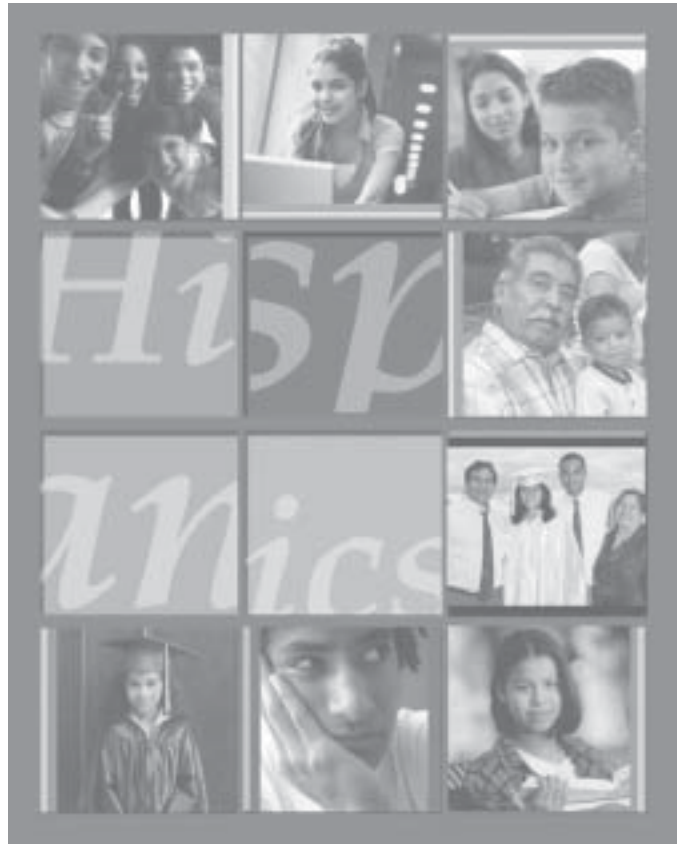


National Education Association

A Report on the Status of Hispanics in Education: Overcoming a History of Neglect



**A Report on the
Status of Hispanics in Education:
Overcoming a History of Neglect**

By Richard Verdugo



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The Status of Underserved Groups in Education

The National Education Association's commitment to creating great public schools for every child requires working to ensure that all students are learning and succeeding in schools. This task is challenging. From its beginnings, our nation's school system has treated students differently, depending on their race, ethnicity, gender, social class, sexual orientation, language, and disabilities. Even today, significant gaps in academic attainment and achievement persist among these and other groups.

Beginning in 2005, NEA began publishing a series of eight reports on the status of underserved groups in education, focusing on American Indians and Alaska Natives; Asian Americans and Pacific Islanders; Hispanics; Blacks; Women and Girls; Gay, Lesbian, Bisexual, and Transgendered students; English Language Learners; and students with disabilities. The reports draw on proceedings of national summits that bring together researchers, national leaders, and NEA members to discuss the problems experienced by each group and the promising strategies for change in policy and practice.





About the Author

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Richard R. Verdugo, is a Senior Policy Analyst in NEA's Human and Civil Rights Department. Verdugo has Ph.D. in Sociology from the University of Southern California, and an undergraduate degree from the University of California at San Diego. His work at the NEA focuses on School Safety, Minority Student Achievement, The Demography of Minority Groups, and English Language Learners. Dr. Verdugo has over 70 scholarly and public policy publications, and has been the recipient of many awards for his research, including being named a Fulbright Scholar in 2003 where he studied the Demographic challenges facing Germany.



NEA and LULAC: The Community Speaks—A Hispanic Education Summit

On March 10, 2006, the National Education Association (NEA) and the League of United Latin American Citizens (LULAC) joined forces and convened an Education Summit in Denver, Colorado. The purpose of the Summit was to have participants (mainly community activists) discuss and provide information and strategies as to how educators and policy makers might improve the educational status of Hispanic students. In order to facilitate the discussion over the two-day Summit, NEA and LULAC staff identified five areas for discussion:

- Innovative classroom strategies for Hispanic students
- School funding and educators' professional development
- Early childhood education and postsecondary education
- Immigration, migrant education, and English language learner politics
- Early childhood education and higher education

The purpose of this report is to examine the status of Hispanic education by integrating the results from the Denver Summit with the information provided by the available research about each of the above five topics.





Introduction

“Until I came to New York, I didn’t know I was black.”
—Chiqui Vicioso, Dominican poet

The story of Hispanics in the U.S. is not a simple one. It is a rich, complex, and dynamic history. Hispanics are not one nationality or one culture or one race. They are a very diverse group. Some Hispanics are recent immigrants, but many others have lived here for generations. As one Texas educator has said, “I am a fifth generation Texan, but I’m still called a Mexican by everybody who knows me. I like to say I didn’t cross the boundary. Several boundaries crossed me.” (Shorris 1992) Even the word “Hispanic” is confusing since, originally, it was an English word meaning “pertaining to ancient Spain.” The U.S. Census uses “Hispanic,” but many Hispanics prefer Latino or Latino/Latina or Chicano. And certainly, few Hispanics think of themselves first and foremost as Hispanic, but rather as a Mexican, Puerto Rican, Cuban, Dominican, Salvadorian, etc., or as a Mexican American, Cuban American, etc., or simply as an American.

But certain common threads stand out in the mosaic of people that we call Hispanic.

First, Hispanics are making a dramatic impact on American life and culture. Hispanic influences in language, cuisine, music, art, literature, and mass media are profound. Hispanics are enriching American culture and life in many ways. They are transforming America as

America transforms them.

Second, language remains a huge obstacle to many Hispanics participating fully in American life. One in five Hispanics in the U.S. report that they do not speak English or they do not speak English well. One would think in a nation of immigrants such as the U.S. that how to learn a language and adapt to a new culture would be well understood. But it is not. In fact, language and culture have been described as a “wall” that Hispanic students in the U.S. must get over to enter the society of the school. And if they do not overcome it in the early years of schooling, the wall grows higher and thicker with each succeeding year.

Third, education matters more to Hispanics than any other political issue. Numerous polls have confirmed this. It is important that we listen to the concerns of Hispanics. As NEA President Reg Weaver has said: “Ethnic minority communities need to know that we care about their children and their children’s future. With that knowledge, we can regain and strengthen their support for public schools.” NEA and LULAC convened the Hispanic Education Summit in order to listen to the educational concerns of Hispanics at the grassroots.

The educational challenges facing Hispanics in the U.S. are not new; nor is NEA’s commitment to overcoming them. Forty-one years ago, in Tucson, Arizona, NEA sponsored a conference entitled “The Spanish-Speaking Child in the Schools of the Southwest.” The participants at this conference concluded that Spanish-speaking children were not deficient learners but rather victims of inappropriate materials, undertrained educators and poor techniques available to remedy the situation.” Today, this sounds self-evident, but, at the time, it was a big deal, because, back then, children who did not speak English were often put into the lowest grade or declared mentally defective.

NEA is committed to improving the education of Hispanic children for the long haul. While we do not accept sole responsibility for the education system’s faults, as educators, we absolutely do accept that we have a shared responsibility—shared with the community at large—to close the gaps in student achievement, reduce the dropout rate, and increase the number of high school graduates who go to and graduate from college. When we say every child deserves a great public school, we mean every child—native born or immigrant, legal or “illegal,” black, brown or white, poor or prosperous. Every child. Every young person. Every student. What’s more, NEA believes the time for excuses is over. The politicians have had plenty of time—decades—to get it right, and they have failed to deliver. Now we must hold our public officials accountable for providing the resources necessary to deliver a quality public education to all of our students. To govern is to choose, and it is time our elected representatives move our children and young people to the front of the line.

The hard truth of the matter is that the quality of education provided in the U.S. is

linked directly to the power of the people whose children are being educated. Hiring a mariachi band to play at political rally will not improve education, nor will high flying rhetoric. Action is required. Quality teachers and education support professionals must be recruited and retained. Class sizes must be reduced. Teaching methods and curricula must be improved.

As this report shows, Hispanics certainly have the numbers to hold the politicians responsible. But as we also know, numbers alone will not suffice, not if people are uninvolved in the democratic process. As the late Barbara Jordon once said: “Democracy was not designed to be spectator sport.”

Collective action that focuses like a laser beam on education as the number one issue is required. There is an old saying among organizers: “An individual can resist injustice, but only a community can do justice.” It is our task as activists to draw people out of their private pain, out of their passivity and disappointments, and get them connected with other people in collective action on behalf of their kids and their schools.





The Demography of the Hispanic Population¹

Introduction

Demography is the science of population.² There are three important concepts in demography—size, distribution and structure of some specified population. Size is simply a counting concept—how many are there. Distribution refers to the dispersion or spread of a population over some geographic area, such as a region, state, or city. Finally, structure refers to the traits of the population of interest, such as age, gender, race-ethnicity, and income. We use the three concepts in describing the Hispanic population.

Each of these concepts can significantly affect educational systems. The table below briefly describes how each of the three demographic concepts can affect three important educational factors—the physical plant, resources, and pedagogy. In chapter three, we see how each of these educational factors are, indeed, affected by the demography of the Hispanic population.

The Impact of Demography on Three Educational Factors

Demographic Concepts	Demographic Concepts		
	<i>Physical Plant</i>	<i>Resources</i>	<i>Pedagogy</i>
Size	More schools or additions to existing physical structures.	More resources, such as teachers, texts.	Difference pedagogical strategies and curriculum
Distribution	More schools additions to existing physical structures in selected areas, depending on how students are distributed.	More resources depending on the distribution of the Hispanic population.	Different strategies and curriculum depending on where Hispanic population is distributed.
Structure	Impacted if school officials decide to create an environment that reflects the culture from which Hispanic students originate, e.g, art, signs, posters, etc. reflecting Hispanic culture.	Programs, teachers, textbooks, etc., may be needed that are relevant and reflect the everyday lives of Hispanic students.	Strategies and curriculum (and other pedagogical factors) may be affected depending on the needs of students with different demographic traits.

Source: Adapted from R. R. Verdugo. 2006. *The Demography of the Hispanic Population and Education: Framework, Analysis, and Implications*. Paper No. 1. Washington, DC: National Education Association.

Size of the Hispanic Population

On April 1, 2000, the total U.S. population stood at 281,424,600, and the Hispanic population was 35,306,300—or 12.5 percent of the total U.S. population. By July 1, 2004, the U.S. population had climbed to 293,655,400—an increase of 4.3 percent. The Hispanic population, however, grew at an even faster rate. By July 1, 2004, the Hispanic population had grown by 17.0 percent to 41,322,100—or 14.1 percent of the total U.S. population.³ The impact of the growth of the Hispanic population for U.S. society, especially education, is significant.

Moreover, all indications are that the Hispanic population will continue growing faster than the overall population. In 2010, Hispanics are projected to account for about 15.5 percent of the U.S. population, 17.8 percent in 2020, 20.1 percent in 2030, and 22.3 percent in 2040. By 2050, Hispanics are projected to be nearly one-quarter (24.4 percent) of the total U.S. population.⁴ In other words, the size and growth of the Hispanic population will continue to have an impact on American life—the schools, the economy, the culture, and the politics—for years to come.

Distribution

Stability and change might seem like to polar opposites, but they exactly describe the distribution of the Hispanic population across states and regions from 1990 to 2004. (See Appendix B for data.)

Stability is reflected in the continued dominance of certain regions and states in their share of the total Hispanic population, while change can be seen in the movement of Hispanics into states and regions in which, historically, they have not been a major presence. The movement of the Hispanic population into new areas in the U.S. is changing social life in many local communities throughout the nation.

- **Regional Distribution.** Regionally, the majority of Hispanics can be found in two regions of the U.S.: the West and the South. In 1990, there were 9,940,000 Hispanics living in the Western region of the U.S.—representing about 45 percent of the total Hispanic population. Another 6,661,000 were living in the South—30 percent of the total Hispanic population. The number and percent share (displayed in parentheses) of the total Hispanic population in the remaining two regions were: Midwest 1,659,000 (8 percent), and Northeast, 3,638,000 (17 percent). By 2004, the distribution changed only slightly. Thus, while the Hispanic population grew in the West to 16,996,000, the West’s share of the total Hispanic population dropped to 42 percent. In the South, the population also increased, to 14,417,000, and its share of the total Hispanic population also increased to 36 percent. Both the Midwest and Northeast increased their population totals of Hispanics, but only the Midwest realized an increase in its share of the total Hispanic population.⁵

Between 1990 and 2004, the Hispanic growth rate in the West was 71 percent, 116 percent in the South, 112 percent in the Midwest, and 51 percent in the Northeast.

- **State Distributions.** In 1990, the five states with the largest Hispanic populations were California, Texas, New York, Florida, and Illinois. By 2004, there was one important change in these rankings: Florida moved past New York. The rankings in 2004 were: California, Texas, Florida, New York, and Illinois.

Changes in the Hispanic population between 1990 and 2004 were significant. The five states exhibiting the largest growth rates were: North Carolina (575 percent), Arkansas (508 percent), Georgia (449 percent), Tennessee (410 percent), and Nevada (328 percent).⁶

- **New Destinations.** The data on the growth of the Hispanic population point to an important phenomenon: Hispanics are moving into new areas of the U.S. These growth rates are not spread evenly within a state, but are limited to certain localities, and are affecting such institutions as housing, jobs, politics, and schools.

