
White, not Hispanic	3.8	40.1	56.1	100.0
Black, not Hispanic	6.9	36.8	56.3	100.0
Asian	2.8	38.5	58.7	100.0

Source: 1999-2000 National Postsecondary Student Aid Study (NPSAS: 2000) Data Analysis System

Table 12: Percentage of NELS postsecondary participants who earned an academic credential by 2000, by high school academic intensity

High School Academic Intensity	None	Certificate	Associate's	Bachelor's	Total
Highest quintile					
Hispanic or Latino	27.2	0.8	8.5	63.4	100.0
White, not Hispanic	17	0.8	3.2	79.1	100.0
Black, not Hispanic	33.8	-	7.1	59	100.0
Asian or Pacific Islander	13.3	0.7	2.1	83.9	100.0
All	18.3	0.7	3.6	77.3	100.0
2nd quintile to 4th quintile					
Hispanic or Latino	68.3	5	8.1	18.6	100.0
White, not Hispanic	49.5	4.5	8.6	37.3	100.0
Black, not Hispanic	71.2	5	5.3	18.5	100.0
Asian or Pacific Islander	47.7	5.4	8.9	38	100.0
All	53.5	4.6	8.3	33.6	100.0
Lowest quintile					
Hispanic or Latino	87.1	6	2.2	4.7	100.0
White, not Hispanic	78.9	6.3	7.4	7.4	100.0
Black, not Hispanic	92.3	3.6	1.2	2.9	100.0
Asian or Pacific Islander	90.1	7.5	1.5	0.9	100.0
All	81.6	5.9	6	6.4	100.0

Notes: The source is Educational Policy Institute tabulations of the NELS postsecondary transcripts file (NELS 2003-402). The 2000 panel weight F4BYPNWT was used to estimate the number of 8th graders in the population that participated in both the base year and the fourth followed up that took place 12 years later (approximately 2.9 million). Highest PSE degree completed is based on college transcripts (HDEG).

REFERENCES

- Adelman, Clifford. 1999. *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, DC: U.S. Department of Education.
- Alfonso, Mariana. 2003. *Educational Attainment of Hispanics in Sub-baccalaureate Education*. Boston, MA: Harvard Civil Rights Project.
- Alon, Sigal, and Marta Tienda. 2003. Hispanics and the "Misfit" Hypothesis: Differentials in College Graduation Rates by Institutional Selectivity, August, mimeo.
- Astin, Alexander W. 1993. *What Matters in College? Four Critical Years Revisited*. San Francisco, CA: Jossey-Bass.
- Carnevale, Anthony P., and Stephen J. Rose. 2003. *Socioeconomic Status, Race/Ethnicity, and Selective College Admissions*. New York, NY: The Century Foundation.
- Fry, Richard. 2002. *Latinos in Higher Education: Many Enroll, Too Few Graduate*. Washington, D.C.: Pew Hispanic Center.
- Ganderton, Phillip T., and Richard Santos. 1995. "Hispanic College Attendance and Completion: Evidence from the High School and Beyond Surveys," *Economics of Education Review*, pages 35-46.
- Kane, Thomas J. 1998. "Racial and Ethnic Preferences in College Admissions," in *The Black-White Test Score Gap*, edited by Christopher Jencks and Meredith Phillips. Washington, DC: The Brookings Institution.
- Light, Audrey, and Wayne Strayer. 2000. "Determinants of College Completion: School Quality or Student Ability?," *The Journal of Human Resources*, Spring, pages 299-332.
- National Center for Education Statistics. 2003a. *Racial/Ethnic Differences in the Path to a Postsecondary Credential*. NCES 2003-005. Washington, DC: NCES.

National Center for Education Statistics. 2003b. *Postsecondary Attainment, Attendance, Curriculum, and Performance: Selected Results from the NELS:88/2000 Postsecondary Education Transcript Study (PETS), 2000*. NCES 2003-394. Washington, DC: NCES.

National Center for Education Statistics. 2003c. *Community College Students: Goals, Academic Preparation, and Outcomes*. NCES 2003-164. Washington, DC: NCES.

National Center for Education Statistics. 2003d. *Digest of Education Statistics, 2002*. NCES 2003-060. Washington, DC: NCES.

National Center for Education Statistics. 2002a. *The Condition of Education 2002*. NCES 2002-025. Washington, DC: NCES.

National Center for Education Statistics. 2002b. *Coming of Age in the 1990s: The Eighth-Grade Class of 1988 12 Years Later*. NCES 2002-321. Washington, DC: NCES.

National Center for Education Statistics. 1998. *Generational Status and Educational Outcomes Among Asian and Hispanic 1988 Eighth Graders*. NCES 1999-020. Washington, DC: NCES.

National Center for Education Statistics. 1997. *Access to Postsecondary Education for the 1992 High School Graduates*. NCES 98-105. Washington, DC: NCES.

National Center for Education Statistics. 1995a. *Profile of Undergraduates in U.S. Postsecondary Education Institutions: 1992-93, With an Essay on Undergraduates at Risk*. NCES 96-237. Washington, DC: NCES.

National Center for Education Statistics. 1995b. *Educational Attainment of 1980 High School Sophomores by 1992*. NCES 95-304. Washington, DC: NCES.

Nettles, Michael T., Catherine M. Millett, and Marne K. Einarson. 2000. High Potential College Bound Seniors: Their Backgrounds, Preparation, and Aspirations, October 31, presentation to the 2000 College Board National Forum.

Pew Hispanic Center/Kaiser Family Foundation, 2004. *National Survey of Latinos: Education, Summary and Chartpack*, January, Washington, D.C.: Pew Hispanic Center.

Rivkin, Steven G. 1995. "Black/White Differences in Schooling and Employment," *Journal of Human Resources*, Fall, pages 826-852.

