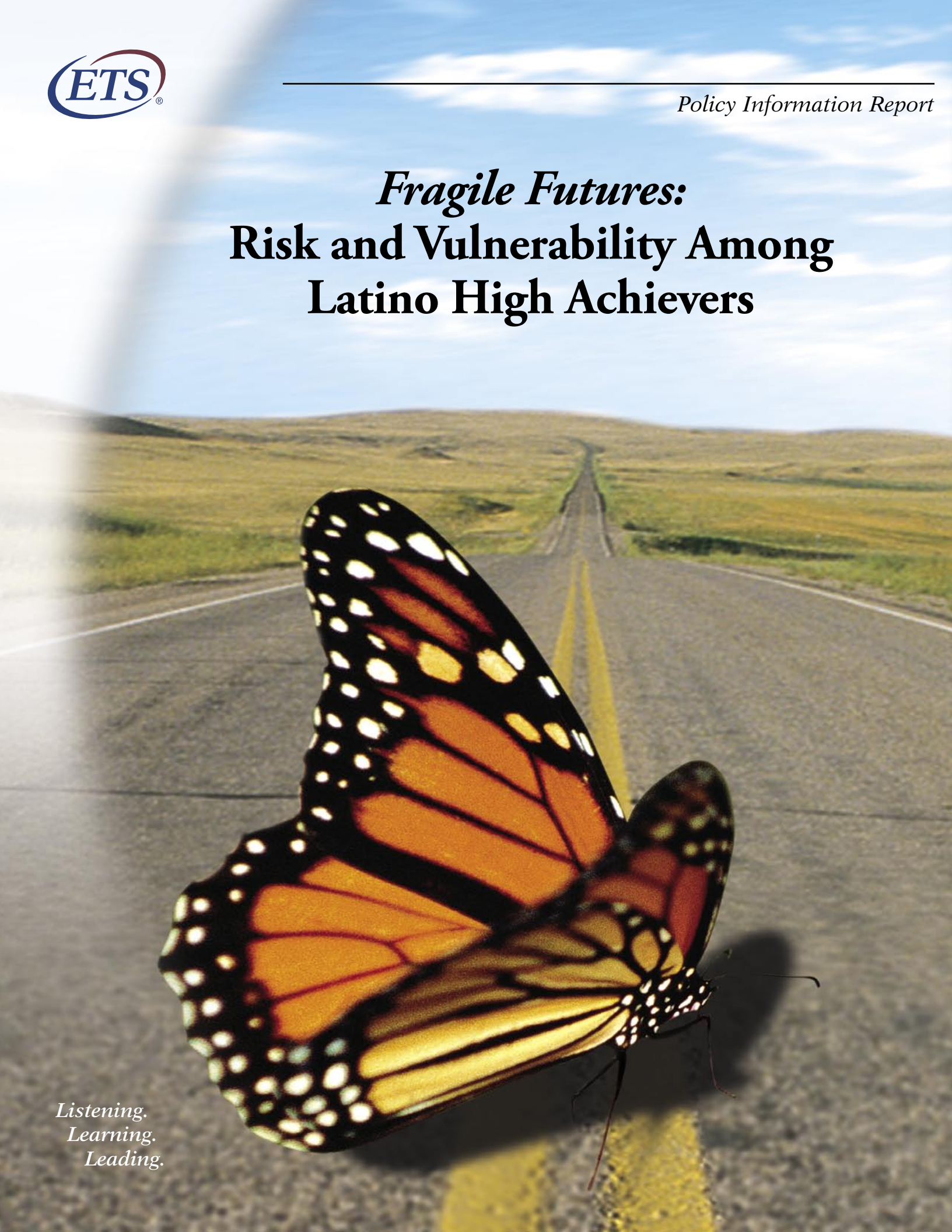
Policy Information Report

Fragile Futures: Risk and Vulnerability Among Latino High Achievers



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Preface

When we think of closing achievement gaps, we often think about the students who are at the bottom of the achievement distribution. These students certainly need help and could benefit from interventions aimed at improving their educational achievement. These are the students who are typically the targets of policies, like No Child Left Behind, that seek to promote educational improvement. The unique needs of high-achieving students appear to be less often targeted by public policies. This is particularly a concern for high-achieving minority students who may lack the support and resources that are provided to their advantaged peers. The academic futures of high-achieving minority students can be very fragile — hanging by a thin thread of hope that nothing will interfere with their educational progress. The "fragile futures" of high-achieving Latino students are the focus of this report.

Using two national databases, Patricia Gándara presents a portrait of high-achieving Latino students and shows us how their profile differs from their high-achieving peers who are members of other racial/ethnic groups. Gándara also reviews what we know about existing intervention programs that are designed to support these high-achieving students. She examines several policy options that are available to increase the academic achievement and educational attainment of Latino high achievers from low-income backgrounds.

To help convey the complicated lives of these students, Dr. Gándara describes the experiences of four high-achieving Latino students who participated in a longitudinal study. Vignettes of Andrés, Ofelia, Angela, and José help us understand the challenges they face as they complete high school and attempt to enter postsecondary education.

Michael T. Nettles
Vice President
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When policymakers talk about closing the achievement gap, the focus is typically on bringing the average performance of minority or economically disadvantaged students in line with the average performance of White or middle-class students. From a statistical perspective, this strategy of bringing up the bottom to close the achievement gap is illogical. It would require a massive movement of lower-performing students toward the middle of the score distribution to achieve similarly "average" scores if nothing is done simultaneously about raising test scores at the upper end of the score distribution. This report takes a different perspective and focuses on high-achieving Latino students and the language, culture, and immigration-status issues that can greatly affect their motivation and ultimate achievement.

The achievement gap is not just a phenomenon that exists at the mid-range of scores; it is a significant feature of achievement at the upper-score ranges as well. For example, the top fifth of Latino students in 2002 had an SAT Verbal score of 598 compared to a score of 663 for the top fifth of White students. These high-achieving Latino students are more likely to come from economically and educationally disadvantaged backgrounds. Thus, their academic futures can be considered fragile — hanging by a thin thread of hope that nothing will go terribly wrong in their extended families, or in school, that will dash their pursuit of academic success.

It is imperative that interventions designed to close the achievement gap attend to the needs of the entire academic spectrum of Latino students. This report is intended to inform such efforts by:

- describing the status of academic achievement for Latino students
- comparing the characteristics of Latino high achievers with those of White high achievers at different points along the K-12 continuum
- describing the lives and academic choices of Andrés, Ophelia, Angela, and José — four high-achieving Latino students who were part of a longitudinal study
- reviewing what we know about the ability of intervention programs to help high-achieving students realize their potential
- examining the policy options that are available to increase the academic achievement and educational attainment of Latino high performers from low-income backgrounds.

Using two national databases, analyses reveal that high-achieving Latino students are much more likely than high-achieving White students to have parents with very low educational levels — more than 25 percent of Latino high-achieving students have at least one parent who did not graduate from high school compared with less than 5 percent of their White peers. These less-educated parents are not often in a position to provide specific support for and advice to their children about successfully navigating through school.

In the early grades, school seemed to have a greater effect for Latino students than for White students on the usually close relationship between socioeconomic status (SES) and achievement. Latino students from low SES backgrounds were more likely than White students to move into the upper 20 percent of achievers after kindergarten. Consistent with other studies, the report finds that school may have a greater influence on the academic outcomes of Latinos than on White students.

While some Latino students who are consistently high achievers may be "on track" for college, their academic careers can be derailed by the same factors that are often associated with low-achieving students. If they are among the few who are invited into a college access program, it will not likely be designed with high achievers in mind, and the support offered may not be appropriate for their needs.

The failure of some high-achieving Latino students to navigate successfully through high school and into college illuminates the out-of-school challenges many of these students face and the failure of U.S. education and social policy to acknowledge and deal with these issues. Schools cannot tackle this job alone. It will require a broader, "whole child" vision of youth development and support.

This report concludes by examining some policy options that are available to increase the academic achievement and educational attainment of Latino high achievers. It also offers some recommendations for programs and policies that can help convert the thin thread of hope held by many Latino high achievers into a sturdy lifeline to the future.

Much has been written in recent years about "closing the achievement gap." A search of education articles will yield hundreds of titles with that phrase. What it usually refers to are efforts to bring the average performance of minority or economically disadvantaged students in line with the average performance of White or middle-class students. Discussion on ways to close this achievement gap generally revolves around focusing resources or remediation on the lower-performing students among the minority groups. The result is a proliferation of dropout programs designed to ensure high school graduation and of college-access programs that aim to place students in college — any college. Part-time enrollment in a two-year college is counted the same as enrollment in a selective four-year university. In other words, the strategy is to "bring up the bottom."

Of the literally hundreds of educational intervention programs that Gándara and Bial have reviewed, few waver from this strategy. Few even acknowledge the notion that high-achieving students might need support and that this support might differ from what is needed by their lower-achieving peers.[1]

A notable exception is the work of Edmund Gordon and the National Study Group for the Affirmative Development of Academic Ability that attempts to raise the issue of developing high achievement among low-income and minority students.[2] The National Study Group concludes its 2004 report with a series of recommendations that focus largely on better preparing adult educational leaders and instructors to teach diverse students with research-based methods proven to enhance these students' learning. Yet this perspective has hardly permeated the culture of research and practice that continues to focus its attention almost exclusively on the bottom half of the achievement distribution. Moreover, this effort does not acknowledge the unique needs of Latino high achievers, including language, culture and immigration-status issues — all of which can greatly affect motivation and achievement.

From a statistical perspective, the strategy of focusing only on bringing up the bottom in order to close the achievement gap is illogical. It would require a truly massive movement of the lower-performing students toward the middle of the academic distribution to achieve similarly "average" scores if nothing is done simultaneously about raising test scores and other performance indicators at the upper end of the distribution scale.

The average high-achieving Latino student is performing at a lower level than the average high-achieving White student. For example, looking at the 2002 SAT scores (which include a smaller percentage of the Latino student population than is true for the White student population), one finds that the top fifth of Latino test takers achieved a mean of 598 on the SAT verbal section and a mean of 646 on the SAT math, compared to a mean of 663 and 720, respectively, for White test takers.[3] (This is a difference of two-thirds to three-fourths of a standard deviation.) Thus, the achievement gap is not just a phenomenon that exists at the midrange of scores, but is a significant feature at the upper ranges of achievement as well. How is this discrepancy in achievement among the upper quintile of scorers explained?

Generally speaking, high-performing students tend to come from higher-income and higher-educated families.[4] Students from such backgrounds often have a multitude of financial and educational resources at their disposal. However, among economically disad-

Author's note: Throughout this report, the terms "Latino" and "Hispanic" are used interchangeably to refer to the broad category of people of Spanish-speaking origin. The term "Latino" is frequently preferred by members of this group, while "Hispanic," preferred in some areas, is most often used for government statistics. Most data sets do not disaggregate for subgroups, but where specific subgroups (e.g., Mexican origin) are discussed, it is noted in the text. It is also important to note that the different Latino subgroups often have widely varying achievement profiles. However, the two most numerous groups — Mexican Americans and Puerto Ricans — perform at similar levels and constitute about three-fourths of the Hispanic/Latino category.

[1] Patricia Gándara and Deborah Bial, *Paving the Way to Postsecondary Education: K-12 Intervention Programs for Underrepresented Youth*, Washington, DC: National Postsecondary Education Cooperative, National Center for Education Statistics, 2001.

[2] Edmund Gordon, *All Students Reaching the Top. Report of the National Study Group for the Affirmative Development of Academic Ability*, Naperville, IL: Learning Point Associates, 2004.

[3] College Board, unpublished SAT data from 2002 administration.

[4] Valerie Lee and David Burkham, *Inequality at the Starting Gate: Social Background Differences in Achievement as Children Begin School*, Washington, DC: Economic Policy Institute, 2002; Michael Puma et al., *Prospects: Final Report on Student Outcomes*, Washington, DC: U.S. Department of Education, Office of the Under Secretary, 1997; and Karl White, "The Relationship Between Socioeconomic Status and Academic Achievement," *Psychological Bulletin*, 91, 461-81, 1982.

vantaged groups, as well as groups for whom racial, ethnic, and linguistic discrimination remains a reality, the landscape can be quite different. Unlike other high-achieving students, Latinos who demonstrate high academic ability — especially those of Mexican and Puerto Rican ancestry — are not as likely to come from economically and educationally advantaged backgrounds. Disproportionately, the schools that minority and low-income students attend are less likely to offer rigorous curricula and Advanced Placement classes.[5] They also tend to have lower percentages of qualified teachers and fewer resources overall.[6] Moreover, the aspirations for these students tend to be lower, since neither peers nor teachers expect them to shoot for high academic goals.[7]

It is hardly a secret that schools in this country that serve poor children tend to serve them poorly,[8] and, partly as a result, low-income and disadvantaged children with the same potential as their middle-class peers score worse on standardized tests of academic achievement. Even those poor and otherwise disadvantaged children who rank at the upper end of the achievement spectrum may not be supported by rich educational resources in the home. Their academic futures may be hanging by a thin thread of hope that nothing will go terribly wrong in their extended families, or their relationship to school, to dash their dreams. And, even if they manage to make it through their entire K-12 education as outstanding students, they remain at very high risk for not realizing their academic promise beyond high school.[9] Their academic futures could, perhaps, be characterized as "fragile."