Why are Hispanics moving into these areas? Research indicates that the big draw is the availability of jobs that do not require much skill. And these jobs are being filled, mainly, by Hispanic immigrants. In many of these areas, new manufacturing plants have been erected in rural areas, unions have either lost their influence, or never had any, and so employers are able to hire cheap immigrant labor. Another feature that draws Hispanics to the new areas is the availability of cheaper housing (Durand and Massey 2003; Hernandez-Leon and Zuniga 2000; Stull et al. 1995; Griffith 1995). In addition, the growth of the service sector in certain areas has attracted Hispanic workers. For example, Hispanics began emigrating from Los Angeles to Las Vegas in the 1980s, and 20 years later, they all but dominate the service industry in Las Vegas (Durand 1994; Martinez-Curiel 2003).

In Georgia, a revitalized carpet industry has attracted a large number of Hispanics to the state, especially to Dalton (Hernandez-Leon and Zuniga 2000). In Florida, the agricultural industry continues to draw Hispanic workers into the state (Griffith 2000). In other parts of the South, the attraction has been the poultry industry (Kandel and Parrado 2003). By contrast, further up the East Coast, the fish canning industry has attracted Hispanics to the area (Smith-Nonini 2000). In the Midwest, meat and poultry packing have drawn Hispanics to the area (Stull et al. 1995; Durand and Arias 2000; Valdes 1982, 1991, 2000). As a result of these population shifts, local educational systems are facing major challenges.⁷

Structure

Content matters. While the size and distribution of the Hispanic population and its children present resource and logistical challenges for educators and policy makers, it is the traits and characteristics of the Hispanic population that pose the greatest educational challenges for U.S. school systems. This section briefly examines those structural traits.

- ***Hispanic Ethnicity.*** Hispanics are not a homogenous group. Their differences by ethnicity reflect significant cultural and economic variation.⁸ Among Hispanic ethnic groups, Mexicans have been the largest group for many years. The table below presents the distribution of Hispanic ethnic groups for the years 1990 to 2004. For this analysis, we limit the number of Hispanic groups to: Mexican, Puerto Rican, Cuban, and Other Hispanics.

The Hispanic population, 1990 to 2004 by ethnicity						
Year Hispanic	Hispanic Ethnic Groups (000s)					
	Total U.S.	Total Hispanic	Mexican	Puerto Rican	Cuban	Other
2004	294,941	40,425	26,630	3,840	1,614	8,341
2002	288,369	37,438	25,074	3,222	1,376	7,765
2001	284,796	36,972	25,990	3,241	1,355	7,775
2000	281,421	35,305	23,760	3,206	1,390	7,432
1999	279,040	33,937	22,308	3,168	1,390	7,070
1998	275,854	32,382	20,997	3,205	1,357	6,822
1997	272,646	30,895	19,704	3,217	1,289	6,683
1996	269,394	29,463	18,680	3,191	1,188	6,402
1995	266,278	28,157	18,187	2,896	1,160	5,913
1994	263,125	26,945	17,406	2,752	1,114	5,672
1993	259,918	25,776	16,584	2,704	1,136	5,351
1992	256,514	24,607	15,773	2,601	1,132	5,099
1991	252,980	23,543	14,873	2,568	1,123	4,978
1990	248,709	22,256	13,430	2,719	1,042	5,065
% Change 1990 – 04	18.5	81.8	107.7	40.7	60.0	62.7

Sources: National Center for Health Statistics. 2003. National Vital Statistics Reports. Volume 51, Number 12. Statistical Abstract of the United States, 2003, Tables 1 and 2. U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2004, Ethnicity and Ancestry Statistics Branch, Population Division.

Note (1): Other Hispanics are composed of Central Americans, South Americans, and Other Hispanics.
 Note (2): Data for the total U.S. population in 2004 is an estimate from December 1, 2004. U.S. Census Bureau, Monthly National Population Estimates.

Between 1990 and 2004, however, there were differences in the growth rates among the various Hispanic ethnic groups. Mexicans grew at a much faster rate than the other three groups—107.7 percent, and “Other Hispanics” were next with a growth rate of 62.7 percent, and they were followed closely by Cubans who had a growth rate of 60.0 percent. Note that the growth rate of the entire U.S. population over the same time period was only 18.5 percent.

Mexicans are by far the largest group and have averaged between 60 percent and nearly 70 percent of the total Hispanic population between 1990 and 2004. Over that time period, the Mexican population grew from 13,430,000 to 26,630,000. The next largest group is “Other Hispanics,” who grew from about 5 million in 1990 to 8,341,000 in 2004, with Central Americans leading the way.

- **Hispanic Immigrants/Foreign-Born.** Immigration records were first started in 1820, and, from that time to about 1970, most immigrants to the U.S. originated from Europe.⁹ In 1900, 84.9 percent of all immigrants to the U.S. came from Europe, and 1.3 percent from Latin America. But by 1990, 22 percent originated from Europe, and 42.5 percent from Latin America. And by 2004, 53.3 percent of the foreign-born were from Latin America, and 13.6 percent from Europe.¹⁰

Not all Hispanics are immigrants, so an important question is “what proportion of the Hispanic population is actually foreign-born?” In 1990, the Hispanic population stood at 22.3 million, and 7.8 million were foreign born—or 34.8 percent. By 2005, there were approximately 41.9 million Hispanics in the U.S., of which 16.8 million were foreign born—or 40.1 percent.¹¹ The increase of the foreign-born as a percent of the total Hispanic population points to an important trend.

The growth of the foreign-born Hispanic population has been the largest component in the growth of the total Hispanic population.¹² Between 1990 and 2005, the foreign-born Hispanic population increased by 115 percent. However, in the future, it will be birth rates that will become the largest component in the further growth of the total Hispanic population. (Tienda et al. 2005).

- **Hispanics and Language.** A vast majority of Hispanics in the U.S. indicate that Spanish is their dominant language. There are three important ways to look at language: language most often spoken in the home, language fluency, and language isolation.

A significant proportion of the Hispanic population in 1990, 2000, and in 2004 indicated that Spanish was the language most often used in the home. In 1990, 69.4 percent of the Hispanic population spoke a non-English language in the home. In 2000, the percentage increased slightly to 70.3 percent, and then declined to 68.9 percent in 2004. Spanish, therefore, is the language of choice for a vast majority of the Hispanic population.

English fluency is a second important concept because it has implications for school and for communicating in other areas of social and economic life. Data in the table below exhibit the self-reported English fluency levels for Hispanics for the years 1990, 2000, and 2004. For our purposes, we report only the proportion in each year who indicated that they did not speak English or did not speak English well.

**Percent not speaking English or not speaking English well:
1990 to 2004**

Year	Does not Speak English	Does not Speak English Well	Total
2004	7.97	13.47	21.44
2000	7.90	13.34	21.24
1990	6.59	12.65	19.24
Difference: '90-'04	1.38	0.82	2.20

Source: All data are original computations by R. R Verdugo from the Census data files. Data for 1990 and 2000 are from the 5 percent IPMUS, and 2004 data are from the Census Bureau’s American Community Survey. For descriptions of both data files see Steven Ruggles, Matthew Sobek, Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander. Integrated Public Use Microdata Series: Version 3.0 [Machine-readable database]. Minneapolis, MN: Minnesota Population Center [producer and distributor], 2004, see the website: <http://www.ipums.org>.

What do the data tell us? To begin with, about one in five Hispanics does not speak English or does not speak English well. Secondly, the percentage of Hispanics who do not speak English or do not speak it well increased by 2.2 percentage points between 1990 and 2004—and the greater part of this increase is due to the increase of Hispanics not speaking English at all.

If English fluency is an issue, certainly linguistic isolation is its close neighbor. By linguistic isolation we mean: (a) the dominant language in the home is a non-English language, and (b) that no one in the family speaks English at a fluency level greater than “well.” This is a definition of linguistic isolation used by the Census,¹³ and, truthfully, it refers to family or household linguistic isolation. For this particular concept, data are not easily accessible from the 1990 and 2000 Census data files, but they are available from the 2004 American Community Survey.¹⁴ In 2004, among all Hispanics, over one-quarter (26.28 percent) were linguistically isolated. If we restrict the analysis to Hispanics in homes where Spanish is the dominant language, the percentage increases to 33.17 percent. These findings can be compared to the results from Siegel et al (2001). Siegel and his colleagues found that in households where Spanish is the dominant language, 26.6 percent were linguistically isolated in 1990.

- **Poverty Status.** Hispanics have poverty rates that vary from two to nearly three times the rates among whites.¹⁵ In 1980, 10.2 percent of whites lived in poverty, compared to 25.7 percent among Hispanics. By the year 2003, the Hispanic rate dropped to 22.5 percent.

As a second measure of poverty, we used the family poverty rate: the proportion of families living in poverty, based on the race or ethnicity of the head of household. In 1980, 8 percent of white families lived in poverty. Among Hispanic families the rate was 23.2 percent. By 2003, the rate for Hispanics dropped to 20.8 percent) and white rate remained relatively unchanged.

Finally, we can look at the children poverty rates. Here Hispanics exhibit the highest rates due to the large number of children per family. In 1980, one in three (33.0 percent) Hispanic children lived in poverty. The poverty rate for white children in 1980 was 13.4 percent. By 2003 the Hispanic child poverty rates was 29.5 percent and the white rate was 13.9 percent.

The Educational Status of the Hispanic Population

There are two educational status terms used here that need to be defined. The first is educational attainment, and the second is educational achievement. By educational attainment, we mean progress through the educational system, e.g., enrollment, graduation. By educational achievement, we mean performance in the educational system, that is, grades and test scores.

Educational Attainment

- **High School and College Graduates.** While the high school completion rate among Hispanics increased between 1970 and 2004, these rates still remain far lower than the high school completion rates among whites. In 1970, 32.1 percent of the Hispanic population age 25 years or older had completed high school or more. Among the white population age 25 or older, 54.5 percent had completed high school or more. By 2004, 58.5 percent of Hispanics had completed high school, compared to 85.8 percent of whites.

Hispanics also lag behind whites in college completion. This is a major concern because researchers expect a college degree to be essential for success in an increasingly competitive world.

Our brief analysis of college completion indicates that a sizeable percent of Hispanics do not complete their college education. In 1970, 4.5 percent of the Hispanic population had completed a college degree or more; for whites, it was 11.3 percent. By 2004, 12.1 percent of Hispanics had completed college or more, compared to 28.2 percent of whites.

- **High School Dropouts.** Hispanics have the highest dropout rates among the three major race-ethnic groups—Hispanics, whites, and blacks.¹⁶ Indeed, when compared to the white dropout rate, the Hispanic dropout rate is nearly three times higher. In 1972, among Hispanics ages 16 to 24, 34.3 percent were high school dropouts. The comparable rate for whites was 12.3 percent. By 2004, the Hispanic dropout rate had declined to 23.8 percent, while the white rate dropped to 6.8 percent.¹⁷

Before moving on to another topic, we should point out why these data are important. In order to attend college and thus build a solid foundation for later economic success, one needs to be a high school graduate. Researchers have shown that high school dropouts earn about \$200,000 less than high school graduates, and over \$800,000 less than college graduates over their lifetimes (Focus Adolescent Services 2000: www.focusas.com/Dropouts.html). What's more, dropouts make up over half of heads of households who are on welfare (Focus Adolescent Services 2000); and 82 percent of prisoners in America are high school dropouts (National Dropout Prevention Center/Network www.dropoutprevention.org/npcdefault.htm).¹⁸

Educational Achievement

The educational achievement of Hispanic students is among the poorest of the three major ethnic-racial groups, regardless of grade level. In this sub-section we examine data from the National Assessment of Educational Progress (NAEP) for the years 1990 to 2005. Our focus is on three academic subjects and limited to Hispanic-white differences in math, science, and reading.

- **NAEP Math.** NAEP math scores for Hispanic and white students in grades 4 and 8 for the years 1990 to 2005 are reported below.

Average NAEP Math Scores, Hispanic and white 4th and 8th Graders: 1990 to 2005

Year	Fourth Graders		Eighth Graders	
	Hispanic	White	Hispanic	White
2005	226	246	262	289
2003	222	243	259	288
2000	208	234	253	284
1996	207	231	251	281
1992	202	227	249	277
1990	200	220	246	270
Percent Change 1990-2005	13.0	11.8	6.5	7.0

Source: M. Perie, W. Grigg, and G. Dion. 2005. *The Nation's Report Card: Mathematics 2005*. NCES 2006-453. U.S. Department of Education, National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office.

In 1990, the math gap between Hispanic and white 4th graders was 20 points. In 2005, it remained the same. Between 1990 and 2005, Hispanic fourth graders improved their math scores by 13 percent, and white students by 11.8 percent.

Among 8th graders in 1990, the gap between Hispanic and whites 8th was 24 points on the NAEP math test. By 2005, the math gap had increased to 27 points. One important factor contributing to this increase was the slightly greater improvement in the 8th grade test scores for whites between 1990 and 2005. Hispanic 8th graders improved by 6.5 percent (16 points), while whites improved by 7.0 percent (19 points).

Though these scores are important, they need an anchor so we can evaluate their significance. The NAEP has benchmarks that measure achievement levels. For all groups, there are three achievement levels—basic, proficient, and advanced. These levels vary by grade level.

It is informative to look at the minimum scores students must attain in order to meet NAEP's different levels of performance (See appendix C for specific definitions of what these proficiency levels mean. Also, see Loomis and Bourque (2001) for detailed discussions.)

