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Education's Hispanic Challenge

by

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***RAND**

INTRODUCTION

Thirty years of increasing immigration from Mexico, Central America, and South America, has led to a rapid increase in the population of Hispanic origin in the United States. The Hispanic population has grown from four percent of the total population in 1970, to nearly 10 percent in 1992. By the year 2005, people identifying themselves as being of Hispanic origin are expected to constitute the largest ethnic minority in the United States, thus exceeding African Americans. A relatively high fertility rate combined with expected continuing high levels of immigration among Hispanics makes clear that these trends will continue for at least the next 20 years. Already, Hispanics are an increasing proportion of children born in the United States. More than 13 percent of children aged 1 to 3 years old in 1990 were Hispanic compared to 6 percent in 1970.

Hispanic children and youths will enter an economy that has changed significantly over the past few decades. The number of well-paying manufacturing jobs that have been the backbone of the U.S. economy are stagnating and are projected to provide employment for only 11 percent of the economy by 2005 (U.S. Department of Labor, 1995). The service related jobs that are replacing them require a level of knowledge and skill that, for the most part, require at least some college. Indeed, acquiring at least one or two years of postsecondary education following high school graduation has become a prerequisite for competing in today's U.S. labor market and assure oneself an adequate living wage. Today, nearly all new net jobs created by the economy are being filled by workers with some college or more. At the same time, the number of jobs filled by workers with less than a high school education has declined by 41 percent since 1970. Also, the number of jobs filled by high school graduates has increased by only 3 percent since 1980, compared to an increase of 19 percent for the economy as a whole. At the same time, wages of workers with a high school degree or less have declined steadily since 1970, while the earnings of those with some college education or a college degree have held their own or increased slightly (McCarthy and Vernez, 1997). If these trends continue, youths—including Hispanic youths—who enter the labor market without at least some college will continuously lose ground throughout their lifetime.

These trends present a dual challenge for U.S. schools, colleges, and universities. They not only face a growing demand from an increasingly larger cohort of students entering kindergarten, attending high school, and eventually college, but they must also face the need to upgrade the educational attainment of those students who are lagging, most particularly Black and Hispanic children who account for more than 25 percent of all students entering primary schools in the United States today.

This paper documents the nature of this dual challenge. The first section describes the trends and characteristics of the Hispanic population. The second section documents the extent to which the native-born Hispanic population, particularly that of Mexican origin, continues to lag in educational attainment not only Asians and Non-Hispanic Whites, but African Americans as well. Section 3 outlines questions that must be answered in order to address the Hispanic education challenge.

TRENDS AND CHARACTERISTICS OF THE HISPANIC POPULATION.

Immigration Led Growth

The growth in the number of people of Hispanic origin has tripled from 10 million in 1970, to 27 million in 1996 (Table 1). Their number is growing six times more rapidly than the general population and within a decade or so, Hispanics will become the largest minority ethnic group in the nation. The Hispanic population has already reached that status in several states including California and Texas where 25 percent of the population is Hispanic, and Florida where it is 13 percent.

Table 1

Hispanic Population by Immigration Status, 1970-1995 (Thousands)

Hispanics	1970	1980	1990	1995
Natives	7,846	10,239	13,988	NA
Immigrants	1,854	4,370	8,366	NA
Total	9,700	14,609	22,354	26,099

Source: U.S. Census of Population

Note: NA means not available

Immigration has been and continue to be the main contributor to the disproportionate growth of the Hispanic population. The number of immigrants of Hispanic origin doubled in the 1970s and doubled again in the 1980s. Immigrants alone accounted for half of the growth in the

Hispanic population and for nearly two-third of that growth if we account for their children born in the United States. We estimated that more than 70 percent of children of immigrants are born in the United States (McCarthy and Vernez, 1997).

Diverse and Concentrated Population

Although diverse, the Hispanic population in the U.S. is dominated by people from Mexico (Table 2). Sixty percent of Hispanics in the United States came from, or trace their ancestry to Mexico and their numbers continue to grow faster than that of any other group with the recent exception of people from Central America.

Table 2

**Hispanics by Country/Region of Origin
(Thousands)**

Hispanic	1980	1990	1980–1990 Growth (Percent)	Percent Share of Total Hispanic Population 1990
Mexican	8,740	13,496	54	60.4
Puerto Rican	2,014	2,728	35	12.2
Cuban	803	1,044	30	4.7
Other Hispanic	3,051	5,086	67	22.7
Total	14,609	22,354	53	100.0

Source: O'Hare, 1992, Table 2, p. 12.

The next largest concentration of Hispanics in the United States is from Puerto Rico with 12 percent. No other Central and South American or Caribbean country, including Cuba, can claim more than a 5 percent share of the Hispanic population in the United States. In 1990, Cubans constituted 5 percent of the Hispanic population in the country. Cubans have become the slowest growing Hispanic group as migration from Cuba has sharply declined over the last two decades.

By contrast, immigration from Central America has increased rapidly since 1980 (Table 3). For instance, the number of immigrants from El Salvador has quintupled in just one decade while immigrants from other Central American countries—Nicaragua and Guatemala e.g.,—have nearly tripled during the same period of time. Immigration from these countries grew at more than twice the rate of Mexican immigration.

Table 3

**Hispanic Immigrants by Country/Region of Origin, 1970–1990
(Thousands)**

Country/Region	1970	1980	1990	1980–1990 Growth (Percent)
Mexican	792	2,194	4,307	96
El Salvador	12	93	470	405
Other Central American	104	258	652	153
South America	267	570	1,024	80
Caribbean	679	1,255	1,913	52
Total	1,854	4,370	8,366	91

Source: U.S. Census of Population

Just as other immigrants before them, Hispanic immigrants are concentrated in a few states (Table 4). More than half of the nation's Hispanics—an overwhelming majority of whom are of Mexican origin—reside in the states of California and Texas. New York and Florida each house another 10 percent of the nation's Hispanics but their countries of origin differ. New York has been a favorite destination for South Americans, and to a lesser extent Hispanics, from Caribbean countries. Florida has been and continues to be the main destination for Cubans. As for the most recently arrived Central American immigrants, half have been settling in California. Another 25 percent are divided equally between New York and Florida, and the remaining are dispersed throughout the rest of the nation.