Richard Fry asserts that Latino students generally under-enroll in selective higher-education institutions even when they have the preparation and achievement levels necessary to be admitted.[10] And because such institutions boast higher graduation rates than less selective colleges, Latino college students do not graduate from college at the same rates as other ethnic groups.[11] That Latino students appear to "shoot low" is probably related to the low socioeconomic backgrounds of so many of these students, which may cause them to apply to relatively less expensive schools, and to their lack of familiarity with the differential benefits of attending more selective colleges.

If we are indeed committed to closing the achievement gap, it is imperative to attend to the needs of the entire spectrum of Latino achievers. It follows, then, that interventions focused on, and tailored to, the special needs of high achievers within this group may be necessary.

The next section of this report discusses the current status of Latino educational achievement and describes the context in which these high achievers are situated. The section after that describes the background characteristics of Latinos in the upper quintile of academic achievement and compares these characteristics with those of White students. This is followed by a depiction of the life circumstances and academic choices of high-achieving Latino students involved in a longitudinal study, and a review of what is known about the ability of intervention programs to help high achievers realize their potential. This review includes a discussion on how these programs and strategies are and are not used to support high achievement. The report concludes with an examination of policy options that are available to increase the academic achievement and educational attainment of Latino high performers from low-income backgrounds.

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[5] Isaac Martin, Jerome Karabel, and Sean W. Vasquez, "High School Segregation and Access to the University of California," Educational Policy, 19, Spring 2005; and Julian R. Betts, Kim S. Rueben, and Anne Danenberg, Equal Resources, Equal Outcomes? The Distribution of School Resources and Student Achievement in California, San Francisco: Public Policy Institute of California (PPIC), 2000.

[6] Linda Darling-Hammond, "Inequality and the Right to Learn: Access to Qualified Teachers in California's Public Schools," *Teachers College Record*, 106, 1936-1966, 2004; and Betts, Rueben, and Danenberg, 2000.

[7] See, for example, Margaret Gibson, Patricia Gándara, and Jill Koyama, *School Connections: U.S. Mexican Youth, Peers, and School Achievement*, New York: Teachers College Press, 2004.

[8] Jonathan Kozol, *Savage Inequalities: Children in America's Schools*, New York: Crown Publishers, 1991.

[9] Laura J. Horn and Xianglei Chen, *Toward Resiliency: At-risk Students Who Make it to College*, Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 1998 (available at www.ed.gov); and Patrick Terenzini, Alberta F. Cabrera, and Elena Bernal, *Swimming Against the Tide: The Poor in American Higher Education*, New York: The College Board, 2001.

[10] Richard Fry, *Latino Youth Finishing College: The Role of Selective Pathways*, Washington, DC: Pew Hispanic Center, 2004.

[11] William Bowen and Derek Bok, *The Shape of the River*, Princeton, NJ: Princeton University Press, 1998.

In every group there are high achievers. Latinos are no exception. However, the average Latino student achieves at considerably lower levels than his or her White or Asian American peers. Latinos score only slightly higher than African Americans on most indicators of academic achievement, but they appear to be at higher risk than students from all other racial/ethnic groups for failing to complete high school and going on to college.[12, 13]

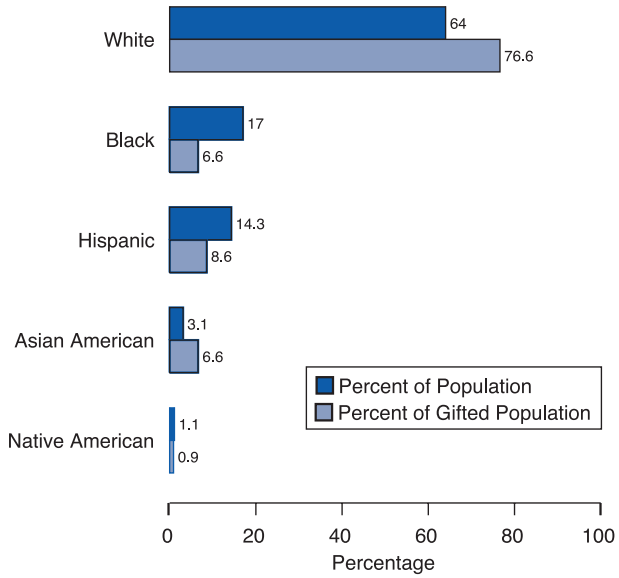
In a study of the impact of specific programmatic interventions on the academic achievement of low-income and minority students, Stringfield and his colleagues found that large achievement gaps between White and Latino students in Title 1 (high-poverty) schools remain relatively constant across the six elementary grades. But based on the Comprehensive Test of Basic Skills (CTBS/4) scores, Latino students lag about one-half of a standard deviation behind White students throughout the primary grades in reading.[14] The 2003 National Assessment of Educational Progress (NAEP) shows similar discrepancies. While 41 percent of White students in the fourth grade score at or above the Proficient level, only a little more than a third as many (15 percent) Latino students do.[15]

At the secondary level, gaps in reading achievement between these groups continue to be large. For example, in 2003, 41 percent of White eighth-graders score at the level of Proficient or higher on the NAEP reading assessment, but only 15 percent of Latino eighth-graders do. According to 1998 NAEP data, by the 12th grade, a point at which a significant portion of the lower-scoring students have dropped out of school, 47 percent of White students score at or above Proficient, while 26 percent of Latino students reach this level of reading competence.[16]

Twelfth-grade NAEP mathematics scores for 2000 reveal an even more troubling picture. While 20 percent of White students and 34 percent of Asian American students score at or above Proficient, only 4 percent of Latino students score at this level.[17] Not surprisingly, Latino students as a group are also seriously underrepresented in programs for the gifted and talented (GATE), while White and Asian American students are overrepresented. Figure 1 shows the percentage of each racial/ethnic group participating in K-12 GATE programs in the 1997 school year, the last year for which these data are available.

Figure 1

Comparison of Participation in Gifted and Talented Classes Within the K-12 Population, by Racial/Ethnic Group



Source: U.S. Department of Education, Office for Civil Rights, 2000.

[12] For some time, nationally collected data have suggested that Latinos were more likely than any other major ethnic group to drop out of high school. New data have called this into question, however, indicating that African Americans are as likely to drop out of high school as Latinos, although Latinos are still less likely to go to college. These new data also show that the dropout problem is far worse than previously reported for both groups. See Gary Orfield, *Dropouts in America: Confronting the Graduation Rate Crisis*, Cambridge, MA: Harvard Education Press, 2004.

[13] William Harvey, *Minorities in Higher Education, 2001-2002, Nineteenth Annual Status Report*, Washington, DC: American Council on Education, 2002.

[14] Sam Stringfield, Mary Ann Millsap, and Rebecca Herman, *Urban and Suburban/Rural Special Strategies for Educating Disadvantaged Children. Final Report*, Washington, DC: U.S. Department of Education, 1997.

[15] Patricia Donahue, Mary Daane, and Wendy Grigg, *NAEP 2003 Reading Report Card for the Nation and the States*, Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 2004.

[16] Patricia Donahue, Kirstin Voelkl, Jay Campbell, and John Mazzeo, *NAEP 1998 Reading Report Card for the Nation and the States*, Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 1999.

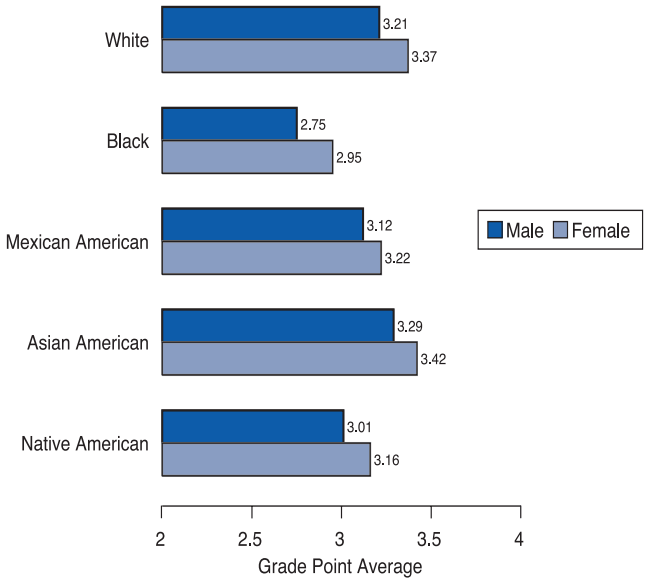
[17] James S. Braswell et al., *The Nation's Report Card: Mathematics, 2000*, Washington, DC: National Center for Education Statistics, National Assessment of Educational Progress, 2001. Available online at http://nces.ed.gov.

The substantial underrepresentation of Latinos in programs for the gifted may be due to overall lower academic performance than other groups, to stereotyped notions that teachers may hold about the abilities of these students, or to an inability of teachers to identify giftedness in Latino students. Evidence of this third possibility is presented in a study that randomly surveyed all middle and junior high schools in New York State.[18] The authors found that training in the identification of gifted minority students increased the nomination of African Americans and Asian Americans, but not Latino students. One reason the investigators posited for this inability to recognize gifted behaviors in Latino students was teachers' limited understanding of the effects of language on classroom performance. Although not all Latino students are English learners, many are, or come from homes in which they are exposed to little English. Of course, language differences also depress standardized test scores, reducing the chances that the minority students will signal their ability through high scores on achievement tests.[19]

Figure 2 shows the grade point averages (GPAs) for students who took the SAT in 1998. This is admittedly a select pool of the nation's students, generally those who envision themselves going on to a four-year college, but the data make an important point: Even among the most academically ambitious students, there are large discrepancies in achievement by race and ethnicity.

Figure 2

Grade Point Averages for U.S. College-Bound Students, by Racial/Ethnic Group



Source: The College Board, 1998

Figure 2 includes GPAs for Mexican American students, as opposed to all Latinos, as these students are the most numerous of the Latino subgroups (approximately two-thirds of all Hispanics) and the most at risk for dropping out of high school.[20] It is notable that females outperform males across all racial/ethnic groups, but both Mexican American males and females intending to go to college achieve lower grades than their White and Asian American

[18] Teresa Forsbach and Nancy Pierce, *Factors Related to the Identification of Minority Gifted Students*, Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada, April 23, 1999.
[19] Guadalupe Valdes and Richard A. Figueroa, *Bilingualism and Testing: A Special Case of Bias*, Norwood, NJ: Ablex Publishing, 1994.
[20] Russell Rumberger and G. Rodríguez, "Chicano Dropouts: An Update of Research and Policy Issues," In Richard R. Valencia (Ed.), *Chicano School Failure and Success. Research and Policy Agendas for the New Millennium*, New York: Teachers College Press, pp.114-146, 2002.

counterparts. The increasing educational gender gap is worthy of special consideration, but to date researchers are only beginning to focus on the reasons why males appear to be underperforming with respect to females, especially in communities of color. [21] Much work remains to be done in this area.

Data on high school completion for Latinos, compared to others, provide another perspective on Latino achievement. Bureau of the Census figures for 2000 show that, among all 18- to 24-year-olds, 84 percent of the White population had completed high school, compared to only 60 percent of Hispanics. Further, only about 53 percent of Hispanics in this age group had enrolled in any type of college for one year or more, while just over two-thirds (67 percent) of White students had gone on to college.[22]

The types of colleges that students attend differ substantially by race/ethnicity as well. Almost two-thirds (64 percent) of White students attend four-year colleges, where their likelihood of earning a college degree is enhanced considerably, whereas Hispanic students are much more likely to attend two-year community colleges (56 percent), where degree completion is the exception rather than the rule.[23] As a result, White students are more than twice as likely to complete four or more years of college as are Latino students in the United States.[24]

There are many reasons why the gap in average academic attainment between Latinos and all others is important. Higher education is known to increase civic involvement and voting, and to decrease the chances of finding oneself incarcerated or on public assistance. It reduces unemployment and significantly enhances people's earnings.[25] It is also good for the general economy.

