

# Para nuestros niños

Expanding and Improving Early Education for Hispanics  
Main Report

March 2007



**National Task Force on Early Childhood Education for Hispanics**  
*La Comisión Nacional para la Educación de la Niñez Hispana*

## TASK FORCE MEMBERS

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Vice President for University-School Partnerships  
Arizona State University, Tempe, Arizona

### **Kay Barnes**

Mayor, Kansas City, Missouri

### **Jeff Bingaman**

U.S. Senator, New Mexico

### **Susan Castillo**

Superintendent of Public Instruction  
Department of Education  
State of Oregon

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Corporate & Community Relations  
Univision, Los Angeles, California

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Director, Hispanic Marketing  
General Motors  
Detroit, Michigan

### **Liza Gross**

Managing Editor  
The Miami Herald  
Miami, Florida

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San Antonio Metro Health District  
City of San Antonio, Texas

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U.S. Secretary of Education  
1993–2001

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Children's Rights Activist  
Los Angeles, California

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### **Edward Zigler, Ph.D.**

National Institute for  
Early Education Research  
Advisory Board Chair  
Sterling Professor of Psychology  
Director, The Bush Center in  
Child Development & Social Policy  
Yale University, New Haven, Connecticut

## TECHNICAL ADVISORY COMMITTEE

### **Dina C. Castro, MPH, Ph.D.**

Scientist  
FPG Child Development Institute  
Research Associate Professor  
School of Education  
The University of North Carolina at  
Chapel Hill, North Carolina

### **Linda M. Espinosa**

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University of Missouri-Columbia  
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Center for Social &  
Demographic Analysis  
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& Family Research  
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Nadine Basha Professor  
of Early Childhood Education  
Arizona State University  
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Tempe, Arizona

### **Marlene Zepeda**

Professor & Chair  
Department of Child & Family Studies  
California State University  
Los Angeles, California

# National Task Force on Early Childhood Education for Hispanics

## Staff

**L. Scott Miller**  
*Executive Director*

**Amara Scott Andrews**  
*Director of Strategic Communications*

**Delis Cuéllar**  
*Research Associate*

**Bryant Jensen**  
*Research Associate*

## Consultants

**Margie K. Shields**  
*Editor*

**Pauline A. Hall**  
*Graphic Designer*

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# Para nuestros niños

National Task Force on Early Childhood Education for Hispanics

La Comisión Nacional para la Educación de la Niñez Hispana

*“Early education is critical for all children. I consider it one of the keys to future success for this country and as such we need to be diligent in providing quality options for all parents regardless of income. This Task Force is one avenue for building the kind of momentum we need to make quality education for all a reality. I am honored to have been invited to participate.”*

*~ Janet Napolitano, Governor, State of Arizona*

## Table of Contents

	Page
Preface	
Executive Summary .....	1
Introduction .....	5
<b>Demographic Portrait of Young Hispanic Children</b> .....	<b>6</b>
Rapid Growth of Hispanic Population .....	7
Diversity Among Hispanic Children .....	8
Challenges Faced by Hispanic Families .....	9
Strengths of Hispanic Families and Communities .....	12
<b>Hispanic Educational Performance Patterns</b> .....	<b>13</b>
Achievement Gaps at the Elementary School Level .....	14
Achievement Gaps at the Secondary School Level .....	18
Achievement Gaps and English Language Proficiency .....	20
Evidence of Intergenerational Progress .....	21
<b>Early Sources of School Readiness and Achievement Gaps</b> .....	<b>24</b>
Parenting Patterns and Social Class .....	24
Parenting Patterns and Intergenerational Access to Formal Education .....	26
<b>Efforts to Improve and Expand Early Childhood Education</b> .....	<b>27</b>
Promising Infant/Toddler Programs and Practices .....	27
Promising Pre-K Programs and Practices .....	30
Promising K-3 Programs and Practices .....	35
<b>Strategies to Accelerate Progress for English Language Learners</b> .....	<b>40</b>
English-plus-Spanish Language Development Strategies .....	40
Preparing Teachers for Hispanic English Language Learners .....	42
<b>Summary of Major Findings of the Task Force</b> .....	<b>44</b>
Hispanic Educational Attainment and Achievement Patterns .....	44
Foundations of Hispanic School Readiness and Achievement .....	45
Capacity of Early Childhood Education to Promote Readiness and Achievement .....	46
R&D Needed to Provide Better Early Childhood Education for Hispanics .....	47
<b>Recommendations for Action</b> .....	<b>48</b>
State Governments .....	48
The Federal Government .....	51
Private Foundations .....	53
Hispanic Organizations .....	54
Education Researchers .....	55
<b>Endnotes</b> .....	<b>57</b>
<b>Acknowledgments</b>	

### Acronyms

CPC	Child-Parent Center	ELS	Education Longitudinal Study	K-12	kindergarten through twelfth grade
CSR	comprehensive school reform	EPS	English-plus-Spanish	OECD	Organization for Economic Cooperation and Development
ECLS-B	Early Childhood Longitudinal Study, Birth Cohort	GED	General Education Development	Pre-K	prekindergarten
ECLS-K	Early Childhood Longitudinal Study, Kindergarten Class of 1998-99	K-2	kindergarten through second grade	PK-3	prekindergarten through third grade
ELL	English language learner	K-3	kindergarten through third grade	R&D	research and development
		K-5	kindergarten through fifth grade	SES	socioeconomic status



## Preface

It is no surprise to learn that the rapid growth of Hispanics in the United States is a highly significant phenomenon for our society. Of especially great importance is the almost startlingly large presence of young Hispanics. About one-fourth of the newborns in our country are now Hispanic; yet, for many, they remain invisible right before our eyes.

The mission of the National Task Force on Early Childhood Education for Hispanics has been straightforward: to empirically explore the circumstances of the youngest Hispanics and to develop recommendations for expanding and improving early childhood education for these children and their families. Collectively, Hispanic students are achieving at much lower levels across the K-12 years and in college than the White majority. Closing the “achievement gap” with Whites is essential for the long-term economic health of the nation and will be necessary for Hispanics to participate fully in all sectors of our technology-based democratic society.

Moreover, our society has an enormous opportunity to meaningfully improve academic outcomes for Hispanic children in the early childhood years. Hispanics are already making some valuable educational progress, even though many Hispanic families have low incomes and many of the parents have relatively little formal education. There also are promising approaches for improving education in the primary grades, in prekindergarten, and in programs for infants and toddlers. Thus, if we expand our efforts in a thoughtful manner, we almost certainly will be able to accelerate the rate of progress in the years and decades ahead.

There is nothing more valuable that we can provide to these young learners. As my mother made clear to me: *La educación nunca te puede quitar. What you learn, no one can take from you.* In a history that has too often not provided high quality education or positive outcomes for these children, maximum educational opportunities, including important early opportunities, are what this nation can “give” to these children for their benefit and ours.



Eugene E. Garcia, Chair



## Executive Summary

Expanding and improving the quality of early childhood education for the rapidly growing Hispanic population in the United States should be among the nation's highest educational priorities. Hispanics now constitute one-fifth of the nation's young children (infants through eight-year-olds) and are projected to be a quarter of all young children in the United States by 2030. It is of great concern, then, that Hispanic children lag well behind their White counterparts on measures of school readiness when they start kindergarten, and subsequently achieve at much lower levels in the primary grades.<sup>i</sup> This pattern of lower academic achievement persists through high school and college.

In order to ensure that the United States continues to have a well-educated workforce, it is essential that the achievement differences between Hispanics and Whites be closed as rapidly as possible. It also is essential to do so, if Hispanics are to have the education they need to participate fully in all sectors of our society. High quality early childhood education is key to making this progress.

### Foundations of Hispanic Low Achievement

The major reason why levels of school readiness and school achievement are lower for Hispanic children than for Whites is that a high percentage of Hispanic youngsters are from low socioeconomic status (SES) families—families in which the parents have little formal education and low incomes. The situation is complicated further by the fact that a large share of low SES Hispanic children are from immigrant families; and, therefore, many of these youngsters know little English when they start kindergarten. To address these challenges, low SES Hispanic children need excellent preschools and elementary schools, and teachers who can build effectively on their primary language, Spanish.

In addition, Hispanic children from middle class and high SES families are lagging somewhat behind middle class and high SES Whites in school readiness and achievement. Consequently, the need to raise school readiness and achievement levels among young Hispanics cuts across social class lines.

### Early Childhood Education Can Make a Difference

Research shows that high quality infant/toddler programs, prekindergarten (pre-K) programs, and kindergarten through third grade (K-3) education can contribute to meaningfully higher levels of school readiness and school achievement among low SES children, including low SES Hispanics. However, gains produced by the most effective strategies to date have generally been modest and, therefore, have only been able to partially eliminate the readiness and achievement gaps between low SES children and their middle class and high SES counterparts. Also, little attention has been given to developing early childhood education strategies for improving outcomes for middle class and high SES Hispanic children or those from other racial/ethnic groups.

Although infant/toddler programs have demonstrated positive school readiness benefits for low SES children, they have been of limited size in the important area of language development. Thus, there is a pressing need to design, test, and evaluate new or modified infant/toddler strategies concerned with promoting greater language development for low SES children, including low SES Hispanic English language learners (ELLs).

<sup>i</sup> In this report, "White" refers to the U.S. Census category "non-Hispanic White." Also consistent with the U.S. Census, Hispanics may be of any race.

At the pre-K level, there is growing evidence that low SES children would benefit from having two years of full-day programs. Yet, much remains to be learned about how best to use full-day pre-K for three- and four-year-olds to promote their development, especially in the language arena. How to use this time to foster much greater development in both English and Spanish among low SES Hispanic ELLs is one of the most important unanswered questions about pre-K programs. Moreover, despite the developmental benefits of high quality pre-K, both poor and non-poor Hispanics have long been significantly underrepresented among children who attend center-based programs. Ways must be found to markedly expand Hispanic participation in pre-K.

At the K-3 level, some of the most effective strategies for raising achievement of low SES Hispanics are those that have a strong literacy development focus and a capacity to be responsive to the language and culture of Hispanic children who are ELLs. This finding is consistent with growing evidence that Hispanic ELLs make more academic progress when they are provided with opportunities to learn in both English and Spanish, (referred to here as English-plus-Spanish strategies), rather than being immersed exclusively in English. There also is evidence that multi-year summer programs during the primary grades can raise the achievement of low SES students, but further research and development is needed to determine how best to serve low SES Hispanic children with such programs.

Finally, at all levels of early childhood education, there is a shortage of Spanish-speaking, culturally knowledgeable teachers and teachers who are experts in strategies for helping students master a second language. Developing effective approaches for addressing these teacher supply problems is an increasingly pressing matter, not only in states with large, longstanding Hispanic populations, but also in states where a significant Hispanic presence has emerged more recently.

### **Reasons for Optimism**

There is a compelling and urgent need for our society to mount a much larger effort to expand and improve early childhood education for Hispanics; and, there is also good reason to believe that such an effort would produce positive results. Hispanics are already making some significant educational progress, including achievement gains in the early years of school, and Hispanic families are deeply committed to the educational success of their children. A key to producing greater Hispanic educational progress is to make much better and more extensive use of the effective early childhood education strategies that are currently available, while at the same time taking steps to develop better approaches over time.

### **Recommendations**

Realistically, it will take a generation to build a much more robust early childhood education system for the nation's young, including young Hispanics. Therefore, the Task Force has formulated its recommendations using a 5- to 20-year time horizon. The recommendations focus primarily on increasing Hispanic children's access to high quality early childhood education; increasing the number of Spanish-speaking teachers and language acquisition specialists; and increasing efforts to design, test, and evaluate early childhood education strategies that can strengthen the language and literacy development of Hispanic children. Extensive public and private action will be required. Thus, the Task Force's recommendations are directed to five categories of actors that are playing, or could play, central roles in expanding or improving early childhood education for Hispanics over the next two decades: 1) state governments; 2) the federal government; 3) private grantmaking foundations; 4) Hispanic organizations with a major interest in improving educational outcomes for Hispanic youngsters; and 5) education researchers.

### **The Task Force recommends that state governments:**

- Expand and increase infant/toddler programs in their states that are serving, or have the potential to serve, large numbers of Hispanic children and their parents;
- Continue to expand their state-funded pre-K initiatives, with the objective of creating voluntary universal pre-K systems in most states within the next 10 to 20 years;
- Support efforts to provide information to Hispanic parents on the availability of pre-K programs in their communities;
- Provide school districts in their states with resources to fund multi-year summer programs for their low SES students to attend on a voluntary basis;
- Initiate programs to increase: 1) the number of pre-K and K-3 teachers in their states who are proficient in English and Spanish; and 2) the number of pre-K and K-3 teaching specialists in second language acquisition;
- Support pay and benefit levels for pre-K teachers and administrators that are equal to those of public school teachers and administrators as a means of providing the economic incentives to recruit and maintain a well-educated, reasonably stable group of preschool professionals; and
- Establish information systems that would be used by school districts and state education departments to disaggregate their students into subpopulations defined simultaneously in terms of race/ethnicity, parent education level, family income, generational status (whether they are first, second, or third generation children), and primary language spoken in the home.

### **The Task Force recommends that the federal government:**

- Undertake a substantial expansion of Head Start and Early Head Start that will help ensure that low SES Hispanic children have greater access to high quality infant/toddler and pre-K programs;
- Increase investments in efforts to design, test and evaluate infant/toddler, pre-K, and K-3 language and literacy development strategies for low SES Hispanics;
- Underwrite tests of programs designed to produce large increases in the number of: 1) English- and Spanish-proficient and culturally knowledgeable pre-K and K-3 teachers; and 2) pre-K and K-3 teaching specialists in second language acquisition;
- Create assessments of Spanish language proficiency and development for infants, toddlers, and preschool-age Hispanic children from immigrant families in which Spanish is the primary language of the home, and improve assessments of English proficiency for Hispanic ELLs at the pre-K and K-3 levels;
- Expand investment in longitudinal studies of young children, such as the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 and the Early Childhood Longitudinal Study, Birth Cohort, in a manner that allows for much more extensive analysis of Hispanics and other groups that are achieving below U.S. norms; and
- Expand U.S. participation in international assessments of student achievement in a manner that would allow much more detailed monitoring of how different segments of the nation's population compare to students in other industrialized nations.

### **The Task Force recommends that private foundations:**

- Fund long-term efforts to design, test, and evaluate infant/toddler, pre-K, and K-3 language and literacy development strategies for Hispanics from all SES levels and from immigrant/nonimmigrant families; and
- Work to create some new foundations that would specialize in funding in these areas, and thereby ensure that sustained investments in strategy development would be made over the long-term.

### **The Task Force recommends that Hispanic organizations:**

- Jointly develop a set of recommendations for specific new or substantially modified approaches to infant/toddler programs, pre-K programs, and K-3 programs for Hispanics that should be tested with funding from the federal government and/or private foundations;
- Jointly develop detailed proposals for state governments for programs to increase the number of English- and Spanish-proficient early childhood educators; and
- Become leaders in providing literacy development information, materials, and other support to Hispanic parents in all SES segments.

### **The Task Force recommends that education researchers:**

- Propose specific combinations of tests of infant/toddler, pre-K, and K-3 approaches to language development that would provide varying amounts and kinds of such opportunities for low SES children, including low SES Hispanics;
- Suggest a set of tests of English-plus-Spanish (EPS) approaches for the infant/toddler, pre-K, and K-3 years that would be designed to provide much better information on their effectiveness and their feasibility of use;
- Propose a set of tests of the use of second language acquisition specialists for schools and classrooms in which EPS strategies would not typically be appropriate; and
- Suggest a set of tests of promising strategies, which would be designed to determine the kinds of variations in outcomes that should be expected with their use on a widespread basis over time.