Hispanics are also highly concentrated in large metropolitan areas. In California, 60 percent of Hispanics are concentrated within the Los Angeles metropolitan area; in New York, a majority are concentrated within the New York City/New Jersey metropolitan area; and in Florida they are concentrated in Miami. Texas is the only state where more than half of the Hispanic population is not concentrated within one major area. Including San Antonio where half of the population is of Hispanic origin, no one area has more than 15 percent of the State's Hispanic population.

This high concentration of Hispanics within a few states and metropolitan areas would suggest that it makes little sense to look at this population through a national lens. The task of educating Hispanic children has become primarily the responsibility of four states: California, Texas, New York, and Florida, and within those states, a few school districts.

Table 4
Hispanic Population by Selected State and SMSA in these States, 1989

State/SMSA	Number (Thousands)	Percent of Total Hispanic Population	Percent of Total Population in Area	Dominant Origin of Hispanic Group
California	6,762	34	24	Mexico and Central America
Los Angeles	4,073		29	
San Francisco	894		15	
San Diego	426		18	
Texas	4,313	22	26	Mexico
Houston	668		19	
San Antonio	667		51	
Dallas/Ft. Worth	400		11	
New York	1,982	10	11	Caribbean and South America
NYC/New Jersey	2,499		14	
Florida	1,386	8	13	Caribbean (Cuba)
Miami/Ft. Lauderdale	858		28	
Tampa/St. Petersburg	116		6	
Nation	20,076	100	8	

Source: Schick and Schick, 1991, Table A4-2 and A4-3, pp. 8 and 9

Characteristics of Parents of Hispanic Children

When it comes to education, two family characteristics are consistently associated with educational attainment: (1) the level of education of the parents, and (2) the material and other parental and community resources available to support the education of the children (Vernez and Abrahamse, 1996; Grissmer et. al., 1994; Hill and O'Neill, 1993; Hanushek, 1992; Blake, 1989; Wilson and Justiz, 1988; and Tracey and Seddacek, 1985). Both immigrant and native-born Hispanic children are relatively disadvantaged as regards these criteria. Table 5 shows the proportion of children aged 0–3 in 1990 who were living with two parents having less than 12 years of education. It also details the proportion of the same children living in families with an income in the lowest quartile of the income distribution for both the nation and California. It shows that both Hispanic immigrant and native-born children are more likely to live in such families than the children of any other racial/ethnic groups. In particular, the native-born children of Hispanics—a majority of whom are native-born children to immigrant parents, i.e., second generation children of immigrants—are twice as likely to live with parents with a lower level of education than African American children, and more than three times as likely to have a lower level of education than Asians and non-Hispanic Whites. Relative to income, the pattern

is similar with one exception—African Americans are just as likely as Hispanics to be raised in low income families.

The proportion of native children raised in low income families has increased over time for all ethnic groups; the increase has been particularly large for Hispanic children. In 1990, for instance, 36 percent of the cohort of Hispanic native children aged 15 to 17 were being raised in families in the lowest quartile compared to 52 percent for the cohort of children aged 0–3. For Blacks, the increase has been from 48 to 56 percent, and for non- Hispanic whites, it has been from 16 to 24 percent. The largest increase occurred among Asian children—from 9 to 24 percent (Vernez and Abrahamse, 1996) [Table 5]. The share of native children raised in families whose parents have less than 12 years of education has remained constant across cohorts: 40 percent for Hispanic children, 21 percent for African Americans, and 6 percent for non-Hispanic Whites. However, younger Asian children have become twice as likely than their older counterparts to be raised in families with low educated parents—13 versus 6 percent.

Table 5

Percentage of Youths Aged 0–3 Living in Families with Income in Lowest Quarter or with Two “High School Drop Out” Parents, by Immigration Status and Race/Ethnicity, 1990

Race/Ethnicity	United States		California	
	Native	Immigrant	Native	Immigrant
Percent Children 0-3 in Families with Income in Lowest Quarter				
Asians	24	45	26	47
Blacks	56	40	51	43
Hispanics	52	51	44	54
Non-Hispanic Whites	24	38	20	50
All	31	47	32	52
Percent Children 0-3 With Two Parents Having Less Than 12 Years of Schooling				
Asians	13	20	14	26
Blacks	21	22	12	18
Hispanics	41	53	39	55
Non-Hispanic Whites	6	11	4	13
All	12	38	18	46

Source: U.S. Census of Population

The increase in the proportion of Asian children being raised in low income families and/or having both parents with less than 12 years of education has been particularly sharp. A main reason for this change over time has been the increasingly large immigration from South East Asia. This migration has tripled during the 1980 decade--from 295,000 to 847,000—about

half of the latest arrivals have less than 12 years of education which is about the same proportion as immigrants from Central America.

Depending on the country of origin, there are also significant differences in characteristics of the parents of second generation children (Table 6). The largest group of Hispanic immigrants—those from Mexico—have the lowest level of education, the highest fertility rate, and the lowest family income of any Hispanic groups. Cubans and Other Hispanics (primarily from South America) have had significantly more schooling, lower fertility rates, and higher incomes. Central Americans who are the fastest growing group of Hispanic immigrants fall in between these two groups.

Table 6
Characteristics of Hispanic Immigrants Aged 18-64 by Country/Region of Origin, 1990

Country/Region	Percent with Less Than a 12 Year Education	Fertility Rate ¹	Percent Married	Mean Income (Dollars)	Median Income (Dollars)
Mexico	69	3.8	65	14,523	12,000
Central America	49	2.9	52	15,553	12,121
Cuba	29	2.1	64	27,000	19,714
Other Hispanics	30	2.4	57	22,379	17,268

Source: U.S. Census of Population

¹Average number of children born to married women aged 40–44.

Hispanic Children: The Second Generation

The number and share of Hispanic children in the total population has steadily increased since 1970. For instance, the number of Hispanic children aged 0–3 years in 1990 (and who by now have just begun their education) is twice as large as the same age cohort in 1970 (Table 7). Today, 13 percent of children in this age group are of Hispanic origin compared to about 7 percent in 1970. Two-thirds of these children are of Mexican origin.