Sorensen and colleagues computed the economic benefits to the country that would result from increasing the education level of Latinos. They concluded that "Hispanics with a bachelor's degree will pay more than twice as much in taxes as those with only a high school diploma, and Hispanics with a professional degree will pay an estimated three times as much as those with a bachelor's degree."[26]

Current projections are that, within 20 years, Latinos will comprise one-fourth of all students in the United States.[27] As they become an even larger presence in the population, the social well-being of the nation as a whole will be increasingly tied to that of Latinos. So it is imperative to understand the factors that correlate with high achievement within this group and to use the information to inform policy.

[21] Dan Kindlon and Michael Thompson, *Raising Cain: Protecting the Emotional Life of Boys*, New York: Random House, 2000; and Thomas Mortenson, "Where Are the Boys? The Growing Gender Gap in Higher Education," *The College Board Review*, 188, 8-17, 1999.
[22] Harvey, 2002.
[23] Harvey, 2002; Fry, 2004; Patricia Gándara and Lisa Chávez, "Putting the Cart Before the Horse: Latinos and Higher Education," in David López and Andrés Jiménez (Eds.), *Latinos and Public Policy in California: An Agenda for Opportunity,* Berkeley, CA, California Policy Research Center and Regents of the University of California, pp. 87-120, 2003; and Norton Grubb, "The Decline of Community College Transfer Rates, Evidence from National Longitudinal Surveys," *Journal of Higher Education*, 62, 194-222, 1992.
[24] Harvey, 2002.
[25] Sandy Baum and Kathleen Payea, *Education Pays 2004*, New York: The College Board, 2005.
[26] Stephen Sorensen et al., *Increasing Hispanic Participation in Higher Education: A Desirable Public Investment*, RAND IP-152, 1995.
[27] Marcelo M. Suarez-Orozco and Mariela M. Paez (eds.), *Latinos: Remaking America*, David Rockefeller Center for Latin American Studies, Harvard University, and the University of California Press, 2002.

Given the strong association between socioeconomic status (SES) and academic achievement, it is tempting to believe that Latino high achievers would come from an upper-economic background. For Mexican American and Puerto Rican students, however, this is often not the case. Some national data sets provide evidence of this fact.

The top 20 percent of achievers across two major national data sets — the Early Childhood Longitudinal Study (ECLS) and the National Educational Longitudinal Study (NELS) — form the basis of the following analyses of high-achieving Latino students. The top quintile of performers represents broadly the "A" and "B" students in any group — the students most likely to complete school and go on to college. While the top quintile of Latino students in these studies scored at an absolute level considerably lower than either White or Asian American students, given the multiple disadvantages that Latino students face, it can be argued that it is most important to examine the profiles of Latino students who rise to the top of their own group.

Because the students sampled for each of the two data sets are different, and born at different times, they are not strictly comparable. Parental education is an example. Approximately one-fourth of Whites between 25 and 29 years of age in 1988, when the NELS data were first collected, held at least a bachelor's degree, while only half as many — about 12 percent — of Hispanics of all races in the same age range held a bachelor's degree or more.[28] By 1998, when the ECLS data were first collected, 32 percent of non-Hispanic Whites between the ages of 25 and 29 held at least a bachelor's degree, and the overall percentage of Hispanics with a bachelor's degree or more in this age group had declined to approximately 10 percent, demonstrating a substantial growth in the educational attainment gap between the groups.[29]

An interesting aspect of ECLS is that parents from both White and Latino samples have, on average, higher educational levels than is typical for their age group. This is explained in part by the fact that parents tend to have more education than people without children, and that people who volunteer to complete surveys probably are somewhat more educated than the general public. There may also be a slight upward bias on the part of survey respondents wanting to present themselves in the best possible light. Nonetheless, White parents in the ECLS sample are at least twice as likely as Latino parents to have completed college, and are much more likely to have completed high school (See Tables 2 and 3) — information that accurately represents the relative educational levels of the two groups.

Thus, while ECLS and NELS cannot be treated as a single longitudinal study, they do provide a snapshot of Latino and White students across a broad spectrum of education — from kindergarten to grade 12 — and allow us to speculate about the relative importance of various background factors in students' school careers.

Early Childhood Longitudinal Study of 1998

The ECLS data set was established by the U.S. Department of Education in 1998, with approximately 22,000 kindergartners from across the nation participating. Since that time, the same students have been sampled in the first and third grades, with the latest available data being released in 2004 on the third-grade sample. ECLS data show significant differences in performance and background of students from different racial/ethnic groups at kindergarten entry.[30] The National Center for Education Statistics released a report in 2000 showing the discrepancies among racial/ethnic groups with respect to those students in the upper and lower quartiles of achievement at the outset of kindergarten. Table 1 illustrates that Latino children are the most likely to

[28] Although 25 to 29 years old is on the low side for parents of kindergarteners, and extremely low for parents of eighth-graders, data on parents in this age range better approximates the educational level of today's parents. Data commonly reported for all persons over age 25 includes substantial percentages of adults who were educated in a time when average educational levels were much lower.

[29] Table A-2, U.S. Bureau of the Census, 2004.

[30] Richard J. Coley, *An Uneven Start: Indicators of Inequality in School Readiness*, Policy Information Report, Princeton, NJ: Policy Information Center, Educational Testing Service, March 2002.

Table 1

Percentage of Kindergartners in Lowest and Highest Quartiles of Reading and Mathematics Skills, by Race/Ethnicity, Fall 1998

	Percentage in Lowest Reading Quartile	Percentage in Highest Reading Quartile	Percentage in Lowest Math Quartile	Percentage in Highest Math Quartile
Black	34	15	39	10
Latino	42	15	40	14
Asian American	13	39	13	38
White	18	30	18	32

Source: U.S. Department of Education, National Center for Education Statistics, *America's Kindergartners*, NCES 2000-070, by Kristin Denton, Elvira Geronimo-Hausken. Project Officer, Jerry West, Washington, DC, 2000.

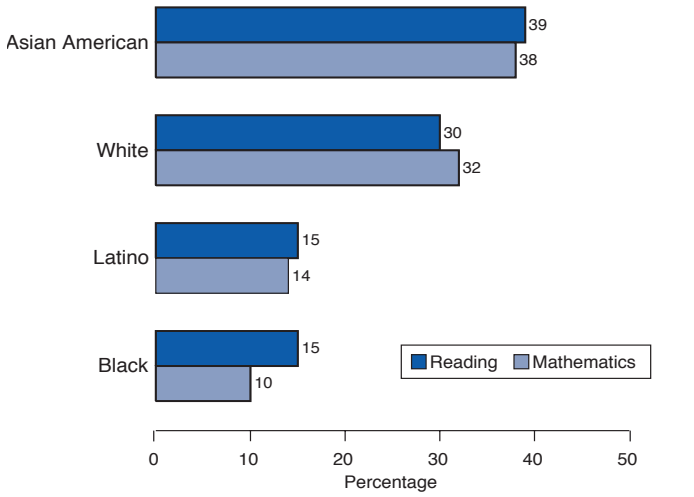
fall into the lowest quartile of performance at entry to kindergarten, especially in reading.[31]

Figure 3 shows the relative likelihood that students from different racial/ethnic groups will be found in the upper quartile of achievement in reading and mathematics at this early point in their academic careers.

A clue to understanding the differences in skills of entering kindergartners can be found in Tables 2 and 3, which present background data for Latino and White students who scored in the highest quintile (20 percent) in reading and mathematics. The data show large differences in average education levels between Latino and White parents. Differences among top-quintile students' parents are also striking in spite of the fact that both Latino and White high achievers are socially and economically advantaged compared to others in their group. Both are significantly more likely than other lower-performing students to live with both biological parents, attend non-public schools (especially for high performers in reading), have parents with more education, and come from families that earn more than the average for their group. A chi square

Figure 3

Percentage of Kindergartners in the Highest Reading and Mathematics Quartiles, by Racial/Ethnic Group, Fall 1998



Source: U.S. Department of Education, National Center for Education Statistics, *America's Kindergartners*, 2000.

[31] There are a number of explanations for the relatively low achievement of Latino students at the outset of kindergarten. No doubt language plays a role for some, as approximately 30 percent of Latino kindergartners' home language was not English in the sample (Lee and Burkham, 2002). Furthermore, since Latinos are the least likely of all major racial/ethnic groups to have attended preschool, the students studied had likely received less exposure to schooling and the expectations of academic environments than their Asian American, Black, and White peers.

test of differences found all of these factors to be significant at p <.05 (that is, the chances of differences this large occurring randomly are less than 5 in 100).

Consistent with extensive research on the effects of socioeconomic status on academic achievement, high performers in both these racial/ethnic groups, relatively speaking, are socioeconomically advantaged. However, it is notable that there are very large gaps in all background variables in favor of White students. An examination of standard deviations (not shown here) also reveals that there is more variability in the backgrounds of Latino high achievers than in those of White high achievers.

Table 2

Characteristics of Students in the Top Quintile of Reading, ECLS 1998

	LATINO				WHITE			
Grade:	**K**	**1**	**3**	**All K Quintiles**	**K**	**1**	**3**	**All K Quintiles**
Percent:								
Male	39%	45%	40%	50%	45%	47%	44%	50%
Live with biological family	75	73	73	64	84	82	74	74
Public school attendees	58	69	72	80	66	65	67	74
Mother with <high school	4	7	9	16	<1	1	2	4
Mother with BA+	36	27	33	18	66	65	67	36
Father with <high school	6	10	11	19	1	2	2	1
Father with BA+	37	32	33	20	58	56	58	39
Family income <30K	14	23	23	Median 30-35K	6	8	7	Median 50-75K
Family income 100K+	20	17	14		32	29	29	
Urban	43	50	51	54	37	35	33	29

Source: ECLS

Table 3

Characteristics of Students in the Top Quintile of Math, ECLS 1998

	LATINO				WHITE			
Grade:	**K**	**1**	**3**	**All K Quintiles**	**K**	**1**	**3**	**All K Quintiles**
Percent:								
Male	47%	52%	56%	50%	55%	58%	64%	50%
Live with biological family	77	73	74	64	88	84	83	74
Public school attendees	69	76	81	80	62	68	72	74
Mother with <high school	6	14	11	16	<1	1	<1	4
Mother with BA+	30	28	28	18	58	52	55	36
Father with <high school	13	17	18	19	<1	2	1	1
Father with BA+	31	28	29	20	60	55	58	39
Family income <30K	19	27	29	Median 30-35K	5	8	8	Median 50-75K
Family income 100K+	19	13	13		34	28	30	
Urban	47	50	50	54	38	35	33	29

Source: ECLS

Tables 2 and 3 describe background characteristics of the high achievers in White and Latino racial/ethnic groups over time (between kindergarten and third grade). While there appear to be large differences between the groups on a number of background characteristics, differences between White and Latino students cannot be statistically compared because they represent different positions on the overall continuum of achievement. That is, the mean score for the upper-quintile Latino group is not the same as the mean score for the upper-quintile White group.

It is possible, however, to compare within groups over time: What is the likelihood of staying in the upper quintile group once having achieved that status? What are the characteristics of those students who remain in the upper quintile? That is, are there good predictors for who will be able to maintain the high-achieving status over time? The policy implications of such knowledge could be significant if it were possible to identify characteristics that could signal a need for early intervention to help students maintain their high achievement.

The greatest discrepancies between Latino and White students are in the area of parental education and income. Latino high-achieving students are many times more likely than White students to have a mother or a father with less than a high school education and only about half as likely to have a mother or father with a bachelor's degree or higher. Parents' education appears to be somewhat more associated with kindergarten reading and math performance for Latino students than for White students. The trend is for a greater percentage of Latino students in the first and third grades to have parents with less than a high school education and somewhat fewer with a bachelor's degree, suggesting that the students' schooling may begin to differentiate them in important ways. In other words, school may operate to disrupt to some extent the very clear advantage that parent education and income hold for most students.

Latino high performers are also less likely than White high performers to live with their two biological parents — as are all Latino students. More Latino students who were not initially advantaged by parent background begin to emerge into the upper quintile of performers after kindergarten as higher percentages of students whose parents do not have a high school diploma begin to enter the upper quintile by first grade. Parent income also appears to hold somewhat less of an advantage for both math and reading performance in later grades for both groups, but especially for Latinos, where about one-fourth of the high performers come from very low income homes compared to only about 8 percent of White high performers.