## Introduction

It has been 20 years since the rapid changes underway in the racial and ethnic composition of the U.S. population became widely recognized. In the middle 1980s, racial/ethnic minorities—Hispanics, African Americans, Asian Americans, and Native Americans—had reached nearly 30% of the under-age-18 population, twice their collective percentage as recently as 1950. Furthermore, demographers forecasted that these groups would account for half of this age segment by 2030, with most of the growth centered in the Hispanic population.<sup>1</sup>

The “demographic shift” quickly emerged as a major impetus for education reform, because, compared with the White majority, the two largest minority groups (Hispanics and African Americans) were achieving at much lower levels in school. Many policymakers, educators, business leaders, and others concluded that the achievement gaps between these groups should be closed as quickly as possible for both economic and social justice reasons. They believed that the gaps needed to be closed to ensure that the United States would continue to have a well-educated workforce and that these groups would have the education needed to participate fully in all sectors of our society. Extensive efforts to improve minority educational outcomes have been undertaken at all levels of the education system since that time, including for Hispanics.<sup>2</sup> Despite these efforts, much less progress has been made than many people had hoped would occur.<sup>3</sup>

Increasing emphasis is now being given to the early childhood years, especially with the movement to expand state-funded prekindergarten (pre-K) programs. This emphasis on early childhood reflects the growing understanding that the foundations for educational outcomes are established when children are very young, the period from birth through age eight.<sup>4</sup> Moreover, evidence is increasing that high quality pre-K programs and well-conceived and executed school improvement efforts during kindergarten through third grade (K-3) can raise achievement, especially for low socioeconomic status (SES) children—youngsters from families that have low parent education and income levels.<sup>5</sup> The fact that it has proven to be very difficult to develop strategies that markedly raise achievement for disadvantaged students at the middle school and high school levels is an additional reason for giving greater attention to the early childhood years.<sup>6</sup>

In the summer of 2004, the National Task Force on Early Childhood Education for Hispanics was established to determine how early childhood education could be expanded and strengthened in ways that would improve the school readiness and academic achievement of Hispanic children. Hispanics are very diverse in terms of national heritage, social class, geographic distribution within the United States, length of time that they or their families have been in the United States, and their level of proficiency with the English language. Some segments are doing well, but many have low achievement patterns. During their earliest years, many Hispanic children do not have the opportunity to acquire the knowledge and skills needed to get off to a good start academically when they enter kindergarten. Subsequently, many develop low academic achievement patterns in the K-3 years, which continue for the rest of their formal schooling.<sup>7</sup>

In pursuing this work, the Task Force has given attention to the question of how to use early childhood education to improve the educational fortunes of all Hispanic children, including those from low SES, middle class, and high SES families. This is because, compared with their White counterparts, children from these Hispanic segments are doing less well academically, on average, from the time they start school.<sup>8</sup> However, the Task Force has given highest priority to finding ways to improve outcomes for Hispanic children from low SES immigrant families. The SES profile of these children would place many

of them “at risk” even in schools in their parents’ countries of origin.<sup>9</sup> In the United States, most of these youngsters have the added challenge of becoming proficient in academic English.<sup>10</sup>

The Task Force also has given attention to identifying ways in which programs for infants and toddlers, as well as pre-K and K-3 strategies, can improve the educational futures of Hispanic children. This reflects the now extensive evidence that children’s experiences prior to age three can make very important contributions to their school readiness and later academic success.<sup>11</sup>

In addition, across all three stages of early childhood, the Task Force has focused not only on identifying existing strategies that can improve early education for Hispanics, but also on assessing their limitations and suggesting ways that they might be improved. As promising as a number of current strategies may be, they are able to close only part of the school readiness and K-3 achievement gaps.<sup>12</sup> Hispanic children need and deserve both expanded and improved early childhood education opportunities.

Finally, the Task Force has focused exclusively on early childhood education strategies and institutions. It has not addressed broad societal conditions that influence early education outcomes. For example, the Task Force has not sought to propose ways to reduce the number of children experiencing extreme family poverty, which is a source of family duress, family instability, family mobility, and health problems that undermine children’s learning, even when the youngsters attend good preschools and elementary schools.<sup>13</sup> Nevertheless, the Task Force recognizes that improving academic outcomes for many Hispanic and other children from the most disadvantaged circumstances will require much more effective societal responses to such issues. The movement for schools to provide social services in areas such as health and child care reflects the critical importance of these matters for many children and their families.

Collectively, Hispanics parents and communities have strong family support structures and a deep commitment to the education of their children. But much more effort is urgently needed in the early childhood arena to improve the life chances of many Hispanic children. We can—and must—do more to build on the strengths of Hispanic families and accelerate the rate of their children’s educational progress in the years and decades ahead.

## **Demographic Portrait of Young Hispanic Children**

Economically, politically, and socially, Hispanic children will play an increasingly important role in our nation’s future. Over the next few decades, the number of workers versus non-workers is projected to decline significantly. In 2000, there were 106 workers for every 100 non-workers. But the Bureau of Labor Statistics projects that, by 2050, there will be only 90 workers for every 100 non-workers.<sup>14</sup> To maintain a strong economy and be competitive internationally, it is critical for all our nation’s children, including Hispanic children, to receive the preparation they need today to become our nation’s productive workforce tomorrow.

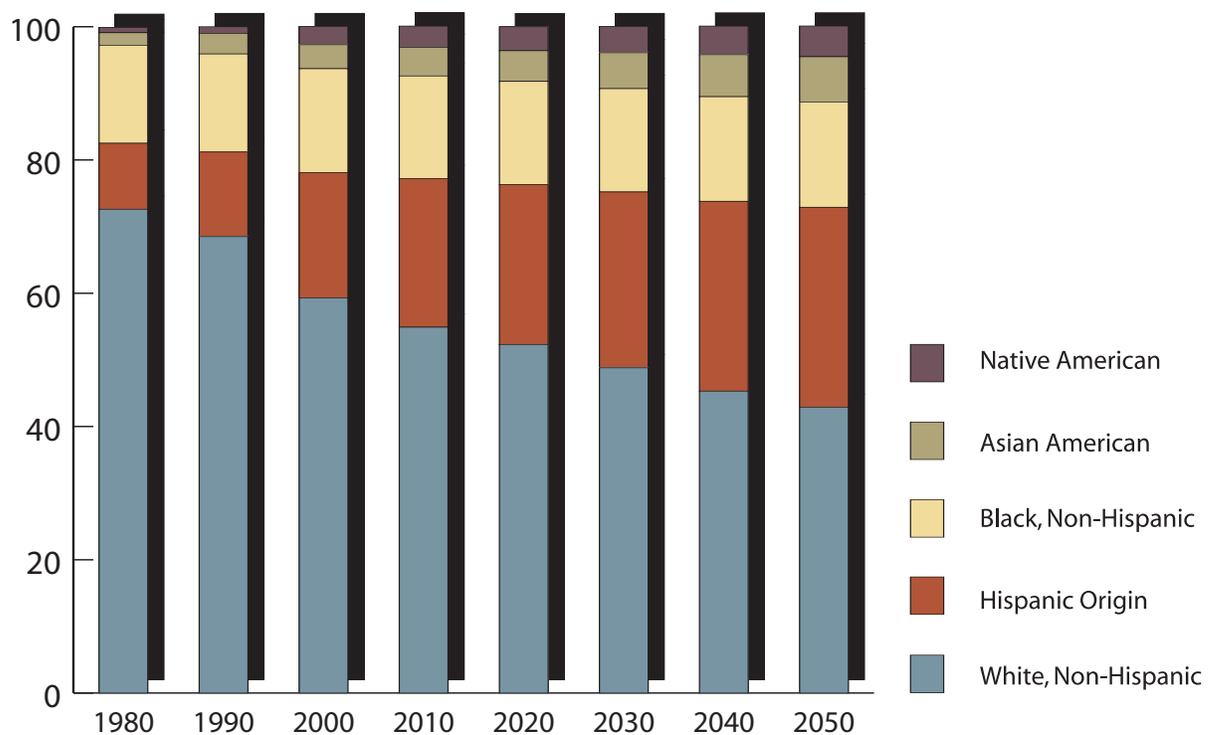
In addition, Hispanic children are an increasingly important asset for our nation politically and socially. Most young Hispanics were born in the United States and, thus, are U.S. citizens. As a growing proportion of the future electorate, it is important for them to become informed, engaged citizens and to participate fully in society. Moreover, Hispanic families have many strengths that can contribute to our social fabric. Efforts to build on these strengths and promote greater social equity will be essential to creating a society characterized by social cohesion rather than divisiveness.

## Rapid Growth of Hispanic Population

Between 1960 and 2000, the number of Hispanics in the United States grew fivefold—from 7 million to 35 million people.<sup>15</sup> In the process, they tripled their share of the nation’s population, growing from less than 4% to 12.5%. By mid-2001, Hispanics numbered 37 million and had become the country’s largest minority group.<sup>16</sup> By mid-2005, they had reached nearly 43 million (14.4% of the population) and accounted for half the nation’s population growth in the previous year.<sup>17</sup> This rapid expansion is expected to continue for decades to come. By 2050, Hispanics are projected to number about 100 million and constitute about one-quarter of the nation’s population.<sup>18</sup>

The rapid growth of the Hispanic population is a product of several factors, including a high, sustained level of immigration; a large number of young adults who are in their family-formation years; and, a relatively high total fertility rate among Hispanic women (mainly among those who are immigrants).<sup>19</sup> Consistent with these factors, the Hispanic share of the nation’s youngest children is considerably larger than their share of the population as a whole. For example, an analysis commissioned by the Task Force of the demographics of children in 2000 found that, among the 33.4 million children ages 0-8 in the United States, 6.8 million were Hispanic—20% of the total.<sup>20</sup> Moreover, the Hispanic share of the 0-8 age group is projected to reach 26% as early as 2030 (see Figure 1).<sup>21</sup> Consistent with this projection, 23% of the 4.1 million babies born in the United States in 2004 had Hispanic mothers, up from 21% in 2000.<sup>22</sup>

**Figure 1: Percentage of U.S. Children Ages 0-8 in Specified Racial/Ethnic Groups  
1980 - 2050**



Source: Hernandez, D. (2006). *Young Hispanic Children in the U.S.: A Demographic Portrait Based on Census 2000*. Report to the National Task Force on Early Childhood Education for Hispanics. Tempe, AZ: Arizona State University. Based on U.S. Census Bureau projections for 2000-2050, released by the U.S. Census Bureau on March 18, 2004.

Historically, Hispanics have been concentrated in a few states, and that is still the case. But, Hispanics currently have a rapidly increasing presence across the country. In 2000, about four-fifths of young Hispanic children lived in just nine states: California, Texas, New York, Florida, Illinois, Arizona, New Jersey, Colorado, and New Mexico. Half were living in just two states: California and Texas.<sup>23</sup> However, the growing number of young Hispanic children in other states was becoming evident as well. In 24 states, at least one in eight of the children in the 0-8 age group were Hispanic. In 2004, babies born to Hispanic mothers accounted for at least 10% of the births in 27 states and the District of Columbia.<sup>24</sup>

Some of the most rapid growth is taking place in states in the South and South East. For example, in both Georgia and North Carolina, the share of the babies born to Hispanic mothers grew from 2% in 1990 to 14% in 2004. In Virginia, it grew from 3% to 11% and in Arkansas from 1% to 9%.<sup>25</sup>

### **Diversity Among Hispanic Children**

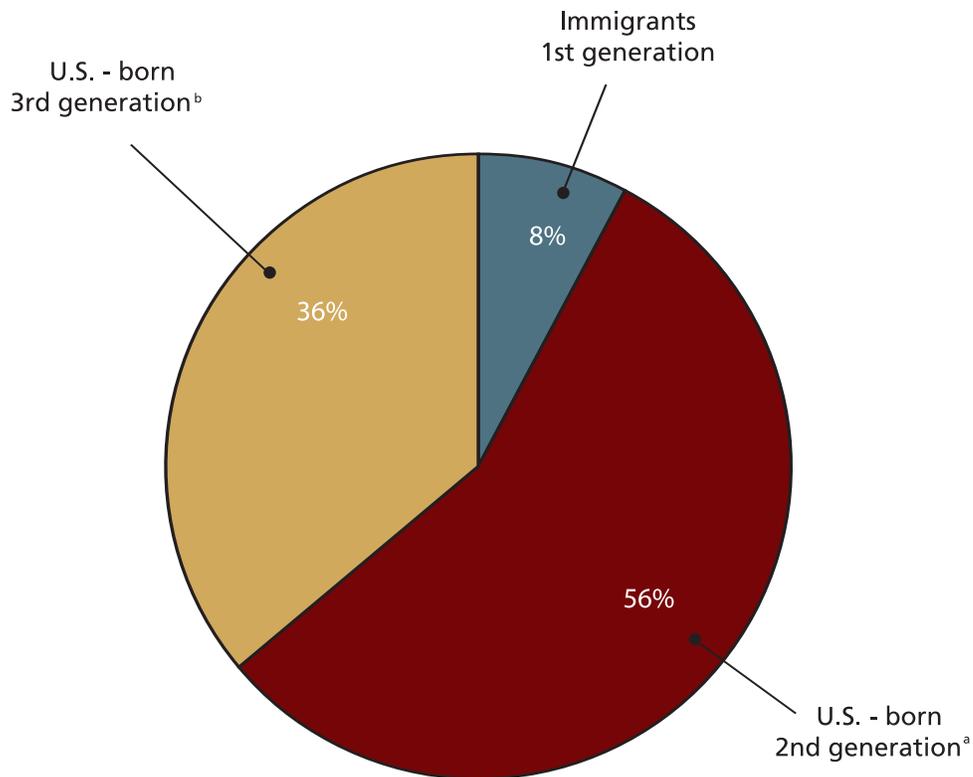
A large majority of the Hispanic population is of Mexican heritage. Yet, Hispanics also are quite diverse in terms of national origin. Among the Hispanic children in the 0-8 age group in 2000, the heritage of about 68% was Mexican, 9% Puerto Rican, 7% Central American, 6% South American, 3% Dominican, and 2% Cuban.<sup>26</sup> In recent years, Hispanic births in the United States have continued to be generally consistent with this pattern.<sup>27</sup>

Owing to the high level of Hispanic immigration over the past 40 years, a majority of Hispanic children are either immigrants or from families in which one or both parents are immigrants. The Task Force's study of the 0-8 population in 2000 found that 64% (4.4 million) of the Hispanics were either immigrants themselves (first generation Americans) or the children of immigrants (second generation Americans). Only 36% (2.4 million) were children with two U.S.-born parents (third generation Americans).<sup>ii</sup> Nevertheless, this pattern varied considerably among Hispanic national origin groups. The split for Mexican Americans was 66% first or second generation and 34% third generation, while the split was 91% and 9% for those of South American heritage.<sup>28</sup>

Although it might be assumed that the majority of children in immigrant families are themselves immigrants, this is not the case, especially for the youngest children. Currently, among all immigrant families, regardless of their race or ethnicity, about 9 in 10 young children were born in the United States.<sup>29</sup> Hispanics follow this pattern closely. About 88% of the 4.4 million first and second generation Hispanic children in the 0-8 age group in 2000 were U.S.-born (see Figure 2).

ii For second generation children, one or both parents may be immigrants. The third generation category includes not only children who have two U.S.-born parents, but also those who may have U.S.-born grandparents, great grandparents, and so forth. Thus, third generation as used here includes children who are technically third generation as well as those who are technically, for example, fourth or ninth generation.

**Figure 2: Percentage of Hispanic Children Who Are Immigrants versus Born in the United States**



Source: Hernandez, D. (2006). *Young Hispanic Children in the U.S.: A Demographic Portrait Based on Census 2000*. Report to the National Task Force on Early Childhood Education for Hispanics. Tempe, AZ: Arizona State University.

a For second generation children, one or both parents may be immigrants.

b For third generation children, the category includes not only children who have two U.S-born parents, but also those who may have U.S.-born grandparents, great grandparents, and so forth. (That is, the category includes children who are technically third generation as well as those who are technically, perhaps, fourth or ninth generation.)

### Challenges Faced by Hispanic Families

Collectively, Hispanics differ demographically from Whites in several ways that are correlated with Hispanics' lower levels of school readiness and kindergarten through twelfth grade (K-12) academic achievement. Relative to Whites, Hispanics have lower parent education levels, a significantly higher child poverty rate, a greater share of children living in single parent homes, and a larger percentage of children who are English language learners.

#### *Lower parent education levels*

Throughout the industrialized world, children from families in which the parents have relatively little formal schooling are markedly overrepresented among low academic achievers, and those from families in which the parents have a great deal of higher education are heavily overrepresented among students who excel academically.<sup>30</sup> The most important reason why a maximum effort needs to be made to expand and improve early childhood education for Hispanics is because of their parent education patterns.