Swail, Watson Scott, Alberto F. Cabrera, and Chul Lee. 2004. *Latino Youth and the Pathway to College*. Washington, DC: Pew Hispanic Center.

Tornatzky, Louis G., Richard Cutler, and Jongho Lee. 2002. *College Knowledge: What Latino Parents Need to Know and Why They Don't Know It*. Claremont, CA: Tomas Rivera Policy Institute.

Winston, Gordon C. 1999. "Subsidies, Hierarchy and Peers: The Awkward Economics of Higher Education," *Journal of Economic Perspectives*, Winter, pages 13-36.

Appendix A: Data Source

Most of the tabulations reported are based on the U.S. Department of Education’s National Education Longitudinal Survey (NELS), which tracked the experiences of a nationally representative sample of 1988 eighth graders. The fourth follow-up survey of these youth was conducted in 2000, when most were 26 years of age. The original 1988 survey included about 25,000 eighth graders and represented a weighted sample of 3,008,000 eighth grade students nationally. The NELS tabulations herein are based on the 11,384 sample members who participated in both the original 1988 survey and the fourth follow-up in 2000. This sample represents 2,928,000 members of the 1988 eighth grade class 12 years later. The class has shrunk over the ensuing 12 years due to mortality and emigration (NCES 2002b).

The NELS analysis is restricted to those 1988 eighth graders who by 2000 reported participating in some form of postsecondary education. About 2.2 million reported completing some postsecondary credits by 2000 (NCES 2002b). Of the 317,000 Hispanics in the NELS fourth-follow-up, approximately 220,000, or about 70 percent, reported obtaining at least some postsecondary credits (Appendix Table A).

	Reported at least some postsecondary credits (in 1,000s)	Percent
Hispanic or Latino	221	11
White, not Hispanic	1,534	70
Black, not Hispanic	262	12
Asian or Pacific Islander	62	2
American Indian or Alaska Native	23	1
More than one race	68	3
		<u>100</u>

Source: NCES, National Education Longitudinal Study: 1988/2000 Data Analysis System 04/18/03

Appendix B: An Alternative Analysis of the Postsecondary Pathway

Much of our analysis is validated by a similar examination of the postsecondary educational experiences of the 1988 NELS eighth grade cohort (Swail, Cabrera, and Lee, 2004). The basic difference is that Swail, Cabrera, and Lee (2004) measure the college preparedness of youth differently and do not examine the admissions selectivity of the postsecondary institutions. These are the relevant findings from the Swail, Cabrera, and Lee (2004) study:

- Hispanic eighth graders were as likely as white eighth graders to pursue some form of postsecondary education (Table B1). Three-quarters of both white and Latino eighth graders enrolled in postsecondary education by 2000. Hispanic eighth graders were not necessarily as likely as white eighth graders to complete high school by 1992 or to enroll in postsecondary education by 1993 or 1994.
- The cohort's academic preparation is gauged by the U.S. Department of Education's composite measure of academic qualification for four-year college work. Swail, Cabrera, and Lee categorize the level of preparation as either "qualified," "minimally qualified," or "not qualified." Table B1 shows that Hispanic students in this cohort were more likely to continue to postsecondary education than their white counterparts of the same preparation level. Rivkin (1995) reports similar findings for African-American and white youth with equal academic preparation.
- Latino postsecondary entrants are less likely to initially enroll in four-year colleges and universities (Table B2). This is partially explained by the lower-quality academic preparation that Hispanics on average receive in high school. However, regardless of qualification level, Hispanics are less likely to initially enroll in four-year institutions.
- The disparity in bachelor's degree completion rates between Hispanic and white students who begin their studies at four-year colleges is only significant in the "qualified" category (Table B3). Nearly 80 percent of "qualified" white four-year students finished college, compared to 57 percent of "qualified" Hispanic four-year students. The eighth grade class of 1988 yielded about 46,000 Hispanic BAs. The difference in "qualified" initial four-year entrant persistence rates represents about 11,000 Hispanic BAs.
- Bachelor's degree completion rates of students beginning at two-year colleges are fairly low (Table B4). Only three out of ten of the best-prepared white and Hispanic

students at two-year colleges complete a bachelor's degree by age 26. Rates of completion are even lower for less well-prepared students.

4-Year College Qualification Level		Entered Postsecondary Education	No Postsecondary Education	
Not Qualified	Latino	57	43	100
	White	53	47	100
Minimally Qualified	Latino	91	9	100
	White	85	15	100
Qualified	Latino	97	3	100
	White	96	4	100
All	Latino	74	26	100
	White	78	22	100

Source: Swail, Cabrera, and Lee (2004) exhibit 1

4-Year College Qualification Level		4-Year	2-Year	Other	
Not Qualified	Latino	16	77	6	100
	White	24	69	7	100
Minimally Qualified	Latino	33	65	1	100
	White	42	57	2	100
Qualified	Latino	64	34	2	100
	White	76	24	0	100

Source: Swail, Cabrera, and Lee (2004) exhibit 1

Table B3: Bachelor's Attainment Rates of Initial 4-Year College Entrants (in percent)

4-Year College Qualification Level		Attained a B.A.
Not Qualified	Latino	32
	White	36
Minimally Qualified	Latino	56
	White	52
Qualified	Latino	57
	White	79

Source: Swail, Cabrera, and Lee (2004) exhibit 1

Table B4: Bachelor's Attainment Rates of Initial 2-Year College Entrants (in percent)

4-Year College Qualification Level		Attained a B.A.
Not Qualified	Latino	5
	White	10
Minimally Qualified	Latino	7
	White	16
Qualified	Latino	31
	White	31

Source: Swail, Cabrera, and Lee (2004) exhibit 1