Few of the students who started off in the top quintile in kindergarten remained in the upper quintile of performers between kindergarten and third grade for both White and Latino students. However, it is notable that there are some problems in answering this question accurately because students who were not fully proficient in English in kindergarten (about 25 percent) were excluded from the initial reading sample and added in later as their proficiency grew. This altered the composition of the reading sample.

Nonetheless, the math sample provides a reasonable proxy for the total sample. Less than 10 percent of both White and Latino kindergartners in the top quintile held that position through third grade. This both raises concerns about the reliability of many standardized tests for young children and suggests that schooling has a significant effect on student achievement, above and beyond what children bring with them from home.

To determine what factors are predictive of students maintaining their position in the upper quintile, a logistic regression analysis was conducted (see Appendix Tables 1 and 2). The analysis found that mothers' education was significantly associated with staying in the top quintile of reading and math for both White and Latino students. However, some differences are notable. Whereas mothers having a high school diploma increases the chances of staying in the upper quintile of reading and math for Latinos, this level of mothers' education does not have the same effect for White students. Moreover, the level of mothers' education is even more highly associated, overall, with staying in the upper quintile for Latinos than for Whites. Fathers' education, on the other hand, is less of a predictor for Latinos of staying in the top quintile in reading and math than for White students. For White students, each increasing level of fathers' education, from high school to graduate school, also increases the odds of remaining in the top quintile. For Latino

students, only a bachelor's degree or above has this effect for math, and only graduate school increases the odds of staying in the top quintile in reading.

With respect to gender, being a White male increases the odds of staying in the top quintile in math, while being a White female increases the odds in reading. However, there is only a mild relationship between staying in the upper quintile of math for Latino males, and no significant relationship between being either male or female Latino and staying in the upper quintile of reading. Thus, gender appears to be a less important predictor of staying in the top quintile for Latinos than for Whites. For Latinos, the odds of staying in the top math quintile are reduced mildly if they come from a low-income family. There is no income effect for reading, however. Coming from a high-income Latino family has no effect for either reading or math. For White students, however, coming from a high-income family increases the odds significantly of staying in the top quintile of math (but not reading). The differing relationships observed between achievement and the advantages of high income and fathers' education may be because it is possible that a father's education level is more closely tied to socioeconomic status for White students than for Latino students, making it more predictive of early high achievement (as the SES literature suggests). On the other hand, where overall socioeconomic status is depressed, as in the case of Latino students, a mother's education level is the better predictor of staying in the upper quintile of readers — placing more influence on students' educational environment than on the relatively narrow range of income variability.

National Educational Longitudinal Study of 1988 (NELS 88)

The NELS 88 study was established by the U.S. Department of Education in 1988 to follow a national sample of more than 24,000 of that year's eighth-graders throughout high school and ultimately beyond to determine the factors that affected high school performance and postsecondary choices. The students followed are now about 30 years old, with analyses conducted through their mid-20s. These are the most recent longitudinal data available in the United States on adolescents and their pathways through high school and beyond. Tables 4 and 5 show the same or similar characteristics investigated for Latino and

Table 4

Characteristics of Top Quintile of 8th, 10th and 12th Grade Latino Students, NELS Reading

	8th Grade		10th Grade		12th Grade	
Percent:	**Top 1/5**	**All**	**Top 1/5**	**All**	**Top 1/5**	**All**
Male	44.9%	47.8%	47.1%	48.8%	52.3%	48.4%
Maternal education						
<HS	29.1	42.4	25.3	41.5	27.2	42.1
>BA	19.6	11.8	20.8	11.8	20.4	11.7
Paternal education						
<HS	23.9	44.5	25.0	44.0	27.5	44.1
BA or above	31.8	14.5	32.4	14.1	28.3	14.2
Live w/both parents	66.4	67.4	70.6	68.4	71.6	68.2
Urban	39.6	42.4	50.8	49.3	44.2	47.9
Public school	80.8	90.2	87.6	92.8	85.5	93.4
Family income < $30K[32]	39.8	62.8	41.1	63.4	46.6	63.1
Family income > $100K	2.0	1.0	1.4	1.1	1.8	1.0
N	1,750		1,594		1,302	

Source: NELS 88

[32] In all cases, NELS data are based on 1988 dollars, so actual dollar comparisons between 1988 and 1998 cannot be made. The same income cutoffs are used for consistency and provide relative comparisons between groups.

Table 5

Characteristics of Top Quintile of 8th, 10th and 12th Grade Latino Students, NELS Math

	8th Grade		10th Grade		12th Grade	
Percent:	**Top 1/5**	**All**	**Top 1/5**	**All**	**Top 1/5**	**All**
Male	59.6%	47.8%	58.5%	48.8%	64.0%	48.4%
Maternal education						
<HS	32.9	42.4	27.7	41.5	30.2	42.1
>BA	19.6	11.8	21.1	11.8	26.0	11.7
Paternal education						
<HS	26.8	44.5	22.5	44.0	28.4	44.1
BA or above	32.3	14.5	34.2	14.1	33.3	14.2
Live w/both parents	70.3	67.4	69.8	68.4	77.6	68.2
Urban	33.6	42.4	48.1	49.3	51.1	47.9
Public school	82.4	90.2	86.1	92.8	82.1	93.4
Family income < $30K	37.4	62.8	39.9	63.4	43.1	63.1
Family income > $100K	2.2	1.0	2.0	1.1	2.6	1.0
N	1,753		1,598		1,303	

Source: NELS 88

White kindergarten, first grade, and third grade students in the ECLS study.

Two observations are immediately evident from Tables 4 and 5. First, the patterns of advantage for the upper quintile of Latino achievers that were documented in the ECLS data are often replicated in the NELS data. For example, in most cases, high-achieving Latino students tend to live with both biological parents, to have parents with higher educational levels and income than the mean for their group, and to attend non-public schools. The upper-quintile students are consistently less likely to have a parent with less than a high school education and are more than twice as likely as their lower achieving peers to have a father with a bachelor's degree or higher. The greater likelihood of having a well-educated father than mother is inconsistent with the ECLS data, however, and may be related to significant cultural shifts over time.

Second, there also appears to be an increased likelihood of living with both biological parents for those Latino students who are in the top quintile at 12th grade. This is especially true for the top quintile of math scorers. It has been pointed out before that coming from a single-parent family is a significant risk factor for all students for school failure.[33] Therefore it is logical that living with both biological parents would, on average, enhance students' chances of being higher performers.

Tables 6 and 7 show the background characteristics for high-achieving White students in the NELS sample.

White high achievers in math in particular (more than half of whom are male in all grades) are increasingly likely as they move toward high school graduation to come from families with well-educated fathers, to live with both biological parents, and to be more urban. Latino high achievers, however, did not share this pattern. There appears to be an increased likelihood of coming from a low-income background for Latino students. This may suggest that SES has a somewhat less powerful effect on achieving at high levels for Latino students than for White students. In addition, using income as a measure of SES can mask differences among racial/ethnic groups. For example, groups may

[33] Laura J. Horn and Xianglei Chen, *Toward Resiliency: At-risk Students Who Make it to College*, Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 1998. Available at www.ed.gov.

Table 6

Characteristics of Top Quintile of 8th, 10th and 12th Grade White Students, NELS Reading

	8th Grade		10th Grade		12th Grade	
Percent:	Top 1/5	All	Top 1/5	All	Top 1/5	All
Male	43.3%	50.4%	48.3%	50.3%	45.6%	50.9%
Maternal education						
<HS	3.6	11.9	4.9	11.5	4.3	10.7
>BA	43.1	25.7	41.9	25.9	44.7	26.4
Paternal education						
<HS	4.1	13.2	3.3	12.6	3.0	12.2
BA or above	55.2	33.2	54.0	33.4	54.9	34.0
Live w/both parents	77.9	68.8	78.1	69.6	77.6	71.0
Urban	22.3	18.5	23.9	20.3	26.2	20.2
Public school	78.0	86.5	83.0	89.5	85.2	89.9
Family income < $30K	15.4	28.8	16.1	27.9	17.3	27.4
Family income > $100K	9.6	4.6	9.4	4.6	8.6	4.8
N	8,588		8,159		6,808	

Source: NELS 88

Table 7

Characteristics of Top Quintile of 8th, 10th and 12th Grade White Students, NELS Math

	8th Grade		10th Grade		12th Grade	
Percent:	Top 1/5	All	Top 1/5	All	Top 1/5	All
Male	52.7%	50.4%	54.6%	50.3%	57.0%	50.9%
Maternal education						
<HS	3.3	11.9	2.3	11.5	2.1	10.7
>BA	45.1	25.7	45.2	25.9	44.8	26.4
Paternal education						
<HS	3.4	13.2	2.6	12.6	2.8	12.2
BA or above	57.2	33.2	58.1	33.4	60.4	34.0
Live w/both parents	78.6	68.8	78.8	69.6	81.2	71.0
Urban	19.5	18.5	25.2	20.3	26.7	20.2
Public school	81.7	86.5	84.7	89.5	82.5	89.9
Family income < $30K	15.5	28.8	15.0	27.9	14.5	27.4
Family income > $100K	10.8	4.6	11.0	4.6	11.2	4.8
N	8,593		8,163		6,813	

Source: NELS 88

report similar levels of income, but experience important differences in family and living circumstances.

Finally, the same two questions were considered with the NELS data as with the ECLS data: What is the likelihood of staying in the upper-quintile group once having achieved that status? And what are the characteristics of those students who remain in the upper quintile? These logistic regression results are shown in Appendix Tables 3 and 4.

About half of the students in the top quintile of achievers in eighth grade remained there through 12th grade, with somewhat more stability in the percentages among White students, and the factors that predict for remaining in the highest quintile differ somewhat between the two data sets and age groups.

Latino males are more likely than females to continue being high achievers in reading, whereas this is not true for White students. Mother's education is highly predictive of staying in the upper quintile of both reading and math for White students, but not for Latinos. The data show an inexplicable relationship between a mother's holding a BA degree and a lower likelihood of Latino students retaining their position in the upper quintile of readers. A father's education, unlike the ECLS data, is a strong predictor of maintaining position in the upper quintile of performance in both math and reading for both Whites and Latinos, but only if the father has at least a bachelor's degree. "Some college" does not provide this protective effect.

For White students, high income ($100,000+) is also a predictor of maintaining position among the top quintile in reading, but this is not true for Latinos, probably because there are so few in this income category. However, Latinos are much less likely to remain in the top quintile of reading if they are in public schools, and no such effect exists for White students (who have higher rates of affluence and are, therefore, more likely to attend better-resourced public schools).

Finally, while being in a two-biological-parent family is associated with remaining in the top quintile for both math and reading for White students, the two-parent family does not predict that Latino students will stay in the top quintile of performers. Why such a difference exists is not clear. It could be related to differences in income between White families and Latino families.

Summary of ECLS and NELS Findings

Across the two data sets there appear to be some enduring differences between Latino and White students. High-achieving Latino students in the NELS sample are more likely to have parents with low levels of education — more than 25 percent of the Latino students compared with less than 5 percent of the White sample have at least one parent without a high school diploma. Latino students are also about half as likely to have a parent with a bachelor's degree or higher. For both Latino and White students, however, the high achievers in the high school sample are somewhat more likely to have a father than a mother with a bachelor's degree, whereas this is only true for Latino students in the ECLS sample. Also, high family income and education are less likely to keep Latino students in the upper achievement quintile than they are to maintain White students in this position, and the advantage that Whites receive as a result of living in a two-biological-parent family does not appear to carry over to Latinos.

One way to interpret these data is that schooling is more likely to interrupt the strong relationship between socioeconomic status and achievement for Latino students than for White students. This is consistent with a considerable body of research that suggests schooling has a greater effect on low-income and minority students' achievement than it does on middle-class and White students precisely because it compensates for what low-income homes and communities are not able to provide.[34] It is also important to continue to examine differences in the meaning of socioeconomic status across racial/ethnic groups. Latinos, with larger families and less social and financial capital, may be even more disadvantaged, compared to other groups, than existing SES data suggest.

Compared to the total population, both White and Latino students in the ECLS sample have a higher percentage of mothers with a bachelor's degree or higher,

[34] Richard Rothstein, *Class and Schools: Using Social, Economic, and Educational Reform to Close the Black-White Achievement Gap*, Washington, DC: Economic Policy Institute, 2004; and James Coleman et al., *Equality in Educational Opportunity*, Washington, DC: U.S. Department of Health, Education, and Welfare, Office of Education, 1966.

reflecting the increasing educational level of women over the past 20 years. This may increase student achievement over time, especially for Latinos where the gains are significant and the role of mothers is so strong in predicting student achievement. Across both data sets, Latino students are less likely to live with both biological parents. They are more likely to come from urban areas and to be public school students than the White high-achieving students — despite the fact that attending non-public schools is a protective factor for retaining Latino students in the upper quintile of reading performers.