Relative to non-Hispanic Whites, young Hispanic children are much more likely to have parents who have little formal schooling (referred to as “educational attainment”). Specifically, Hispanic parents are less likely to have graduated from high school and are much less likely to have a bachelor’s degree or more. For example, in the 0-8 age group in 2000, almost 44% of the Hispanic children had mothers who had not graduated from high school, while this was the case for only 9% of the Whites. Twenty percent of the Hispanics had mothers who had not gone beyond the eighth grade compared to only 1% of the White children. Also, less than 10% of the Hispanic children had a mother with a bachelor’s degree or more, while 30% of the Whites had a mother who was a college graduate.<sup>31</sup>

These differences were even larger for Hispanic youngsters in immigrant families. About 54% of these children had a mother who had not completed high school; 29% had a mother who had not gone beyond the eighth grade; and, 9% had a mother who had no more than a fourth-grade education. Regarding higher education, only 8% of Hispanic children in immigrant families had a mother with at least a bachelor’s degree.<sup>32</sup>

Yet, not all Hispanic national origin segments had low maternal educational attainment levels. Among those of Cuban and South American heritage, the children in both immigrant and nonimmigrant families had parent education profiles that were generally similar to that of Whites. However, together, these two groups of children constituted only about 8% of the 6.8 million Hispanics in the 0-8 age group in 2000.<sup>33</sup>

In contrast, among young Mexican Americans, the parent educational attainment in immigrant families was much lower than for Hispanics as a whole. Only 4% of the Mexican American children in immigrant families had a mother with a bachelor’s degree or more, while 64% had a mother who had not completed high school. In fact, 36% of these youngsters had a mother who had not gone beyond the eighth grade, and 11% had a mother had not gone beyond the fourth grade.<sup>34</sup>

These parent education patterns mean that, in 2000, Hispanics accounted for a very large share of the nation’s young children from families in which parents had little formal education. Among the 33.4 million children in the United States in the 0-8 age group, about 6.1 million (18%) had a mother who had not completed high school and about 1.8 million (6%) had a mother who had not gone beyond the eighth grade. Hispanic youngsters accounted for 49% of those with a mother who had not completed high school and 74% of those with a mother who had not gone beyond the eighth grade. By themselves, Hispanic immigrants accounted for 39% of the children with mothers who had not completed high school and 69% of those with mothers with an eighth grade education or less.<sup>35</sup>

### *Higher child poverty rates*

Consistent with the large differences in parent education, a much larger percentage of young Hispanic children live in families that have incomes that fall below the federal poverty line. Among children in the 0-8 age segment in 2000, about 26% of the Hispanics were below the poverty line, compared to only 9% for Whites. The gaps also were large for children in low-income families (with low income defined as below twice the official poverty line). About 58% of young Hispanic children were from low-income families, while this was the case for 27% of Whites.<sup>36</sup>

Low-income rates were significantly higher for young Hispanic children from immigrant families than for Hispanics with U.S.-born parents—63% versus 48%. Among Hispanic national origin groups, young Mexican American children with immigrant parents had the highest percentage in low-income families: 69%.<sup>37</sup>

These high poverty and low income rates were not primarily a function of high unemployment rates—about 93% of the young Hispanic children in 2000 had fathers who were employed full or part time. Rather, they were mainly due to low wage rates and relatively high levels of part-time employment, which are consistent with the low average attainment levels of the Hispanic fathers and mothers.<sup>38</sup>

### *Greater share in single parent homes*

One of the major social changes in the United States over the past four or five decades has been the increase in single parent families, especially those headed by women.<sup>39</sup> This is related, in part, to rapid growth in the percentage of babies born to unmarried mothers.<sup>40</sup> Among children in the 0-8 age group in 2000, about 77% of the Hispanics were in two parent families, while 23% were in single parent families. In contrast, among young White children, 85% were in two parent families, while 15% were in single parent families. For both groups—Hispanics and Whites—single parent families are mostly headed by mothers (nearly nine in ten and eight in ten, respectively).<sup>41</sup>

The share of young Hispanic children in single parent homes is much higher for those with U.S.-born parents than for those with immigrant parents. Among those with U.S.-born parents in 2000, 32% were in single parent homes, while only 13% of those with immigrant parents were in single parent families. Significantly, the single parent family rate for Hispanics with U.S.-born parents seems to be moving in the direction of the very high single parent family rate of African Americans (54%), while Hispanic children with immigrant parents have a single parent family percentage that is about the same as that of Whites.<sup>42</sup>

Moreover, these patterns are present from the start of children's lives. Another study commissioned by the Task Force—an analysis of data on a national sample of infants born in 2001 that are being followed for several years in the federal government's Early Childhood Longitudinal Study, Birth Cohort (ECLS-B)—found that 80% of the Hispanic infants were in two parent homes compared with 90% of the Whites.<sup>43</sup>

### *Larger percentage of English language learners*

Because a large majority of young Hispanic children have immigrant parents, a majority of these youngsters also have home environments in which Spanish is the primary or exclusive language. The Task Force's analysis of ECLS-B data found that 56% of the Hispanic infants had a mother who was born outside the United States. Consistent with this pattern, 19% of the Hispanic parents said that only Spanish was spoken in their home, while 35% described the language environment of their home as being mainly Spanish with some English spoken. About 21% said that only English was spoken in their home and 22% reported that mainly English was spoken with some Spanish. The tendency for Spanish to be the exclusive or primary language of the home was even greater for Hispanic families in poverty. About 28% reported that only Spanish was spoken, while 15% said that only English was used.<sup>44</sup>

The dominance of Spanish in the home environments was reinforced by the childcare arrangements of the families. Among the families that used non-parental childcare on a regular basis, 60% said that English was not the primary language used in childcare.<sup>45</sup>

Consistent with these circumstances, a companion federal study to the ECLS-B, the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K), found that about 30% of the Hispanics in the national sample did not have strong enough oral English skills when they started kindergarten in the fall of 1998 to be given the test designed to assess their English literacy skills.<sup>46</sup> Moreover, because a large number of Hispanic children in immigrant families have parents with little formal education, as

noted earlier, many of these youngsters' parents may have weak academic Spanish capabilities.<sup>47</sup> Thus, a substantial percentage of Hispanic children may be starting kindergarten without either the English or Spanish literacy foundations needed to get off to a good start in school. These are among the lowest achieving Hispanics in the early elementary school years and, therefore, among those with the most urgent need for more and better early childhood education opportunities.

### **Strengths of Hispanic Families and Communities**

Although many Hispanic families face challenges correlated with lower academic achievement, it also is true that Hispanic families and communities generally have enormous strengths on which Hispanic youngsters are able to draw.

One of the most important of these strengths is *familismo*, a conception of the family in which family ties are very strong and family members are fully committed to the support of each other. For Hispanic children, this means that their parents and other family members are usually deeply and actively concerned about their emotional, educational, and material well-being.<sup>48</sup>

Regarding emotional well-being, there is evidence that young children in Mexican immigrant families (most of which have two parents) enjoy high levels of mental health. Apart from its inherent benefits, emotional well-being is valuable educationally, allowing the children to enter school able to work well in the classroom with their teachers and peers.<sup>49</sup>

Similar to other groups in the United States, Hispanic parents have consistently demonstrated a very strong commitment to their children's education. This commitment to education includes not only school academics, but also moral and social development.<sup>50</sup> The latter are essential components of education in a democracy—components that are often given too little attention as our society works to raise academic achievement.<sup>51</sup>

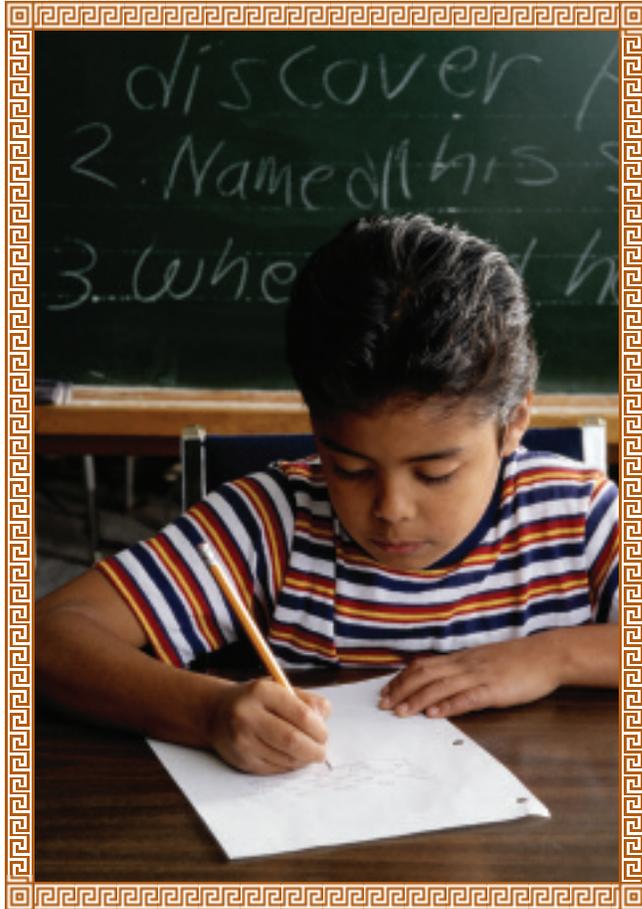
Hispanic parents who are immigrants with little formal education are especially aware of the need for their children to succeed in school.<sup>52</sup> In a subsequent section of this report, data are presented that document that U.S.-born Hispanics have much higher high school and college graduation rates than their immigrant parents, which is consistent with the parents' firm commitment to their children's educational advancement.

Finally, even though many Hispanic immigrant families have low incomes, and the fathers have little formal education, the overwhelming majority are employed and striving to provide for the material needs of their children.

These characteristics of Hispanic families mean that, as our society works to expand and improve the quality of early childhood education available to Hispanic children, there are many strengths on which to build. Strong educational efforts will continue to be made on the family side, even though many of the families do not have all the resources typically available to middle class and high SES families.

## Hispanic Educational Performance Patterns

Consistent with the parent education, family income, single parent family, and home language patterns discussed in the previous section, Hispanic students have had much lower levels of academic achievement compared with the achievement levels of non-Hispanic Whites and Asian Americans at least since national achievement data first became available by race/ethnicity in the mid-1960s.<sup>53</sup> Importantly, there is extensive evidence that



these differences in achievement, whether measured by standardized tests or school grades, have their foundations in the infant/toddler and preschooler period. On measures of reading readiness, math concepts, and general knowledge, Hispanic youngsters are already behind their White peers when they start kindergarten. By the end of the third grade, the achievement gaps are essentially entrenched in reading and mathematics, both of which are central to academic progress in most areas of the school curriculum in the late elementary grades and at the secondary level.<sup>54</sup>

The differences are largest at low and high academic achievement levels. As students move into the upper elementary school grades, Hispanics are heavily overrepresented among low achieving students and markedly underrepresented among high achievers.<sup>55</sup> Consequently, viewed from the perspective of educational futures, Hispanics are overrepresented among students with such low achievement that they are at-risk of eventually not graduating from high school, and they are underrepresented among those who are on course to emerge from high school academically well prepared to attend college. They also are severely underrepresented among those on course to be very well prepared to attend highly selective institutions.

## Achievement Gaps at the Elementary School Level

In light of these overall achievement patterns and the diversity of the Hispanic population, the Task Force commissioned an analysis of kindergarten through fifth grade (K-5) reading and mathematics achievement, using data from the ECLS-K. The objective was to obtain a much more detailed picture than has been available to date of how Hispanic academic achievement compares to the achievement of non-Hispanic Whites in the early years of school.<sup>iii</sup> In making these comparisons, the study looked at the achievement patterns of Hispanics on an overall basis and for a number of subpopulations, including: 1) several Hispanic national and regional origin groups, such as those of Mexican and Central American descent; 2) first, second, and third generation Mexican Americans; and 3) low SES, middle class, and high SES Hispanics. The White students in the study were limited to those who were third generation. (With respect to academic achievement, third generation Whites are the “baseline” group within the White population with which to compare a group such as Hispanics that has a high percentage of children in immigrant families. A very small percentage of White children are first or second generation.)

In terms of reading proficiency, the nine reading proficiency levels used in the ECLS-K study for assessing students during the K-5 years are listed in Box 1. Hispanic achievement lagged behind Whites at every level. In general, the patterns in math are similar to the patterns in reading.

### Box 1

#### ECLS-K Reading Proficiency Levels for K-5

- Level 1: Recognition of letters
- Level 2: Understanding beginning sounds of words
- Level 3: Understanding ending sounds of words
- Level 4: Sight recognition of words
- Level 5: Comprehension of words in context
- Level 6: Literal inference from words in text
- Level 7: Extrapolating from text to derive meaning
- Level 8: Evaluating and interpreting beyond text
- Level 9: Evaluating nonfiction

*Source: Princiotta, D., and Flanagan, K. (2006). Findings From the Fifth-Grade Follow-up of the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99. Washington, DC: U.S. Department of Education, National Center for Education Statistics.*

<sup>iii</sup> The study also looked at the achievement patterns of African Americans and Asian Americans, but data for these groups are not presented here. The full report to the Task Force by S.F. Reardon and C. Galindo, Patterns of Hispanic Students' Math and English Literacy Test Scores, which includes these data, is available online at: <http://www.ecehispanics.org>.

Table 1 presents data on students' reading skills at the start of kindergarten. The Hispanic data do not include the 30% of the Hispanic children in the ECLS-K sample that did not have oral English skills strong enough for them to take the English language reading readiness assessment as they entered kindergarten. (The reading skills of the non-English-speaking group of Hispanic youngsters are discussed later in this section.) Yet, even with 30% excluded, the data in Table 1 show that the remaining Hispanics lagged well behind third generation Whites in letter recognition, understanding beginning sounds of words, and understanding ending sounds. They also lagged behind Whites in sight reading words, although few children from any group had that skill at the beginning of kindergarten.

Among Hispanic national and regional origin groups, those of Mexican and Central American descent had achievement levels that lagged those of Whites to about the same extent as Hispanics overall. The strongest performing Hispanics at the start of kindergarten were children of South American origin, followed closely by youngsters of Cuban and Puerto Rican origins. As may be recalled, children with South American and Cuban heritage have parent education levels that are generally similar to those of Whites, while the other Hispanic groups have much lower parent education levels.

Table 1

**Percentage of Children Scoring at or above Levels 1, 2, 3 and 4  
in Reading at the Start of Kindergarten**

<b>Group</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
Third Generation Whites	73	34	20	4
All Hispanics	54	20	10	2
Mexican Descent	51	19	10	2
Cuban Descent	67	25	12	2
Puerto Rican Descent	62	26	14	2
Central American Descent	52	18	11	1
South American Descent	60	26	15	5

*Source: Reardon, S.F., and Galindo, C. (2006). Patterns of Hispanic Students' Math and English Literacy Test Scores. Report to the National Task Force on Early Childhood Education for Hispanics. Tempe, AZ: Arizona State University.*

Table 2 presents reading skill data for the end of fifth grade that also exclude the 30% of Hispanics who began kindergarten with limited oral English proficiency. At the end of fifth grade, Hispanics overall and those of Mexican and Central American descent had considerably smaller percentages of students demonstrating mastery of the more advanced reading skills than third generation White students. However, the reading skill patterns for those of South American descent were virtually identical to those of Whites. Those of Cuban and Puerto Rican origins were close to the White pattern as well.

Table 2  
**Percentage of Children Scoring at or above Levels 6, 7, 8 and 9  
 in Reading at the End of Fifth Grade**

<b>Group</b>	<b>Level 6</b>	<b>Level 7</b>	<b>Level 8</b>	<b>Level 9</b>
Third Generation Whites	91	79	52	10
All Hispanics	86	69	41	5
Mexican Descent	86	67	40	5
Cuban Descent	92	80	48	5
Puerto Rican Descent	92	78	48	6
Central American Descent	90	76	43	3
South American Descent	91	79	51	11

*Source: Reardon, S.F., and Galindo, C. (2006). Patterns of Hispanic Students' Math and English Literacy Test Scores. Report to the National Task Force on Early Childhood Education for Hispanics. Tempe, AZ: Arizona State University.*

Although the achievement gaps between Hispanics and Whites are heavily related to the differences in SES circumstances between Hispanics and Whites, this is not the entire story. Extensive research going back to the late 1960s has found that Hispanics achieve at somewhat lower levels than Whites and Asian Americans at all or most social class levels across the K-12 years. Moreover, the within-class gaps have often been found to be larger at high SES levels than at low SES levels. (African Americans also lag behind Whites and Asian Americans within most social class segments, including the middle class and high SES segments.)<sup>iv</sup>

The data in Table 3 show the within-class gaps between Hispanics and Whites at the start of kindergarten across five social class segments (referred to as "quintiles").<sup>iv</sup> Although gaps existed in all quintiles, the data in Table 4 show a mixed picture at the end of the fifth grade. Hispanics continued to lag behind Whites somewhat in the top three SES quintiles. However, the Whites and Hispanics in the first SES quintile looked very similar in their reading skill patterns at the end of the fifth grade, while in the second quintile Hispanics had a slight edge. That is to say, low SES Hispanic children who started kindergarten with reasonable oral skills in English ended the fifth grade with about the same English reading skill levels as their low SES White counterparts, at least as measured by the assessment instruments and proficiency levels used in the ECLS-K.

<sup>iv</sup> Social class in the ECLS-K is a composite of family income, educational attainment levels of mothers and fathers, and the occupations of the mothers and fathers.

Table 3

**Percentage of Children Scoring at or above Levels 1, 2, 3 and 4 in Reading at the Start of Kindergarten, by SES Quintile, for Hispanics and Whites**

SES Quintile	Group	Level 1	Level 2	Level 3	Level 4
First (Low)	Hispanic	37	8	3	0
	White	48	13	5	0
Second	Hispanic	54	17	8	1
	White	60	20	10	1
Third	Hispanic	54	20	11	3
	White	69	29	16	3
Fourth	Hispanic	72	33	17	2
	White	80	38	21	3
Fifth (High)	Hispanic	73	41	25	5
	White	86	50	33	8

Source: Reardon, S.F., and Galindo, C. (2006). *Patterns of Hispanic Students' Math and English Literacy Test Scores. Report to the National Task Force on Early Childhood Education for Hispanics.* Tempe, AZ: Arizona State University.

Table 4

**Percentage of Children Scoring at or above Levels 6, 7, 8 and 9 in Reading at the End of Fifth Grade, by SES Quintile, for Hispanics and Whites**

SES Quintile	Group	Level 6	Level 7	Level 8	Level 9
First (Low)	Hispanic	77	51	29	1
	White	73	51	30	3
Second	Hispanic	89	74	44	6
	White	86	68	40	4
Third	Hispanic	86	66	38	2
	White	91	77	48	7
Fourth	Hispanic	92	81	51	9
	White	94	86	55	9
Fifth (High)	Hispanic	95	87	59	13
	White	96	91	64	20

Source: Reardon, S.F., and Galindo, C. (2006). *Patterns of Hispanic Students' Math and English Literacy Test Scores. Report to the National Task Force on Early Childhood Education for Hispanics.* Tempe, AZ: Arizona State University.