Math cut scores used in determining achievement levels by grade

Proficiency Level	Grade 4	Grade 8
Basic	214	262
Proficient	249	299
Advanced	282	333

Source: M. Perie, W. Grigg, and G. Dion. 2005. *The Nation's Report Card: Mathematics 2005*. NCES 2006-453. U.S. Department of Education, National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office.

The math achievement level among Hispanic 4th graders had been low up until accommodations were made in 1996.¹⁹

- In 1990, only 33 percent of Hispanic 4th graders had achieved the basic level in the math assessment. By 1996 the percent increased to 40 percent. And by 2005, 68 percent of Hispanic 4th graders achieved the basic level. For white 4th graders, the comparable percents were 59 percent in 1990, 76 percent in 1996, and 90 percent in 2005.
- Among 8th grade Hispanic students in 1990, 34 percent had reached the basic level in math; in 1996 the percentage increased to 39 percent. By 2005, 52 percent of Hispanic 8th graders reaching the basic level in math. The comparable percentages for white 8th graders were 60 percent in 1990, 73 percent in 1996, and 80 percent in 2005.
- *NAEP Science*. Science scores for Hispanic and white 4th, 8th, and 12th graders are displayed in the Table below.

NAEP Science Scores Among Hispanic and White 4th, 8th, and 12th graders: 1996 to 2005

Year	4th Graders		8th Graders		12th Graders	
	Hispanic	White	Hispanic	White	Hispanic	White
2005	133	162	129	160	128	156
2000	122	159	127	161	128	153
1996	124	158	128	159	131	159
Percent Change	7.3	2.5	0.8	0.6	-2.3	-1.9

Source: Grigg, W., Lauko, M., and D. Brockway. 2006. *The Nation's Report Card: Science 2005*. NCES 2006-466. U.S. Department of Education. National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office.

Between 1996 and 2005, the science scores for Hispanic 4th graders improved. In 1996, the science score for Hispanic 4th graders was 124 versus 158 for whites. By 2005, the scores were 133 for Hispanics and 162 for whites. Note that the greater improvement occurred among Hispanic students, thereby narrowing the science gap.

Among 8th graders, the science scores remained the same, for both Hispanics and whites, between 1996 and 2005. In 1996, Hispanic 8th graders had a score of 128 on the NAEP science assessment, and a score of 129 in 2005. For whites, the scores in 1996 and in 2005 were, respectively, 159 and 160. Consequently, the gap of 31 points remained unchanged.

In 1996, Hispanic twelfth graders registered a science score of 131, and in 2005, 128. For whites the scores were 159 in 1996 and 156 in 2005. Similar declines in the scores for both groups meant that the achievement gap did not change.

Science cut scores for 4th, 8th, and 12th graders are displayed in the table below.

Science cut scores used in determining achievement levels by grade			
Proficiency Level	Grade 4	Grade 8	Grade 12
Basic	138	143	146
Proficient	170	170	178
Advanced	205	208	210

Source: Grigg, W., Lauko, M., and D. Brockway. 2006. *The Nation's Report Card: Science 2005*. NCES 2006-466. U.S. Department of Education. National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office.

- Among 4th graders, in 1996 only 36 percent of Hispanics scored at the basic level in science, while 76 percents of whites did so. By 2005, 45 percent of Hispanic 4th graders had reached the basic level, and 82 percent of whites reached that level as well.
 - Among 8th graders in 1996, 35 percent of Hispanics reached basic level in science, and the percent remained the same in 2005. Among white 8th graders, the percent reaching basic level in 1996 was 72 percent and 74 percent in 2005.
 - Hispanic 12th graders had low achievement levels on the science assessment in both in 1996 and 2005. In 1996, 32 percent of Hispanic 12th graders reached the basic level of performance, and only 30 percent reached that level in 2005. For whites, the percent reaching a basic level in 1996 was 67 percent and 65 percent in 2005.
- **NAEP Reading.** In 1992 Hispanic 4th graders registered a NAEP reading score of 197. By 2005, the NAEP readings score for Hispanic 4th graders increased by 6 points to 203. The comparable scores for white 4th graders were 224 in 1992, and 229 in 2005. In other words, the reading gap closed only slightly—by 1 point.

In 1992, Hispanic 8th graders registered a NAEP reading score of 241 and 246 in 2005. The comparable data for white 8th graders was 267 in 1992 and 271 in 2005.

Reading cut scores for the three achievement levels are presented below for grades 4 and 8. Our brief analysis highlights a disturbing fact: less than half of Hispanic 4th graders have yet to achieve a basic reading level of performance on the NAEP assessment. These are appalling statistics because reading is central to the learning process.

Reading cut scores in determining achievement levels by grade		
Level	Grade 4	Grade 8
Basic	208	243
Proficient	238	281
Advanced	268	323

Source: M. Perie, W. Grigg, and P. Donahue. 2005. *The Nation's Report Card: Reading 2005*. NCES 2006-451. U.S. Department of Education, National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office.

- In 1992, 39 percent of Hispanic fourth graders had reached a basic level of performance, and by 2005 the percentage increased to 46 percent. The comparable data for whites were 71 percent in 1992 and 76 percent in 2005.
- In 1992, 49 percent of Hispanic 8th graders reached the basic level of reading performance. By 2005, 56 percent had reached that milestone. For white 8th graders, the comparable data were 77 percent in 1992 and 82 percent in 2005.

A Brief History of Hispanics In the U.S.

Hispanics predate Anglos on this continent. In 1609, 11 years before the pilgrims landed at Plymouth Rock, Mestizos (Indian and Spanish) settled in what is now Santa Fe, New Mexico and started a community.

While there is no one history of Hispanics in the United States, the history of Mexican Americans, the largest Hispanic sub-group, generally captures the issues surrounding Hispanics in the U.S. and their educational experiences. Nevertheless, we briefly describe the educational history of Mexican Americans and Puerto Ricans, and Cubans.

Our discussion focuses on what may be considered “axial” events in the history of education for Mexican Americans, Puerto Ricans, and Cubans. (The concept of “axial” events is linked to the early work of Karl Jasper (1953) and S.N. Eisenstadt (1982), and referred to major revolutions in ideas, especially world views, that changed the course of human history. The same can be said about events.) Axial events are those events that change and define the history of populations.

The History of Mexicans in the U.S.

Five major historical events are important in defining the status of Mexicans in the U.S.—the Mexican American War, the two World Wars, the economic restructuring of the U.S. at the end of the 19th Century and at the beginning of the 20th century, and the de-industrialization/globalization of the U.S. in the latter part of the 20th century.

The Mexican American War and the Treaty of Guadalupe Hidalgo

Some scholars have estimated that at the time of the U.S. arrival in the Southwest, there were no more than 80,000 Mexicans living in that part of the continent.²⁰ The level of isolation was severe, and it was a hard scrabble existence that most Mexicans experienced.

Under the doctrine of “Manifest Destiny” the U.S. pushed westward and eventually this led to conflict with Mexico over the status of Texas.²¹ The Mexican American War began in 1846 and ended in 1848, with the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848. The Treaty led to three important consequences. First, of course, the U.S. annexed a sizeable portion of what is now the western region of the United States: Texas, Arizona, New Mexico, California, Colorado, Nevada, and parts of Utah. The natural resources found in that part of the U.S. were huge bonuses and contributed to the further economic development of the United States.

A second result was that those Mexicans who decided to stay in what was now the U.S. found themselves to be American citizens—the first Mexican Americans.²² As U.S. citizens, they were afforded all the rights and responsibilities of U.S. citizens. Unfortunately, their rights were not honored by the dominant Anglo culture in the Southwest, especially in Texas.²³ This was, after all, the 19th century—a century in which racism ran deep—in a country deeply rooted in racism. Mexicans, especially darker skinned Mexicans, were seen by many in the dominant culture as inferior beings.

Thirdly, the war relegated Mexicans to the status of a conquered people. It is this status, and the viewpoint attached to such a status, that has led some scholars to maintain that it was a major factor in the maintenance of Mexican culture in the Southwest.²⁴

In the middle of the 19th century, there were schoolhouses, but few educational systems to speak of. As the Anglo immigration surged, however, conflict arose over language. For example, the town of Santa Barbara in 1855 tried bilingual education in the public schools. But neither Mexicans nor Anglos liked the situation, which was resolved when the Spanish speaking families took their children out of the public school and sent them to a parochial school where they could study in Spanish.

Overall, the education provided Mexican American children in the lands acquired by the U.S. in the Treaty of Guadalupe Hidalgo could best be characterized as haphazard, segregated, and inferior—a state of affairs that persisted well into the 20th Century.

The Two World Wars and Economic Restructuring in the Early Part of the 20th Century

During the latter part of the 19th century and the early part of the 20th century, the U.S. underwent a significant economic transformation, affecting all aspect of life. In essence, the U.S. moved from a predominantly agricultural economy to one based on industry and manufacturing—or the “Industrial Revolution.”

In addition, during the first half of the 20th century, the U.S. fought in two world wars that affected not only the general population, but had significant effects on its two largest ethnic/racial groups: Hispanics and Blacks.

For Hispanics, the two world wars and the economic restructuring of the U.S. economy led to three phenomena that shaped their educational experiences: urbanization, immigration, and the emergence of Hispanic leadership in the fight for civil rights.

- **Urbanization.** The economic restructuring of the U.S. economy led to important population shifts. Specifically, the U.S. population moved from traditional rural/farming areas into the cities; it was in the cities that jobs were to be found.

Hispanics were part of this movement as they sought jobs in industry and manufacturing. For example, Mexican workers could be found in the auto industry in Detroit, or working in Chicago (McWilliams 1996[1948]).

Though Hispanics continue to be an urban population, it is noteworthy that their numbers are growing in rural areas because of jobs and housing opportunities (Economic Research Service 2005; Kandel and Cromartie 2004; Effland and Kassel 1996).

- **Immigration.** Increased immigration also resulted because Hispanics sought jobs where they could earn more than they ever could in Mexico or other parts of Latin America. They moved north in large numbers in search of a better life for themselves and their children.

Moreover, during the two World Wars, the native-born workforce was reduced because of Armed Forces responsibilities. And the resulting labor shortage was filled by immigrant labor.

The continued immigration of Hispanics, and their concentration in urban areas guaranteed the persistence of Hispanic culture and language (Samora 1962, 1966; Sanchez 1997).

In addition, while on the subject of immigration, it is worth recalling that despite the inviting words on the Statue of Liberty—“Give me your tired, your poor/your huddled masses yearning to breathe free”—immigration has always been a contentious issue in the U.S. That was true in the 19th century and the 20th century, and it is true today. The U.S. welcomes the cheap labor immigrants provide, but not always the immigrants themselves, with their different customs, cultures, and languages. And the darker the skin color of these immigrants, the more intense the anti-immigrant reaction.

- ***Hispanic Leadership and the Fight for Civil Rights.*** The two world wars also spawned a new Hispanic leadership that stood at the forefront of the civil rights movement.

Soldiers returning from the battlefield, where they have fought bravely (more Mexican Americans had won the Medal of Honor during World War II than any other racial or ethnic group) refused to put up with humiliations at home in the U.S. This fueled an already simmering civil rights movement. The poor economic status of the Hispanic population in the U.S., their poor housing, and the inferior education provided their children led to civil rights protests and advocacy, and the creation of various Hispanic civil rights organizations.

Among the organizations founded between the two world wars was the League of United Latin American Citizens (LULAC) in 1929. One scholar has commented that the years 1945 to 1965 were significant for Hispanic leadership and a new advocacy for civil rights, including advocating for equal educational opportunities.²⁵

Hispanics challenged school segregation, just as black civil rights activists were doing. One of the cases—*Mendez v. Westminster 1945*—involved Hispanic parents seeking entrance for their child into an all-white public school, and it paved the way for the Supreme Court’s historic *Brown v. Board* decision in 1954.

The De-Industrialization of the United States and Globalization in the Late 20th Century.

A third factor occurring in the U.S. that has had a significant effect on Hispanics and the educational system is the de-industrialization of the U.S.

Well-paying manufacturing jobs began to disappear some time in the middle to late 1970s, and, by the 1980s, the loss of industrial jobs in the North and Northeastern part of the U.S. created serious problems (Harrison and Bluestone 1990; Wilson 1996). Among other things, the loss of manufacturing jobs and industries eroded the tax base of communities across the Midwest and Northeast, making it increasingly difficult for them to support their public school systems.

Technology and global competition led to new strategies for companies. For some companies that had the ability, it meant relocating to another country where labor

was cheaper, or to the out-sourcing of jobs. For companies that could not relocate or out-source, the strategy was to hire cheap, immigrant labor.

Moreover, in those industries driven by new technologies, unskilled labor provided special services (e.g., housekeeping, baby care, gardening) or filled positions in the service industries that supported the new technology companies in places such as Silicon Valley, California and Austin, Texas.

For Hispanics, the economic changes of the 70s, 80s, and 90s led to major demographic shifts—including a return to rural areas where there were new jobs in meat/chicken packing, and migration to new areas of the country, such as Arkansas, North Carolina, Georgia. These shifts in the Hispanic population has led to important educational challenges in communities unaccustomed to providing services to large numbers of Hispanics.

The Puerto Rican Population: A Colonial Past

There appear to be three important historical events affecting the education of the Puerto Rican population: the colonization of Puerto Rico by the U.S., the “Great Migration,” and the protest era for self-determination.

The Colonization of Puerto Rico

Puerto Rico began formal relationships with the U.S. in 1898. As a colony of the U.S., the major focus in the education of Puerto Rican children was learning the English language, and learning the “American way of life.” Indeed, these were mandates from the U.S. government (Negron de Montilla 1971; Osuna 1949).