Perhaps the biggest surprise in the NELS data is the relatively high percentage of Latino males in the top quintile of reading performance. Males of both racial/ethnic groups overall were much less likely than females to be in the upper quintile of reading performance after kindergarten. These data raise the question: What happened to Latina students in 12th grade?

In spite of the shrinking gender gap in mathematics course-taking[35], high-achieving Latino males in the early 1990s held their substantial advantage over females into 12th grade. Latino high achievers in math were almost twice as likely to come from urban environments than were White high achievers, although there were few differences in public-school attendance at this point. Finally, the differences in family income are even more acute between Latino and White high-achieving students in math: Latino students are almost three times as likely to come from a low-income home as high-achieving White students. The closer tie between socioeconomic status and literacy skills may, in part, be related to the greater likelihood that higher-income Latino families will be strong speakers of English. Thus, math achievement may be less sensitive to socioeconomic advantage than literacy skills.

[35] National Center for Education Statistics, *The Nation's Report Card*, 2003.

What can we conclude from these profiles that is relevant to education policy? It is tempting to believe that all students who consistently do well in school, and do not appear to be at risk for any major adolescent setbacks (e.g., drugs, truancy), are low priorities for intervention. This may be especially tempting in schools and communities in which there are many social, psychological and academic needs, and very limited resources. For high-achieving students in these circumstances, the attitude may be to "leave well enough alone" so attention can be directed toward other, more-at-risk students. But the ECLS and NELS data also point up vast differences in socioeconomic and family support resources between White and Latino high-achieving students. And they provide hints into the ways in which these high achievers may compensate for some of their disadvantages. White students benefit especially from having both biological parents living in the home, coming from families with high incomes, and having mothers with advanced education. Both groups are aided by having fathers with at least a bachelor's degree. While it is difficult to envision a social policy, much less an educational policy, that would equalize the advantages seen, overall, by White students, it is possible to envision educational policy that could approximate some of these advantages.

Certainly a starting point would be to recognize that, in order to bring larger numbers of Latino students to higher levels of achievement, a dual strategy of maintaining the initial high achievers while continuously adding others is critical.

Providing targeted, intellectually rigorous preschool and kindergarten experiences, designed to build on already strong beginning skills would be one way to sustain early high achievers while others are raised to their level. Simultaneously, of course, efforts need to be made to strengthen the beginning skills of other Latino students. Examples of such differentiated early education do exist.[36]

Supportive networks of adults — teachers, counselors, mentors and others in the school or community — in addition to supportive and cohesive peer groups are some of the resources that can be established for socioeconomically disadvantaged students. Because literacy skills appear to be more closely tied to socioeconomic advantage than math skills, the data also suggest that programs might want to focus on academic English — or English skills that students need to thrive in intellectually demanding settings, but that are seldom explicitly taught.[37] In the absence of explicit instruction, only students who are routinely and naturally exposed to academic English are likely to acquire it. Of course, such students tend to be economically and educationally advantaged, typically from White or Asian American homes.

Important issues not captured in these data are how legal status and low income create not only impediments, but disincentives, to high achievement among Latino students. Many bright students who begin school functioning at high levels, but who are undocumented immigrants or the children of undocumented immigrants, come to realize that postsecondary education is probably foreclosed to them — either because they cannot enroll in or pay for it. Even where policies around admission have been relaxed, and some undocumented students can achieve resident status for purposes of tuition, the inability of many institutions to extend financial aid to them forecloses the possibility of attending college. Knowing this, many students are apt to give up, drop out, or approach high school with a lackadaisical attitude.

[36] Patricia Gándara, ***Latino Achievement: Identifying Models That Foster Success,*** Storrs, CT: National Research Center on the Gifted and Talented, 2004.

[37] Cynthia Greenleaf et al., "Apprenticing Adolescent Readers to Academic Literacy," *Harvard Educational Review,* 71, 1-42, 2001; Catherine E. Snow and Gina Biancaosa, *Adolescent Literacy and the Achievement Gap: What Do We Know and Where Do We Go From Here?* New York: Carnegie Foundation, 2003; and Guadalupe Valdés, "Between Support and Marginalization: The Development of Academic Language in Linguistic Minority Children," *Bilingual Education and Bilingualism*, 7, 102-132, 2004.

It is important to remember, as well, that upper-quintile Latino students will compete with their much more advantaged White peers for access to Honors and AP courses, for counselor time, and for the attention and high expectations of their teachers. Ultimately, if all goes well, they will also be competing for a seat in a selective university. But the competition may not be fair. The very different resources that White and Latino students bring with them to school are reflected in both the opportunities they are able to secure and the academic outcomes that they achieve. Access to these opportunities needs to begin early and needs to be apportioned not just on the basis of past achievement, but also on the basis of potential achievement. In this sense, being in the top quintile of one's own group, even if this means being only in the top 30 percent of all students, may be considered a good indicator of potential.

If we allow high-achieving Latino students to try to "make it on their own" we are placing at risk some of the best talent within the Latino community. Moreover, we are squandering a real opportunity to make significant progress toward closing the achievement gap.

In the next section, an attempt is made to provide a better understanding of how data convert into real life stories and how social and economic disadvantage play out for high-achieving Latino students with complicated lives.

All low-income students have special challenges in their lives. Poverty creates challenges that many of us can only imagine. These challenges are not just from lack of money, but are also related to the complicated webs of activity and responsibility that help keep poor people afloat.

In our research with low-income students, my colleagues and I have been surprised and dismayed by the wholly unanticipated events that prevent some students from following through on what sometimes seem to be routine commitments. These events often relate to the daily dynamic of conducting life without a car, childcare, health care, or the money to buy books or pay for bus fare. For Latinos, they are sometimes related to being undocumented and, therefore, to conducting routine business in circuitous ways, and often to issues of language barriers, where the student must be available as a translator or cultural broker for members of the family. And because extended family is considered by Latinos to be the vital network at the core of existence, students may feel a strong responsibility to put the needs of family members ahead of their own immediate commitments. High-achieving students from low-income backgrounds are as likely to be caught up in this web of responsibilities as low-achieving students.

In an effort to better understand the challenges that low-income Latino students face in successfully completing high school and entering into postsecondary education, we followed 28 Latino students from three different high schools on the West Coast.[38] The schools these students attended represented different geographic areas and had different racial/ethnic compositions, but all served low-income and working-class students, and all had significant populations of Latino students.

The study took place between 1996 and 2002, and followed students throughout their high school careers, from ninth to 12th grade, and beyond. We interviewed the students in person several times a year over the four years, and by telephone after that. We observed them in class and at activities at school, we collected periodic attitudinal surveys on them, and we talked with their teachers and counselors over time. Half were males and half females. All were from working-class and low-income families.

The students were grouped into four categories of achievers — ranging from low achievers, with GPAs below 2.0; to high achievers, with GPAs above 3.5. About half fell into the upper two categories, with at least a 3.0 GPA and aspirations to go to college. All were participating in a college-access intervention program, Puente, aimed at supporting their goal of going to college. Of the 28 students, 22 remained in the study through the end of high school. Table 8 shows the basic statistical data on the 15 high-achieving students from the group.

Table 8

Case Study: High-Achieving Students

Category, Number, and Gender	Mean 8th Grade GPA	Mean 12th Grade GPA	Percent Graduated High School	Percent Went to 4-Year College	Percent Went to 2-Year College	Percent Went to Military or Other Job
I. 8 (4 female)	3.5	2.87	88	50	12.5	37.5
II. 7 (4 female)	3.0	2.82	100	71	29	0

[38] Patricia Gándara, "A Study of High School Puente: What We Have Learned About Preparing Latino Youth for Postsecondary Education," *Educational Policy*, 16, 474-495, 2002; and Patricia Gándara and J. Moreno, "The Puente Project: Issues and Perspectives on Preparing Latino Youth for Higher Education," *Educational Policy*, 16, 463-473, 2002.

Category I. The Highest-Achieving Students at the Beginning of High School

Seven of the original eight highest-achieving students remained in the study through high school graduation. Four were female and three were male; one male student dropped out of school rather suddenly. Although a capable student, he began working more and more hours, until school no longer fit into his schedule.

The Category I students had a mean GPA of 3.5 when they began high school, but by 11th grade this had dropped to a 3.2 average, and they graduated with an average GPA of 2.87 — considerably lower than the one from their lofty beginning. There is tremendous variability in performances among these students: About half remained strong students and continued to excel in school through the 11th grade, but by 12th grade only two of these students had maintained a GPA above 3.0; the others encountered problems or significant distractions — mostly outside of school — that contributed to derailing their ambitions.

In a general sense, the backgrounds of these students were not different from the backgrounds of those in the other achievement categories: Six of the eight families spoke either Spanish only or used both Spanish and English in the home; only two were primarily English-speaking families. Several came from single-parent families, and half had parents who did not go beyond elementary school.

Only two of the Category I students came from homes in which parents had gone as far as junior college. These were the same two students who continued to excel through the end of high school. These two high achievers also both lived with their biological parents and tended to maintain close relationships with other students in the college-access program, often studying together and supporting each other socially and emotionally.

All students in this study were asked in 11th grade to rank the following priorities, by personal importance: Family, school, friends, boyfriend/girlfriend, work, sports, or other significant activity in their life. Seven of the eight highest-achieving students ranked school as either No. 1 or No. 2, competing with family. Even the student who dropped out of high school ranked school as No. 2, right behind family. All of these students aspired to attend four-year colleges and universities and had taken all required college entrance exams by 11th grade, suggesting that they were on track to realize their ambitions. However, as a group, they experienced serious declines in both aspirations and performance.

Two students from Category I stand out as powerful examples of the life circumstances with which Latino students often must cope in order to realize their ambitions. They are described below:

Andrés. Andrés is tall and thin, with straight black hair and intense black eyes. He attended Frontera High School. When we first met Andrés he was shy and it was difficult to get him to utter more than a few words at a time. Without having seen his records, my initial assessment was that he was probably an above-average student, but struggling in some areas. When asked how he was doing in school, he said, "OK, but there are things I don't understand in my classes. I have to listen hard, pay a lot of attention."

I assumed that Andrés was like many other Chicano students, wanting to do well, but barely staying afloat in some of the more rigorous courses, perhaps with some language-related problems. As I probed further, I found I could not have been more wrong.

Andrés completed his freshman year with a 4.04 GPA — he had earned all A's and two A pluses. He was taking a regular college-preparatory curriculum and had selected German as his language. Asked why he was taking German when Spanish would have seemed the easier choice, Andrés said he liked the challenge. And besides, he liked German.

Andrés was the oldest of three boys at the time he began high school. His middle brother was 10, and his younger brother was four. The 10-year-old already showed signs of not liking school and getting into trouble. Andrés resented that his younger brother created problems for his mother and that he didn't help her. To complicate matters, by the end of Andrés' sophomore year, his mother had another child — a fourth boy.

Besides his younger siblings and mother, a Mexican immigrant who had attended junior college but married and who had children before she could complete her course of study, Andrés lived with his stepfather, a working-class man who had immigrated from Northern Europe. Because the stepfather was undocu-

mented, it had been difficult for him to find work, and Andrés' mother supported the family of five with a paper route and part-time work at a fast-food restaurant. However, when she had her fourth child, she had to give up the fast-food job and concentrate on serving a larger paper route. Andrés often helped, getting up at 2 or 3 o'clock in the morning to prepare papers and deliver them. He then came home and slept for a short time before going to school.

Andrés' mother and biological father had divorced when Andrés was only a few years old. His father, a Chicano with a bachelor's degree in computer science, had since remarried and moved to a nearby state. During high school, tensions began to arise between Andrés and his father as Andrés became increasingly aware that his father did not pay child support. Andrés' father said that he could not help out financially because of his own pressing needs. Further, each time Andrés' mother suggested that the father help out financially with his two sons, he reportedly threatened to seek custody of the boys, throwing Andrés' home into turmoil. These tensions began to erode the father-son relationship, and by the end of high school, Andrés had only sporadic contact with his father.

From our first meeting in ninth grade, Andrés was certain of what he wanted to do for a career. He wanted to be in some kind of law enforcement, and joining the FBI was an ultimate goal. Asked about his interests, he offered that he was "a little obsessed with weapons." Asked why, he replied, "So I'll know how to use them when I'm an FBI agent."