The caveat is that 30% of the Hispanic students were excluded from the fifth grade data in this analysis, owing to their limited English skills at the start of kindergarten. Had their fifth grade scores been included, Hispanics would have undoubtedly lagged Whites in the lowest SES quintile for two reasons. First, most of the 30% were Hispanic children from families in the lowest SES quintile. Second, as discussed further later in this section, the reading scores of the 30% were far below those of Whites at the end of the fifth grade—over a full standard deviation in statistical terms.<sup>57</sup> The implications of this are that, for Hispanics as a whole, meaningful within-class gaps with Whites would be predicted in all or most SES segments when students reach the secondary level. That is exactly what some recent national data for high school students show.

### **Achievement Gaps at the Secondary School Level**

The achievement gap for Hispanics at the secondary school level is evident in both national and international studies. For example, a major federal study, the Education Longitudinal Study (ELS), has been tracking the reading skills of a national sample of high school students who were sophomores in 2002. (The three proficiency levels used to assess the reading skills of high school students are listed in Box 2.) The ELS data indicate that the within-class achievement gaps in reading skills between Hispanics and Whites are fairly large.

#### **Box 2**

##### **ELS Reading Proficiency Levels for High School Students**

Level 1: Simple Reading Comprehension of Text

Level 2: Simple Inferences from Main Ideas in Text

Level 3: Complex Inferences from Main Ideas in Text

*Source: Ingels, S.J., Burns, L.J., Chen, X., Cataldi, E.F., and Charleston, S. (2005). Initial Results from the Base Year of the Education Longitudinal Study of 2002. Washington, DC: U.S. Department of Education, National Center for Education Statistics.*

Table 5 presents data on the percentages of Hispanic and White sophomores, by SES quartile, that scored at or above each of the three proficiency levels. For instance, about 20% of the White sophomores in the top SES quartile were reading at the highest level (Level 3—complex inferences of main ideas in text), while only 10% of the Hispanics were doing so. This difference probably means that, among sophomores in 2002, a much smaller percentage of high SES Hispanics than high SES Whites had the advanced reading comprehension skills (in English) necessary to excel in challenging college prep courses in high school.

Table 5

**Reading Proficiency of Hispanic and White High School Sophomores in 2002, by SES Quartile**

SES Quartile	Group	Percentage at or above Reading Proficiency Level		
		Level 1	Level 2	Level 3
Lowest Quartile	Hispanic	72.9	19.5	0.8
	White	88.3	36.7	4.4
Middle Two Quartiles	Hispanic	84.5	32.5	2.9
	White	93.5	52.7	8.3
Highest Quartile	Hispanic	89.8	52.4	9.7
	White	97.2	71.9	19.8
All	Hispanic	79.2	28.0	2.8
	White	93.9	56.0	11.4

Source: Ingels, S.J., Burns, L.J., Chen, X., Cataldi, E.F., and Charleston, S. (2005). *Initial Results from the Base Year of the Education Longitudinal Study of 2002*. Washington, DC: U.S. Department of Education, National Center for Education Statistics

Data in Table 5 also show that 27% of the lowest quartile Hispanics were unable to reach Level 1 (simple reading comprehension of text) compared to 12% of the Whites. Thus, over a quarter of low SES Hispanic sophomores evidently were reading far below the level required to do high school academic work.

In addition, over the past 15 years, the United States has participated in several international achievement studies that have assessed samples of students from numerous countries in reading, mathematics, science and some other areas. Much of the discussion of the results of these studies by educators, policymakers, business leaders, and members of the news media in the United States has focused on how U.S. students often have had lower average scores on these assessments than students in many other industrialized nations.<sup>58</sup> However, the story is more complex. On most of the assessments, non-Hispanic White and Asian American students actually have had average or above average scores, while Hispanic and African American students have had well below average scores.<sup>59</sup>

For example, every three years the Organization for Economic Cooperation and Development (OECD) measures the mathematics literacy, reading literacy, science literacy, and some other skill areas of 15-year-olds in its 30 member nations, as well as in several nonmember nations. In the 2003 assessment, the average scores for U.S. students were below average in all four areas tested (math, reading, science, and problem solving). However, Whites and Asian Americans actually scored at or above the OECD averages in all the subjects. In contrast, Hispanics and African Americans scored far below average. For instance, in mathematics literacy, the Hispanic average was above those of only two OECD member nations—Turkey and Mexico, while the African American average was only higher than Mexico's average.<sup>60</sup>

Table 6

**Average Combined Mathematics Literacy, Problem-Solving, Reading Literacy, and Science Literacy Scores of U.S. 15-Year-Olds, by Race/Ethnicity, 2003**

	Math Literacy	Problem Solving	Reading Literacy	Science Literacy
OECD Average	500.0	500.0	494.2	499.6
White Average	511.6	505.7	524.8	521.6
Asian American Average	506.3	505.3	513.1	508.9
Hispanic Average	442.7	435.6	452.6	448.1
African American Average	417.3	413.2	429.9	422.7

Source: Lemke, M., Sen, A., Pahlke, E., Partelow, L., Miller, D., Williams, T., Kastberg, D., & Jocelyn, L. (2004). *International Outcomes of Learning in Mathematics Literacy and Problem Solving*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Although examination of Hispanic students' academic achievement over the years has been heavily concerned with how their achievement levels compare to the achievement levels of Whites and other groups in the United States, results from international assessments make it clear that this needs to change. Hispanics are achieving far below industrial society norms, as are African Americans.<sup>61</sup> Because, together, Hispanics and Blacks now account for about two-fifths of U.S. births,<sup>62</sup> the nation's international economic competitiveness increasingly depends on bringing these two groups fully into the mainstream of industrial society academic achievement patterns.<sup>63</sup>

### **Achievement Gaps and English Language Proficiency**

As noted earlier, about 30% of the Hispanic children in the ECLS-K did not demonstrate oral English proficiency as they started kindergarten in the fall of 1998.<sup>64</sup> The Task Force's analysis of ECLS-K data found that, among the 30%, seven in ten of the children were from families in the bottom SES quintile and nearly nine in ten were from the bottom two SES quintiles combined. Also, a large majority were from homes in which Spanish was the only or primary language spoken. Thus, this 30% of Hispanic children evidently had much in common with the over one-third of Hispanic children in the 0-8 age group in 2000 that were from immigrant families in which the mother had not completed high school.

In addition, the Task Force's ECLS-K analysis found that, as these children moved through elementary school, their math and reading achievement levels were very low. At the end of the fifth grade, the 30% of Hispanic children that did not demonstrate oral English proficiency at the start of kindergarten were not only performing far below White children's averages in reading and math, they also were well below the averages for the other 70% of Hispanic children. Table 7 presents fifth grade reading data that describes this situation.

Table 7

**Percentage of Children Scoring at or above Levels 6, 7, 8 and 9  
in Reading at the End of Fifth Grade**

<b>Group</b>	<b>Level 6</b>	<b>Level 7</b>	<b>Level 8</b>	<b>Level 9</b>
30% of Hispanics not English Proficient, Fall K	72	41	23	1
70% of Hispanics English Proficient, Fall K	86	69	41	5
Lowest SES Quintile Hispanics English Proficient, Fall K	77	51	29	1
Highest SES Quintile Hispanics English Proficient, Fall K	95	87	59	13
All Third Generation Whites	91	79	52	10
Lowest SES Quintile Third Generation Whites	73	51	30	3
Highest SES Quintile Third Generation Whites	96	91	64	20

*Source: Reardon, S.F., and Galindo, C. (2006). Patterns of Hispanic Students' Math and English Literacy Test Scores. Report to the National Task Force on Early Childhood Education for Hispanics. Tempe, AZ: Arizona State University.*

*Note: The proficiency levels in this table are: Level 6: Literal inference from words in text; Level 7: Extrapolating from text to derive meaning; Level 8: Evaluating and interpreting beyond text; and Level 9: Evaluating nonfiction.*

Moreover, the data show that the Hispanic children who had little or no knowledge of English at the start of kindergarten were severely underrepresented among fifth graders with strong English reading comprehension skills. For example, only 23% demonstrated Level 8 reading skills in English (the capacity to evaluate and interpret beyond the text). Just 1% had Level 9 skills (the capacity to evaluate non-fiction)—skills that are extremely important for excelling in social studies, science, and other parts of the curriculum in the late elementary school years and middle school. Clearly, these youngsters require and deserve much stronger early childhood education opportunities than those currently provided.

One other very important point must be made: The low SES Hispanics who were proficient in English at the start of kindergarten were performing only modestly better at the end of the fifth grade than the 30% who were not proficient. Together these two segments represented about 45% of the Hispanic children.<sup>65</sup> While it is true that the low SES Whites also were not doing well in reading in the fifth grade, they accounted for only 8% of the White youngsters.<sup>66</sup>

### **Evidence of Intergenerational Progress**

Despite the persistence of large overall Hispanic-White achievement differences, data from the ECLS-K analysis commissioned by the Task Force show that some national origin segments of Hispanics, such as those of South American descent, have K-5 achievement patterns close to those of Whites. Moreover, among Mexican Americans, the largest national origin group, children in the third generation had meaningfully higher levels of school readiness in reading and math at the start of kindergarten than did their first and second generation Mexican American counterparts. These third generation Mexican American children went on to perform at higher levels across the K-5 years.<sup>67</sup>

For example, Table 8 shows that, compared to first and second generation children, third generation Mexican Americans were much more likely to start kindergarten proficient in letter recognition and in understanding beginning and ending sounds of words (Level 1, Level 2, and Level 3). Table 9 shows that third generation Mexican Americans generally ended the fifth grade with higher percentages demonstrating proficiency in extrapolating from text to derive meaning, evaluating and interpreting beyond text, and in evaluating nonfiction (Level 7, Level 8 and Level 9). This means that more third generation Mexican Americans had solid reading comprehension skills in English in the upper elementary school grades than was the case for first and second generation Mexican Americans.

Table 8

**Percentage of Children Scoring at or above Levels 1, 2, 3 and 4 in Reading at the Start of Kindergarten: Third Generation Whites and First, Second, and Third Generation Mexican Americans**

<b>Group</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
Third Generation Whites	73	34	20	4
Third Generation Mexican Americans	60	23	12	2
Second Generation Mexican Americans	43	14	8	2
First Generation Mexican Americans	42	14	6	0

*Source: Reardon, S.F., and Galindo, C. (2006). Patterns of Hispanic Students' Math and English Literacy Test Scores. Report to the National Task Force on Early Childhood Education for Hispanics. Tempe, AZ: Arizona State University.*

Table 9

**Percentage of Children Scoring at or above Levels 6, 7, 8 and 9 in Reading at the End of Fifth Grade: Third Generation Whites and First, Second, and Third Generation Mexican Americans**

<b>Group</b>	<b>Level 6</b>	<b>Level 7</b>	<b>Level 8</b>	<b>Level 9</b>
Third Generation Whites	91	79	52	10
Third Generation Mexican Americans	89	72	43	5
Second Generation Mexican Americans	83	61	38	6
First Generation Mexican Americans	83	61	32	1

*Source: Reardon, S.F., and Galindo, C. (2006). Patterns of Hispanic Students' Math and English Literacy Test Scores. Report to the National Task Force on Early Childhood Education for Hispanics. Tempe, AZ: Arizona State University.*

Moreover, the data in Table 8 and Table 9 probably underestimate the gaps between third generation Mexican American children and first and second generation youngsters, because they excluded Mexican Americans in the 30% of Hispanics that did not demonstrate oral English proficiency at the start of kindergarten. That group was disproportionately first and second generation in its composition.<sup>68</sup>

The better outcomes for third generation Mexican American children are related to the fact they had a stronger family SES profile than the profiles of first and second generation Mexican Americans. For instance, more of the third generation children were from families in the top two SES quintiles. Still, as Table 8 and Table 9 show, third generation Mexican Americans lagged well behind third generation Whites in reading skills at the start of kindergarten and at the end of fifth grade. Consistent with these patterns, a smaller percentage of third generation Mexican Americans than third generation Whites were from families in the top two SES quintiles.<sup>69</sup>

In addition to these intergenerational improvements in school readiness and K-3 achievement patterns, there also is evidence that U.S.-born Hispanics have experienced substantial increases in their educational attainment. Both their high school and college graduation rates have increased significantly over the past several decades. For example, between 1970 and 2000, the percentage of U.S.-born 25- to 29-year-old Hispanics with high school degrees grew from 48% to 79%. In the process, they drew closer to the graduation rate for 25- to 29-year-old Whites, which was 78% in 1970 and 93% in 2000.<sup>70</sup> In contrast to the gains made by U.S.-born Hispanics, there was essentially no change in the high school graduation rate for 25- to 29-year-old foreign-born Hispanics. Their rate was 44% in 1970 and 46% in 2000.<sup>71</sup> This is consistent with the fact that there have been large numbers of young adult Mexican immigrants with little formal education in the period.

Between 1970 and 2000, there also was significant growth in the percentage of U.S.-born 25- to 29-year-old Hispanics with college degrees. The percentage more than tripled from less than 5% to about 16%. These gains were made even though, among foreign-born Hispanics, the percentage with college degrees was basically unchanged in the period. It was less than 8% in 1970 and a little over 7% in 2000.<sup>72</sup>

Despite the progress of U.S.-born Hispanics in higher education, they actually lost ground in absolute terms to non-Hispanic Whites in the period, as the White percentage of college graduates grew from 19% to 34%—a huge increase in just 30 years.<sup>73</sup> These large gains for Whites were partly a result of the rapid growth in the percentage of White females earning college degrees, as they took advantage of the much greater higher education and career opportunities available to women since the late 1960s. The gains also reflected several generations of efforts to expand both secondary and higher education in the United States. For example, among 25- to 29-year-old Whites in 1920, only 22% had completed a high school degree or more and less than 5% had completed four or more years of college; and, as recently as 1960, only 64% of Whites in that age group had at least a high school degree and only 12% had at least a bachelor's degree.<sup>74</sup> The low percentages of young White adults with high school and bachelor's degrees in 1920 are a reminder that educational progress for groups tends to be a long-term, intergenerational process.

A recent study of educational attainment levels in the children and grandchildren of immigrants from different racial/ethnic groups in California has produced results that are similar to the national data. For all groups, second generation individuals were found to have higher educational attainment levels than the first generation; and, third generation individuals had higher attainment levels than those in

the second generation. However, comparing across national origin groups, much larger percentages of first generation Whites and Asian Americans than of first generation Mexican Americans had a bachelor's degree. Also, by the third generation, the percentage of third generation Mexican Americans with bachelor's degrees was still much smaller than the percentage of third generation Whites, and lower still than that of third generation Asian Americans.<sup>75</sup>

Overall, the data reviewed here are encouraging in that they suggest that Hispanics have experienced considerable intergenerational educational advancement since the current period of high, sustained levels of Hispanic immigration began three to four decades ago. Nonetheless, there is a compelling need to accelerate Hispanics' rate of advancement as much as possible.<sup>76</sup> Hispanic immigrants' relatively low overall educational attainment profile and associated low skill levels place this group at an enormous competitive disadvantage in the labor market relative to Whites and Asian Americans.<sup>77</sup> Even many third generation Hispanics do not have the educational attainment, knowledge, and skills to be fully competitive with Whites and Asian Americans, or with the labor forces of many industrialized nations.

### **Early Sources of School Readiness and Achievement Gaps**

School readiness and school achievement patterns have important foundations in the period from birth to three, a time in which the home and family typically play the dominant role in the development of children. One of the most significant ways in which the home environment differs for Hispanics and Whites is in literacy-related parenting practices. For example, there is evidence that, on average, Hispanic mothers talk less to their children than do White mothers.<sup>78</sup> They also read less to their infants and toddlers than do White mothers; this is especially true for Hispanic mothers who do not speak English as their primary language.<sup>79</sup> In addition, there tend to be fewer literacy-related materials, such as children's books, available in Hispanic homes than in White homes.<sup>80</sup> These differences in Hispanic-White parenting patterns are heavily associated with social class differences, which, in turn, are significantly related to differences in access to formal education across generations.