As noted above, however, national averages do not provide an accurate view of the effect of the growth of the Hispanic school age population on the education system of the states and localities where they are concentrated. For instance, Table 7 shows that in California the number of Hispanic children in the 0–3 age cohort has tripled since 1970, and now accounts for more than one third of the children in that age cohort. At the same time, the total size of the cohort has increased by 47 percent with Hispanic children accounting for three quarters of that growth.

Table 7

**Cohorts of Children Aged 0-3 Years, Nation and California, 1970-1990
(Thousands)**

Country/Region	Nation			California		
	1970	1980	1990	1970	1980	1990
Mexico						
Native	439	854	1,184	180	363	537
Immigrant	11	40	80	6	25	48
Total	450	893	1,264	187	388	585
Other Hispanics						
Native	424	459	572	39	66	97
Immigrant	12	19	31	2	4	9
Total	436	477	603	41	70	106
All						
Native	13,411	13,178	14,349	1,277	1,360	1,823
Immigrant	82	156	199	17	50	78
Total	13,493	13,333	14,548	1,294	1,410	1,901
Percent Hispanics in						
Total:						
Native	6.4	9.8	12.2	17.1	31.5	34.8
Immigrant	28.0	37.8	55.8	47.1	38.0	73.0
Total	6.6	10.2	12.8	17.6	32.5	36.3

Source: 1990 U.S. Census of Population

Although less dramatic, a similar growth pattern is observable in other states with a high Hispanic population concentration. Additionally, Hispanics are the majority of students in some large school districts including Los Angeles, Miami, and Houston. Their share exceeds one third in Dallas, New York, San Diego, and Chicago (Table 8).

Table 8

Share of Hispanic in Total Enrollment of Selected Large School Districts, 1994-1995

District	Total Enrollment (Thousands)	Percent Hispanic	Percent Minority
Los Angeles ¹	667	68.0	89.0
Houston	198	50.3	88.3
Miami (Dade)	315	49.7	84.8
Dallas	143	41.6	87.2
New York	953	36.5	82.4
San Diego	125	32.3	69.3
Chicago	402	30.6	88.7

Source: Education Weekly, April 9, 1997; Los Angeles County Office of Education (1997).

¹1995-96 school year

Second generation immigrants, i.e., native-born children of immigrant parents, constitute the largest component of growth in the share of the Hispanic school age population. As Table 7 shows, few foreign-born children enter the country as toddlers. Foreign-born children accounted for a mere 1 percent of the national 0–3 age cohort, and 5 percent of the California 0–3 age cohort in 1990. Hence, children in these cohorts are mostly children born in the United States either to immigrant or to native parents, or a combination of the two. In 1990, we estimate that roughly two-thirds of children born to Hispanic parents were children of immigrant parents—2nd generation—and one third were third, and subsequent generation children. Asian children were 80 percent more likely to be second generation, whereas third and subsequent generation children accounted for only 20 percent. This pattern reflects the larger share of immigrants than native-born adults among Hispanics and Asians, and the relatively higher fertility rates of immigrants than natives. This relationship is reversed for non-Hispanic Whites: 10 percent of children are second generation and 90 percent third and subsequent generations which again reflects the low level of immigration from Europe over the second half of this century.

Over time, an increasing number of foreign-born children are joining successive cohorts of native-born as they age and move through the educational system and eventually reach high school. In 1990, 5 percent of the children in the national 15–17 age cohort were foreign-born. However, in California this share was a much higher 22 percent. About 70 percent of the national Hispanic high school age students will be either first or second generation by the time the 1990 cohort of 0–3 year olds reach high school in the years 2002 to 2005. This share is expected to be nearly 75 percent in California. In short, the overwhelming majority of Hispanic students will be the children of first-generation Hispanic parents.

EDUCATIONAL ATTAINMENTS

Acquiring at least one or two years of postsecondary education following high school graduation has become a prerequisite to compete in the U.S. labor market and assure oneself an adequate living wage. Today, in excess of 90 percent of the net new jobs added to the economy are being filled by workers with some college or more. At the same time, from 1970 to 1990, the economy has lost 13 million jobs filled by workers lacking 12 years of education (i.e., those who have not completed high school). Since 1980, it has added only 1.2 million jobs—6 percent of the total net new jobs created that were filled by high school graduates only (McCarthy and Vernez, 1997). Wages of high school dropouts have declined by 17 percent

between 1969 and 1989 for males, and by 10 percent for females; real wages of high school graduates have also declined, although not as sharply. Additionally, real weekly earnings of workers with some college have generally held their own and have increased by 2 to 3 percent for college graduates (McCarthy and Vernez, 1997; Mishel and Bersntein, 1994). If these trends continue, youths who enter the labor market without at least some college will continue to lose ground throughout their lifetime.

Hispanic children are likely to be at a particular disadvantage. Whether first generation—children born abroad—or second generation—native-born children to immigrant parents—Hispanic children not only lag other children in college attendance, they also fall behind at every stage of the educational process from early childhood, to high school and college completion as documented below.

Hispanics versus Other Racial/Ethnic Groups¹

As already noted, for Hispanics, native-born are now predominantly second generation children and so are Asian children. In the case of non-Hispanic Whites and Blacks, today's children are predominantly third or subsequent generation children. Our reason for ignoring intergenerational differences in these initial comparisons is motivated by the policy focus of our discussion. As with previous immigrant groups before them, we recognize that Hispanics are likely to make educational progress from generation to generation. But, whatever intergenerational educational progress Hispanics have been making historically, it is insufficient to provide the current generation of Hispanic children with the education needed to assure they can succeed in today's economy. Note also that to the extent that the native Hispanics cohorts discussed here include third and subsequent generations children, we are underestimating the current gap between first and second generation Hispanics and other racial/ ethnic groups.

The current, relatively low college attendance rate of Hispanics is the cumulative outcome of a developmental and educational pattern that begins with pre-school and the primary school years. It eventually results in Hispanic students lagging at four main junctures in the education continuum all of which are successive prerequisites to completing a college education. These are: (1) taking college preparatory courses while in high school; (2) graduating from high

¹ Comparisons are made between native-born children unless otherwise noted.

school; (3) enrolling in college after completion of high school; and (4) persevering in college until completion of a degree.