Andrés was realistic but also had a lofty goal in mind: "I know it's also a lot of paperwork," he said. "But I like the idea of capturing criminals and putting them behind bars to make the world a better place for my children."

Andrés already had a grown-up sense of responsibility and a need to right the wrongs he saw around him. In an essay he wrote in ninth grade, he expressed a mature understanding of the problems his mother faced and an uncharacteristically sober view of the world. He wrote, "My younger brother does not see all of the positive things about my mom…[He] only sees my mom's struggles as a piece of cake, but my mom's problems are not a piece of cake…I understand why my mom is strict. She is like that so when she dies we would already be in [the] habit to clean up or cook for ourselves."

By his junior year, Andrés reported spending more time at his church. "I help out at the church by setting and cleaning up after a service," he said. "I've become very involved in the church. It is a support system for me. I've acquired a second family through the church. I can really relate to them. We can talk about our problems."

It is not clear what steered Andrés toward the church group, but it clearly signaled a change in his trajectory. Slipping grades were restored and, while Andrés had always been a serious young man, he became more so at this time.

Andrés stood out among his peers in another way. He had gathered a group of Puente students around him, none of whom performed as well as he, and tutored and encouraged them to push themselves in their studies. One morning when we met to talk, Andrés appeared exhausted. He said that he had little sleep the night before because he had been up almost all night helping two of his Puente friends finish papers for their classes. He was proud of the fact that they had completed three papers on one computer during the all-nighter. While Andrés pushed himself by taking every AP and Honors course that he could, he also vowed to make sure that all the Puente students in his study group would have the grades to go to college.

Andrés earned an 1120 on the SAT and graduated from high school with a 3.74 GPA — a high number, but down from the nearly 4.0 he carried for most of his high school career. Nonetheless, because of his rigorous high school course of study and the significant hardships that he had overcome, Andrés was a good candidate for a considerable scholarship at a highly selective university. However, he worried greatly about leaving his mother alone with her heavy responsibilities. Despite the fact that he had always voiced the intention of going to college after high school and that his counselor and teachers had pressed him hard about applying to the closest prestigious four-year university — thus reducing his concerns about leaving home — Andrés opted to join the Marine Corps Reserves. He reasoned that they would help him to pay for his college education when he enrolled and that he could simply defer college for the time being. His concerns about money and about being available to help his family were ultimately the biggest factors in his decision.

Andrés is currently a community college student but, as a reservist, is eligible for active service. He changed his major from criminal justice to psychology and maintains a 3.5 GPA. His plans were to secure an associate's degree within four years of graduating from high school and to receive a bachelor's degree two years after that from the local state university. He figured if he remained on track, notwithstanding the high probability of being called to serve military duty, he would have earned a college degree six years after finishing high school.

This is not the path his teachers and counselors had envisioned for Andrés. As one of the brightest academic stars in his high school — a school with students from low-income families, with more than 85 percent Latino enrollment, and with a high percentage of undocumented and limited-English-speaking students — the sky appeared to be the limit for Andrés. His achievements should have resulted in a full scholarship to a prestigious four-year college or university. But for Andrés, family loyalty was more powerful than personal ambition.

Ofelia. Ofelia was one of the members of Andrés' study group at Frontera High School. She has dark hair and eyes, and a pleasant, earnest face. Ofelia was born in Mexico and came to the United States when she was seven years old. At the time she began high school, she was living with her mother and brother, and the language of her home was Spanish. She began high school with a 3.8 GPA and big ambitions. In an early interview she noted that she wanted to be a doctor, a lawyer or a CEO. When asked where she wanted to go to college, her choices were Harvard, Stanford or Boston University.

It isn't clear how Ofelia cultivated these ambitions because she spent most of her childhood separated from her divorced parents and living with foster families. We do know that Ofelia selected her friends carefully, from among the most ambitious in her school. And when asked to identify who she might want, hypothetically, to change places with, she chose the student who was perceived to be the smartest in her class. In addition, Ophelia rated school as the No. 1 priority in her life, ahead of family, friends, and other activities. Of all of the students in the study, Ofelia was the clearest about her goals and the most knowledgeable about her options. Like Andrés, however, she was drawn to the military and the Naval Academy, as means to help pay for her college education.

Ofelia's parents separated when she was young. After that, she had almost no contact with her father, a high school graduate who attended seminary in Italy for a time. In an essay on people she admired, however, she listed him "because he is smart."

Ofelia and her brother, who is four years older than she, became separated from their mother after coming to the United States. As a result, they spent most of their childhoods with foster families. A couple of years before she began high school, though, Ofelia paired up with her brother to search for their mother. The two broadcasted a message on a radio program that attempted to unite missing relatives. Incredibly, their mother heard the plea. The family was reunited but faced some challenges: Ofelia's mother had only an elementary school education, suffered from chronic health problems, and had difficulty maintaining a stable home life. Ofelia defended her mother and stated that since her mother was usually unable to work, it was her responsibility to help out around the house and help augment the family's income.

When Ofelia was in the 10th grade her mother was incarcerated on drug-related charges. This was psychologically stressful for Ofelia, who found it increasingly difficult to defend her mother's actions. The picture Ofelia had painted for outsiders of a courageous, hardworking mother became difficult to sustain.

Ofelia moved in, temporarily, with her brother, who was also struggling to go to school while holding a job. She then moved in with the family of her boyfriend, a Chicano who was also an outstanding student at Ofelia's high school. (He ended up going to the University of California, Berkeley, upon graduating.)

Ofelia took on several jobs to help support herself. She worked at a fast-food restaurant, cleaned offices in the evening, and sold food at a ballpark concession stand. The combined stress took a toll on her health. She was taken to the hospital twice during her sophomore year for stomach pains that doctors ultimately attributed to stress. Her grades fluctuated wildly, from a high of 3.7 to F's in all of her classes. Through it all, Ofelia maintained that she would go to college. She took night classes and went to summer school to make

up failed courses and raise her GPA. She studied three to four hours a night, often with a study group headed by Andrés, while also volunteering at the local hospital and library, and tutoring ninth-graders. In addition, she was on the school's Academic Decathlon team, which required many additional hours of study. As an 11th-grader, Ofelia reported that she routinely got only about three hours of sleep a night.

Ofelia's mother was released from prison in Ofelia's junior year. She asked Ofelia to return home with her, but Ofelia was reluctant, noting that her mother was not supportive of her educational goals.

"My mom and I argue about school," Ofelia said. "She [thinks] my classes take up too much time." Ofelia became convinced that living with her mother, and the resultant pressures to work more and study less, would make her college goals impossible. She opted to stay with her boyfriend's family.

As motivated and focused as Ofelia was, she still found herself at a crossroads at graduation. She completed high school with a 2.4 GPA and a 900 on the SAT, a considerable accomplishment given the roller coaster ride that her high school years had been, but far below what everyone acknowledged was her potential. Ofelia credited the support of her study mates and her boyfriend with her academic comeback. She did not want to be separated from her boyfriend at UC, Berkeley, so she sought information about community colleges in the Berkeley area. But by the summer after high school graduation, she still had no definite plan. With intervention by her counselor, Ofelia was admitted to a state university campus about 80 miles from Berkeley and given sufficient financial aid to live and go to school.

While at college, Ofelia spent every weekend visiting her boyfriend and failed to make friendships with students on her own campus. She felt isolated and alone, with no family or friends nearby, and gradually began disengaging from school. Out of loneliness, Ofelia began to eat more and put on weight, which made her feel even worse. By the end of her first semester, Ofelia was not happy and talked about leaving. And at the end of her first year, Ofelia returned home. Meanwhile, her boyfriend had also had a difficult first year and took a leave of absence. The two enrolled in a junior college, but Ofelia only enrolled part time, opting to work full time.

Andrés and Ofelia both have enormous potential but had to overcome significant barriers to realize their ambitions. On paper, both began high school with the kinds of grades, test scores and attitudes that should have predicted for high achievement and an easy transition to college. Many people would — and did — argue that these were the kind of students who did not need significant support to make it to college and that resources would be better spent on students whose academic careers were more precarious.

All the way up through his senior year, Andrés looked like a candidate for a highly selective university and appeared to have the drive and ambition to make it happen. Ofelia's difficult personal life made her an obvious risk for school problems, but her ambition, tenacity and clear goals, in addition to her tendency to hang out with high-achieving peers, seemed to bode well for a positive outcome. Yet, for both of these students, complicated personal lives and responsibilities, combined with a lack of financial resources, made the road to college rocky and uncertain. The ending to these stories is still not known, but an unforeseen war that is likely to disrupt Andrés' education, and work obligations that took precedence over college for Ofelia are significant barriers to the futures both envisioned.

Category II: Moderately High-Achieving Students

We followed seven students in the category of moderately high achievers and lost none of them from ninth to 12th grade. These students all began high school with fairly strong academic records. As a group, they started high school with a mean GPA of 3.0. They maintained at that level for most of their high school careers but graduated with a mean of 2.82. Demographically, they look a lot like the highest-achieving students. Five of the seven came from homes in which the parents' education consisted generally of elementary school. One had a parent who had completed some junior college classes, and one had a parent with a bachelor's degree. Only one of the homes was English-only speaking.

The Category II students tended to focus their ambitions on the state college system or on private, four-year colleges that might be a little easier to gain admission to than, say, the University of California — although one student with a 3.3 still hoped to go to

UC. Of these students, all but one took the SAT. As with the higher-achieving students, the most successful of these students tended to socialize mostly with others in the college-access program, and all but one maintained active friendships with other goal-oriented students. Two students who typify the profile of students in this category are Angela and José.

Angela. Angela is tall and light skinned, with light brown hair and a broad, expressive face. She smiles easily and is well-liked by her peers. She is also something of a social butterfly. Asked about who her friends were, Angela proceeded to name a lengthy list of students with whom she interacted, both in and out of school. In spite of generally good grades and a serious attitude toward school, she listed school as a fourth priority, behind family, friends and boyfriend.

Angela is the oldest daughter and one of six children. Her parents were both born in Mexico and left school after third or fourth grade. Angela's mother stayed home with the children, and her father worked in a factory making automobile parts.

Angela's relationship with her parents was interesting. While Angela reported tensions with her mother because she set strict rules for Angela — no boyfriends, no driving, strict curfew — Angela also professed to admire her mother greatly. One of the characteristics she admired most about her mother was her ability to be "in control" of her life. Thus, the very control that sometimes made Angela bristle was also a quality she valued highly in her mother.

Angela's father, on the other hand, was much more supportive of Angela's independence and often allowed what her mother would not. Nonetheless, Angela's strongest bonds were with her mother. Both parents, however, remained significant presences in her life throughout high school.

Although she was a good student coming into high school (3.4 GPA), she was undecided about going to college. Her professed vocational interests shifted in the first few years of high school, from architect to teacher, to pediatrician, to nurse. These changes seemed to be guided largely by Angela's growing understanding of what was required to prepare for each of these careers. She pressed herself to take AP and Honors courses, although she did not always do well in them. Her stated goal was to get B's, but she frequently fell short of this, once getting an F in math that had to be made up in summer school. Math was a major stumbling block for Angela and she dreaded math classes.

Nonetheless, Angela completed the math sequence through Algebra 2, because she was counseled that it was required for good four-year colleges. By the 11th grade she had decided that, as a result of her experience in the college-access program, she "want[ed] to go to college. I know that I can have a better future for my family."

Angela's goals became to attend a university, live in the dorms (which her mother did not support), and become a nurse. She was focused on her goals and anxious to raise her GPA from a 3.0 to a 3.5 to make this possible. But Angela also had a number of things competing in her life.

As the oldest child of a low-income family, Angela had to help her mother with her brothers and sisters. Throughout high school she had a job most afternoons caring for the children of two professionals who lived nearby (but, in her words, were "in another world"). She also had a boyfriend, who took up much of her spare time. Both her parents and her counselor worried that she was spreading herself too thin. But Angela was not eager to give up the childcare job because she relished the contact with the children's family and the advice they dispensed about how to achieve her goals.

Angela tended to hang out with other high-achieving women from the college-access program, two of whom were headed for the nearest UC campus. Angela, too, initially thought this would be a good option, reasoning that she could commute or at least be able to live close to home. Several things conspired to change her mind: higher grades did not materialize, she broke up with her boyfriend, and she began to think of how hard it would be to maintain her focus on school with all the distractions her family presented. Although Angela was never able to raise her GPA to the 3.5 she sought, she did manage to finish high school with a 3.0 and a 1,000 on the SAT. This made it possible for her to enroll in a relatively selective state university further from home than she had at first considered. Angela moved away from home and went to live in a college dorm, which her mother had initially opposed.