### **Parenting Patterns and Social Class**

Hispanic children are more likely than Whites to be from low SES families as measured by parent education and family income levels. This is important, because research has documented large SES-related differences not only in mothers reading books to their children, but also in mother-child talking patterns. On average, low SES mothers talk with their children much less than middle class mothers talk to their youngsters, and even less than high SES mothers talk to their youngsters. One influential study of low SES, middle class and high SES families with young children estimated that, by age three, low SES children have heard only one-third as many words spoken as high SES children.<sup>81</sup>

That study also found large differences between low SES and high SES youngsters in terms of the number of different words that the children heard, in how words were used, in the length of sentences, and in the range of topics that were discussed. Parents' modeling of the use of language differed by SES in terms of such things as the kinds of questions that were asked and how things or events were described. The children also were exposed to very different amounts of information on a wide range of topics.<sup>82</sup>

These differences also mean that there are large differences between SES groups in the ways that the parents acted as teachers of their children. The mothers in the high SES families were much more likely than those in the low SES families to ask their child to elaborate on comments. They were more likely

to ask their children questions concerned with promoting thought and reflection and eliciting behaviors rather than directing the youngsters to do things. They were also much more likely to make positive comments to their children and much less likely to make negative comments. These patterns continued after the children turned three, as they were fundamental characteristics of the families' lives.<sup>83</sup>

Substantial early differences in oral language experiences and vocabulary development are correlated with the large differences in oral vocabulary sizes between low SES and high SES children in the early elementary grades.<sup>84</sup> High SES children have much larger oral vocabularies than low SES children have in the early elementary grades, and their advantage in this area persists into the upper elementary grades and beyond.<sup>85</sup> These vocabulary differences are important, because the vocabulary that children have as they start first grade is not only a predictor of their reading skills at the end of the first grade, but also of their reading comprehension skills on through high school.<sup>86</sup> Moreover, it is not just that high SES children generally have larger vocabularies than low SES youngsters on which to draw when they read a textbook in, say, the fourth grade; they also have larger stores of knowledge on many topics related to understanding their school work that were partly acquired while acquiring the larger vocabularies.<sup>87</sup>

Specifically with respect to Hispanic children, the Task Force's study of data on the infants being tracked in the ECLS-B found that, during the first year of children's lives, there are parenting differences related to literacy development between Hispanics and Whites. The initial assessment of the sample of children in the ECLS-B was undertaken when they were, on average, about nine months old. At that point, the White mothers were more likely than the Hispanic mothers to tell their children stories, to sing to them, and to read to them. These differences were related mainly to differences in SES— a much higher percentage of Hispanic mothers than of White mothers were from low SES circumstance. However, there also were some differences across social class lines.<sup>88</sup>

Other research also has found that some differences in the percentages of Hispanic and White mothers who read to their children exist at most SES levels. Research indicates that these differences are fairly large between White mothers and Hispanic mothers who do not speak English as their primary language, but small when the Hispanic mothers do speak English. One study found that, among mothers with less than a high school diploma, only 13% of the White mothers reported never reading to their children, while this was the case for 21% of the Hispanic mothers who spoke English at home and for 48% of the Hispanic mothers who did not speak English. Similarly, among mothers with a bachelor's degree or more, only 5% of the White mothers did not read to their children, while this was the case for 9% of the Hispanic mothers who spoke English at home and for 30% of the Hispanic mothers who did not speak English.<sup>89</sup>

The importance of these differences in the language and cognitive development of infants and toddlers has recently been documented in a study of about 2,600 low-income mothers and their children who participated in a randomized trial of 17 Early Head Start programs across the United States. Children whose mothers read books to them frequently and regularly from the time they were 14 months old showed greater language and cognitive development at 36 months than did children whose mothers did not read to them in this way. This was true for both children with English-speaking and Spanish-speaking mothers. But, the Spanish-speaking mothers were much less likely to engage in frequent book reading to their children than were the English-speaking mothers.<sup>90</sup>

Some researchers have estimated that these and related parenting differences account for between one-quarter and one-half of racial/ethnic readiness gaps at the start of kindergarten.<sup>91</sup> Clearly, these are consequential differences for Hispanic children.

## Parenting Patterns and Intergenerational Access to Formal Education

More research is needed on the parenting differences between Whites and Hispanics. However, a key factor likely affecting both their between- and within-social-class differences in parenting practices is the extent of their access to formal education across several generations.

Most of us recognize that parents with bachelor's, graduate, or professional degrees typically have much more schooling-derived knowledge and skills (what economists refer to as "human capital") than parents with a high school education or less.<sup>92</sup> Thus, the former have more human capital to use in various realms of their lives, such as on their jobs and in their family life, including in how they parent their children. In other words, children with parents who have extensive formal education are the beneficiaries of both large direct and indirect (intergenerational) school investments. They receive investments directly from the schools that they attend and indirectly from the schools attended by their parents, and possibly by their grandparents and great grandparents.<sup>93</sup>

This helps explain why it is extremely difficult for even well-resourced schools to help children from families that have had relatively little access to formal schooling to achieve academically at a level that approaches the average achievement of children from families with a great deal of formal education. It is virtually impossible to routinely get as much leverage from one generation of school investment as is typically provided by several generations of cumulative investment.<sup>94</sup>

This also helps explain why there are differences in human capital in families in which parents have similar amounts of higher education as measured by degrees, such as a bachelor's degree in engineering or in sociology. Although the evidence is limited, part of the answer seems to be that a higher percentage of Hispanic (and African American) parents than of Whites are the first in their families to have a college degree. On average, then, results of the higher education are different—that is, the typical White parent with a college degree has acquired more human capital than the typical Hispanic parent with a college degree. This would be expected, since, on average, the Whites were better prepared academically for college when they graduated from high school; and, subsequently, they were more likely to attend a competitive college or university and to earn higher grades in college.<sup>95</sup>

In addition, part of the difference may be related to macro societal dimensions of formal education. For instance, the longer that a society has had broad, deep, and complex literacy (and numeracy) dimensions in its economic, political, and social life that are supported by an extensive formal education system, the more ways literacy behaviors may be evident in the "mainstream" of that society. One example of this in the United States is the gradual emergence of the strong societal emphasis on the value of parents reading to their children. Over a long period of time, the behavior was modeled by successive generations of parents, and was reinforced by aspects of the mass media (for example, by children's TV shows such as *Mr. Rogers*), as well as by companies that market children's books and other educational materials and toys to a large middle class with the resources to buy them.<sup>96</sup>

Nevertheless, there is nothing immutable about current differences in literacy-related parenting practices between Hispanics and Whites, whether those differences are observed on a between- or within-social-class basis. With time and effort these differences undoubtedly can be eliminated, especially given Hispanic parents' strong commitment to education. Indeed, as was discussed earlier in this report, there is evidence of substantial intergenerational advancement among Hispanics over the past several

decades in terms of educational attainment and in academic achievement in the early elementary school years. As we have seen, ECLS-K data suggest that the within-class Hispanic-White differences in reading achievement in the K-5 years also are now of modest size.

Efforts over the past 40 years to provide substantial amounts of infant/toddler support, pre-K education, and parent education to low SES children and their parents are attempts to reduce—or compensate at least partially for—the large differences in intergenerationally-accumulated human capital that have emerged as a result of substantial differences over time in opportunities to learn via formal schooling. These efforts have often been explicitly concerned with making developmental investments in low SES children that are consistent with the types of developmental investments typically made by parents with a great deal of formal education.<sup>97</sup> Thus, the more youngsters in the current generation of Hispanic children in all social class segments receive high quality early childhood education, the more human capital they can be expected to accumulate during their educational careers. In turn, the larger the combined home and school investment is likely to be in their children’s development.

### **Efforts to Improve and Expand Early Childhood Education**

Since the mid-1980s there has been considerable effort devoted to expanding early educational opportunities at all levels. For example, although modest in size and scope and limited mainly to low SES children, the federal government’s Early Head Start Program has made important contributions to the development of more effective infant/toddler strategies. This work has included a significant number of Hispanics.

At the preschool level, there have been enormous efforts to expand and improve pre-K opportunities for low SES children, especially those from minority groups. Over the past decade, states have provided a great deal of the leadership in this area by expanding state-funded pre-K programs. Moreover, while priority has been given to expanding pre-K opportunities for low SES youngsters, some states have started universal pre-K programs. Over time, they have the potential to serve large numbers of middle class children.

Substantive efforts also have been dedicated to developing elementary and secondary education strategies, including for the K-3 years, which can help raise student achievement. These efforts have been focused heavily, albeit not exclusively, on developing strategies that can raise the achievement of at-risk low SES students, a group that is disproportionately Hispanic, African American and Native American. The No Child Left Behind legislation strongly reflects these interests.

Collectively, these efforts have added appreciably to the knowledge base on which educators can draw to improve school readiness and to raise the academic achievement of many students, including Hispanic students. Nonetheless, much remains to be learned about how to improve early childhood education for Hispanic and other children.

### **Promising Infant/Toddler Programs and Practices**

Although the infant/toddler period for children is very important from a school readiness standpoint, a relatively small number of infants and toddlers are served by programs explicitly designed, at least in part, to promote school readiness. However, the knowledgebase for providing such programs to more infants and toddlers, including Hispanics, is continuing to grow.

### *The Early Head Start Program*

The largest federal government program with a substantial education component for infants and toddlers is the previously noted Early Head Start Program. Established in the middle 1990s to serve low-income families, Early Head Start is operating in 700 locations across the country. They currently enroll about 62,000 families that have infants and toddlers. Early Head Start is designed to serve two generations in families—mothers and their young children up to three years of age. (Women can enter an Early Head Start program when they are pregnant.) There are three basic types of Early Head Start programs—those that are home-based (services are delivered exclusively in the home), those that are center-based, and those that offer both home-based and center-based services. Similar to Head Start, Early Head Start programs offer comprehensive services, including parent education, health care, and childcare.<sup>98</sup>

Early Head Start has been evaluated through a randomized trial involving 17 programs across the country. All three basic program types were included in the evaluation. Three thousand families participated in the randomized trial and about one-quarter of the mothers and children were Hispanic. The evaluation found small language and cognitive development benefits for the children by age three.<sup>v</sup> Programs that provided a combination of home- and center-based services were the most effective. Unsurprisingly, the programs that were fully implemented produced more positive outcomes than those that were only partially implemented.<sup>99</sup> These findings suggest that a large existing government program for infants and toddlers, such as Early Head Start, can make modest but valuable contributions to improving the school readiness of low SES children, including Hispanics.

### *The Carolina Abecedarian Project*

There is at least one model early childhood program, the Carolina Abecedarian Project, that has demonstrated that infant and toddler programs can make much larger developmental contributions, if such programs are joined with high quality pre-K programs and operate on a year-around basis.<sup>100</sup>

Abecedarian provided a year-around, five-day-per-week, full-day center-based program for its treatment group of low SES children from infancy to the start of kindergarten—five years. Subsequent support during the K-3 years also was provided for some participating children and their families. Although Abecedarian provided comprehensive services for the children, it gave high priority to nurturing cognitive and language development. Moreover, not only has Abecedarian been evaluated using a randomized trial, it has been documented as providing among the largest long-term academic and cognitive development benefits and educational attainment benefits of any model early childhood program. About 67% of the participants graduated from high school and 36% percent attended college. In contrast, 51% of the control group earned a high school degree and 13% attended college. Although the participants did not reach middle class achievement norms overall, the long-term gains were substantial.<sup>101</sup>

One of Abecedarian's major attributes was that its cognitive development efforts were heavily concerned with working directly with the children. Much more than most early childhood programs, Abecedarian was in a position to make that emphasis real: It had a teacher and an aid for every 12 chil-

<sup>v</sup> In statistical terms, they found an overall effect size of 0.10, which is one-tenth of a standard deviation.

dren, and worked with children for extensive amounts of time on a daily basis for several years. While promising, it should be noted that almost all of the children that participated in the test of Abecedarian were African American. The program has not been tested with a primarily low SES Hispanic population. However, it is noteworthy that another model intervention for an extremely high risk group (premature low-birth-weight infants) that drew heavily on Abecedarian's approach also has produced positive long-term results.<sup>102</sup>

### *Two-generation versus child-focused models*

Although Abecedarian emphasized working directly with children, other programs have given much greater attention to working with parents in the home and/or at centers. Some programs, such as Early Head Start, work extensively with both parents and their children. These are called "two-generation" models. Rigorous evaluations, including randomized trials, have found that, in general, family support programs tend to produce small cognitive and social development gains for children—gains that are smaller than those typically produced by programs that mainly work directly with children.<sup>103</sup> The results of the recent Early Head Start randomized trial are consistent with this pattern.

The small gains that typify programs with a strong family support orientation seem to be due to two things. First, working with parents is an indirect way to have an impact on children. Second, the amount of time that most family support programs can work with parents is usually much less than child-focused programs spend with the children.<sup>104</sup>

Nonetheless, family support programs have been able to produce benefits for children in several important areas, not just in cognitive and social development. For example, some programs with a home visitation component have been found to help reduce reported child abuse by low income teen mothers and to increase access to preventative medical care.<sup>105</sup>

There also is evidence that, when it is possible to work extensively with parents, the benefits for children are somewhat larger.<sup>106</sup> Extensive efforts can benefit parents educationally as well. A notable example for Hispanics is AVANCE, an organization that serves low income Hispanic mothers and their young children. In AVANCE's main program, the Parent Child Education Program, mothers come to an AVANCE center three hours each week throughout a school year to learn how to strengthen their parenting skills and to learn to use community services. Research indicates that many participating mothers earn a General Education Development (GED) diploma.<sup>107</sup>

To date, the evidence of school readiness and long-term educational benefits of programs for infants and toddlers and their families has been limited to low SES children and children with other risk factors, such as low birth weight. Because programs have not been designed for the purpose of promoting school readiness of middle class and/or high SES children, including Hispanics, little is known about what role such programs could play for that purpose. Similarly, there is little evidence available regarding what the most effective infant/toddler programs might be for the segment of Hispanic children in greatest need, those from low SES homes in which Spanish is the sole or primary language.

## Promising Pre-K Programs and Practices

Over the past two decades, there has been growing evidence from a few well designed, well executed, and rigorously evaluated model early childhood programs that high quality pre-K can make meaningful improvements in the school readiness of low SES children and help them have better long-term educational outcomes in school. This evidence has contributed to the expansion of the federal government's Head Start Program and to decisions by state governments to greatly expand state-funded pre-K programs. Moreover, initial results of evaluations of several state programs suggest that many children, including Hispanics, enjoy significant readiness benefits from participating in these programs. Yet, it will be some time before the long-term impacts of these large-scale programs can be determined. There also continue to be uncertainties about what the most effective pre-K approaches are for promoting language and literacy development among low SES children, including Hispanic youngsters who are English language learners. In addition, because Hispanic children continue to be heavily underrepresented among youngsters who attend pre-K programs, there is an urgent need for more effective strategies for increasing their enrollment in them.

### *Current evidence of long-term benefits of pre-K*

The two most influential model programs for preschoolers are the Carolina Abecedarian Project (discussed in the previous section) and the High/Scope Perry Preschool Program.<sup>108</sup> Both have been tested using randomized trials and both have tracked the children into adulthood. An operating program, the Chicago Child-Parent Center (CPC) Program, also has been influential, because it has conducted a longitudinal evaluation that has followed a large group of children into adulthood as well.<sup>109</sup>

Among the documented educational benefits of these three programs are higher academic achievement in school, less retention in grade, lower special education referral rates, higher rates of high school graduation, and higher rates of college attendance. Of the three, Abecedarian has shown the greatest capacity to raise participants' academic achievement on a long-term basis.<sup>110</sup> That is unsurprising, since the amount of time children participated in the Abecedarian program was much greater than the amount of time children participated in the other two programs. As noted earlier, Abecedarian provided a full-day, year-around center-based program for five years, from early infancy to the start of kindergarten, with some children getting additional support in the primary grades. Both the Perry Preschool and CPC provided a half-day program for three- and four-olds during the school year. CPC also provided support for some students during the primary grades.

In addition to the empirical evidence of long-term positive outcomes, cost-benefit analyses of these programs have been generally very positive.<sup>111</sup> As a result, the economic case for pre-K has understandably been, and continues to be, a major reason for supporting its expansion in policymaking and advocacy circles.<sup>112</sup>

Yet, as efforts to expand early childhood education for three- and four-year-olds intensified over the past decade, concerns have been raised about the difficulty of mounting large-scale government programs that have high quality features similar to the best model programs—that is, programs that have well-educated teachers, favorable teacher-child ratios, good on-going professional development, and well-resourced classrooms (for example, having a large number of children's books).<sup>113</sup> For the most part, government per capita investment in large operational preschool programs has been much lower than the amount spent per child in the high quality model programs. The largest government funded preschool program, Head Start, is probably the most visible case in point. Its investment per child has

always been much lower than the best model programs, as has been the case for most state-funded pre-K programs.<sup>114</sup> Questions also have been raised about the amount of time most children should attend pre-K, the long-term effectiveness of pre-K programs for a wide range of children, and the most effective strategies for promoting language development.

### *Key questions about pre-K*

At this point, evidence of long-term academic benefits of pre-K comes mainly from Abecedarian, Perry School, and CPC. However, the samples of children used to evaluate these three programs were not diverse in terms of their race/ethnicity and social class. In all three samples, a large majority of children were low SES African Americans. Hispanics were present in only the CPC sample.<sup>vi</sup> Furthermore, until relatively recently, there has not been an evaluation of Head Start that employed the most rigorous techniques, including a randomized trial. Also, most large state-funded pre-K programs are too new to have been evaluated on a long-term basis. Consequently, it is not currently possible to determine the long-term effectiveness of large government-funded pre-K programs for a wide range of children.