Preschool. In general, Hispanic children are under-represented in preschool programs. From 1973 to 1993, Hispanic three-and four-year old enrollment in preschool remained flat (about 15 percent), while preschool enrollment steadily grew from 18 to 35 percent. Enrollment of Black children has also increased during this period of time from 19 to 26 percent (President's Advisory Commission on Educational Excellence for Hispanic Americans, 1996). In 1993, Hispanic four year old children were found to be less able than their non-Hispanic White counterparts to identify basic colors and recognize all letters of the alphabet (12 vs. 31 percent); and write their first name (59 vs. 74 percent) (National Center for Education Statistics, 1996).

Primary and Middle Schools. By age nine, and certainly by age 13, Hispanic children are lagging behind other students in reading, mathematics, and science proficiency. For instance, the National Assessment of Educational Progress (NAEP) of 1992 indicates that at age 13, Hispanic students were on average, about 2 years behind white students in mathematics and reading, and about 4 years behind in science (NCES, 1995).

High School. The lower academic performance of Hispanic children in middle schools carries over into the high school years during which preparation for college intensifies. Two longitudinal surveys of students, one covering the high school years from 1980 to 1984 (High School and Beyond), and the other covering the years from 1988 to 1992, are consistent in showing that Hispanic high school students were less likely to be enrolled in college preparatory courses including being in an academic track and taking advance math and science courses (Table 9). About one third of the 1980 and 1988 cohorts of Hispanic high school students were enrolled in an academic track compared to about half of non-Hispanic Whites, and about 60 percent of Asians. Hispanic students' enrollment in an academic track was slightly lower than that for blacks. There was an increase in enrollment in an academic track between the 1980 and 1988 cohorts of Hispanics students (from 28 to 34 percent), but there was an even larger increase for non-Hispanic Whites and a somewhat smaller increase for Blacks and Asians as well.

Table 9 shows a similar differentiated pattern in the taking of advanced math and science courses. Hispanic students have the lowest enrollment in algebra 2, geometry, calculus, physics, and chemistry of any racial/ethnic group with the exception of Blacks. Indeed, Hispanics and

Blacks have similar advanced course taking patterns. With a few exceptions, enrollment in advanced courses has also generally increased between the 1980 and 1988 cohorts for all racial/ethnic groups. A smaller proportion of students took algebra 2 in the 1988 cohort than the 1980 cohort with the exception of Hispanics whose share remained constant. By contrast, there has been a significant increase in the proportion of all students taking chemistry. Finally, there was a significant increase from one third of students in 1980 to half of the students in 1988 in Hispanic students taking geometry. However, they continue to lag non-Hispanic Whites and Asians.

Table 9

Percentage of Native Students in High School Taking Selected College Preparatory Courses by Race/Ethnicity

College Preparatory Courses	Race/Ethnicity			
	Hispanic	Black	Non-Hispanic White	Asian
Academic Tracks				
1980 cohort	28	37	44	58
1988 cohort	34	38	53	61
Advanced Courses				
Algebra 2				
1980	33	42	54	75
1988	33	31	47	50
Geometry				
1980	35	39	62	78
1988	49	46	62	70
Calculus				
1980	5	4	11	18
1988	4	4	10	26
Physics				
1980	15	18	22	37
1988	12	13	24	44
Chemistry				
1980	25	29	42	57
1988	35	38	53	69

Sources: High School and Beyond for 1980 cohort and National Education Longitudinal Survey (NELS) for 1988 cohorts.

The Road To College. The net result of this primary and secondary education pattern is a cumulatively lower share of Hispanics completing high school, attending college, and eventually completing college. Tables 10 and 11 show the education attainment of the population cohorts that were 30 to 34 years old in 1990 by immigration status, gender, and

racial/ethnic groups for both California and the rest of the nation. They show large variation in educational attainment across racial/ethnic groups between immigrant- and native-born.

Asians and Mexican origin Hispanics are situated at both extremes of the educational attainment distribution. About four out of every five Mexican origin native-born has completed high school compared to nearly all Asians. Also, Mexican origin natives are about half as likely to attend college as Asians and about four times less likely to graduate with a bachelor degree.

“Other Hispanics” have a higher educational attainment than Mexican Hispanics. Theirs is similar to African Americans with about 90 percent graduating from high school, and 60 percent attending some college. “Other Hispanics” however, are somewhat more likely than African Americans to complete a bachelor degree (22 vs 17 percent) in California and to go on to graduate school (9 vs. 5 percent). Non Hispanic Whites are twice more likely to complete a bachelor degree than “other Hispanics” and African Americans.

Although not shown here, there are also significant variations in educational attainment among “other Hispanics”. For instance , those of Cuban origin had the highest college completion rate in 1992 (21 percent among Cubans aged 25 to 34 years). Puerto Ricans educational attainment is closest to Mexicans (9 vs. 7 percent) and Central Americans (15 percent) are in between these two groups and Cubans.

Gender differences within each racial/ethnic group are generally similar. Women, are less likely to attend and graduate from college than men, but the differences are generally small. One exception, African American women were more likely to attend college and to graduate from college. Also, gender differences are typically larger among Hispanics than among non-Hispanic Whites and Asians.

The educational attainment of immigrants varies across racial/ethnic groups in the same way as it does among native-born. Asians and non-Hispanic White immigrants are the most likely to have had a college education and Mexican immigrants the least likely. Other Hispanics are about half as likely as Asians and non-Hispanic Whites to have attended college. In contrast, Black immigrants had as high an educational attainment as non-Hispanic Whites and Asians among men. Black immigrant women, however, were much less likely than their male counterparts to have attended college.

The educational attainment of immigrant shown on Tables 10 and 11 primarily reflect immigrants who have entered the country as adults after they have completed their schooling in their respective home country. Generally, an overwhelming majority of these immigrants

pursue no additional schooling in the United States other than for taking English classes (Vernez, forthcoming).