Attempting to make Puerto Ricans into Americans could be seen in the policies, practices, and curriculum of schools on the island. Textbooks, school materials, teaching methods, language policies, and teacher preparation all stressed the Americanization of Puerto Rican children. In addition, all U.S. holidays were to be celebrated. This stress on American culture led one scholar to state that the average Puerto Rican child knew more about George Washington, Abraham Lincoln, and Betsy Ross than did the average American child (Osuna 1949).

The “Great Migration”

The largest migration of Puerto Ricans to the U.S. began in the late 1940s when air travel became easy and relatively inexpensive. Three important consequences resulted from this great migration. First, Puerto Ricans were the first migrants to arrive in the U.S. as citizens—such status being granted in 1917, though not generally wanted or desired by the Puerto Rican population (Wagenheim and Jimenez de Wagenheim 1973; History Task Force 1983). Second, Puerto Ricans were the first “jet set” migrants to the U.S. (Sanchez Korrol 1983). Third, the “Great Migration” occurred at

a time when more and more jobs were being tied to technologies and skills that placed the poorly educated Puerto Rican population at a significant disadvantage.²⁶

The ease of migration led to some noteworthy educational issues. Puerto Ricans moved back and forth between the U.S. and the island, making the consistency of their education a problem. Some solutions to this problem had been proposed, but were never implemented (Gallardo 1970; Morrison 1958; Rivera-Medina 1984; Santiago-Santiago 1986). This movement between the U.S. and the island had the effect of solidifying Puerto Rican culture within the larger community. Culture and language were not about to be dismissed by the Puerto Rican community, so the efforts to Americanize this group were doomed to fail (Fishman et al. 1971; Duran 1983; National Puerto Rican Task Force 1982; Fitzpatrick 1987).

The Puerto Rican migration to the U.S. mainland has been likened to the movement of Blacks from the south to the north in the 1940s, '50s, and '60s. Both groups found decent housing and jobs difficult to secure. Both groups saw the public schools struggle, often unsuccessfully, to educate their children. And both groups saw too many of their children and their children's children slip into joblessness, crime, and hopelessness.

Protesting for Self-Determination in the Era of Civil Rights and Beyond

Faced with the worsening educational experiences of Puerto Rican children, the Puerto Rican community began organizing to address educational and other social problems facing it. In the 1950s, a group of young Puerto Rican professionals established the Puerto Rican-Hispanic Leadership Forum (now the National Puerto Rican Forum). In the 1960s, ASPIRA and the National Puerto Rican Coalition, among others, were established.

What did these and other Puerto Rican organizations want in terms of education? Two educational resources were pursued, in an increasingly aggressive manner: more programs for Puerto Rican children, such as bilingual education, and greater involvement of Puerto Rican educators. These strategies were pursued because schools were still operating under the premise that greater educational achievement among Puerto Rican children would come if they were assimilated (see Bucchioni 1982).

In the 1980s and beyond, while researchers and activists pursued bilingual education for Puerto Rican students, they also focused on school policies and practices as the driving force behind low educational achievement and attainment among Puerto Rican children (Santiago-Santiago 1986; Caballero 1986; National Puerto Rican Coalition 1991; National Commission on Secondary Education of Hispanics 1984). Of particular importance was the increased segregation of Puerto Rican students

and their attendant lack of resources from such a status (Orfield et al. 1997; Meier and Stewart 1991; Bullock and Stewart 1979).

Cubans: Political Refugees in the Time of the Cold War

The experience of Cubans in the U.S. is vastly different from other Hispanic groups. For starters, many in the first wave of Cuban immigrants were from the middle or upper classes in Cuba, and, thus, were better educated than most Mexican or Puerto Rican immigrants (see Verdugo and Flores 2006). In addition, and most importantly, as political refugees from Cuba, a communist country, during the height of the Cold War, it was crucial to U.S. officials that Cuban immigrants succeeded. The U.S. government worked to assure their success. Two strategies were employed: policy, and money.

The U.S. government worked closely with specific school systems to ensure that Cubans developed skills that would help them educationally. Thus, English language instruction was provided and paid for by the U. S. government.²⁷ For example, in 1960-61 the U.S. government helped set up the Cuban Refugee Program in Dade County, Florida, and did so through annual agreements with the county school system (Sullivan and Pedraz-Bailey 1979).

In terms of money, it is estimated that from 1960 through 1972 the U.S. Government spent over \$117 million on programs and assistance to Cuban refugees.



Key Issues in the Education of the Hispanic Population

Innovative Classroom Strategies for Hispanic Students

What the Research Says About Classroom Strategies

Einstein was purported to have said “the height of stupidity is doing something over and over again the same way and expecting different results.” It is time to think about the pedagogical strategies we use to teach all children, especially Hispanic children. Thus far, the results (outcomes) have not exactly been exemplary, and the existing research seems to concur.

Quite often, teaching involves some kind of lecturing. Lectures tend to be rote, are delivered to the entire class, and controlled by the teacher (Haberman 1991; Padrón and Waxman 1993). The focus of such a teaching strategy is teacher-centered, emphasizes drill and rote learning, and stresses a great deal of seatwork (Stephen, Varble, and Taitt 1993). This strategy tends to reinforce social inequality in the larger social system because it focuses on low-level skills, passive instruction, and following directions from a higher authority (Anyon 1981; Bowles and Gintis 1976; Haberman 1991; Waxman, Huang, and Padrón 1995).

Research suggests that traditional teaching strategies account for much of the poor performance, and low educational motivation among many Hispanic students (Fletcher and Cardona-Morales 1990; Padron and Waxman 1993; Waxman, Huang, and Padron 1995).

If traditional strategies do not work, what does? The extant literature suggests that five teaching strategies have been effective in educating Hispanic students.

- ***Culturally-Responsive Teaching.*** Culturally responsive teaching stresses the everyday concerns of students, student social and academic responsibility, and an appreciation for student diversity (Peregoy and Boyle 2000; Boyer 1993; Rivera and Zehler 1991).
- ***Cooperative Learning.*** In a cooperative learning classroom, students interact in groups and work together in the learning process. The strategy is student-centered, and the teacher acts as a facilitator (McLaughlin and McLeod 1996; Johnson and Johnson 1991). Moreover, the strategy has sound results with Hispanic students (Bejarano 1987; Rivera and Zehler 1991; Calderon 1991; Christian 1995; Alcalá 2000).
- ***Instructional Conversations.*** This strategy emphasizes extended dialogues between students and teachers in areas that have both educational value and are relevant to students. Results have been positive for Hispanic students, especially English Language Learner (ELL) students who have the opportunity to speak and learn English in such a classroom environment (August and Hakuta 1998; Tharp 1995; Duran, Dugan, and Weffer 1997; Christian 1995).
- ***Cognitively-Guided Instruction.*** This particular strategy involves the teaching and learning of sound learning strategies; that is, teaching one how to learn. Four tactics are important in this strategy: summarizing, self-questioning, clarification, and predicting. Research has shown positive effects among Hispanic students because it is student-centered. Moreover, the strategy encourages students to take responsibility for their own learning, and it enables students to examine many different problems with their newly acquired tactics (Padron and Knight 1989; Waxman, Padron, and Knight 1991; Padron 1992, 1993; Chamot and O'Malley 1987).
- ***Technology-Enriched Instruction.*** This is a new strategy, but it appears to be student-centered and has the ability of offering interactive visuals so students can place academic issues in context. There have been positive effects among Hispanic students, for many of the reasons discussed above, with the main reasons being that such strategy is student centered, engages students, and inspires student responsibility. Teachers work as facilitators (Cummins and Sayers 1990; Padron and Waxman 1996; Smolkin 2000; Means and Olson 1994; Bermudez and Palumbo 1994; Jimenez and Barrera 2000; Padron and Waxman 1999; Glickman 1998).

What the Hispanic Education Summit Participants Said about Teaching Strategies

Participants were asked to provide their opinions and suggestions on how best to educate Hispanic students using new/innovative strategies they believed were successful. While some of the ideas expounded by participants were based on knowledge of the research, the driving forces behind their comments were their own experiences and observations.

Three key issues were raised about innovative teaching strategies: (1) relationships are important; (2) student strengths should be stressed, not their deficits; and (3) that the Hispanic community does not see schools as relevant or committed to educating their children. These issues do not contradict what is said in the extant literature, but rather they tend to contextualize the research. This is perhaps best exemplified by what participants felt were best practices.

Comments about best practices focused on two topics: curriculum and teaching/learning strategies. On the one hand, participants felt that the curriculum for all students should be academically rigorous. On the other hand, a second focus was on teaching and learning strategies that engaged students' interests, with more hands-on work and exposing students to their history.

School Funding and Educators' Professional Development

School Funding

- *What the Research Says.* Historically, Hispanic schools or schools in which a significant proportion of the student body was Hispanic have been seriously underfunded in comparison to Anglo schools (Garcia 1981; Nieto 2000). Hispanics know first hand about the "savage inequalities" that Jonathan Kozol has elegantly documented in his books.

One strategy used by Anglo-controlled school boards was to create "Latin Schools" or "Mexican Schools" that were drastically underfunded and in many cases, lacked basic resources such as textbooks, desks and chairs, and were located in inferior buildings. Have things changed? Nowadays, of course, there are no Latin or Mexican Schools per se, but there are schools in which the vast majority of students are of Hispanic ancestry. Indeed, research indicates that segregation in public schools is increasing (Clotfelter 2001, 2004; Frankenberg et al. 2003). More than 70 percent of all Black and Hispanic students in the U.S. attended predominantly minority schools in 2000, and Hispanics are the most isolated minority student group (Orfield and Lee 2005).

What do these schools look like and what sort of funds do they receive in comparison to schools with fewer Hispanic students? Researchers point out that schools with higher proportions of Black and Hispanic students have fewer resources and receive lower per pupil funding than schools with lower proportions of Black and Hispanic students (E. Garcia 2001; Kozol 1991; Nieto 2000).

- ***What Summit Participants Said.*** Summit participants did not contradict the research findings but confirmed, and added some thoughts about key issues.

Two themes emerged from the discussion about funding equity. To begin with, participants struggled with the meaning of equitable funding. That is, what exactly is equitable funding and how is it different from adequate funding? It was believed that an appropriate answer needed to be developed prior to tackling funding issues. Secondly, participants focused on variations in funding by selected factors, such as urban-rural schools, the formulas used to distribute money, etc. In other words, funding differed significantly by these and other characteristics and that such variations were probably not equitable.

How the public perceived public schools was another topic of discussion. In general, the underlying belief among the participants was that public perceptions about public education were not favorable. But the participants also expressed the belief that schools were overwhelmed with social problems which were outside their area of expertise, and these social problems very well might be contributing to their poor performance as educational institutions.

School reform/policy efforts, specifically, the so-called No Child Left Behind law (NCLB), Title I, and school vouchers/charter schools formed another set of issues. In the case of NCLB and vouchers/charter schools, the message from the participants was clear—resist them because they are not good for the education of our children. Regarding Title I, participants felt that there was a need for minimum standards/criteria and that more funds were needed, especially funds that could be earmarked for low-performing schools.

Resources formed a fourth topic. It was the consensus that more funds for more teachers, especially Hispanic teachers, were needed.

Professional Development

- ***What the Research Says.*** Padron et al. (2002: 9) unequivocally state: “One of the most serious problems associated with the educational failure of Hispanic students’ results from a shortage of adequately qualified teachers and a lack of appropriate preparation among credentialed teachers.” This viewpoint is corroborated by other researchers (Menken and Holmes 2000; Gersten and Jimenez 1997; Alexander, Heaviside, and Farris 1999; Urban Teacher Collaborative 2000; Lewis et al 1999; Garcia 1994).

Why is this the case?

- Teachers who teach children who are in the process of learning English are greatly challenged by this task (Gersten and Jimenez 1997).
- Nearly 56 percent of all public school teachers have at least one English Language Learner (ELL) student in their class, yet only 20 percent of those teachers are certified to teach such students (Alexander, Heaviside, and Farris 1999).
- In urban areas where more ELL students live, 80 percent of the 54 largest urban districts said they had noncredentialed teachers on their staff (Urban Teacher Collaborative 2000).
- Most teachers of ELL students, or other culturally diverse student populations, do not feel they are adequately prepared to teach such students (Lewis et al. 1999).
- Alexander et al. (1999) found that 57 percent of classroom teachers in their study felt that they needed more information on how to help students who were limited English proficient (LEP).
- *What the Summit Participants Said.* Professional development was a consistent theme throughout the discussions about the education of Hispanic students. Participants unanimously felt that educators did not understand or were not sensitive to the cultural and economic backgrounds of Hispanic students. This lack of culture awareness and sensitivity, it was argued, impeded the educational performance and attainment of Hispanic students.

Generally, participants felt that teachers needed diversity training because many had no idea about how to teach Hispanics and ELL students.

The community was another topic raised by participants. It was pointed out that schools needed to do a better job of connecting with the community—indeed, this turned out to be a common theme throughout the Summit. In addition, greater parental involvement was urged as was teachers teaching parents, per the Partnerships Advancing the Learning of Mathematics and Science (PALMS) program.

Early Childhood Education & Postsecondary Education

What the Research Says

- *Early Childhood Education.* Beginnings are important. Research shows that children who acquire cognitive and other academic skills before starting school perform better academically (Heckman 2006; NCEDL 2005; Schulman and Barnett 2005). Moreover, this body of research also points out that cognitive

development and skills acquisition are cumulative over the life cycle. That is, children who acquire skills at an early age are more likely to acquire more skills as they age.