Similarly, it has been difficult for policymakers to determine what the most promising basic attributes of large-scale programs are likely to be for promoting children's school readiness for reading and overall literacy development (and for other academic areas, such as mathematics), while at the same time ensuring that their other developmental needs are met. Some of the most important questions concern the amount of time children should attend pre-K to obtain meaningful developmental benefits—including the extent to which the amount of time should vary among subpopulations.<sup>115</sup> For example, is it virtually essential that most low SES children attend full-day, year-around pre-K for two years in order to significantly increase the percentage of these youngsters that have the literacy-related knowledge and skills needed to succeed in school? Would a half-day program for four-year-olds be sufficient for most high SES children?

There also continue to be uncertainties about what the substance of pre-K programs should be for many children, including for many Hispanics. One of the most visible areas of uncertainty concerns the methods that should be used to facilitate language development and emergent literacy. While it has become increasingly evident, for instance, that much more attention needs to be given to developing the oral vocabularies of low SES children, it is far from clear how that can be done most effectively.<sup>116</sup> Two interrelated questions here are: (1) To what extent should there be relatively direct teaching of vocabulary and other literacy-related knowledge and skills? And, (2) To what extent should these skills be nurtured more informally, such as via structured forms of play?<sup>117</sup>

As discussed further later in this report, the uncertainties in this area are compounded for low SES Hispanic children from immigrant families who are English language learners. Since many of these children have parents with little relatively formal schooling (and associated limited Spanish literacy skills), this group has very challenging language development needs in both Spanish and English.<sup>118</sup>

There also are uncertainties about what the education should be for pre-K teachers. Many people have concluded from research on early childhood program effectiveness that pre-K teachers should have bachelor's degrees and be very knowledgeable about child development.<sup>119</sup> At the same time, there is not an evidence-based consensus on what the specifics of their bachelor's degree programs should be.

vi All the children in the treatment and control groups were low SES African Americans in the Perry School program test; 98% were low SES Black children in the Abecedarian test; and over nine in ten were African Americans in the test of the CPC. Hispanics were 5% of the nearly 1,600 children in the CPC evaluation.

Most of these uncertainties are likely to persist to some extent for many years to come. However, much more research-based information recently has become available in many of these areas, and considerably more should become available in the years ahead. Much of this growing body of evidence is being generated by evaluations of a number of state pre-K programs that have been recently established or expanded. Other information has been coming from the federal level, including from a major evaluation of Head Start that is employing a randomized trial.

Because there is substantial variation among state programs, many opportunities also have emerged to compare benefits of different amounts of pre-K and to experiment with different curricular and instructional approaches as well. For example, comparative evaluations recently have been undertaken of full- and half-day programs and one- and two-year programs. Moreover, many of these evaluations and strategy tests have included substantial numbers of Hispanic children. Thus, the amount of information is growing on “what works” for promoting developmental benefits for Hispanics in pre-K programs.

### *Emerging evidence from large government pre-K programs*

The initial results from the current Head Start randomized trial have produced evidence that Head Start programs, overall, do contribute to improvements in the school readiness of low SES children, including low SES Hispanic youngsters. However, the cognitive gains documented to date for participating children, including Hispanics, have generally been small in size and concentrated in the verbal area. For example, three-year-old Hispanics gained in letter recognition and vocabulary, but Hispanic four-year-olds did not experience similar gains. On average, the participating children in this evaluation of Head Start (including the Hispanics) were still well below national school readiness norms.<sup>120</sup>

In contrast, a recent rigorous evaluation of the public-school component of Oklahoma’s state pre-K program (which serves four-year-olds) has documented more substantial school readiness benefits for participating children.<sup>121</sup> The findings from this evaluation, which looked at children in pre-K programs in the Tulsa public schools, are very important. One reason is that Oklahoma is one of the few states with a universal pre-K program; and, a larger share of four-year-olds attends either a state- or federally-funded pre-K in Oklahoma than in any other state.<sup>122</sup> Another reason is that the evaluation has documented benefits for children for several racial/ethnic groups, including Hispanics. Moreover, the evaluation has found that both poor and non-poor children benefit from participating in the program. Substantial cognitive gains were documented on assessments of prereading, prewriting, and math reasoning skills. In “age-equivalent” terms, the participants had scores equal to those usually registered by children four to eight months older, depending on the skill area. Overall, the gains were not quite as large as the best model programs (Abecedarian and the Perry Preschool), but they were larger than typical average gains in large government programs.<sup>123</sup>

The authors of the evaluation of Oklahoma’s universal pre-K program have conjectured on why the readiness benefits of its program seem to be above average among state pre-K programs.<sup>124</sup> One possible reason is that Oklahoma is providing a higher quality program in terms of their teacher requirements and compensation. For example, the state has required that teachers in public pre-K programs have a bachelor’s degree and be certified in early childhood education. They also are paying their public pre-K teachers salaries that are the same as public school teachers in general, which is a substantial recruitment incentive in a field with notoriously low pay.

The authors also suggest that another reason may be that, based on their informal classroom observations, teachers in public school pre-K programs in Tulsa seem to be stressing academics more than is done in many other programs. This suggestion is consistent with the fact that some of the largest gains

were in such directly teachable prereading skills as letter-word recognition and spelling. Of course, it is also possible that some of the gains may represent only a moderate acceleration of the acquisition of basic skills that would have been acquired a year later in kindergarten.

At this point, the investment that Oklahoma is making in universal pre-K looks very promising, including for Hispanics. Moreover, early results from a recently launched evaluation of five state pre-K programs with strong structural features (including requiring teachers to have a bachelor's degree and early childhood certification) also appear promising in terms of gains in reading and math readiness.<sup>125</sup>

Yet, for both the Oklahoma evaluation and the five-state evaluation, the documented gains are currently short term in nature; the children have only been tracked for a year. It will be several more years before it can be determined whether the readiness benefits help large numbers of Hispanic and other children to be quite a bit more successful academically in school over time than would otherwise have been the case.

### *Emerging evidence from recent pre-K experiments and other studies*

As previously noted, it has been difficult to determine what the most promising basic attributes of large-scale pre-K programs should be in certain key areas, such as how much time children should attend, and how programs should make use of Spanish and English. Evidence is beginning to emerge that sheds some light on these questions.

For example, some findings recently have become available on the question of whether it is beneficial to attend two years of pre-K rather than one year. Researchers in New Jersey tested the relative school readiness benefits for low SES children, including low SES Hispanics, of attending a full-day pre-K program for either one year or for two years. An analysis of the vocabulary, print awareness, and math skills of entering kindergartners who had attended one year of pre-K and those who had attended two years of pre-K found that only in the area of vocabulary did two years of pre-K produce greater benefits than attending one year.<sup>126</sup>

In a related vein, a recent analysis of ECLS-K data found that children who start attending a center-based program by age three (but after age two) gain larger reading and math readiness benefits than do children who start at age four. Moreover, this study documented gains for both low SES and middle class children. It also found that providing universal access did little to close readiness gaps among children from different social classes.<sup>127</sup>

Some findings also are emerging about whether low SES children benefit more from attending full-day or half-day pre-K programs. Another recent study of pre-K explored this question for low SES children in a New Jersey community that is one-half Hispanic. Using a randomized trial, a group of four-year-old low SES children who attended a full-day (8-hour) pre-K were compared with a control group of youngsters who attended a half-day (2.5 to 3 hour) program. The children who had attended the full-day program performed much better in vocabulary and math skills at the end of kindergarten and continued to outperform the control group through the end of the first grade, including in reading comprehension and in math calculations. At that point the children with the full day pre-K were only moderately below national norms, while those in the control group remained far below the norms.<sup>128</sup>

The previously discussed ECLS-K analysis of children who attended center-based programs starting by age three or by age four provides further evidence in support of full-day programs for low SES children, including for Hispanics (all of whom were English-proficient in that study). Low SES children who at-

tended centers on a full-day basis had somewhat larger gains in reading and math than those who attended centers on a half-day basis. However, children from higher income families did not benefit more from full-day programs than they did from half-day ones.<sup>129</sup>

Another very important question in preschool education for Hispanic children from immigrant families has been how preschool programs should make use of Spanish and English. This, of course, has long been a major topic at the elementary school level, as educators, policymakers, and the general public have debated the effectiveness of bilingual education and English immersion approaches for English language learners. As will be discussed later in this report, there is a growing body of research at the elementary level, which suggests that immersion exclusively in English is less productive than approaches that make substantial use of the children’s primary language in addition to English. Some recent work at the preschool level offers further support for this conclusion, but much more strategy testing work needs to be done in this area.<sup>130</sup>

*Pressing need to expand pre-K access for Hispanics*

Apart from the need to improve the quality of pre-K programs available to Hispanics, it also is critically important to expand their access to pre-K as rapidly as possible. As Table 10 shows, while 59% of White and 66% of African American children ages 3-5 attended some form of center-based childcare or preschool program in 2005, only 43% of Hispanics do so. Moreover, the percentages for each group had changed very little over the previous 15 years. In 1991, they were, respectively, 39%, 54%, and 58%.<sup>131</sup>

Table 10

**Percentage of Children Ages 3-5 Who Attended Center-Based Early Childhood Care and Education Programs in 2005, by Race/Ethnicity and Economic Status**

Group	Economic Status of Children		
	All	Poor	Non-poor
Hispanic	43	36	48
White	59	45	61
African American	66	65	68

*Source: National Center for Education Statistics (2006). The Conditions of Education 2006. Washington, DC: U.S. Department of Education.*

As Table 10 also shows, attendance by Hispanics lagged well behind that of Whites and African Americans among both poor and non-poor children. Thus, Hispanics’ need for much greater access to preschool reaches across social class lines.

Although the reasons for the relatively low attendance of Hispanics have not been firmly established, several factors seem to be involved. One evidently is inadequate preschool capacity to meet demand in many Hispanic communities. The Task Force commissioned an analysis of the preschool supply-demand situation for Hispanics in two large urban areas, Los Angeles and Chicago.<sup>132</sup> It found an overall shortage of center-based preschool slots in Hispanic neighborhoods.<sup>133</sup>

In addition, a recent survey of Hispanic adults' views on preschool asked the respondents what they think accounts for the low enrollment rates of Hispanic children.<sup>134</sup> The two most cited reasons were: 1) Hispanic parents' lack of knowledge about program availability in their communities (one-third of the respondents held this view); and 2) the inability of Hispanic parents to afford to pay for preschool for their children (one-fifth gave this reason).

Because a large segment of Hispanic parents have limited knowledge of English, it would be expected that obtaining information about pre-K programs might be difficult for many. Also, the cost of pre-K programs is likely to be an obstacle for many middle class and lower middle class Hispanic families—just as it is for similar families from other groups. Such families have incomes that are too high to qualify for Head Start or other programs that target low SES children, but are too low for the families to have the discretionary income to pay for their children to attend a good pre-K program. These circumstances may help explain why a majority of the respondents to that survey said that government-funded pre-K should be available to all children, not just youngsters from low-income families.

The survey also identified another obstacle of potential importance: About one-eighth of the respondents believed that many parents do not have the documents required to enroll their children in preschool. The extent to which this is a real obstacle in many cases is unclear. However, because many Hispanic parents and some of their children are undocumented, an appreciable number may be reluctant to enroll their children in pre-K.

The U.S. Government Accountability Office (GAO) recently completed a study of child care and early childhood education for families with limited English proficiency that found evidence of many of these problems. Among the challenges the GAO identified for low income limited-English-proficient families, including Hispanics, were a lack of knowledge about program availability, a shortage of subsidized child care slots, language barriers in the application process and in communicating with child care providers, and a lack of transportation.<sup>135</sup>

Because there is not yet a full explanation for why Hispanics lag far behind African Americans and Whites in pre-K attendance, much more research and analysis is required in this area. Nonetheless, policymakers almost certainly will need to address the supply and affordability issues described here. Providing much better information about available pre-K opportunities to immigrant parents with limited English proficiency also will probably be necessary.<sup>136</sup>

### **Promising K-3 Programs and Practices**

Similar to the pre-K expansion movement, elementary school reform efforts over the past twenty years have been heavily concerned with improving outcomes for low SES children, including low SES Hispanics. These efforts have given high priority to improving K-3 outcomes, owing to the evidence that achievement patterns for most students are established in the early school years.<sup>137</sup> Such efforts have produced modest gains in achievement, but many children still are not proficient. Moreover, many low SES children experience a “summer learning loss.” The evidence suggests that summer programs and other efforts to expand formal education time during the school year would likely be helpful in minimizing this loss.

### *Reform movement has produced modest gains*

Because many factors contribute to learning outcomes, elementary school reformers have necessarily worked in many areas. Raising academic standards, developing better curricula and instructional strategies in several subjects, strengthening teacher education programs, lowering teacher/pupil ratios, and providing more decision-making authority at the school level are but a few examples. Attention has been given to these and other factors on an individual basis and in combination. They also have been pursued at many levels, including by the federal government, state governments, school districts, and individual schools.

The “whole school reform” or “comprehensive school reform” (CSR) movement is one of the more influential, empirically-oriented ways in which several factors are being addressed in combination at the school and district levels to raise achievement.<sup>138</sup> Although CSR approaches vary, a core idea of CSR is that many aspects of individual schools have to change in a systematic, integrated fashion if children—especially low SES youngsters—are to perform academically at markedly higher levels on a sustained basis. Consequently, many CSR initiatives work simultaneously to change curriculum and instruction in key subjects, such as reading and math; to strengthen school leadership and management; to improve student assessment; to strengthen staff development; and to expand parental involvement.<sup>139</sup>

CSR has much in common with the model preschool program design, testing, and evaluation work exemplified by Abecedarian and the Perry Preschool. Not only has CSR been concerned with empirically testing model programs designed to address a number of factors that influence achievement, the most effective CSR strategies provide benchmarks for elementary education reform similar to those that the best model preschool programs provide for the pre-K expansion movement.

Two distinctive aspects of the CSR movement are that many CSR models have been tested in a large number of schools and many also have sought to improve their practices on an ongoing basis over a long period of time.<sup>140</sup> Several CSR initiatives also have been conceived not only as ventures to develop more effective strategies for raising achievement, but also as mechanisms for helping many schools and school districts learn to use the strategies and to implement them as designed.<sup>141</sup> The heavy emphasis that some CSR programs give to technical assistance and support among participating schools is a distinctive contribution of this type of school reform.

Over the past decade, many CSR strategies have been evaluated—in some cases, numerous times.<sup>142</sup> Although the quality of the evaluations has been uneven, their sheer numbers have made it possible to begin to gauge the overall impact of CSR strategies and to identify the approaches that seem to be producing the largest achievement gains.

One of the most extensive and sophisticated efforts to date to assess CSR programs examined 213 evaluations of 29 CSR approaches.<sup>143</sup> That analysis found that, collectively, CSR strategies produce achievement gains, but the gains are generally small.<sup>vii</sup> Essentially, the average student in CSR schools was found to achieve at a higher level than 55% of the comparable students in the non-CSR schools in the comparison group. The analysis also found that only three CSR strategies have been able to demonstrate, through several rigorous evaluations,<sup>144</sup> that they have a capacity to produce considerably higher levels of achievement than the average for CSR strategies as a whole.<sup>145</sup>

vii In statistical terms, they found an overall effect size of 0.12, which is about one-eighth of a standard deviation. (This is about the same effect size documented in the recent randomized trial of 17 Early Head Start programs that was discussed earlier.)

Other studies also have concluded that achievement gains produced by CSR strategies—as well as by locally-devised school improvement programs—tend to be small, on average. For instance, one study found achievement gains in low performing schools to be small and variable. That study also found that the gains were often hard to maintain.<sup>146</sup>

Because no major studies of CSR strategies have assessed their value specifically for Hispanics, the Task Force commissioned the authors of the study of 29 CSR approaches to conduct an Hispanic-focused analysis. They found 12 CSR strategies with evaluations that allowed Hispanic outcomes to be assessed separately. The results for the 12 showed that, collectively, they produce small achievement gains for Hispanics—about the same size as the gains documented in the earlier study for all students. Only two programs—Core Knowledge and Success for All—had strong evaluation evidence regarding their impact on Hispanic achievement. In both cases, the achievement gains were moderate in size,<sup>viii</sup> but larger than the average gains for the 12 CSR programs as a group.<sup>147</sup>

In addition to their better outcomes, these two programs are distinguished by a strong literacy development focus that can be tailored in ways that are culturally and linguistically responsive to Hispanics. In the case of Core Knowledge, teachers in participating schools have materials designed to support instruction for second language learners. Success for All has a full Spanish bilingual version of its program called *Éxito Para Todos*. Thus, there are reading materials designed for Spanish instruction from pre-K through sixth grade.<sup>148</sup>

Success for All also is noteworthy because it gives high priority to helping low SES children become proficient readers by the end of third grade. Furthermore, evidence continues to accumulate that it raises reading achievement for many low SES children. Recently, a kindergarten through second grade (K-2) randomized trial of Success for All, involving a large number of schools from across the nation, found moderate-size reading benefits through the end of the second grade. About 10% of the students in the sample were Hispanic.<sup>149</sup>

These results are consistent with research on the benefits of one of the most intensive and effective approaches to helping children learn to read—one-on-one tutoring by expert tutors. The program with the most evidence of effectiveness is Reading Recovery, which provides 12 to 20 weeks of tutoring for first graders who are among the lowest achieving readers (usually those in the bottom 15 to 20%). A large number of studies have shown that Reading Recovery can help many children become competent readers.<sup>150</sup> Importantly, there is evidence that a Spanish version of Reading Recovery has produced positive results.<sup>151</sup>

### *Despite gains, many children still not proficient*

In some respects, Success for All illustrates the good news and the bad news for school improvement work focused on raising reading proficiency among low SES children, including Hispanics, during the primary grades. Its intensive efforts produce meaningful results; yet, many at-risk children still do not become proficient readers. (This also is the case with intensive tutoring programs such as Reading Recovery.) Moreover, there is little evidence that Success for All increases the percentage of low SES children who reach very high levels of reading proficiency. But, that is the case for the reading research base in general. Quite a bit is known about how to reduce the number of low achievers in reading, but little is evidently known about how to increase the number of high achievers—for example, students

viii The two programs had an effect size of about one-fifth of a standard deviation, compared with one-eighth for all 12 programs overall.

who demonstrate reading comprehension levels that would place them in the top 5%, 10%, or even 25% of students nationally on National Assessment of Educational Progress reading assessments of fourth, eighth, and twelfth graders.<sup>152</sup> This has consequences for Hispanics and African Americans, because they are heavily underrepresented among high academic achievers in reading (and in math, science and other subjects) from the time they start school.