Table 10

Percent Distribution by Highest Educational Attainment, Nation Less California, Ages 30-34 in 1990

Population Group	Distribution by Highest Achievement								
	8th Grade or Less	Some High School	12th Grade, No Degree	High School Degree	Some College	AD	BA	Any Graduate Degree	Total
White-Nat-M	2.0	7.5	2.7	32.8	21.2	7.7	18.5	7.6	100.0
White-Nat-F	1.4	6.0	2.0	33.4	22.6	10.1	17.9	6.5	100.0
White-imm-M	4.4	5.7	3.6	21.3	18.3	7.5	20.1	19.0	100.0
White-imm-F	5.7	4.7	4.1	27.9	18.3	11.2	17.7	10.4	100.0
Black-Nat-M	3.4	15.9	7.3	35.6	22.0	5.4	8.1	2.3	100.0
Black-Nat-F	2.3	12.5	6.5	31.9	25.6	7.7	10.4	3.1	100.0
Black-imm-M	8.2	7.0	4.9	17.7	21.6	10.0	16.2	14.3	100.0
Black-imm-F	7.6	6.1	6.2	26.4	21.9	13.2	13.4	5.2	100.0
Asian-Nat-M	2.1	3.6	1.3	24.8	21.7	13.5	20.2	12.8	100.0
Asian-Nat-F	1.4	5.5	2.4	21.7	23.4	11.6	27.4	6.6	100.0
Asian-imm-M	4.7	4.1	3.1	14.9	14.3	6.7	25.3	27.8	100.0
Asian-imm-F	8.4	6.3	4.1	19.2	12.4	7.5	27.8	14.5	100.0
HispMex-Nat-M	7.4	18.7	4.2	32.2	22.1	4.9	7.3	3.1	100.0
HispMex-Nat-F	7.9	16.2	3.2	33.7	22.9	5.4	7.9	2.6	100.0
HispMex-imm-M	55.2	12.8	4.0	13.4	7.5	2.7	3.0	1.4	100.0
HispMex-imm-F	53.7	14.1	3.4	13.7	6.5	3.6	3.4	1.7	100.0
HispMex-Nat-M	9.0	16.9	4.6	27.3	21.2	6.8	8.8	5.4	100.0
HispMex-Nat-F	7.4	15.4	5.7	25.0	23.2	8.0	10.3	4.9	100.0
HispMex-imm-M	16.7	10.9	6.0	23.5	19.3	6.3	9.6	7.5	100.0
HispMex-imm-F	18.4	9.6	5.7	24.4	17.0	7.6	12.1	5.2	100.0
Other-Nat-M	6.8	17.4	4.7	36.9	20.9	6.1	4.7	2.4	100.0
Other-Nat-F	3.3	17.2	3.9	31.7	24.0	9.2	7.9	2.9	100.0
Other-imm-M	10.2	15.6	0.0	8.1	9.5	13.5	18.0	25.0	100.0
Other-imm-F	15.3	3.0	4.1	32.4	10.5	11.4	9.8	13.5	100.0
All Groups	3.3	8.2	3.1	32.0	21.7	8.4	16.5	6.7	100.0

Source: Current Population Survey, 1994.

Note: Nat = Native; imm = immigrant; M = male; F = female; AD = Associate Degree; BA = Bachelor Degree.

Finally, note that there are differences between the educational attainment of native-born and immigrants residing in California and those residing in the rest of the country. Native-born in California have generally higher educational attainment than native-born in the rest of the country, possibly reflecting the emphasis that California has given to post-secondary education,

at least until recently. The reverse is true among immigrants. California immigrants have lower levels of education than immigrants elsewhere in the country confirming the greater tendency of low educated immigrants to settle in California (McCarthy and Vernez, 1997).

Table 11

Percent Distribution by Highest Educational attainment, California, Ages 30-34 in 1990

Population Group	Distribution by Highest Achievement								Total
	Eighth Grade or less	Some High School	12th Grade, No Degree	High School Degree	Some College	AD	BA	Any Graduate Degree	
White-Nat-M	0.8	4.5	3.5	23.0	28.0	9.1	21.6	9.6	100.0
White-Nat-F	0.6	4.2	2.7	21.8	31.0	11.4	20.9	7.3	100.0
White-imm-M	3.0	4.0	3.9	15.7	20.5	8.8	25.1	19.0	100.0
White-imm-F	3.9	3.7	3.7	20.6	21.9	12.4	22.1	11.9	100.0
Black-Nat-M	1.4	6.3	8.4	26.7	32.5	9.1	11.7	4.0	100.0
Black-Nat-F	1.5	6.1	6.8	22.9	35.6	12.1	12.0	2.9	100.0
Black-imm-M	3.1	5.7	5.5	13.3	23.5	13.1	19.8	16.2	100.0
Black-imm-F	3.6	4.5	4.4	17.9	29.4	15.2	18.6	6.5	100.0
Asian-Nat-M	1.2	1.8	2.6	12.4	25.7	10.7	30.7	14.9	100.0
Asian-Nat-F	1.5	2.0	2.4	13.3	22.6	11.8	33.8	12.6	100.0
Asian-imm-M	7.0	3.9	4.3	13.5	20.0	10.9	24.6	15.8	100.0
Asian-imm-F	10.4	4.4	4.5	16.2	17.8	10.5	27.7	8.5	100.0
Hispmex-Nat-M	5.0	12.5	8.1	30.9	25.8	8.4	7.1	2.3	100.0
Hispmex-Nat-F	4.1	15.1	6.8	30.4	25.2	9.3	7.1	2.0	100.0
Hispmex-imm-M	51.3	14.4	6.8	12.9	8.2	2.6	2.2	1.6	100.0
Hispmex-imm-F	53.0	13.3	6.8	12.7	6.9	4.1	2.2	1.0	100.0
Hispoth-Nat-M	3.9	8.3	5.4	25.0	29.6	10.0	12.9	5.1	100.0
Hispoth-Nat-F	2.8	8.2	5.4	24.4	30.6	10.0	13.3	5.1	100.0
Hispoth-imm-M	28.4	12.7	7.9	17.7	16.9	6.0	7.2	3.1	100.0
Hispoth-imm-F	30.9	13.6	7.5	19.5	13.8	5.5	5.9	3.3	100.0
Other-Nat-M	1.4	10.7	4.8	30.8	30.5	9.2	9.4	3.2	100.0
Other-Nat-F	3.0	12.5	5.1	26.8	30.2	11.4	8.5	2.5	100.0
Other-imm-M	29.1	8.6	5.4	13.1	31.6	4.2	2.8	5.0	100.0
Other-imm-F	21.4	4.6	4.6	12.5	20.7	13.7	17.4	5.1	100.0
All Groups	9.2	6.8	4.5	21.1	25.0	9.2	17.1	7.1	100.0

Source: Current Population Survey, 1994.