For children from disadvantaged backgrounds, early childhood education and other programs aimed at developing skills could be a huge benefit—academically for children and economically for society—because the cost of educating youth is more expensive in later years than in the early years (Heckman 2006; NCEDL 2005).

Though the research is clear about the benefits of early childhood programs, the U.S. fails to adequately fund such programs. Forty-three states have early childhood programs, and their quality and focus are of great concern (NCEDL 2005). Another concern is that not all children attend early childhood programs.

The impact of early childhood education programs can be observed when children enter elementary school. Entering elementary school with fewer skills places children at a disadvantage, and it also places educators in a difficult position because they must decide how best to educate students with skills who are ready to move at a fast pace, and other students with less skills whose pace will be slower.

Hispanics have not enrolled in pre-school programs at high rates. In 2000, for example, only 45 percent of eligible Hispanic children were enrolled in a pre-school program, compared to 80 percent among Black and white children. However, the enrollment rates for Hispanic children have been increasing. In 2004, 55 percent of Hispanic children were enrolled in a pre-school program. If this pattern continues, it will pose significant challenges for pre-school systems because of the projected increase in the Hispanic population (Tienda et al. 2006).

- **Postsecondary Education.** While there are many important factors involving Hispanics and postsecondary education, the two most important are access and retention.²⁸ That is, providing Hispanic students access to higher education, and providing them services and support so they actually graduate.

Access. The most important factor involving Hispanics and postsecondary education is the small percentage of Hispanics actually entering institutions of higher education.

Between 1972 and 2004, the total enrollment rate of 18-to-24-year-olds in degree-granting institutions in the U.S. increased from 25.5 percent to 38.0 percent. The rate for Hispanics was 13.4 percent in 1972, increasing to 24.7 percent in 2004. For whites the rate was 27.2 percent in 1972, and increased to 41.7 percent in 2004.²⁹ So, while the overall number of Hispanics attending college has increased impressively—286.5 percent between 1980 and 2004—they still lag behind whites and the general population in their rate of attendance.³⁰

What's more, there is an important difference in the type of college Hispanics attend, e.g., two-year or four-year.

Between 1980 and 2004, more than half of Hispanics enrolled in institutions of higher education were enrolled in two-year community colleges. For example, in 1980 of the 471,700 Hispanics enrolled in higher education, 216,600 were enrolled in four-year institutions (45.9 percent), and 255,100 (54.1 percent) were enrolled in two-year institutions. By the year 2004, 46.3 percent were enrolled in four-year institutions, and 53.7 percent in two-year colleges. Basically, over this 24 year period, the distribution of Hispanic students in higher education by institution type changed very little. The comparable data for white students were:

- 1980: percent in four-year = 63.6 percent; 36.4 percent in two-year institutions.
- 2004: percent in four-year = 64.4 percent; 35.6 percent in two-year institutions.

Degrees Awarded. It is one thing to enroll in higher education, and quite another to actually earn a college degree. Indeed, researchers have found that Hispanics are much less likely to earn a degree than whites (Fry 2002, 2004, 2005; Swail, Cabrera, and Lee 2004).

Between 1980 and 2004, the number of earned degrees by Hispanics increased by over 300 percent. The growth was especially significant among Hispanics earning a master's degree. In 1980 Hispanics in higher education earned 6,461 master's Degrees, and by 2004 the number jumped to 29,666. The next largest increase was among Hispanics in four-year programs: in 1980, there were 21,832 bachelor's degrees earned by Hispanics, and 94,644 in 2004.³¹

What the Hispanic Education Summit Participants Said

Participants were able to identify many issues pertaining to early childhood education and higher education for Hispanic students. A number of themes emerged from these discussions, with school achievement being the most important topic for discussion. The discussion focused on these topics because of the clear link between early childhood education and higher education.

Participants were concerned about the poor level of educational achievement and attainment among Hispanic students, and as an example they noted their high dropout rates. A second topic was the lack of access to quality, affordable higher education.

School climate emerged as another topic for discussion. The norms, values, expectations, and relationships within the school often seem to negatively affect Hispanic students. Educator's complacency also was addressed. It was felt that educators were more concerned with maintaining the status quo than educating Hispanic students.

Participants also noted the lack of funding for early childhood education.

Immigration/Migrant Education/English Language Learner Politics

What the Research Says

- Immigrant Students.** In a recent issue of the *Washingtonian*, a Washington, D.C.-based magazine, the lead story was the way immigrants are changing the face of the Washington D.C. metropolitan area. Immigrants and their children are altering the economy, religion, and schools. In the 11 counties making up the D.C. metro area, the percent of Hispanics in both 1995 and 2005 are presented below:³²

<i>County</i>	<i>1995</i>	<i>2005</i>	<i>Difference</i>
Alexandria	18	27	9
Arlington	30	29	-1
Fairfax County	9	16	7
Falls Church	9	8	-1
Loudon	3	12	9
Prince William	6	22	16
Anne Arundel	1	5	4
Howard	2	4	2
Montgomery	12	20	8
Prince George's	5	14	9
District	2	9	7

Source: *Washingtonian*. 2006 (October), page 103.

These findings are a microcosm of what is occurring in many communities across the nation. Hispanic immigrants are moving into local communities that do not have a history of addressing their needs, and this mismatch creates important challenges. These challenges include, but are not limited to, language instruction and issues of poverty and culture.

The research on the education of immigrant children is complex. Some researchers find that immigrant students do very well in school (Kao and Tienda 1995). Other researchers find immigrant students do about as well as the native-born (Rumbaut 1995; Waters 1999; Kao and Tienda 1995). And other researchers find many immigrant students do poorly (Kao and Tienda 1995; Portes and Zhou 1993; Rumbaut 1995; Suarez-Orozco and Suarez-Orozco 1995; Vernez, Abrahamse and Quigley 1996).

One particularly disturbing finding is that the longer immigrant children stay in the U.S., the worse they perform in school (Kao and Tienda 1995; Portes and Rumbaut

2001; Rumbaut 1995; Steinberg 1996; Suarez-Orozco 2001; Suarez-Orozco and Suarez-Orozco 1995; Waters 1999). Perhaps the best way to summarize this body of research is to say that immigrant students do well in school if their parents are able to maintain their own cultural patterns of sanctioning and discipline and resist those from the host society (the U.S.), especially norms regarding authority, discipline, homework, peer relations, and dating.

- ***Migrant Education.*** Migrant education refers to the education of children who follow their parents as they move from job to job, mostly in agriculture.

In the fiscal year 2001-2002, 77 percent of migrant farm workers were either from Mexico or some other Latin American country.³³ Seventy-five percent were from Mexico, 2 percent from Central American, 1 percent from some other country, and 23 percent are Americans.

Moreover, a significant proportion of migrant workers are foreign-born. In 1993-94, the foreign-born were 23 percent of all migrant farm workers, and by 2001-02, they constituted about 38 percent of the migrant farm workforce (U.S. Department of Labor 2005).

There are several important issues facing migrant students. To begin with, they face barriers related to their mobility, which results in an inconsistency in their education (Gordon and Straub 1990; Jones and Murray 1986; Prewitt Diaz and Seilhamer 1985; Inbar 1982; van Dusen 1954; Leon 1996; Potts 1960; Salerno 1991; Kindler 1995; Cox et al. 1992; Tatto et al. 2000). Other factors related to the mobility of migrant students are differences in curriculums from one district to the other, and inconsistency in record keeping across school districts.

A second issue is language. A large proportion of Hispanic migrant workers are English Language Learners, and their inability to speak English hurts their educational attainment and achievement (Cox 1992; Kindler 1995; Salerno 1991; Leon 1996; Tatto et al. 2000).

Poverty negatively affects the education of all poor students, but for migrant students it is an even greater burden (Kindler 1995; Leon 1996; Salerno 1991; Tatto et al. 2000). Being poor means that migrant students are needed to work in the fields in order to bolster the family's salary, or they are used to watch younger siblings because of day care issues.

These factors contribute mightily to the poor educational status of migrant students, three-quarters of whom are Hispanic. It was estimated in the late 1980s that 45 percent of migrant students drop out of school (Migrant Attrition Project 1987). More recent data are difficult to obtain, and point out an important obstacle to addressing the status of migrant education students—we need reliable and current data.

- **English Language Learners.** English Language Learner (ELL) students face a number of challenges in public schools. These challenges are not only tied to their language skills, but to their socioeconomic status. For example, many ELL students come from poor backgrounds and attend schools that lack adequate resources, including teachers who are prepared to provide them with appropriate instruction (see Verdugo and Flores in press). Other factors related to ELL students include:
 - Proficiency in English does not guarantee academic success; rather, academic English must be mastered to achieve academic success (August and Hakuta 1997).
 - ELL students are more likely to come from poor families (August and Hakuta 1997; Verdugo and Flores in press).
 - ELL students do not do as well in school as non-ELL students (August and Hakuta 1997; Verdugo and Flores in press).

What the Hispanic Education Summit Participants Said

Participants identified the lack of teachers who are qualified to teach ELL students as a major issue in the education of immigrant and/or migrant Hispanic students. Continuing with this line of reasoning, participants felt there was a shortage of qualified Hispanic teachers, counselors, and supervisors.

Culture and curriculum was a second issue that emerged. The topic, cultural competence, (sensitivity to and understanding the cultural background of their students) surfaced throughout the Summit. Participants also urged that there needed to be curriculum changes for the education of Hispanic students to be relevant and sensitive to the backgrounds of Hispanic students.

Student achievement was a third issue. Basically, the lack of achievement among Hispanic ELL and undocumented Hispanic students was of special concern. It also was noted that Hispanic students' educational attainment was hampered because there were not mastering the English language.

Policy was a fourth issue. The negative influence of NCLB on Hispanic education was duly noted. The Development, Relief, and Education for Alien Minors (DREAM) Act³⁴ was held up as an exemplary policy, but participants also felt that most policies tended to blame students for their lack of achievement and attainment.

School climate and organization also emerged as an issue. By school climate is meant the general views held by students and school staff about one another, the school, and the practices being implemented within the school. Participants were sympathetic to the fact that many education employees felt disempowered. Moreover, participants felt that separating and segregating students contributes to a negative school climate.

Community is critical in the education of Hispanic students. Participants pointed out that schools need to reach out to parents, especially in a time when immigration and immigrants are under attack.

Finally, the issue of resources was raised. Specifically, the lack of adequate funding at a time when ballooning higher education costs are short changing poor and minority students. In addition, student populations most in need of resources did not have access to information necessary to improve educationally.

Recruitment and Retention of Culturally/English Language Competent/Highly Qualified Educators

What the Research Says

- **Qualified Teachers.** The research is fairly clear—Hispanic students do not, generally, get qualified teachers. Three factors are often cited in determining qualified: credentials, teaching within one’s area of expertise, and years of teaching experience.

It also is important to note that teachers themselves do not feel prepared to teach Hispanic students. In some surveys, teachers cite their own lack of understanding of the cultural backgrounds of their students as well as their own inability to speak Spanish. Moreover, there has been, historically, the issue of teachers having low educational expectations of Hispanic students (U.S. Commission on Civil Rights 1973; Verdugo n.d.), and, regrettably, such viewpoints have continued into the modern era (Duran 1983; Romo and Falbo 1996). Both factors affect the quality of interaction teachers have with Hispanic students, and affect student performance (Rosenthal and Jacobson 1992).

- **Recruitment and Retention.**³⁵ The number of Hispanic K-12 teachers in the U.S. is quite small, especially when you consider their proportion of the total teaching force.

Data indicate that there were 67,084 K-12 Hispanic teachers in U.S. public schools in 1987, or 2.84 percent of the total K-12 public school teaching force. By 1993, the number had increased to 108,744, or 4.26 percent of the K-12 public school teaching force. In 1999, the most recent data available, the Hispanic K-12 public school teaching force reached 169,025—5.62 percent of the total K-12 public school teaching force. By contrast, in 1999, Hispanics students accounted for 15.6 percent of the total student population in K-12 public schools (www.nces.ed.gov).

Thus, from 1987 to 1999, while there was a 152 percent increase in the Hispanic K-12 public school teaching force, the percentage of Hispanics teachers improved modestly.

What the Hispanic Education Summit Participants Said

Effective schools require high quality teaching staff. For students who face serious educational barriers, having highly qualified staff is critical. For Hispanic students, and students from different cultures, good teaching is not only related to subject matter, but knowledge of and sensitivity to the diverse cultural backgrounds of the students.

Four themes emerged from the discussion about teacher recruitment and retention. The first theme focused on quality. Of particular significance to participants was the lack of qualified teachers, both minority and nonminority. Another set of issues dealt with including the concept of cultural competence into the definition of “qualified teacher.”

A second strand of issues focused on the evaluation and training of teachers. One line of thought suggested that the evaluation of teachers and paraprofessionals was too long, as were the probationary periods, and that many Hispanic teaching candidates were not passing tests such as PRAXIS.³⁶ It was suggested that multiple measures should be used in evaluating education employees.

Some other proposed solutions to the teacher recruitment and retention issue included: provide mentors and better in-service professional development for new teachers, stop lying to recruits, start recruiting teachers in middle and high school, and enlist the support of corporations and communities in teacher recruitment.

A third theme dealt with NCLB: it is punitive and its terms need to be clarified, particularly regarding who is quailed to teach and who is not.