In addition, with the heavy focus of school improvement efforts on low SES children, proven strategies for raising K-3 achievement have mainly demonstrated benefits for low SES youngsters. Strategies with solid evidence that they raise K-3 achievement of middle class or high SES children from any group, including Hispanics, in reading or other subjects are essentially nonexistent.<sup>153</sup> Again, this is consequential for Hispanics and African Americans, given their lower achievement compared with Whites among children from middle class and high SES families.

The lack of empirically demonstrated K-3 and other elementary school strategies for increasing the number of high achieving Hispanic and African American students and for raising the achievement of middle class and high SES students from these groups reflects a lack of attention to these issues over the years by funders of education research and development (R&D), especially the federal government, but also private foundations. Furthermore, there currently seems to be little pressure on funders to begin to address these issues in a major way. For example, they are not major topics in education research or school reform circles, despite the availability of national achievement data on these issues going back nearly four decades.<sup>154</sup>

In fairness to elementary school educators, there are a number of formidable obstacles to rapidly making large reductions in the differences in achievement among students from different social classes and racial/ethnic groups in the K-3 years. The large differences in school readiness described earlier in this report constitute one of the biggest obstacles. Another major challenge for the K-3 years has only recently begun to be addressed in a substantive matter—the growth in achievement gaps that take place during the summer, when school is not in session.<sup>155</sup>

### *More learning time may be key*

Since the late 1970s, research has established that much of the growth in achievement gaps in the K-3 period between low SES children and their middle class and high SES counterparts takes place during the summer, when school is not in session.<sup>156</sup> Low SES children experience “summer learning loss” in both reading and mathematics. In contrast, middle class and high SES children tend to make gains over the summer in reading, while their learning losses in math are smaller than those experienced by low SES youngsters.<sup>157</sup> These patterns seem to be related to differences in family resources that tend to produce school readiness gaps in the first place.<sup>158</sup>

The research base on summer programs indicates that time is one of the most important variables in efforts to improve outcomes for low SES children, including Hispanics. As has been discussed in this report, low SES youngsters, including low SES Hispanics, have less home-based time in their early years devoted to cognitive development of the types that are related to success in school than is the case for middle class and high SES children. One response is to try to use existing school time in a much more productive manner for low SES children than it is used for high SES children. A second response is to expand the amount of time that low SES children spend in high quality formal or quasi-formal educational settings.

Over the years, many summer programs have been launched for the purpose of raising achievement of

disadvantaged children, especially those who are having academic difficulty. Probably the most visible current use of summer programs in large urban school districts is to help reduce the number of children who do not pass tests required for promotion to the next grade.<sup>159</sup>

The weight of the evaluation evidence is that summer programs can raise achievement somewhat for both low SES and middle class students.<sup>160</sup> However, relatively few strategies have been evaluated rigorously, which means that there are uncertainties about the extent of their benefits.<sup>161</sup> This is true for the student population as a whole, including Hispanics.

In addition, many summer programs for low SES students are remedial, reflecting the previously noted desire to reduce the number of students who are retained in grade. Although some of these programs seem to be helping a number of students move on to the next grade, little is known about whether and how non-remedial summer programs in the K-3 years might provide academic benefits to low SES students who are average or above average achievers in school.<sup>162</sup>

Possibly most important, few summer programs have been designed to serve students for more than one year, even though many low SES youngsters are vulnerable to falling further behind over successive summers in the early years of school. Consequently, little has been learned about the extent to which low SES students might benefit academically from attending summer programs for several years in the K-3 period, or even throughout their elementary school years.<sup>163</sup>

Recently a major test was undertaken of a strategy for providing access to non-remedial summer programs over three successive years to low SES children in the K-3 period. The test took place in Baltimore, using the Teach Baltimore Summer Academy, which offers a seven-week, full-day, academically-oriented summer program for low SES children in that city. The program provides extensive reading and writing instruction as well as hands-on math and science projects (along with substantial recreational activities) to participating students. The test involved a randomized trial in which several hundred children from ten high-poverty schools were assigned either to the participant group or to the control group. Although the program was voluntary, two-thirds of the participating children attended the program for at least two summers and one-third attended for all three summers.<sup>164</sup>

To date, the reported results from the evaluation have focused on reading. As prior research would predict, the control group experienced reading losses during the summer. However, participants who attended the program regularly for at least two summers had substantial reading gains. In the fall of the third year, these children had gains relative to the control group equal to three-quarters of a grade level in vocabulary, four-fifths of a grade level in comprehension, and seven-tenths of a grade level in overall reading skills.<sup>165</sup> The vocabulary and reading comprehension outcomes are potentially quite valuable, owing to their importance for learning in the fourth grade and thereafter.

An important caveat to these findings is that only about half of the participating children attended the summer program regularly enough over two years to experience meaningful benefits. Still, the fact that half did regularly attend a voluntary multi-year program suggests that many low SES children are willing to spend much of their summers working to raise their achievement. This, coupled with the fact that substantial achievement gains were documented via a rigorous evaluation, is truly promising.

Because the sample of students in this study was heavily African American, it should be replicated with samples that are primarily low SES Hispanic children, including ELLs from immigrant families. Based on evaluations of some other summer programs that have included Hispanic children, it is reasonable to expect that well designed and executed multi-summer programs will be valuable for Hispanic youngsters.<sup>166</sup>

## Strategies to Accelerate Progress for English Language Learners

The evidence reviewed in this report indicates that some infant/toddler programs, pre-K approaches, and K-3 strategies can help improve the school readiness and subsequent school achievement of Hispanic children from low SES immigrant families. Nevertheless, more effective strategies are needed, especially with regard to promoting the language development of those who are ELLs. As was discussed earlier in this report, most of the 30% of the Hispanic children in the ECLS-K study who were not proficient enough in oral English to be given the English reading readiness assessment at the start of kindergarten were from low SES families. Moreover, by the end of the fifth grade, the English reading proficiency of these youngsters was lower than that of low SES children in general and their mathematics achievement was very low as well.

There is growing evidence that one way to further the educational progress of these youngsters would be to provide them with more extensive opportunities to learn in both English and Spanish during the early childhood years. However, much more R&D needs to be done to determine what the most effective approaches are for using both English and Spanish in early childhood education for these children. Moreover, to implement these approaches would require much larger numbers of teachers who speak both English and Spanish than are currently available.

### English-plus-Spanish Language Development Strategies

A continuing topic of public debate concerns whether and how Spanish, the primary language of many Hispanic youngsters, should be used in their formal education. Despite this debate, research provides strong support for the conclusion that Hispanic children who are English language learners generally do better academically, if they receive some form of English-plus-Spanish (EPS) education, rather than be taught only in English.<sup>167</sup> The evidence indicates that such strategies produce gains that, on average, are similar to those produced by the good pre-K and K-3 strategies discussed earlier.

EPS refers to a wide range of formal and informal approaches to using both English and Spanish in the classroom. An example of an informal approach would be classrooms in which instruction is mainly in English, but teachers routinely use Spanish extensively to clarify points or ask questions when the students' knowledge of English is too limited for the exchange. Students also would use varying amounts of both English and Spanish in their own conversations in the classroom. Transitional bilingual education is an example of a common formal approach to EPS education. With this approach, Hispanic ELLs are taught most subjects (math, science, etc.) in Spanish for two or three years while they are learning English.

Although the weight of the evidence now strongly favors EPS over English-only strategies, a national group of experts in second-language development recently concluded that insufficient evidence is available on most existing EPS approaches to determine which ones are the most effective for which students.<sup>168</sup> This is due, in part, to the fact that too few strategies have been sufficiently evaluated. Consequently, some experts have called for extensive testing of reading strategies for ELLs, including randomized trials of promising approaches, which would assess the benefits for participating students over several years.<sup>169</sup>

Evaluating the impact of a number of EPS strategies over a period of years is consistent with research that has found that it usually takes several years for ELLs to become highly proficient in academic Eng-

lish.<sup>170</sup> One reason is that it takes a long time for most young ELLs to acquire the extensive vocabularies and associated background knowledge in English that become increasingly important for reading comprehension after the third grade.<sup>171</sup>

It is in this area that language development challenges for young Hispanic ELLs from low SES immigrant families begin to “merge” with some of the most difficult literacy development challenges for English-speaking children from low SES families with U.S.-born parents. As was discussed earlier in this report, researchers have found that, on average, the oral vocabularies of children in such families are typically much smaller than those of their middle class and high SES counterparts; and, they tend to remain much smaller throughout the primary grades.<sup>172</sup> Consequently, many of these children are at great disadvantage by the end of the third grade, when reading comprehension has become more dependent on having a large operational vocabulary and related general knowledge. This is such a significant issue that a number of reading researchers are giving high priority to finding ways to promote greater oral vocabulary development in pre-K and the primary grades for low SES children whose primary language is English.<sup>173</sup> (This also is a reminder that the language or languages of instruction are only one component of a high quality learning environment for low SES Hispanic ELLs.)

Research is limited on the home-based Spanish language development opportunities of children in low SES Hispanic families in which the primary language of the home is Spanish. However, the available evidence suggests that they have some important similarities to the home-based English language development opportunities of children in low SES families in which the home language is English. As noted earlier, Spanish-speaking mothers with less than a high school degree read much less frequently to their young children than Spanish speaking mothers with college degrees, just as English-speaking mothers who have not completed high school read much less to their youngsters than English-speaking mothers who have graduated from college.<sup>174</sup> Thus, many Hispanic ELLs from low SES immigrant families may need to make a great deal of progress in oral vocabulary development in Spanish as well as in English during the early childhood years.

Encouragingly, there is evidence that progress in Spanish can facilitate progress in English and vice versa. For example, learning new words in the first language can facilitate learning the equivalent words in a second language; and, learning new words in the second language can help children learn the equivalent words in their first language. The same is true regarding learning other aspects of reading, such as when young children begin to learn letters.<sup>175</sup>

In fact, literacy development in Spanish and English has much in common. This helps explain why both the English and Spanish versions of Success for All focus on helping children develop a set of core reading knowledge and skills in the primary grades that will enable them to have solid reading comprehension capacities in subsequent years of school. For example, both versions are concerned with developing phonemic awareness, word decoding skills, reading fluency, vocabulary, and reading comprehension strategies.<sup>ix</sup>

Also, the dual language immersion approach to EPS education seems to show promise, in part, because it provides extensive language development and subject area knowledge development opportunities in both the first and second languages on an ongoing basis. With this approach, teachers teach exclusively in each language on an alternating basis. Available evidence suggests that, done well,

ix Phonemic awareness refers to the ability to hear, identify, and manipulate individual sounds in spoken words. Decoding skills refer to the knowledge of relationships between letters and sounds that readers use to pronounce a word that they don't know. Fluency refers to readers' ability to know many words by sight, which is necessary in order to read quickly and efficiently.

dual language immersion can provide developmental opportunities in both languages that are mutually reinforcing.<sup>176</sup>

It also is important to recognize that improving strategies for helping low SES Hispanic ELLs develop their English and Spanish skills could benefit many middle class and even high SES Hispanic children from immigrant families in which Spanish is the primary language of the home. Becoming proficient in academic English takes time to develop, even for those with access to higher levels of human capital in their homes. Although these youngsters are generally better positioned to master English than their counterparts from low SES immigrant families, it can still be difficult for them.<sup>177</sup>

Since it takes a long time for most ELLs to become proficient enough in English to learn academically challenging material in English, EPS programs in elementary schools will typically need to operate for several years. Similarly, because it seems likely that two-year pre-K programs have more potential than one-year programs to make substantive contributions to Hispanic ELLs development in English and Spanish, design and evaluation efforts for one- and two-year programs serving these children need to give a great deal of attention to this issue. Also, the large number of Hispanic ELLs from low SES immigrant families raises the question of how infant/toddler programs can be improved in ways that would enable them to have a major impact on the early Spanish (and possibly English) language development of these children.

### **Preparing Teachers for Hispanic English Language Learners**

Regardless of what specific EPS approaches to instruction are found to be most effective in the future, providing such programs on a much wider basis will require a great many teachers who are proficient in Spanish. In fact, even in preschools and elementary schools that do not use EPS strategies, having more teachers who speak Spanish would be extremely valuable for communicating with Hispanic ELL students in the classroom and with many of their parents as well.

How could a much larger supply of Spanish-speaking teachers be secured? Multiple strategies probably will be needed. One approach would be to pursue policies designed to encourage more Spanish-speaking Hispanic college students to choose early childhood and elementary education as a career. Another approach would be to pursue policies focused on increasing the number of English monolingual Whites, African Americans and others who are already teachers, or are preparing to become one, to learn Spanish.

A fairly traditional policy approach by state governments focused on increasing the number of Spanish-speaking Hispanic teachers would be to establish substantial college scholarship or loan-forgiveness programs that would be provided to Spanish-proficient college students who were prepared to commit to several years as a teacher. If a relatively high level of Spanish proficiency were to be established to qualify for the program, it probably would attract mainly Hispanic candidates. If some other Spanish-proficient individuals were recruited as well, that would be a plus.

Irrespective of the specific strategy chosen in this area, however, there are several reasons why it probably would be difficult to produce a large, rapid increase in the number of Hispanic preschool and elementary school teachers, assuming that those individuals possess at least a bachelor's degree. First, Hispanics are already overrepresented among college students who teach immediately after college. For instance, among college graduates in 2000, nearly 19% of Hispanics reported teaching at the elemen-

tary or secondary level in the year following graduation, compared to 12% of Whites, 13% of African Americans, 2% of Asian Americans, and 7% of Native Americans.<sup>178</sup>

Second, teaching is an overwhelmingly female profession. About 98% of preschool and kindergarten teachers and 79% of all elementary school and middle school teachers are women.<sup>179</sup> Thus, barring a major increase in male interest in early childhood education teaching careers, growth would have to come mainly from women.

Third, low pay is an obstacle to recruitment, especially for positions in preschool and infant/toddler programs. Center-based pre-K educators (teachers and administrators) earn only about \$10 per hour, a little over half the \$19 per hour earned by all women college graduates. They also are much less likely to have health benefits.<sup>180</sup> On the positive side, growth in publicly-funded, public-school-run pre-K programs may be mitigating the pay and benefits problem to some extent in some states, because teaching positions in them tend to have the same pay scales as K-12 public school teachers. Nonetheless, despite the increase in school-based pre-K in recent years, the percentage of center-based preschool teachers and administrators nationally with at least a bachelor's degree is currently only about 30%—down from 43% in the mid-1980s. Low pay may be a big factor in this drop.<sup>181</sup>

Fourth, Hispanics continue to be heavily underrepresented among the nation's high school graduates and college students. For example, in 2003-2004, of the 1,399,542 bachelor's degrees awarded by U.S. colleges and universities, not quite 7%—94,644—were earned by Hispanics. Moreover, Hispanics earned only 4,792 of the 106,278 degrees in education, less than 5% of the total. Of course, it is true that the number and share of all bachelor's degrees earned by Hispanics have been growing. In 1993-1994, Hispanics earned just 54,230 bachelor's degrees, a little less than 5% of the 1,169,275 awarded nationally.<sup>182</sup> However, the increase from 5% to 7% in the share of bachelor's degrees that took place in that 10-year interval did not come close to matching the growth in the Hispanic share of young children in the United States: The percentage of babies with a Hispanic mother grew from 17% in 1994 to 23% 2004.<sup>183</sup> Moreover, in 2004, only about 6% of the nation's teachers were Hispanic.<sup>184</sup>

While there should be greater efforts to increase the number of Spanish-speaking Hispanic teachers, these circumstances suggest that it could be difficult in the years ahead for the Hispanic share of teachers with bachelor's degrees to keep pace with the increase in the Hispanic share of the nation's young children.<sup>185</sup> Therefore efforts also should be made to increase substantially the number of White, African American, and other monolingual English-speaking teachers who become proficient in Spanish.