Note: Nat = Native; imm = immigrant; M = male; F = female; AD = Associate Degree; BA = Bachelor Degree.

The comparisons made above are based on a cohort of people aged 30-34 who have completed their schooling and many of whom left college in the early 1980s. Since then

however, there has seemingly been little relative progress across racial/ethnic groups. For instance, Post-secondary Education Opportunity (PEO), 1994, estimates that of all Hispanics who had started college, about 38 percent had completed four years or more of college by age 25-29 years, a figure that has remained relatively constant throughout the 1980s and early 1990s. The equivalent rate for non-Hispanic Whites has increased slightly over that period of time from 52 to 55 percent. Similarly, in 1990, 12 percent of Hispanic 22 year olds had earned a bachelor degree compared to 15 percent, for Blacks and 30 percent for non-Hispanic Whites. Finally, while we have noted above the progress made by Hispanic high school students in the taking of college preparatory courses between the early 1980s and the early 1990s, we also have shown that these progress have been matched and, in some cases exceeded, by other racial/ethnic groups (see Table 9).

Immigrant, Second Generation, and Third Generation Children Compared.

Immigrant vs. native students. In a recent analysis of High School and beyond—a longitudinal survey of high school students who were sophomores and seniors in 1980—we concluded that immigrant students were just as likely as natives to graduate from high school. Upon graduation, immigrant students were more likely than native students to attend at least one year of college and persevere through four years of college (Vernez and Abrahamse, 1996). These findings are generally consistent with the assessment of teachers and professors who report that immigrant students generally do better than native-born students (McDonnell and Hill, 1994; Jacobi-Gray, Rolph, and Melamid, 1996). It is also consistent with several recent studies which have found that achievements of immigrant students exceed that of natives (Rumbaut, 1995; Kao and Tienda, 1995).

This pattern of immigrant children outperforming native-born children is seemingly consistent across all racial/ethnic groups (Table 12). However, the differential pattern of educational attainment between natives of different racial/ethnic groups is repeated among immigrants from different racial/ethnic groups. As their native-born counterparts, Asian immigrants are the most likely to attend college while Hispanic immigrants are the least likely as are black immigrants.

Table 12

Percentage of Students Graduating from High School and Participating in Post-Secondary Education, by Immigration Status and Race/Ethnicity¹

Educational Attainment	Race/Ethnicity									
	Asian		Black		Hispanic		White		All	
	I	N	I	N	I	N	I	N	I	N
High School Graduate	95	86	79	72	70	75	87	85	81	83
Attended College ²	84	79	59	55	65	45	67	62	68	60
Completed 4 years of College ²	29	33	17	11	18	8	23	18	22	16

Source: Vernez and Abrahamse (1996)

¹Figures are for a cohort of students who were high school sophomores in 1980 as measured in 1984. About half of those who had not graduated by that time eventually received a high school degree or equivalency certificate.

²These percentages are conditional to being a high school graduate.

Teenage Immigrants: A Group Apart. The above pattern hold true for immigrant children who were enrolled as sophomores in high school. However, not all immigrant children, most particularly immigrants who are already teenagers when they arrive in the United States continue their education here.

Whereas, nearly all immigrant children aged less than 15 years at time of arrival enroll in school as do most native children of the same age, this is not the case for teenagers who arrive between the age of 15 to 17 years. Based on the survey of Income and Program Participation (SIPP), we estimated that less than half of immigrants who arrived as teenagers obtained any education in the United States (Table 13). This is consistent with previous findings derived from analysis of census data suggesting that a significant proportion of immigrant youths who fail to graduate from high schools do not actually drop-out. Rather, they never enter the U.S. school system in the first place (Vernez and Abrahamse, 1996). Teenage immigrants from Mexico have particularly low enrollment rates in U.S. schools, a tendency that also affect their younger counterparts. About 25 percent of Mexican-born immigrant who came to the United States prior to the age of 15 years had received no education in an American school. We suspect that the low enrollment of Mexican immigrant teenagers in American schools reflect, at least in part, the fact that in Mexico schooling was mandated only through elementary school until 1993. Schooling is now mandated through junior high school, however.

Table 13

**Percent immigrants Receiving Some Education in the United States
by Age at Arrival, 1990-1993**

Age (years)	Men	Women
Less than 15	96	98
15-17	42	36
18 or more	9	7

Source: Survey of Income and Program Participation, 1990-1993

Note: Universe is immigrants aged 18 to 64 at time of survey

Intergeneration Educational Progress. A few recent studies (e.g. Rumbaut 1995, Suarez-Orozco, 1995, Kao and Tienda, 1995, Abrahamse and Vernez, 1996) exploring the educational attainment of immigrants and natives in the nation's high schools have consistently found that immigrants outperform natives. For instance, Rumbaut (1995, p. 48) concludes that "...longer residence in the United States and second generation status (that is, being born in the United States) are connected to declining academic achievement and aspirations, net of other factors. That finding does not support a linear assimilation hypothesis." To explore, whether this phenomenon extend to educational attainment as well, we turned once more to the survey of "High School and Beyond." The results presented in Table 14 are mixed. They suggest some upward mobility with regard to graduation from high school, but some decline with respect to college attendance and completion. The pattern for Hispanics with respect to college attendance is somewhat more pronounced for the High School and Beyond cohort.

Table 14

Percentage of High School Graduates Participating in Post Secondary Education by Generation of Immigrants¹

	Immigrant s	U. S. Bom	
		2nd Generation	3rd or more generation
High School Graduate			
Hispanics	79	77	82
All	81	80	86
Attended College			
Hispanics	64	51	41
All	67	67	61
Completed 4 years of college ²			
Hispanics	19	16	7
All	21	19	17

Source: Vernez and Abrahamse (1996)

¹Figures are for a cohort of students who were high school sophomores in 1980 as measured in 1984. About half of those who had not graduated by that time eventually received a high school degree or equivalency certificate.