A final theme focused on so-called “pay for performance.” Specifically, participants voiced the fear that tying teachers’ salaries to student test scores might lead to teachers leaving schools that serve primarily poor and minority students. In addition, it was pointed out that teachers lack appropriate support and that students should receive help from other education employees other than teachers, e.g., counselors, social workers, etc.

Recommendations from the Summit

For School Personnel

1. Learn about the history of Hispanics in the U.S.
2. Work closely with parents and the community.
3. Engage policy makers.

For Classroom Teachers

1. Recognize and be sensitive to the cultural backgrounds as well as the economic circumstances of Hispanic students.
2. Create engaging classroom environment that reflects students' in your class.
3. Learn the language, history, and cultures of Hispanic students.
4. Encourage Hispanic students to learn about their cultures and histories.
5. Use parents and community to learn more about their cultures and about your students.
6. Develop and use innovative teaching strategies.

7. Students lack academic skills, so teach students how to study, how do research, how to write a term paper, etc.
8. Standardized tests are biased because they are not normed on students with traits like Hispanic students, and appropriate testing accommodations can be used to level the playing field. Hence, be aware of test bias and what accommodations you can use for your students.
9. Put students of teacher education in classrooms to gain teaching experience or create teaching academies.
10. Make information and training available for teachers for their professional development.
11. Teachers need mentors, and they need to share resources, and partner with other teachers.

For Professional Development Programs

1. Offer pre- and in-service for teachers.
2. Recruit and retain Hispanic teachers.
3. Provide professional development programs for educational support professionals.
4. Mentor new Hispanic teachers.
5. Provide programs that help teachers learn more about their student's cultures. By so doing, teachers could gain a better understanding of their students' backgrounds and behaviors.
6. Help teachers to pass tests because too many are failing.
7. Train educators in programs that have positive outcomes with Hispanic students, such as Credit Smart, mother-daughter programs, and Los Padres.
8. Teacher training should be linked to classroom teaching and to the actual roles teachers take in their profession.

For the Community

1. Form coalitions, informing the community about the good work schools are doing, and have school employees make home visits.
2. Help develop funding strategies.
3. Work for voter initiatives, advocacy, and parental involvement.
4. Develop partnerships with national organizations.
5. Become advocates for your children.

For Parents

1. Parents are a child's first teachers, and it is important that parents offer positive lessons to their children.
2. Get your children into early childhood education programs.
3. Become counselors in your school because early starts are very important.
4. Get involved in your child's education from the beginning, especially fathers (mothers usually are).

5. Continuously ask questions of teachers and counselors about your child's progress.

For Educational Policy Makers

1. Work with Hispanic community organizations.
2. Develop strategies to overcome the negative experiences Hispanic students have in school.
3. Analyze barriers that Hispanic students face in gaining access to college.
4. Provide parents and students with financial information that can be used for students' college education.
5. Listen to and become familiar with the research.
6. Improve teachers' education programs. Teachers are not well prepared for teaching Hispanic students, especially Hispanic ELL students.
7. Schools should attempt to foster relationships between students and college students.
8. Research indicates that many alternative schools do a good job of educating problem students (see Barton 2005; Verdugo and Glenn 2006). So, look at alternative schools, as options for hard to reach students because they seem to work for at-risk students.
9. Reduce class sizes, improve student resources, and student social services.
10. Develop and maintain, in students, positive attitudes about school.
11. Develop respect for teachers—from both students and the general public—because mutual respect and trust are key factors in a positive school environment, and they are crucial for student achievement.
12. Use the arts and humanities as hooks to get Hispanic students interested in school.
13. Teachers should be exposed to a curriculum during their university years that teaches them cultural understanding and sensitivity.
14. Develop strategies for getting the federal government to increase funding.
15. Work to pass legislation that changes property tax laws and state laws to broaden the school funding base.
16. Offer retention programs for Hispanic students, mentoring family members on how to enter and stay in college, and programs that build on the strengths of students.
17. Hire more specialists in schools so they could help Hispanic students, such as bilingual specialists, psychologists, and social workers.
18. Place more people of color into administrative positions.
19. Create safer school environments, encourage student performance, and generally promote schools and their programs.
20. Link high schools and higher education institutions so that course work and expectations in high school are clearly related to higher education.

21. Schools should work with nonprofits on behalf of parents.
22. Schools should develop an infrastructure that encourages new teachers remain to in the profession. Forgiving teachers' student loans might help retain teachers.
23. School districts should help new teachers find housing.
24. Rethink the interview and hiring practices because too many Hispanic candidates are being screened out by current hiring practices.

For Researchers

1. Examine barriers to Hispanic education at all levels.
2. Examine the gaps in student achievement.
3. Examine the "gender gap" in the Hispanic community.
4. Examine the effect of NCLB on Hispanic students.
5. Examine programs that work.
6. Research why Hispanic students drop out.
7. Research curriculum that engages Hispanic students.
8. Research state policies to improve Hispanic educational attainment and achievement.
9. Research school environments that work for Hispanic students.

For Hispanic Organizations

1. Promote the involvement of Hispanic educators and community members in the use of assessment instruments.
2. Assess and seek programs that work.
3. Reach out to legislators.
4. Seek funds for Hispanic students.
5. Provide awards to Hispanic students.
6. Act as conduit between community and public school.
7. Take Hispanic educational issues to a national level, and focus on electing more Hispanic leaders who would then make Hispanic education a national priority.

For the National Education Association

1. Conduct policy analysis on the educational status of various Hispanic ethnic groups and inform members and the public about this report.
2. Continue partnerships with Hispanic organizations.
3. Address Hispanic socioeconomic issues in all NEA's strategic goals.
4. Continue advocacy for adequate funding for Hispanic students and programs that help Hispanic students overcome poverty, language, and cultural differences.
5. Continue to advocate for more funds and revisions to NCLB.



An Educator's Postscript³⁷

Is the Hispanic education glass half full or half empty?

A persuasive case can be made for either. Certainly, Hispanic students' scores on standardized tests have improved over the past three decades. The number of Hispanics graduating from high school has increased. What's more, the number of Hispanics going on to college is on the rise. As one author has noted, "more and more Latinos are moving into the middle class."

On the other hand, too many Hispanic children are still not reading at even a basic level, too many Hispanic students are still not mastering English, too many Hispanic students are still dropping out of school, and too many Hispanic college students are leaving higher education before earning a degree.

There are, in other words, reasons to be encouraged as well as reasons for real concern. There are still too many Hispanic children for whom "at risk" describes their fate and not simply their circumstances. So, the central question is: Can public schools make a difference?

After the passage of the 1964 Civil Rights Act, the renowned sociologist James Coleman (1966) was asked

to look into this very question. He did, and his findings unsettled people (and were largely ignored). Coleman concluded that everything schools did accounted for only 5 to 35 percent of the variation in students' academic performance, with disadvantaged students at the higher end of the scale. Coleman said that "inequalities imposed on children by their home, neighborhood, and peer environment are carried along to become the inequalities with which they confront adult life at the end of school." He did not argue, however, that we learn to live with inequality. Quite the contrary, Coleman urged that instead of relying almost exclusively on K-12 schools, we also look to other institutions to provide children and their families with the help they need to succeed.

As educators, we want to challenge Coleman's 5 to 35 percent formulation. After all, we have seen education transform individual students. But we also know that school alone cannot overcome the glaring inequalities in our country. We know that our best efforts in our classrooms and schools are not always sufficient when it comes to educating America's most disadvantaged students—and that knowledge haunts us. We know that some children start school already behind and don't catch up. We know, despite our best intentions, some children never fulfill their potential. We also know that raising children is never easy, even under the best of circumstances, and for parents constantly scrambling just to survive, the task becomes even more daunting. This is why we advocate for free public preschool provided by professionals and comprehensive family services that include counseling, parenting education, health care, and quality day care. That is why we advocate for the living wage.

Will socioeconomic class be the determining factor in the education of Hispanic children? We are convinced that a school-family-community alliance, once forged, will become an invincible force in the education of Hispanic children, one powerful enough to overcome socioeconomic class.



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Resources

NEA

1201 16th Street, N.W.
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The following products are available from the NEA.
Please contact the Human and Civil Rights Department.

R. R. Verdugo and N. Canton. 2005. FOCUS on Hispanics: *Immigration, Poverty, and English Language Learners*.

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R. R. Verdugo. 2006. The Demography of the Hispanic Population and Education: Higher Education. Paper No. 5.

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Appendix

Appendix A: Methodology

The methods used in gathering information from the Summit participants were straightforward. To begin with, all participants attended presentations from three researchers on three topics: early childhood education, immigration, and on the educational status of Hispanic students. The researchers were Professor Patricia Gandara (UC Davis), Professor Noni Mendoza-Reis (San Jose State University), and Professor Armando Navarro (UC Riverside).

After a short question and answer session, participants broke off into five workshops. Participants were assigned to one of five workshops based on their preference and professional responsibilities. The NEA/LULAC planning committee attempted to assign at least 20 participants to each workshop; the committee planned for one hundred attendees. The workshops were given in the morning and again in the afternoon, so attendees were able to attend two workshops during the one-day Summit.

During the workshop sessions, a moderator asked participants to provide and discuss their ideas on the chosen topic in three areas: key issues facing the topic, best practices, and recommendations about how to improve this part of the educational process for Hispanic students.

Comments were written on newsprint, and the planning committee assigned scribes to each workshop.

All workshop notes were given to Richard Verdugo, who analyzed by theme for each of the three topics (issues, best practices, and recommendations) by each workshop session.

Appendix B: State Distribution of Hispanic Population

	Hispanics	Hispanics	Percent Change
State	1990	2004	80 - 04
Alabama	24,629	98,388	299.48
Alaska	17,803	32,386	81.91
Arizona	688,338	1,608,698	133.71
Arkansas	19,876	120,820	507.87
California	7,687,938	12,442,626	61.85
Colorado	424,302	878,803	107.12
Connecticut	213,116	371,818	74.47
Delaware	15,820	48,153	204.38
District of Columbia	32,710	47,258	44.48
Florida	1,574,143	3,304,832	109.94
Georgia	108,922	598,322	449.31
Hawaii	81,390	99,830	22.66
Idaho	52,927	123,900	134.10
Illinois	904,446	1,774,551	96.20
Indiana	98,788	269,267	172.57
Iowa	32,647	104,119	218.92
Kansas	96,670	220,288	127.88
Kentucky	21,984	77,055	250.50
Louisiana	93,044	124,222	33.51
Maine	6,829	12,476	82.69
Maryland	125,102	297,717	137.98
Massachusetts	287,549	494,188	71.86
Michigan	201,596	375,041	86.04
Minnesota	53,884	179,303	232.76
Mississippi	15,931	49,075	208.05
Missouri	61,702	148,201	140.19
Montana	12,174	21,841	79.41
Nebraska	36,969	119,975	224.53

See notes at end of table

Appendix B: State Distribution of Hispanic Population

Hispanic population by state 1980 to 2004 (continued)			
	Hispanics	Hispanics	Percent Change
State	1990	2004	80 - 04
Nevada	124,419	531,929	327.53
New Hampshire	11,333	27,500	142.65
New Jersey	739,861	1,294,422	74.95
New Mexico	579,224	823,352	42.15
New York	2,214,026	3,076,697	38.96
North Carolina	76,726	517,617	574.63
North Dakota	4,665	9,755	109.11
Ohio	139,696	252,269	80.58
Oklahoma	86,160	223,005	158.83
Oregon	112,707	343,278	204.58
Pennsylvania	232,262	475,552	104.75
Rhode Island	45,752	111,823	144.41
South Carolina	30,551	130,432	326.93
South Dakota	5,252	15,093	187.38
Tennessee	32,741	167,025	410.14
Texas	4,339,905	7,781,211	79.29
Utah	84,597	253,073	199.15
Vermont	3,661	6,414	75.20
Virginia	160,288	426,152	165.87
Washington	214,570	526,667	145.45
West Virginia	8,489	14,621	72.93
Wisconsin	93,194	237,200	154.52
Wyoming	25,751	33,830	31.37
Total	22,359,049	41,324,074	84.82

a/ Data for the years 1980 and 1990 are from Campbell Gibson and Kay Jung. 2002. Historical Census Statistics on Population Totals by Race, 1790 to 1990, and by Hispanic Origin, 1970 to 1990, for the United States, Regions, Divisions, and States. Working Paper No. 56. Washington, DC: US Census Bureau. Data for 2000 and 2004 from the Census website: www.census.gov.

Appendix C: Definitions of Proficiency Levels for Math, Reading, and Science NAEP Scores.

Grade 4: Math

Basic (214) Fourth-grade students performing at the *Basic* level should show some evidence of understanding the mathematical concepts and procedures in the five NAEP content areas.

Fourth-graders performing at the *Basic* level should be able to estimate and use basic facts to perform simple computations with whole numbers; show some understanding of fractions and decimals; and solve some simple real-world problems in all NAEP content areas. Students at this level should be able to use—though not always accurately—four-function calculators, rulers, and geometric shapes. Their written responses will often be minimal and presented without supporting information.

Proficient (249) Fourth-grade students performing at the *Proficient* level should consistently apply integrated procedural knowledge and conceptual understanding to problem solving in the five NAEP content areas.

Fourth-graders performing at the *Proficient* level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions and decimals; be able to solve real-world problems in all NAEP content areas; and use four-function calculators, rulers, and geometric shapes appropriately. Students performing at the *Proficient* level should employ problem-solving strategies such as identifying and using appropriate information. Their written solutions should be organized and presented both with supporting information and explanations of how they were achieved.