The summer before college, Angela was invited to attend a "transition to college" program at the school she was going to attend. This turned out to be an especially important experience.

Although the program was not particularly instrumental in helping her decide on a major, or in improving her academic foundation, it did help orient Angela to the routines and expectations of college. Through the program, she also met a number of students who later became good friends. These friendships immensely helped her adjust to college life and not succumb to homesickness or loneliness.

In spite of her participation in the summer program, Angela was not well-prepared to decide what to study at college. Her parents were not able to provide guidance about career choices, but Angela had thought at one time that she would be a pediatrician or a nurse, so she declared a major in biology. Biology in college was not at all what Angela had experienced in high school; the classes were demanding and competitive, and the subject matter did not interest her. She changed to psychology after struggling with a relatively low 2.3 GPA her freshman year.

Nonetheless, Angela remained confident that she would graduate from college within five years, and she was happy with her college choice. She also maintained contact with a number of her classmates from the college-access program as well as with her counselor, who continued to advise and encourage her.

Angela graduated from college in five years, true to her goal. It is worth noting that Angela almost certainly would not have been accepted to the school from which she graduated if she had applied one year later — after passage of Proposition 209 barred affirmative action. As a result, her educational career, and most likely her life, would have turned out much differently.

José. José is a handsome young man with bronze skin, dark hair, and a well-groomed appearance. He has an outgoing personality and a quick sense of humor that are readily on display in even a brief conversation. He began high school with a good GPA (3.1) and continued to grow academically each year. At the end of 11th grade, his GPA was 3.6.

José is the second-oldest child in a family of five siblings, and neither of his parents has a high school education. His father is a construction worker, and his mother is a homemaker. José lived with both parents through high school graduation. Spanish was the language of the home.

José jumped at the opportunity to take honors classes and enjoyed challenging himself in school. By his junior year, almost all of his classes were honors or AP, and he was easily maintaining at least a B in all of them. His goal going into 12th grade was to earn a 4.0, which would have required only a little more study.

When José began high school, he had hopes of attending Stanford University and going into medicine. This was the path his older brother was following and he, as well as the rest of the family, was proud of this brother. José, however, encountered a distraction from his studies. He started a car-detailing business about the same time that he started high school. Initially, it was a small, part-time activity he engaged in after school and on weekends. As the years went by, however, each interview with José included more and more discussion of the business and revealed that he was spending an increasing amount of time working rather than studying.

José was well-liked and maintained some friendships among the students in the college-access program, but he generally preferred to hang out with the cholos from his neighborhood — boys who would often cut school and who showed little interest in studying. José's school performance did not appear to be affected by the lower aspirations of his friends, but his other interests did threaten to derail his ambitions. The auto-detailing business grew and began to realize substantial profit. By the end of his junior year, José had five employees working for him, and he began to see that he could dedicate himself to the business and earn a significant income. As a result, he started to talk about not going too far away from home for college and about maintaining the business on the side. He contended that he still wanted to go to a good university, but that he also wanted to be close to home and his fledgling business.

José graduated from high school with an SAT score of 1,020 and a GPA of 2.96. His grades fell precipitously in his senior year, as his attention turned away from school. He vacillated throughout his senior year about going to college or dedicating himself to his business. He did not apply to Stanford but was accepted at a highly regarded private university near his home; he

reported that he had decided to attend this school and to maintain his business on the side.

José did not, however, go to college. He decided to "take a year off" and dedicate himself full time to his business. He contended that his older brother and he were 50/50 partners in the business, although José was the one who ran it since his brother was studying full time at Stanford. As José put it: "My brother is the studious one. So the way I see it, he'll be living out both of our dreams, in terms of medicine."

Two years after high school, José did enroll at the local community college part time, taking largely business courses. He reported that he had about a 3.5 GPA in his courses, because he said, "It's not too tough there." When asked when he thought he would graduate from college, he could not say. He simply noted that he wasn't "really thinking about that now. In reality, I think of it as a waste of time. My business is doing great, and we're actually about to expand. When the weather isn't good, I work at [the] city college library and get paid over 12 bucks an hour. So I'm doing pretty good right now."

Angela and José represented great potential. Both were bright, hardworking and capable students. When asked in the 11th grade where school ranked among their priorities, José said "first," just ahead of work; and Angela ranked school a low fourth. But both students' priorities changed radically between 11th grade and high school graduation. For Angela, breaking up with her boyfriend, putting her family's needs in greater perspective, and seeing her friends go off to a different college, left her with school and college as her highest priority. It is important to recall, however, that Angela's best friends always intended to go to college, and they frequently talked about going off together. The idea of college simply moved from the margins of her thinking to center place.

José, on the other hand, hung out with people unlike himself. While he maintained cordial relationships with other students in the college-access program, his primary friends were mostly uninterested in school — and none went on to a four-year college. José did not disappoint any of them when he chose to stay home and work, but he did disclose the following: "[I] got a lot of advice from everyone. Of course, they were all telling me about going straight to college, but I made a decision that was best for me. I knew what I wanted to do."

José is an example of a student with enormous intellectual capability who became distracted by the immediate gratification he was gaining from his business. He is bright and talented, and may eventually make different choices, but the idea of spending several more years in school could not compete with the satisfaction he gained from running a successful business and having ready cash available. Conceivably, by involving his family in discussions about his future — especially his academically ambitious older brother — José could have been convinced to continue his education, while making other arrangements for his business.

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Of these four highly talented students, who at different times in high school looked like high achievers with many postsecondary options, only one completed college — and that was six years after high school. Whether any of the others will earn a degree remains an open question.

At the time the study began, all were participating in a college-access program that provided significant counseling, preparation for college, and, importantly, a peer group that was supportive of college as a goal. In many ways, these students represented "best case scenarios." Yet, because of family responsibilities, the lure of an immediate income (and of owning one's own business), and multiple setbacks, and loss of self-confidence, three found themselves far from the goal of a college education. The only student who did successfully complete college credited the various program supports she had in high school and through the summer bridge program, as well as a goal-oriented group of friends in college and the opportunity to leave home for her studies. It is still notable, though, that she, too, adjusted — and downscaled — her ambitions somewhat after realizing how much work it took to become a doctor, and how difficult it would be to compete with students who were much better prepared by their high schools.

What can we learn from these students that might help us to shape education policy? First, we see that the kinds of activities that take place in many college-access programs — specific college counseling, access to and encouragement to take more rigorous courses, preparation and support for taking college entrance exams, and the availability of a supportive peer group — are all key elements to helping keep students on track for college. These activities need to be provided, if not by such a program, then by schools themselves.

But, college-access programs are not enough. For Andrés, personal counseling about how to manage his perceived responsibilities at home and still continue with college, and about how to access financial aid might have helped him make decisions that were more academically oriented. Receiving encouragement to better involve family in discussions about college options might also have helped.

For Ofelia, social service support that could have reduced her dependence on multiple part-time jobs, and better counseling about how to handle the stress of going away to college might have helped. And, if the community college she attended had helped to embed her in a supportive peer group, she might have stayed in college.

It isn't clear that José could have been motivated to go to college in the face of a successful business that gave him prestige and access to money. However, he might have weighed the decision more carefully had a mentor been available to talk with him about the hazards of joining the workforce before completing his education.

Despite the imperfections with the system, one thing appears clear: Without the college-access program and the peer-group support it offered, at least one of these students would have likely dropped out of high school, and probably none would have completed college — and these were among the most talented students in their high schools. The research suggests that the program offered most of the critical components needed to support low-income, Latino students in high achievement, at least within the context of their schools. However, limited involvement of parents and social service agencies, combined with failure to bridge the transition points in students' academic lives, proved costly in terms of loss of academic momentum.

The downside of college-access programs is that they are labor intensive and expensive. If more students are to benefit from the support services offered by such programs, these services will need to be offered in more routine and cost-effective ways. And it is apparent that *other* services not offered by these programs — services that extend across developmental stages and transitions — are probably necessary.

Although good documentation is now available on both the cognitive benefits and the cost effectiveness over the long run of intensive early interventions for young children, the investment that would be necessary is probably not going to be forthcoming in the near future.[39] The more likely policy targets are preschool education, college-access programs, and some of the features of these programs that can be embedded in school-reform efforts. The features of college-access programs that could help retain more Latino students in the upper quintile of performers, and stimulate others to shoot for that goal, are discussed below.

[39] Frances Campbell and Craig Ramey, "Cognitive and School Outcomes for High Risk African American Students at Middle Adolescence: Positive Effects of Early Intervention," *American Educational Research Journal*, 32, 743-772, 1995; and Lynn Karoly et al., *Investing in Our Children: What We Know and Don't Know About Costs and Benefits of Early Childhood Interventions*, Santa Monica, CA: Rand Corporation, 1998.

A study by Patricia Gándara and Deborah Bial examined the extant literature on the effects of college-access programs and studied 13 programs for which evaluation data could be located. The goal was to understand how the programs operated, what the programs' impact was on participants, and which students were most likely to profit from such intervention.[40] From this work, the researchers identified several features that appear to have broad appeal and help most students find their way to college.

- A key person who monitors and guides the student over a long period of time. This could be a mentor, program director, faculty member, or guidance counselor; studies are not clear on which of these is most effective. Critical, however, is that someone takes responsibility for the student at a personal level and does not allow the student to fall through the cracks of the system.
- Help receiving high-quality instruction. This was best done by directing students to the most challenging coursework offered by a school ("untracking"), by providing special coursework that supports and augments the regular curricular offerings (tutoring and specially designed classes), or by intervening in the school curriculum to better address specific learning needs. All of the programs studied by Gándara and Bial that were able to demonstrate effectiveness incorporated a strand of rigorous coursework with enrollment in honors courses or, in some cases, in more rigorous schools outside the students' neighborhoods.
- Development of a peer group that supports students' academic aspirations and that meets for academic as well as for social and emotional support. It is critically important for students in "at risk" communities, where few models of high achievement exist, to have peers that are supportive of the idea of working hard at school. It is equally important to have a peer group that is supportive of the young person's personal and social identity and that makes it OK to be a good student. Not all successful programs did this as a conscious strategy, but, even if inadvertently, successful programs created spaces for these kinds of relationships to flourish.
- Financial assistance and incentives. Financial assistance is important for allowing access to academic-leveling experiences, such as college visits and SAT preparation courses, and for making college a realistic possibility for many students. Scholarships do make the difference between going to college or not for many low-income students,[41] but too often this aspect of support is overlooked in programs. Program directors in the Gándara and Bial study sometimes believed funds would be available through other sources. What these directors failed to understand was the importance of security, of knowing funding would not be a problem. The fear of going into debt or of not being able to pay tuition kept parents from being as supportive of college as they might otherwise have been. Some college-access programs are centered on financial incentives. These programs uniformly find, however, that more is needed to spur high achievement. That said, the most successful programs incorporate financial assistance as a core aspect of a comprehensive program of services.

Gándara and Bial also found that the great majority of college-access programs did not, or could not, attend to certain areas and that this fundamentally undermined their mission. For example, program attrition is a large problem for most programs. By high school, students have busy lives. Many work at part-time jobs and engage in sports or other extracurricular activities. Often, social lives take on greater importance as students move through high school. Students who are interested in going to competitive colleges also often participate in service activities and student government, for example, so they can mention this work in their applications. A voluntary college-intervention program is viewed as optional, often abandoned when other demands get in the way. To avoid this from occurring, school could embed college-access program activities in requirements for graduating.

Most college-access programs do not attend to the specific academic backgrounds of the students. Their mission is, specifically, to help low-income, first-generation students get to college. For some programs,

[40] Gándara and Bial, 2001.
[41] K. Akerheilm et al., *Factors Related to College Enrollment*, Final Report, Mathtech, Inc., Washington, DC: U.S. Department of Education, Office of the Undersecretary, 1998.

the mix of higher and lower achievers is an important feature of the program itself, and the assumption is that stronger students will help weaker students. However, this may not be the case if the program is not explicit about this intent. Moreover, there is a tendency to believe that high-functioning students need less attention, when they may be the best targets for programmatic efforts. Of the students studied in the Puente program, it could be argued that the highest-performing students received the greatest (value added) benefit from the program in terms of meeting the goal of going to college.[42]

Evidence suggests that college-access programs are often more successful with one group of students than another. One glaring, and yet inexplicably overlooked, area of weakness is the failure of programs to focus on the eroding academic position of minority males. While gains for females have been significant over the last two decades on almost every measure of academic achievement, males have made virtually no progress and therefore lag seriously behind females. Males, then, could be particularly helped by college-access programs — yet they are seriously underrepresented in them. Across all kinds of programs, only about one-third of participants are males. This is a particular concern because minority males are overrepresented in all categories of risk, and underrepresented at almost all levels of school and college participation.[43] That they are underrepresented is especially ironic because the aim of these programs is to level the playing field for students who are not adequately represented among college-goers. Programs admit to having great difficulty both attracting and retaining males, yet they have employed few systematic strategies to increase the enrollment of males.