²These percentages are conditioned to being a high school graduate

One should be cautious in accepting as definitive the findings of a few studies that measured different outcomes at different times in different areas of the country. One test of whether the pattern identified above holds will be whether it can be replicated using college attendance and completion data from the longitudinal cohort of high school students who were freshman in 1988 (NELS). These data will be available in a year or two. In the meantime, and as a partial replication test, we compared the high school college preparatory course taking pattern of the 1980 (High school and Beyond) and 1988 (NELS) cohorts. Both of these cohorts are consistent with a flat or declining educational progress as far as college preparatory course-taking is concerned (Table 15).

Table 15

Percentage High School Students Taking College Preparatory Courses, 1980 and 1988 Cohorts

Selected Courses Taken	Immigrants	U.S. Born	
		2nd Generation	3rd or more generation
Academic Track			
1980 Cohort			
Hispanics	44	43	27
All	47	49	43
1988 Cohort			
Hispanics	33	34	34
All	52	50	46
Geometry			
1980 Cohort			
Hispanics	49	50	33
All	66	61	58
1988 Cohort			
Hispanics	48	48	50
All	64	60	60
Chemistry			
1980 Cohort			
Hispanics	37	31	23
All	50	46	40
1988 Cohort			
Hispanics	34	39	36
All	59	56	50
SAT/ACT			
1980 Cohort			
Hispanics	38	36	31
All	46	47	48
1988 Cohort			
Hispanics	39	41	43
All	65	61	60

Sources: High School and Beyond for 1980 Cohort and NELS for 1988 Cohort.

Further research is needed to confirm these findings. If they are confirmed, however, much work will have to be done to gain a full understanding of this phenomenon. Note, however, that if flat or negative educational assimilation is confirmed, this phenomenon is not necessarily inconsistent with the "intergenerational" educational progress of a successive generations of immigrants that have been well documented in past cross-sectional research. The

two phenomena can be both true at the same time if successive cohorts of immigrants, second generation, and third generation of children all increase their educational attainment over time as appears to have taken place (McCarthy and Vernez, 1997) and as is further suggested by our comparison of the 1980 and 1988 cohorts in Table 15. What may be occurring in this case is that the secular increase in levels of education for all students is masking the flat or negative educational assimilation of different generations of immigrant children at a given point in time.

ADDRESSING THE CHALLENGE.

The rapid increase in the number and share of Hispanic children and their currently low relative educational attainment—which is shared by all generations of Hispanic children—should raise concerns that a disproportionate share of them may not be adequately prepared to compete in an economy which increasingly creates jobs that are primarily filled by workers with at least some college education. These concerns are heightened by the fact that the burden of educating the majority of Hispanic children is falling on a few states—and a few large urban school districts within these states that are already facing difficulties. They are confronted with the dual task of meeting steady increases in enrollment and of upgrading the educational achievements of an increasingly larger share of minority students. One cannot be overly optimistic about their prospects for success. These states and districts are already under severe fiscal pressures to meet ongoing demands, let alone being able to improve their students' education. California alone will educate some 40 percent of these children—the overwhelming majority of whom reside in the Los Angeles-Orange County area. Yet, this state has seen its K–12 expenditures per capita decline steadily relative to those of other states and its fiscal support for its extensive postsecondary educational system has been stagnating over the years and has declined in the early 1990s (CAE 1997).

Seemingly the task of enhancing the educational attainment of Hispanics—and other similarly situated students—is as overwhelming as it is urgent. While reversing the relative disinvestments in education—particularly postsecondary education—of the past few years would be a first step (CAE, 1997,) it is not likely to be nearly enough. Indeed, it appears that in spite of having implemented a multitude of demonstration programs and other activities to help minority students, we still do not know quite when, where, and how to intervene at a system-wide scale to effectively change past patterns of relatively low educational achievements. One

reason is that the key factors that may explain the lagging educational performance of Hispanics—and other minorities—are not well understood.

Factors that have been associated with the relatively low educational performance of Hispanics fall into four categories: school-based, parent-based, cultural, and structural/institutional factors. Different studies have typically emphasized one or more of these factors, but which dominate and, among these, which can be effectively acted upon remain uncertain.

School-based factors were emphasized by the president's Advisory Commission on Education Excellence for Hispanic Americans (1996) including such disparate factors as inequity in school financing, school segregation and poverty, lack of bilingual and ESL programs, underutilization of technology, underrepresentation of Hispanics among school personnel, misplacement of students in special education classes, testing and assessment, and lack of school safety (p.41). The relative disadvantage of Hispanic children relative to these factors are well documented in the above cited report. What is not known, however, is the relative contribution of each of these factors to educational achievements or attainments. Additional and/or reallocation of resources can address some of these factors; however, past attempts at desegregation have been impaired by stubbornly segregated residential patterns by class and by race/ethnicity. And school finance reform efforts—many court ordered—have not seemingly had the results hoped for in correcting resource allocation inequities. Also, some of the school based factors are not readily amenable to remedies, at least not in the short-term. For instance, it will take a generation or more to alleviate the underrepresentation of Hispanic teachers in the nation's classrooms.

By contrast, parental/family factors have been consistently found to be associated with educational achievements and with educational attainment of all racial/ethnic groups, all else being equal (Vernez and Abrahamse, 1996; Grissmer, et. al., 1994; Hill and O'Neill, 1993; Hanushek, 1992; Blake 1989). Two factors, in particular stand out in these studies: family income and the level of education of the father and of the mother. As noted earlier, Hispanic children are more likely than other groups to be disadvantaged on these factors (Table 5). Family size is another factor that has been associated with educational attainment and as noted above Hispanic children are more likely to live in large families than other children. All three of these factors measure different dimensions of a family's monetary resources and parental know how, time and attention that can be devoted in support of a child education. Income assistance and financial assistance can alleviate the income gaps between Hispanics and other groups. But

public funding for these programs are being reduced at the same time as college tuition and fees are going up. By 1994, tuition and fees had risen by more than 100 percent in real terms compared to 1976 (CAE, 1997). Also, low levels of parental education are not readily amenable to change and we do not quite know how to compensate for disadvantages due to lack of access to this most important parental resources.