Advanced (282) Fourth-grade students performing at the *Advanced* level should apply integrated procedural knowledge and conceptual understanding to complex and nonroutine real-world problem solving in the five NAEP content areas.

Fourth-graders performing at the *Advanced* level should be able to solve complex and nonroutine real-world problems in all NAEP content areas. They should display mastery in the use of four-function calculators, rulers, and geometric shapes. The students are expected to draw logical conclusions and justify answers and solution processes by explaining why, as well as how, they were achieved. They should go beyond the obvious in their interpretations and be able to communicate their thoughts clearly and concisely.

Grade 8: Math

Basic (262) Eighth-grade students performing at the *Basic* level should exhibit evidence of conceptual and procedural understanding in the five NAEP content areas. This level of performance signifies an understanding of arithmetic operations—including estimation—on whole numbers, decimals, fractions, and percents.

Eighth-graders performing at the *Basic* level should complete problems correctly with the help of structural prompts such as diagrams, charts, and graphs. They should be able to solve problems in all NAEP content areas through the appropriate selection and use of strategies and technological tools—including calculators, computers, and geometric shapes. Students at this level also should be able to use fundamental algebraic and informal geometric concepts in problem solving.

As they approach the *Proficient* level, students at the *Basic* level should be able to determine which of the available data are necessary and sufficient for correct solutions and use them in problem solving. However, these eighth-graders show limited skill in communicating mathematically.

Proficient (299) Eighth-grade students performing at the *Proficient* level should apply mathematical concepts and procedures consistently to complex problems in the five NAEP content areas.

Appendix C: Definitions of Proficiency Levels for Math, Reading, and Science NAEP Scores.

Eighth-graders performing at the *Proficient* level should be able to conjecture, defend their ideas, and give supporting examples. They should understand the connections between fractions, percents, decimals, and other mathematical topics such as algebra and functions. Students at this level are expected to have a thorough understanding of *Basic* level arithmetic operations—an understanding sufficient for problem solving in practical situations.

Quantity and spatial relationships in problem solving and reasoning should be familiar to them, and they should be able to convey underlying reasoning skills beyond the level of arithmetic. They should be able to compare and contrast mathematical ideas and generate their own examples. These students should make inferences from data and graphs; apply properties of informal geometry; and accurately use the tools of technology. Students at this level should understand the process of gathering and organizing data and be able to calculate, evaluate, and communicate results within the domain of statistics and probability.

**Advanced
(333)**

Eighth-grade students performing at the *Advanced* level should be able to reach beyond the recognition, identification, and application of mathematical rules in order to generalize and synthesize concepts and principles in the five NAEP content areas.

Eighth-graders performing at the *Advanced* level should be able to probe examples and counterexamples in order to shape generalizations from which they can develop models. Eighth-graders performing at the *Advanced* level should use number sense and geometric awareness to consider the reasonableness of an answer. They are expected to use abstract thinking to create unique problem-solving techniques and explain the reasoning processes underlying their conclusions.

Grade 12: Math

**Basic
(288)**

Twelfth-grade students performing at the *Basic* level should demonstrate procedural and conceptual knowledge in solving problems in the five NAEP content areas.

Twelfth-grade students performing at the *Basic* level should be able to use estimation to verify solutions and determine the reasonableness of results as applied to real-world problems. Twelfth-graders performing at the *Basic* level should recognize relationships presented in verbal, algebraic, tabular, and graphical forms; and demonstrate knowledge of geometric relationships and corresponding measurement skills.

They should be able to apply statistical reasoning in the organization and display of data and in reading tables and graphs. They also should be able to generalize from patterns and examples in the areas of algebra, geometry, and statistics. At this level, they should use correct mathematical language and symbols to communicate mathematical relationships and reasoning processes, and use calculators appropriately to solve problems.

**Proficient
(336)**

Twelfth-grade students performing at the *Proficient* level should consistently integrate mathematical concepts and procedures to the solution of more complex problems in the five NAEP content areas.

Twelfth-graders performing at the *Proficient* level should demonstrate an understanding of algebraic, statistical, and geometric and spatial reasoning. They should be able to perform algebraic operations involving polynomials, justify geometric relationships, and judge and defend the reasonableness of answers as applied to real-world situations. These students should be able to analyze and interpret data in tabular and graphical form; understand and use elements of the function concept in symbolic, graphical, and tabular form; and make conjectures, defend ideas, and give supporting examples.

Appendix C: Definitions of Proficiency Levels for Math, Reading, and Science NAEP Scores.

Advanced (367) Twelfth-grade students performing at the *Advanced* level should consistently demonstrate the integration of procedural and conceptual knowledge and the synthesis of ideas in the five NAEP content areas.

Twelfth-grade students performing at the *Advanced* level should understand the function concept, and be able to compare and apply the numeric, algebraic, and graphical properties of functions. They should apply their knowledge of algebra, geometry, and statistics to solve problems in more advanced areas of continuous and discrete mathematics.

They should be able to formulate generalizations and create models through probing examples and counterexamples. They should be able to communicate their mathematical reasoning through the clear, concise, and correct use of mathematical symbolism and logical thinking.

Grade 4: Reading

Basic (208) Fourth-grade students performing at the *Basic* level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth-graders, they should be able to make relatively obvious connections between the text and their own experiences and extend the ideas in the text by making simple inferences.

Proficient (238) Fourth-grade students performing at the *Proficient* level should be able to demonstrate an overall understanding of the text, providing inferential as well as literal information. When reading text appropriate to fourth grade, they should be able to extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connection between the text and what the student infers should be clear.

Advanced (268) Fourth-grade students performing at the *Advanced* level should be able to generalize about topics in the reading selection and demonstrate an awareness of how authors compose and use literary devices. When reading text appropriate to fourth grade, they should be able to judge text critically and, in general, to give thorough answers that indicate careful thought.

Grade 8: Reading

Basic (243) Eighth-grade students performing at the *Basic* level should demonstrate a literal understanding of what they read and be able to make some interpretations. When reading text appropriate to eighth grade, they should be able to identify specific aspects of the text that reflect overall meaning, extend the ideas in the text by making simple inferences, recognize and relate interpretations and connections among ideas in the text to personal experience, and draw conclusions based on the text.

Proficient (281) Eighth-grade students performing at the *Proficient* level should be able to show an overall understanding of the text, including inferential as well as literal information. When reading text appropriate to eighth grade, they should be able to extend the ideas in the text by making clear inferences from it, by drawing conclusions, and by making connections to their own experiences—including other reading experiences. Proficient eighth-graders should be able to identify some of the devices authors use in composing text.

Advanced (323) Eighth-grade students performing at the *Advanced* level should be able to describe the more abstract themes and ideas of the overall text. When reading text appropriate to eighth grade, they should be able to analyze both meaning and form and support their analyses explicitly with examples from the text; they should be able to extend text information by relating it to their experiences and to world events. At this level, student responses should be thorough, thoughtful, and extensive.

Appendix C: Definitions of Proficiency Levels for Math, Reading, and Science NAEP Scores.

Grade 12: Reading

Basic (265)	Twelfth-grade students performing at the <i>Basic</i> level should be able to demonstrate an overall understanding and make some interpretations of the text. When reading text appropriate to twelfth grade, they should be able to identify and relate aspects of the text to its overall meaning, extend the ideas in the text by making simple inferences, recognize interpretations, make connections among and relate ideas in the text to their personal experiences, and draw conclusions. They should be able to identify elements of an author's style.
Proficient (302)	Twelfth-grade students performing at the <i>Proficient</i> level should be able to show an overall understanding of the text which includes inferential as well as literal information. When reading text appropriate to twelfth grade, they should be able to extend the ideas of the text by making inferences, drawing conclusions, and making connections to their own personal experiences and other readings. Connections between inferences and the text should be clear, even when implicit. These students should be able to analyze the author's use of literary devices.
Advanced (346)	Twelfth-grade students performing at the <i>Advanced</i> level should be able to describe more abstract themes and ideas in the overall text. When reading text appropriate to twelfth grade, they should be able to analyze both the meaning and the form of the text and explicitly support their analyses with specific examples from the text. They should be able to extend the information from the text by relating it to their experiences and to the world. Their responses should be thorough, thoughtful, and extensive.

Grade 4: Science

Basic (138)	Students performing at the <i>Basic</i> level demonstrate some of the knowledge and reasoning required for understanding Earth, physical, and life sciences at a level appropriate to grade 4. For example, they can carry out simple investigations and read uncomplicated graphs and diagrams. Students at this level also show a beginning understanding of classification, simple relationships, and energy. Fourth-grade students performing at the <i>Basic</i> level are able to follow simple procedures, manipulate simple materials, make observations, and record data. They are able to read simple graphs and diagrams and draw reasonable but limited conclusions based on data provided to them. These students can recognize appropriate experimental designs, although they are unable to justify their decisions.
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When presented with diagrams, students at this level can identify seasons; distinguish between day and night; and place the position of the Earth, sun, and planets. They are able to recognize major energy sources and simple energy changes. In addition, they show an understanding of the relationships between sound and vibrations. These students are able to identify organisms with similar physical features. They can also describe relationships among structure, function, habitat, life cycles, and different organisms.

Proficient (170)	Students performing at the <i>Proficient</i> level demonstrate the knowledge and reasoning required for understanding of the Earth, physical properties, structure, and function. In addition, students can formulate solutions to familiar problems as well as show a beginning awareness of issues associated with technology.
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Fourth-grade students performing at the *Proficient* level are able to provide an explanation of day and night when given a diagram. They can recognize major features of the Earth's surface and the impact of natural forces. They are also able to recognize water in its various forms in the water cycle and can suggest ways to conserve it. These students recognize that various materials possess different properties that make them useful. Students at this level are able to explain how structure and function help living things survive. They have a beginning aware-

Appendix C: Definitions of Proficiency Levels for Math, Reading, and Science NAEP Scores.

ness of the benefits and challenges associated with technology and recognize some human effects on the environment. They can also make straightforward predictions and justify their position.

Advanced
(205)

Students performing at the *Advanced* level demonstrate a solid understanding understanding of the Earth, physical, and life sciences as well as the ability to apply their understanding to practical situations at a level appropriate to grade 4. For example, they can perform and critique simple investigations, make connections from one or more of the sciences to predict or conclude, and apply fundamental concepts to practical applications.

Fourth-grade students performing at the *Advanced* level are able to combine information, data, and knowledge from one or more of the sciences to reach a conclusion or to make a valid prediction. They can also recognize, design and explain simple experimental procedures.

Students at this level recognize nonrenewable sources of energy. They also recognize that light and sound travel at different speeds. These students understand some principles of ecology and are able to compare and contrast life cycles of various common organisms. In addition, they have a developmental awareness of the benefits and challenges associated with technology.

Grade 8: Science

Basic
(143)

Students performing at the *Basic* level demonstrate some of the knowledge and reasoning required for understanding of the Earth, physical, and life sciences at a level appropriate to grade 8. For example, they can carry out investigations and obtain information from graphs, diagrams, and tables. In addition, they demonstrate some understanding of concepts relating to the solar system and relative motion. Students at this level also have a beginning understanding of cause-and-effect relationships.

Eighth-grade students performing at the *Basic* level are able to observe, measure, collect, record, and compute data from investigations. They can read simple graphs and tables and are able to make simple data comparisons. These students are able to follow directions and use basic science equipment to perform simple experiments. In addition, they have an emerging ability to design experiments.

Students at this level have some awareness of causal relationships. They recognize the position of planets and their movement around the sun and know basic weather-related phenomena. These students can explain changes in position and motion such as the movement of a truck in relation to that of a car. They also have emerging understanding of the interrelationships among plants, animals, and the environment.

Proficient
(170)

Students performing at the *Proficient* level demonstrate much of the knowledge and many of the reasoning abilities essential for understanding of the Earth, physical, and life sciences at a level appropriate to grade 8. For example, students can interpret graphic information, design simple investigations, and explain such scientific concepts as energy transfer. Students at this level also show an awareness of environmental issues, especially those addressing energy and pollution.

Eighth-grade students performing at the *Proficient* level are able to create, interpret, and make predictions from charts, diagrams, and graphs based on information provided to them or from their own investigations. They have the ability to design an experiment and have an emerging understanding of scientific phenomena, and can design plans to solve problems.

Students at this level can begin to identify forms of energy and describe the role of energy transformation in living and nonliving systems. They have knowledge of organization, gravity,

Appendix C: Definitions of Proficiency Levels for Math, Reading, and Science NAEP Scores.

and motion within the solar system and can identify some factors that shape the surface of the Earth. These students have some understanding of properties of materials and have an emerging understanding of the particulate nature of matter, especially the effect of temperature on states of matter. They also know that light and sound travel at different speeds and can apply their knowledge of force, speed, and motion. The students demonstrate a developmental understanding of the flow of energy from the sun through living systems, especially plants. They know that organisms reproduce and that characteristics are inherited from previous generations. These students also understand that organisms are made up of cells and that cells have subcomponents with different functions. In addition, they are able to develop their own classification system based on physical characteristics. These students can list some effects of air and water pollution as well as demonstrate knowledge of the advantages and disadvantages of different energy sources in terms of how they affect the environment and the economy.

**Advanced
(208)**

Students performing at the *Advanced* level demonstrate a solid understanding of the Earth, physical, and life sciences as well as the abilities required to apply their understanding in practical situations at a level appropriate to grade 8. For example, students can perform and critique the design of investigations, relate scientific concepts to each other, explain their reasoning, and discuss the impact of human activities on the environment.