Because good, comprehensive programs are labor intensive and require frequent one-on-one contact with students, they are expensive. Most programs cannot afford to enroll large numbers of students, so even given the high turnover, only few students have contact with these programs. Data from the *High School and Beyond* longitudinal survey estimate that no more than 5.3 percent of Latino students nationwide participate, at any level, in such programs.[44] Moreover, a central finding of the Gándara and Bial study was that the longer programs maintained contact with the students, the better the outcomes. Programs that extended over many years of schooling and helped students across the transitions from middle school to high school and from high school to college are the most likely to be successful. Vulnerable students continue to be vulnerable to all of the circumstances that placed them at risk in the first place, and when programs end or no longer provide services for these students, many flounder.

[42] Gándara, 2002.
[43] Mortenson, 1999.
[44] Clifford Adelman, *Participation in Outreach Programs Prior to High School Graduation: Socioeconomic Status by Race*, U.S. Department of Education, ConnectED Conference, San Diego, CA, January 10, 2000.

After careful consideration of the data, we find ourselves confronted by two major policy challenges: to close the gap at the upper end of the achievement continuum so that the highest quintile of Latino students can match and compete with their White and Asian American counterparts, and to find ways to dedicate resources to Latino high achievers so these students receive the support they need to realize their potential.

Meeting the first challenge will require providing more rigorous coursework, better schools, better instruction, and possibly more time to "make up" for the learning that is lost outside of school — when middle-class students are receiving academic enrichment that low-income Latino students do not receive. Currently, the primary means to closing the achievement gap at the elementary-school level are placing students in better schools, providing some kind of early intervention, or providing them access to special educational opportunities, such as gifted education. None of these is wholly effective.

School reform is an important, but long-term, solution. Early intervention is fixated on remedial education and on "bringing up the bottom." And, while great strides have been made within the field of gifted education in acknowledging the problems associated with identification of Latino students, there remains a need for refinement within gifted programs. Problems include establishing acceptable definitions of giftedness and talent. Today's definitions are narrow and overly dependent on developed academic skills. They also fail to account adequately for cultural and linguistic differences in the expression of ability and the inadequacy of most teachers and standardized tests to recognize and measure high ability or talent in Latino students. Thus, Latino students remain seriously underrepresented in programs for the gifted and talented. This is especially unfortunate because evidence suggests that placement in these programs can lead to greater access to high-quality instruction, college-preparatory classes, and AP and Honors courses — all critical elements to developing academic talent.[45] Effective alternatives to developing talent outside of special programs are rare. To have substantial effect on developing high levels of talent, both content of instruction and pedagogy must be addressed.[46]

At the secondary level, access to the most rigorous curriculum, including Honors and AP courses, is often guarded as a privilege of the few who are already competitive at the highest levels. Because Latino students routinely score one-half to three-fourths of a standard deviation below both White and Asian American students on standardized achievement tests, they are seldom found in AP or Honors courses in schools where they must compete for space with these groups. And in schools where there are few Asian American or White students, there is often a notable lack of resources to provide truly rigorous coursework.

At the point of matriculating into college, Latino high achievers often make less-than-wise choices. Almost half of Latino college students attend Hispanic-serving institutions (HSI's), most of which are either two-year schools or four-year colleges that are not considered selective. The dilemma for these students is whether to attend an HSI, which can provide needed social support, or a highly selective school that provides the academic rigor and high standards that many high performers require.

As Richard Fry points out, Latino students often make postsecondary choices that do not maximize their potential. The primary reasons for this are both lack of information and the belief that they cannot afford to attend more-selective schools.[47] Numerous studies have pointed to the egregious lack of information that both Latino students and their parents have about getting ready for, applying to, and paying for college.[48] Inasmuch as college-access programs touch

[45] Gándara, 2004.
[46] Joséph Renzulli and Sally M. Reis, *The Schoolwide Enrichment Model, A How-to Guide for Educational Excellence,* 2nd Edition, Mansfield Center, CT: Creative Learning Press, 1997.
[47] Fry, 2004.
[48] L. Tornatzky, R. Cutler, and J. Lee, *College Knowledge: What Parents Need to Know and Why They Don't Know It*, Los Angeles: Tomás Rivera Policy Center, 2002; and *Latino Eligibility Study, Report IV*. Santa Cruz, CA: University of California, UC Latino Eligibility Task Force, 1994.

so few and work with such a wide range of students, very few Latino high achievers receive the benefit of such programs — and when they do, the services provided may not be geared to their particular needs.

Because resources to provide early intervention, college-access, and other special support programs are limited, choices must be made to maximize impact. Who are the most appropriate targets? And which mix of support services provides the most cost-effective outcomes for targeted students? For example, does it make sense to provide the same mix of services for high and low achievers, highly motivated versus less motivated low-income students? Probably not.

While college-access programs are being developed and expanded across the country, virtually every state is also engaged in large-scale education reform activities, focused largely on closing the achievement gap. Since the core of both college-access programs and education-reform activities deals with the same issue — preparing more underrepresented students for success in school and, ultimately, college — it would seem to make sense that the efforts would be linked. But they are not. Instead, these two endeavors are like trains running on parallel tracks. Clearly, there are resource issues that should be addressed, but perhaps even more importantly, one must question how much more could be accomplished if these efforts were coordinated.

Finally, if we begin with the assumption that superior talent exists among all groups of students, but that it must be nurtured if it is to thrive, then the work ahead is clear. We must provide students with similar educational opportunities, as well as with similar opportunities for enrichment and personal and social support. All are necessary for converting the thin thread of hope held by some students into a sturdy lifeline to the future.

1. Intervention must begin earlier to help retain students within the upper quintile of performers and to identify possible high achievers who may not have the resources to reach their potential otherwise. Such early interventions should also recognize the diversity of learners and build on the already established strengths of early achievers.

2. Special attention should be placed on intensive academic-English instruction for high-achieving Latino students. This need not, and probably should not, exclude the possibility of bilingual instruction across the grades, since this has also been shown to yield cognitive benefits for students when used as part of a comprehensive, demanding curriculum.[49]

3. Educators and policymakers need to refocus attention on the top quintile of achievers among Latino students. These students must be seen as valuable and, simultaneously, fragile resources. Schools and programs should find ways to better distribute resources to these students.

4. Much can be learned from college-access programs about strategies that effectively support Latino students. To do the most good, though, the effective components of these programs must be embedded in schools. Examples include counseling students about selective colleges and how to prepare for them; monitoring student progress on higher education goals; steering students into more rigorous courses; structuring opportunities for students to form supportive, high-achieving peer groups; and providing parents with tangible information about college opportunities and how to finance them.

5. Within the context of special programs, developers and directors must examine and target their attention to the needs of high-achieving Latino students. This should include efforts to help these students gain access to college-preparatory courses; to the most rigorous courses offered by the school; to information for students and parents about how to seek scholarship funds and to finance an education at selective institutions; and to frank discussions about both the benefits and liabilities of attending nearby, less-demanding institutions. In addition, the students will almost certainly need continuing support that extends over high school and continues into college.

6. Programs that support low-income students who are at risk in school need to connect with social service agencies and families to provide the kind of personal support and mentorship for high-achieving Latino youngsters that is often reserved for those viewed as being at risk for dropping out of school. Most of these students have supportive family members, but schools often lack the resources or the will to enlist them. Better training of school-counseling personnel, and counselors who are familiar with the cultures and languages of Latino students would be helpful.

7. Gifted education, college-access programs, and school reform are currently compartmentalized, serving particular constituencies in an uncoordinated fashion that fails to maximize their possibilities. If college-access programs were to coordinate with school-reform efforts and embed themselves more deeply in the day-to-day school routines of students, they could have a more pervasive and powerful effect. Moreover, if school-reform and educational intervention programs were to borrow from the teaching and learning strategies developed in gifted education programs, they could likely strengthen the educational experience of all children and increase the yield of high achievement for Latino and other students.

8. If the majority of Latinos, including many high-performing Latinos, are going to continue to attend HSIs, policymakers should pay more attention to these schools: to raising their academic standards, increasing the rigor of their offerings, and demanding accountability in terms of high-achievement outcomes for more of their students. Resources provided to HSI's should come with strings attached — that they also show higher achievement outcomes for their students.

9. Researchers, schools, and programs need to pay particular attention to identifying the factors that uniquely support the high achievement of Latino males, who demand special consideration.

10. Researchers need to focus more on fostering high achievement among Latino students and to uncover what is needed to "bring up the top," rather than only attempting to "raise up the bottom."

[49] Ellen Bialystok, *Bilingualism in Development, Language, Literacy, and Cognition*, New York: Cambridge University Press, 2001.

Table A-1

Logistic Regressions Predicting Staying in the Top Quintile, ECLS, Latino Students

	Reading Odds Ratios	Math Odds Ratios
Male	0.736	1.467*
Maternal education		
<HS (Ref.)		
HS	3.179**	1.974*
Some college/VOC	5.605***	3.133***
BA	6.759***	4.710***
Grad. degree	7.391***	6.939***
Paternal education		
<HS (Ref.)		
HS	1.330	1.405
PSE	1.620	1.590
BA	1.740	2.537**
Grad. degree	2.541*	3.108**
Family income <30K	0.652	0.616*
Family income >100K	1.364	0.850
Public school	0.590**	0.931
Live with biological parents	1.346	1.569

*p< .05; **p<.01; ***p<.001

Table A-2

Logistic Regressions Predicting Staying in the Top Quintile, ECLS, White Students

	Reading Odds Ratios	Math Odds Ratios
Male	0.665***	1.974***
Maternal education		
<HS (Ref.)		
HS	3.246	2.923
Some college/VOC	3.408*	4.383**
BA	5.760**	6.334**
Grad. degree	7.133***	8.771***
Paternal education		
<HS (Ref.)		
HS	2.370	2.968*
PSE	3.715**	5.458***
BA	4.684***	7.828***
Grad. degree	6.042***	9.045***
Family income <30K	0.717	1.332
Family income >100K	1.145	1.483***
Public school	0.972	0.877
Live with biological parents	1.528*	1.693**

*p< .05; **p<.01; ***p<.001

Odds ratios express a probability of occurrence. An odds ratio of 1.46 for being male, for example, means that males are 1.46 times more likely than females to be in the category of high achiever. An odds ratio below 1.0 for a male, such as 0.7, means that females are more likely to be in that category because the odds for a male are less than 1:1.

Table A-3

Logistic Regressions Predicting Staying in the Top Quintile, NELS, Latino Students

	Reading Odds Ratios	Math Odds Ratios
Male	1.78*	0.69
Maternal education		
<HS (Ref.)	1.00	1.00
HS	0.59	0.97
PSE	1.31	2.03
BA	0.33**	1.06
Paternal education		
<HS (Ref.)	1.00	1.00
HS	1.46	1.73
PSE	2.17	2.31
BA and above	6.88***	5.52***
Family income <30K	0.66	0.72
Family income >100K	1.04	0.38
Public school	0.35***	0.77
Live with biological parents	1.33	0.87

*p< .05; **p<.01; ***p<.001

Table A-4

Logistic Regressions Predicting Staying in the Top Quintile, NELS, White Students

	Reading Odds Ratios	Math Odds Ratios
Male	1.17	0.73**
Maternal education		
<HS	0.41**	0.58
HS (Ref.)	1.00	1.00
PSE	1.98***	1.45*
BA	1.96***	2.08***
Paternal education		
<HS	0.46*	0.38**
HS (Ref.)	1.00	1.00
PSE	1.17	1.20
BA and above	2.56***	2.33***
Family income <30K	0.87	1.01
Family income >100K	2.06***	1.42
Public school	0.84	0.97
Live with biological parents	1.43**	1.34*

*p< .05; **p<.01; ***p<.001

Odds ratios express a probability of occurrence. An odds ratio of 1.46 for being male, for example, means that males are 1.46 times more likely than females to be in the category of high achiever. An odds ratio below 1.0 for a male, such as 0.7, means that females are more likely to be in that category because the odds for a male are less than 1:1.

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