Several studies suggest that the significance of race/ethnicity persists in explaining school performance, even after controlling for social class, family structure, and parental education (e.g., Steinberg, 1996; Vernez and Abrahamse, 1996; Portes and Rumbaut, 1996), with Asians outperforming all others and Hispanics lagging all others. Two additional sets of factors have been offered to explain the pattern of lower educational attainments of Blacks and Hispanics, and of Mexican origin Hispanics in particular. One set includes cultural factors that place different values on education and, in turn, may affect the motivations and educational expectations of children. However, several authors have pointed out the paradox of positive attitudes towards education—that Hispanics possess at a high level, although seemingly not as high a level as other groups—being associated with low performance in school (e.g., Mickelson, 1990). One explanation for this paradox is that these aspirations are mediated by the daily experience and reality that they may not be met. Children and adolescents see their parents' experience in the labor market in which class and other factors influence return on education (Mickelson, 1990). This latter explanation is linked to structural/institutional labor market and societal factors—the second set of factors—that may affect some students' perceptions of what is possible: over time and subsequent generations, the children of minority immigrants increasingly perceive that their opportunities are limited, which reduce their sense and value of education (Ogbu, 1991).

Which of these factors, individually or in combination, explain the relatively low educational attainment of Hispanics need to be sorted out if we aim to effectively upgrade the education of the nation's Hispanic children. Regardless, however, two things appear to be certain. First, the upgrading of the educational attainment of Hispanic children will require intervening beyond the classroom and probably will require experimenting with more involvement of parents and communities. Second, such an effort will have to be sustained over the long-term. As of today, recognition that even the problem exists is a hurdle that has not yet been overcome.

References

- Blake, J., *Family Size and Achievement*, Berkeley, CA.: University of California Press, 1989.
- Grissmer, Dave. W., et al., *Student Achievement and the Changing American Family*, Santa Monica, CA: RAND, MR-488-LE, 1994.
- Hanushek, E. A., "The Trade-Off Between Child Quantity and Quality," *Journal of Political Economy*, Vol. 100, pp. 84–117, 1992
- Hill, M. A., and J. O'Neill, "Family Endowment and the Achievement of Young Children with Special Reference to the Underclass," unpublished mimeo, 1993.
- Jacobi-Gray, Maryann, Elizabeth Rolph, and Alan Melamid, *Immigration and Higher Education*, Santa Monica, CA.: RAND, MR-751-AMF, 1996.
- Kao, G., and M. Tienda, "Optimism and Achievement: The Educational Performance of Immigrant Youth," *Social Science Quarterly*, Vol. 76, No. 1, March 1995.
- Los Angeles County, Office of Education, *The Condition of Public Education in Los Angeles County*, 1996, 1997.
- McCarthy, Kevin and Georges Vernez, *Immigration In a Changing Economy: California's Experience*, Santa Monica, CA.: RAND, MR-854-OSD/CBR/FF/WFHF/IF/AMF, 1997.
- McDonnell, Lorraine and Paul T. Hill, *Newcomers in American Schools*, Santa Monica, CA.: RAND, MR-103-AWM/PRIP, 1993.
- Mickelson, Roslyn Arlin, "The Attitude-Achievement Paradox Among Black Adolescents," *Sociology of Education*, Vol. 63, 1990, pp. 44-61.
- Mishel, Lawrence and Jared Bernstein, *The State of Working America 1994–1995*, New York: Economic Policy Institute, M. E. Sharp, 1994.
- National Center for Education Statistics (NCES), *The Educational Progress of Hispanic Students, Findings from the Condition of Education*, Washington, DC, 1995.
- Ogbu, John U., "Immigrant and Involuntary Minorities in Comparative Perspective," in Margaret A. Gibson and John U. Ogbu (eds.), *Minority Status and Schooling: A Comparative Study of Immigrants and Involuntary Minorities*, New York and London: Garland Publishing, Inc., 1991, pp. 3-33.

- O'Hare, William Paul, *America's Minorities - The Demographics of Diversity*, Washington D.C.: Population Reference Bureau, 1992.
- Portes, Alejandro and Ruben G. Rumbaut, *Immigrant America: A Portrait*, Berkeley: University of California Press, 1996.
- Post Secondary Education Opportunity (PEO), 1994.
- The President's Advisory Commission on Educational Excellence for Hispanic Americans, *Our Nation on the Fault Line: Hispanic American Education*, 1996.
- Rumbaut, Ruben G., *Passages to Adulthood: The Adaptation of Children of Immigrants in Southern California*, Report to the Russell Sage Foundation, 1997.
- Schick, Frank L., and Renee Schick, *A Statistical Handbook on U.S. Hispanics*, The Oryx Press, Phoenix, AZ, 1991.
- Steinberg, L., *Beyond The Classroom*, New York: Simon and Schuster, 1996
- Suarez-Orozco, Carole and Marcelo, *Transformations: Migration, Family Life and Achievement Motivation Among Latino Adolescents*, Stanford, CA: Stanford University Press, 1995.
- Tracy, T. J., and W. E. Sedlacek, "The Relationship of Noncognitive Variables to Academic Success: A Longitudinal Comparison by Race," *Journal of College Student Personnel*, pp. 405-410, 1985.
- U.S. Department of Labor, "Regional and State Projections of Economic Activity and Population to the Year 2005," *Survey of Current Business*, Washington, DC, pp. 44-71, 1995.
- Vernez, Georges, *The Labor Market Experience of Immigrant Women*, Santa Monica, CA.: RAND, forthcoming.
- Vernez, Georges and Alan Abrahamse, *How Immigrants Fare In U.S. Education*, Santa Monica, CA.: RAND, MR-718-AMF, 1996.
- Wilson, R., and M. J. Justiz, "Minorities in Higher Education: Confronting a Time Bomb," *Educational Record*, Vol. 68, pp. 9-14, 1987-1988.