Eighth-grade students performing at the *Advanced* level are able to provide an explanation for scientific results. They have a modest understanding of scale and are able to design a controlled experiment. These students have an understanding of models as representations of natural systems and can describe energy transfer in living and nonliving systems.

Students at this level are able to understand that present physical clues, including fossils and geological formations, are indications that the Earth has not always been the same and that the present is a key to understanding the past. They have a solid knowledge of forces and motions within the solar system and an emerging understanding of atmospheric pressure. These students can recognize a wide range of physical and chemical properties of matter and some of their interactions and understand some of the properties of light and sound. Also, they can infer relationships between structure and function. These students know the difference between plant and animal cells and can apply their knowledge of food as a source of energy to a practical situation. In addition, they are able to explain the impact of human activities on the environment and the economy.

Grade 12: Science

**Basic
(146)**

Students performing at the *Basic* level demonstrate some knowledge and certain reasoning abilities required for understanding of the Earth, physical, and life sciences at a level appropriate to grade 12. In addition, they demonstrate knowledge of the themes of science (models, systems, and patterns of change) required for understanding the most basic relationships among the Earth, physical, and life sciences. They are able to conduct investigations, critique the design of investigations, and demonstrate a rudimentary understanding of the scientific principles.

Twelfth-grade students performing at the *Basic* level are able to select and use appropriate simple laboratory equipment and write down simple procedures that others can follow. They also have a developmental ability to design complex experiments. These students are able to make classifications based on definitions such as physical properties and characteristics.

Students at this level demonstrate a rudimentary understanding of basic models and can also identify some parts of physical and biological systems. They are also able to identify some patterns in nature and rates of change over time. These students have the ability to identify basic scientific facts and terminology and have a rudimentary understanding of the scientific

Appendix C: Definitions of Proficiency Levels for Math, Reading, and Science NAEP Scores.

principles underlying such phenomena as volcanic activity, disease transmission, and energy transformation. In addition, they have some familiarity with the application of technology.

Proficient (178)

Students performing at the *Proficient* level demonstrate the knowledge and reasoning abilities required for understanding of the Earth, physical, and life sciences at a level appropriate to grade 12. In addition, they demonstrate knowledge of the themes of science (models, systems, and patterns of change) required for understanding of the Earth, physical, and life sciences at a level appropriate to grade 12. In addition, they demonstrate knowledge of the themes of science (models, systems, and patterns of change) required for understanding how these themes illustrate essential relationships among the Earth, physical, and life sciences. They are able to analyze data and apply scientific principles to everyday situations.

Twelfth-grade students performing at the *Proficient* level are able to demonstrate a working ability to design and conduct scientific investigations. They are able to analyze data in various forms and utilize information to provide explanations and to draw reasonable conclusions.

Students at this level have a developmental understanding of both physical and conceptual models and are able to compare various models. They recognize some inputs and outputs, causes and effects, and interactions of a system. In addition, they can correlate structure to function for the parts of a system that they can identify. These students also recognize that rate of change depends on initial conditions and other factors. They are able to apply scientific concepts and principles to practical applications and solutions for problems in the real world and show developmental understanding of technology, its uses, and its applications.

Advanced (210)

Students performing at the *Advanced* level demonstrate the knowledge and reasoning abilities required for a solid understanding of the Earth, physical, and life sciences at a level appropriate to grade 12. In addition, they demonstrate knowledge of the themes of science (models, systems, and patterns of change) required for integrating knowledge of scientific principles from Earth, physical, and life sciences. Students can design investigations that answer questions about real-world situations and use their reasoning abilities to make predictions.

Twelfth-grade students performing at the *Advanced* level are able to design scientific investigations to solve complex, real-world situations. They can integrate, interpolate, and extrapolate information embedded in data to draw well-formulated explanations and conclusions. They are also able to use complex reasoning skills to apply scientific knowledge to make predictions based on conditions, variables, and interactions.

Students at this level recognize the inherent strengths and limitations of models and can revise models based on additional information. They are able to recognize cause-and-effect relationships within systems and can utilize this knowledge to make reasonable predictions of future events. These students are able to recognize that patterns can be constant, exponential, or irregular and can apply this recognition to make predictions. They can also design a technological solution for a given problem.



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Endnotes

¹ For additional demographic analysis of the Hispanic population, see the five policy papers by R. R. Verdugo: (1) *The Demography of the Hispanic Population and Education: Framework, Analysis, and Implications. Paper number 1.* Washington, DC: National Education Association. (2) *The Demography of the Hispanic Population and Education: Pre-K and Elementary School. Paper number 2.* Washington, DC: National Education Association. (3) *The Demography of the Hispanic Population and Education: Middle School. Paper number 3.* Washington, DC: National Education Association. (4) *The Demography of the Hispanic Population and Education: High School. Paper number 4.* Washington, DC: National Education Association. (5) *The Demography of the Hispanic Population and Education: Higher Education. Paper number 5.* Washington, DC: National Education Association.

² H. S. Shryock and Jacob Siegal. 1976. *The Methods and Materials of Demography.* New York, NY: Academic Press.

³ U.S. Bureau of the Census. 2004. *Race and Hispanic Origin in 2004.* Washington, DC: Author. Census website: www.census.gov.

⁴ Table 1a. U.S. Bureau of the Census. 2004. *U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin.* Washington, DC: Author. www.census.gov/ipc/www/usinterimproj/

⁵ Data are taken from Richard R. Verdugo. 2006. *The Demography of the Hispanic Population and Education.*

Washington, DC: National Education Association. New Business Item 2005-37, Policy Paper #1.

⁶ While these are significant growth rates, the rates for the Hispanic school-age population are even greater. For an analysis and discussion see R. R. Verdugo and Gabriela Lemus. 2004. *The Demography of the Hispanic School-Age Population*. Paper presented at the annual meeting of the Southern Demography Association. Oxford, Mississippi.

⁷ The impact on local communities can be significant. In the small town of Aberdeen, South Dakota, a new beef packing plant is drawing hundreds of Hispanic families, and local decision makers are planning to deal with the influx Hispanic children to their schools. For example, teachers in the district are making visits to schools in Huron, Sioux Fall, and Storm Lake, Iowa, and to a school in Washington, Minnesota to learn how those schools educate Hispanic students. See Russ Keen. 2006 (September 27). *Teachers to Tackle Language Barrier*. See www.AberdeenNews.com.

⁸ There are significant educational differences among the four Hispanic ethnic groups. Cubans, for example, have superior educational profiles, while Mexicans the poorest. If parents are able to transfer their educational status to their children, then Cuban children will have superior educational experiences. See Verdugo and Lemus (2006).

⁹ U.S. Census Bureau. 1993. *We the American Foreign Born*. Washington, DC: Author.

¹⁰ U.S. Bureau of the Census, Current Population Survey, Annual Social and Economic Supplement, 2004. Immigration Statistics, Population Division, Census website: www.census.gov.

¹¹ Data for 1990 are from U.S. Census Bureau. 1993. *We the American Hispanics*. Washington, DC: Author. Census website: www.census.gov. Data for 2005 are from the Census' 2005 American Community Survey. See Census website for information.

¹² Components of population growth are immigration/emigration, births, and deaths.

¹³ See P. Siegel, E. Martin, and R. Bruno. 2001. *Language Use and Linguistic Isolation: Historical Data and Methodological Issues*. Washington, DC: U.S. Census Bureau.

¹⁴ Original computations by R. R. Verdugo from the 2004 American Community Survey. See Ruggles et al. (2004).

¹⁵ Data are from the U.S. Census website: www.census.gov. Also, the full table appears in R. R. Verdugo. 2006. *The Demography of the Hispanic Population: Framework, Analysis, and Implications*. Washington, DC: National Education Association. Paper #1.

¹⁶ For an extensive discussion on high school dropouts, see Verdugo (2001).

¹⁷ U.S. Department of Education. 2005. *Digest of Education Statistics*. Washington, DC: Author. Table 105.

¹⁸ See also, P. E. Barton. 2005. *One-Third of a Nation: Rising Dropout Rates and Declining Opportunities*. Princeton, NJ: Educational Testing Service.

¹⁹ Accommodation refers to a change in how a test is presented, in how it is administered, or in how the test taker is allowed to respond. This term generally refers to changes that do not substantially alter what the test measures. The proper use of accommodations does not substantially change academic level or performance criteria. Appropriate accommodations are made to provide equal opportunity to demonstrate knowledge. The most frequently used accommodations in NAEP are large-print booklets, extended time in regular test sessions, reading questions aloud in regular sessions, small groups, one-on-one sessions, scribes or use of computers to record answers, bilingual booklets (mathematics assessment only), and bilingual dictionaries (not for the reading assessment). In NAEP, accommodations may be provided to certain students with disabilities (SD) and/or limited English proficiency (LEP), as specified in the student's Individualized Education Program (IEP).

²⁰ McLemore and Romo 1985, p.12.

²¹ 4. One interesting aspect of the war involves the fate of U.S. Army deserters of Irish origin who joined the Mexican Army as the Batallón San Patricio (Saint Patrick's Battalion). This group of Catholic Irish immigrants rebelled at the abusive treatment by Protestant, American-born officers and at the treatment of the Catholic Mexican population by the U.S. Army. At this time in American history, Catholics were an ill-treated minority, and the Irish were an unwanted ethnic group in the United States. In September, 1847, the U.S. Army hanged sixteen surviving members of the San Patricios as traitors. To this day, they are considered heroes in Mexico.

²² After the War, Mexicans living in the West were given the option of returning to the newly defined borders of Mexico, or remaining in the new land acquired by the U.S. and becoming U.S. citizens.

²³ See Samora and Simon (1993), and Verdugo (n.d.).

²⁴ See Sanchez (1966).

²⁵ There were four significant educational cases that affected Hispanic education. In 1930 there was the *Del Rio Independent School District v. Salvatierra*. The Texas Court of Civil Appeals agreed with a trial court that schools have no power to arbitrarily segregate Mexican children "...simply because they are Mexicans." However, it should be pointed out that the court ruled that school officials could separate children based on language.

In 1931, the *Roberto Alvarez v. the Board of Trustees of the Lemon Grove School District*, became the first successful school desegregation case in the U.S. Parents petitioned the courts when Mexican children were forced to attend an "Americanization" school. San Diego Superior Court Judge, Claude Chambers ruled in favor of the parents and stated that segregation had no legal basis in the district.

In 1947, another major desegregation case took place in a suburb of Los Angeles, California. In *Mendez v. Westminster School District*. The ruling by Judge Paul J. McCormick was in favor of the plaintiffs, but did so because he argued that the "separate but equal" doctrine did not apply to Mexicans because they were not a

recognized group under the law. More significantly, the Mendez case became a testing ground for the landmark *Brown v. Board of Education*.

In 1948, *Delgado v. Bastrop Independent School District* the U.S. District Court for the Western District of Texas ruled that separate schools for children of Mexican descent violated the 14th Amendment.

²⁶ Of course, there were Puerto Ricans in the U.S. prior to the Great Migration. Sanchez Korrol (1983) points out that Puerto Ricans were living in New York City as early as 1830. In the 1860s, a small group of Puerto Rican activists lived in New York City where they published newspapers and started political and civic organizations.

²⁷ These efforts are seen as the origins of bilingual education in the U.S.

²⁸ Economics also plays a role in both access and completion rates in higher education. To begin with, the high cost of a college education can be prohibitive for students from poor families. Also, the lack of funds can affect the decision to remain or continue one's college career. For excellent discussions about financial aid and Hispanics see M. A. Olivas (1985), A. Nora (1990), and G.A. Jackson (1990).

²⁹ See R. R. Verdugo. 2006. *The Demography of Hispanics and Education: Higher Education. Policy Paper No. 5*. Washington, DC: National Education Association.

³⁰ Data from the U.S. Department of Education: www.nces.ed.gov. See Verdugo (2006) for discussion and additional data.

³¹ See Verdugo (2006) for additional data and discussion.

³² Washingtonian. 2006. Who We Are. *Washingtonian*. October, 2006. Vol. 42, No. 1. Pp. 84-103.

³³ Data are from the U.S. Department of Labor's survey of agricultural workers: National Agricultural Workers Survey, 2005. www.dol.gov.

³⁴ Development, Relief, and Education for Alien Minors (DREAM) Act. The legislation would allow permanent resident status for illegal immigrant students who came to the U.S. at a very young age and have completed an associate or two years of a bachelor's degree. Approximately 65,000 eligible students will graduate high school this year.

The legislation stalled once Congress moved away from the immigration reform issue but has left some students in limbo. The affected students and graduates, some with engineering and science degrees from the most selective universities, complain that they cannot find work given their illegal status and that returning to their respective countries is not an option given that they arrived in the U.S. as small children with little memory or understanding of their native countries.

The bill would allow 'conditional' residence status, for a maximum period of six years, to students at least 16 years of age who have grown up in the United States and completed high school. After completing two years of college, community service or joining the military the students would become eligible for permanent residence.

Opponents of the bill argue that it would send the wrong message to potential illegal immigrants and could further flood the country with unlawful entrants.

³⁵ Data for this brief section are from the U.S. Department of Education. See www.ed.gov.

³⁶ Praxis Series is a series of tests that states use as part of their teaching licensing certification process.

³⁷ This last section was written by David Sheridan with comments furnished by Richard R. Verdugo.





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