The major technical challenges in pursuit of that objective seem to be logistical, as intensive language programs already exist that enable individuals to become proficient in a second language. For example, the Foreign Service Institute of the U.S. Department of State has intensive programs through which individuals can become proficient in speaking, reading and writing languages closely related to English, including Spanish. Those programs require individuals to spend 575 to 600 hours in class on a 25-hour-per-week basis. In addition, students are expected to study another 3 to 4 hours per day.<sup>186</sup> To put this in perspective, a year of language coursework at most colleges and universities involves about 180 hours of class time (3 to 5 hours per week) as well as time spent on homework.<sup>187</sup> Since language requirements in most degree programs are typically only a few courses, it is understandable that those requirements are often not sufficient for students to reach proficiency in speaking, reading and writing.

The main policy challenge associated with this approach is likely to be how to pay for the ongoing costs of providing intensive language training to a large number of individuals. It does not seem feasible to require undergraduates interested in careers in early childhood education to spend extra time in college, at their own expense, to complete intensive language training in Spanish. Similarly, it also does not seem feasible to ask current practicing early childhood educators to enroll in intensive Spanish programs (that might take two or three summers to complete) at their own expense. Thus, most of the costs would have to be underwritten by state governments (possibly with some federal assistance).

Another complexity in the teacher arena is that in many elementary schools and pre-K programs there is great diversity in the national origins and primary languages of the ELL students. In those circumstances, it often is not feasible to use EPS approaches. Instead, the best course may be to make extensive use of teaching specialists who are experts in strategies that can help students become proficient in a second language.<sup>188</sup> For example, research is beginning to identify areas in which ELLs may require modifications and accommodations in instructional practices, if they are to maximize their progress.<sup>189</sup> Having second language acquisition specialists available in school districts to provide ongoing training and advice to K-3 teachers would be one possible approach.

Beyond the question of how to increase the number of teachers who speak Spanish or are skilled in using strategies for helping students learn a second language is the challenge of increasing the number of teachers who are knowledgeable about the cultures of the children that they serve. Although taking a course or two on this topic in a teacher education program can be of some help, this is an area in which the most valuable learning opportunities probably would come once individuals have entered the profession, especially when students from several cultures are present in their classrooms and schools. Yet, resources for formal professional development tend to be limited.

## **Summary of Major Findings of the Task Force**

The Task Force's findings regarding expanding and improving early childhood education for Hispanics fall into four broad categories: 1) the educational attainment and academic achievement patterns of the diverse Hispanic population; 2) the foundations of Hispanic school readiness and academic performance; 3) the capacity of current infant/toddler programs, pre-K, and K-3 education to improve Hispanic school readiness and academic achievement; and 4) the research and development required to strengthen early childhood education for Hispanics.

### **Hispanic Educational Attainment and Achievement Patterns**

Hispanics have made substantial gains on an intergenerational basis over the past several decades, both in terms of educational attainment and academic achievement. Nationally, U.S.-born Hispanics now have much higher educational attainment (that is, more years of formal schooling) than do Hispanic immigrants. For example, California data show that high school completion and college graduation rates are higher among third generation Mexican Americans than among first and second generation Mexican Americans. Similarly with respect to academic achievement, national data for Mexican Americans show that third generation children have higher levels of school readiness and higher levels of reading

and math achievement in the K-5 years than first and second generation children. Yet, even among third generation Mexican Americans, substantial gaps with Whites persist in high school graduation and college graduation rates. They also lag behind Whites on measures of school readiness at the start of kindergarten and on measures of academic achievement on the elementary level.

Overall, Hispanics are overrepresented among low achieving students and underrepresented among high achievers on the elementary and secondary levels in the United States. The achievement of Hispanic students also is far below that of students from most other industrialized nations. Nonetheless, there is considerable diversity in achievement patterns among Hispanics of different national/regional origin groups. Some Hispanic national/regional origin groups, including those of South American and Cuban descent, have achievement levels during elementary school that are close to White norms. Other groups, including the largest—Mexican Americans, are far below White achievement levels. This diversity in achievement is heavily related to social class differences among Hispanic groups.

Social class differences also are the main source Hispanic-White readiness and achievement gaps. Because Hispanic children are disproportionately from low SES circumstances, high priority needs to be given to improving the school readiness and K-3 achievement of this very large segment of children. At the same time, because Hispanics tend to have somewhat lower achievement than Whites at most social class levels, the need to raise achievement among Hispanics cuts across social class lines.

The most urgent need is to improve school readiness and achievement among the very large number of low SES Hispanic children from immigrant families. Many of these children speak little or no English when they start kindergarten and subsequently achieve at very low levels in both reading and math during the early years of schooling.

### **Foundations of Hispanic School Readiness and Achievement**

For all youngsters, the foundations for school readiness and academic performance begin to be established very early in their lives—in the infant/toddler period. Regular reading to toddlers contributes to their language and cognitive development levels at age three. Language development, including in oral vocabulary, during the infant/toddler years, influences achievement in the primary grades and beyond.

Early language development opportunities vary a great deal by social class, and in particular are strongly related to the amount of formal schooling that the parents have had. On average, parents with college degrees have much more formal schooling-acquired human capital available to invest in their children in the early childhood years than is the case for parents who have not graduated from high school. Although these human capital differences initially have impacts in the infant/toddler period, they continue to contribute to differences in developmental opportunities throughout the early childhood years. This is evidenced by the fact that, in the K-3 years, the achievement gaps among children from different social classes grow larger during the summer months when school is not in session.

There are large differences in language development opportunities between young Hispanic and White children that contribute to their differences in school readiness. Studies indicate that, compared with White mothers, Hispanic mothers are less likely to talk, sing, and/or read to their infants. They also are much less likely to read to their toddlers. These differences are substantially related to the much higher percentage of Hispanic children from low SES families, especially low SES families in which the mother has little formal schooling.

## Capacity of Early Childhood Education to Promote Readiness and Achievement

Considerable evidence now supports the conclusion that high quality infant/toddler programs, pre-K programs, and K-3 schooling can contribute to meaningfully higher levels of school readiness and school achievement among low SES students, including low SES Hispanics. However, the gains produced by the most effective strategies have generally been of modest size and, therefore, have been unable to eliminate gaps between low SES children and their middle class and high SES counterparts. Most of the documented benefits have been to reduce the number of low achievers. Little or no high achievement impact has been documented.

In the case of existing infant/toddler programs, the documented language development benefits for low SES children have been valuable, albeit small. This general pattern has been true for low SES Hispanic children as well.

Initial research findings suggest that state-funded pre-K programs are contributing to school readiness gains for non-poor as well as poor children. These benefits have been found for all racial/ethnic groups, including Hispanics. But, evidence is not yet available on whether these state programs produce long-term achievement benefits for either poor or non-poor youngsters. Evidence of long-term benefits is still limited mainly to model pre-K programs that have targeted low SES children.

Despite the readiness benefits of high quality pre-K, both poor and non-poor Hispanics have long been significantly underrepresented among children who attend center-based programs. Thus, greatly expanding Hispanic access to high quality pre-K is imperative. Some factors that may be contributing to the low participation of Hispanics in pre-K include inadequate supply of pre-K slots in many Hispanic communities, lack of affordable pre-K programs, lack of knowledge among Hispanic parents about the availability of programs, and the undocumented status of some Hispanic parents and some of their children.

At the K-3 level, evidence is growing that the most effective school reform strategies for low SES Hispanic students have a strong literacy development focus and are responsive to their culture and/or employ an English-plus-Spanish form of instruction when the children are English language learners. This is consistent with research showing that Hispanic ELLs make more academic progress when they are provided with some form of EPS education, rather than immersed exclusively in English.

Even the most effective K-3 strategies are unable to overcome the expansion of achievement gaps during the summer months between low SES children and middle class and high SES youngsters. However, recent experimentation with multi-year summer programs during the primary grades has produced promising achievement benefits for some low SES students. This approach has not yet been tested extensively with Hispanics.

There is a shortage of Spanish speaking, culturally knowledgeable pre-K and K-3 teachers. A similar shortage exists of teachers who are experts in strategies for helping students master a second language. These are now pressing teacher training and workforce force issues from national, state, and local perspectives.

## **R&D Needed to Provide Better Early Childhood Education for Hispanics.**

Owing to the large readiness and achievement gaps between Hispanics and Whites coupled with the limited capacity of existing early childhood education programs and strategies to close these gaps, there is an enormous need to expand R&D directed at improving early childhood education. For instance, because the infant/toddler years are very important developmentally to children's later academic performance in school, there is a clear need to design, test, and evaluate new or modified strategies concerned with promoting greater language development for low SES children, including low SES Hispanic ELLs.

In addition, since evidence of educational benefits of large, state-funded pre-K programs is still short-term in nature for both poor and non-poor children, including Hispanics, rigorous long-term evaluations need to be conducted of several state programs. High quality long-term evaluations also are needed for Head Start. These evaluations should track students at least through elementary school. Ideally, they should track them through high school.

There is a parallel need to conduct more tests of alternative approaches to pre-K that could inform efforts to improve large government-funded pre-K programs over time. Importantly, additional work is required to determine more precisely what the relative benefits are for low SES Hispanic and other children of attending one or two years of pre-K, including programs that are full-day and half-day—and what the most effective approaches are for using the time available. For low SES Hispanic ELLs, there is an especially pressing need to determine how best to use the time to foster greater language development in Spanish and English.

At the K-3 level, there is a similar need to determine the most effective approaches to English-plus-Spanish strategies. Multi-year summer programs during the K-3 years also need to be tested with low SES Hispanic youngsters, including those who are ELLs and those who speak English as their first language.

Infant/toddler, pre-K, and K-3 strategies have not been designed specifically to promote greater language development among middle class and high SES Hispanic children—or for such children from other racial/ethnic groups. Owing to the Hispanic-White readiness and achievement gaps that exist at these SES levels, and the parallel Black-White gaps, there is a need for extensive strategy design, testing, and evaluation in this area as well across the early childhood years.

Finally, owing to the shortage of Spanish-speaking, culturally knowledgeable teachers and teachers who are experts in strategies for helping students master a second language, there is a need to design and test strategies for increasing the supply of such teachers. This is the case not only in states with large, longstanding Hispanic populations, but also in states where a significant Hispanic presence has emerged more recently.

## Recommendations for Action

The case for mounting a much larger effort to expand and improve early childhood education for Hispanics is both compelling and urgent; and there also is good reason to expect such an effort to produce positive results. The key to this challenge is to make much better and more extensive use of the effective early childhood education opportunities that are currently available, while at the same time taking steps to develop better approaches over time.

Realistically, it will take a generation to build a much more robust early childhood education system for the nation's young, including young Hispanics. Major expansions of—or changes in—early childhood systems take years to execute, as efforts by states to develop extensive pre-K programs over the past decade have demonstrated. It can take 10 to 15 years to design, test, and longitudinally evaluate a new or significantly modified K-3, pre-K, or infant/toddler strategy. Moreover, it should be expected that new strategies that show benefits will often need to be improved—which can add years more to the development process. Thus, the Task Force has formulated its recommendations using a 5- to 20-year time horizon.

In addition, extensive public and private action will be required. Thus, the Task Force's recommendations are directed to five sectors and groups that are playing, or could play, central roles in expanding or improving early childhood education for Hispanics over the next two decades—state governments, the federal government, private grantmaking foundations, Hispanic organizations with a major interest in improving educational outcomes for Hispanic youngsters, and education researchers.

The Task Force's recommendations focus primarily on: 1) increasing Hispanic children's access to infant/toddler programs, pre-K programs, and summer programs during the early elementary years, giving high priority to Hispanic children from low socioeconomic circumstances and who are English language learners in immigrant families; 2) increasing the number of Spanish-speaking teachers and language acquisition specialists; and 3) increasing efforts to design, test, and evaluate infant/toddler, pre-K, and early elementary school language and literacy development strategies for Hispanics, with emphasis on low socioeconomic Hispanics from Spanish-speaking homes.

### State Governments

Owing to the major constitutional responsibilities that states have for educating the nation's children, the Task Force's recommends that state governments:

*Expand and increase infant/toddler programs in their states that are serving, or have the potential to serve, large numbers of Hispanic children and their parents.*

Although many states are currently focused heavily on expanding their state-funded pre-K programs, many children from low SES circumstances, including Hispanic youngsters who are also ELLs, would benefit from access to a high quality infant/toddler program. Particular attention should be given to ensuring that these programs are available in Hispanic communities and that they nurture the children's language development.

*Continue to expand their state-funded pre-K initiatives, with the objective of creating voluntary universal pre-K systems in most states within the next 10 to 20 years.*

The goal of universality should be for both three- and four-year-olds. Universality is important for Hispanics and for African Americans, because they lag Whites on measures of school readiness at all SES levels. However, states should be prepared to offer more time-extensive universal pre-K (such as year-around programs) to low SES youngsters, owing to their greater developmental needs. In addition, while universality should be the ultimate goal, in states where financial resources are scarce, priority should be given to providing pre-K for all low SES children. Careful attention should be given to ensuring that pre-K expansion efforts respond to supply needs in communities with large numbers of low SES Hispanics, including ELLs from immigrant families.

*Support efforts to provide information to Hispanic parents on the availability of pre-K programs in their communities.*

Efforts to provide information on pre-K programs should target both English- and Spanish-speaking parents.<sup>190</sup> They also should provide this information through multiple sources, such as public schools and community organizations. These efforts should include information on other valuable educational services, such as summer program opportunities during the K-3 years for the children and opportunities for the parents to enhance their parenting skills, to learn English, and to pursue additional education (such as a high school diploma).

*Provide school districts in their states with resources to fund multi-year summer programs for their low SES students to attend on a voluntary basis.*

The purpose of these summer programs would be to reduce growth in achievement gaps that tends to occur between low and high SES students in the summer months. The programs would be concerned with improving achievement for all low SES youngsters, including average and above average performers. (These programs would be in addition to those that districts already offer their lowest achieving students as a means to help these youngsters reach at least minimal preparation levels for the next grade.) The term “summer programs” rather than “summer schools” is used, because the emphasis would be on non-graded intellectual development opportunities designed to be similar to those that high SES families may often provide in their homes or through supplementary education programs that they pay to have their children attend during the summer.<sup>191</sup> In the initial decade of these programs, heavy emphasis should be on designing, testing, and evaluating strategies in an effort to determine what approaches are most effective, especially for low SES Hispanic students, including those who are native English speakers and those who are ELLs.

*Initiate programs to increase: 1) the number of pre-K and K-3 teachers in their states who are proficient in English and Spanish; and 2) the number of pre-K and K-3 teaching specialists in second language acquisition.*

Programs to increase the number of English- and Spanish-proficient teachers should use strategies proven to produce proficiency, such as the intensive programs run by the Foreign Service Institute of the U.S. Department of State. Initially, these programs should be tested with at least two target groups: practicing K-3 and pre-K teachers who work with large numbers of low SES Hispanic ELL students and undergraduates who are planning to become teachers. States should pay the full cost of the training for those who commit to teaching a specified number of years following completion of the program. States also should experiment with financial aid programs designed to recruit more Spanish-speaking undergraduates, including from Hispanic groups, into careers in early childhood education. The initial programs to increase the number of teaching specialists in second language acquisition should target experienced teachers who would become specialists charged with helping classroom teachers in schools and preschools with substantial numbers of ELL students to be more responsive to those students' academic needs.

*Support pay and benefit levels for pre-K teachers and administrators that are equal to those of public school teachers and administrators as a means of providing the economic incentives to recruit and maintain a well-educated, reasonably stable group of preschool professionals.*

To the extent that equal pay can most readily be provided in some states by giving priority to funding public school-system-based pre-K programs, states should be prepared to do so. Although it is possible that some school-system-based pre-K programs may be inclined to employ curricular and teaching approaches that are not always as developmentally appropriate as they should be, that concern should not necessarily limit using schools as a means of providing the requisite economic incentives for recruiting and maintaining a well-educated group of pre-K professionals. There are quality control challenges in both the public and private preschool sectors that require state oversight.<sup>192</sup>

*Establish information systems that would be used by school districts and state education departments to disaggregate their students into subpopulations defined simultaneously in terms of race/ethnicity, parent education level, family income, generational status (whether they are first, second, or third generation children), and primary language spoken in the home.*

The objective of establishing such information systems would be to enable each state education department and the districts within each state to monitor the progress of many subpopulations more effectively. The low achievement of low SES Hispanics, including ELLs from immigrant families, as well as the within-class achievement differences between Hispanics and Whites and between African Americans and Whites, requires a much more precise monitoring capacity than most districts and states typically possess. At a minimum, these information systems should track students from the start of kindergarten. For public school districts with pre-K programs, information should be gathered for the children when they begin pre-K.

## The Federal Government

Although the federal government provides only a small fraction of the funding for K-12 education in the United States each year, it is by far the major source of funds for education research and development. In addition, with its support of Head Start, Early Head Start, and other programs, the federal government has led the way over the past 40 years in providing preschool and infant/toddler services for disadvantaged children in the United States. Through its ongoing assessment programs and longitudinal and other studies, the federal government also has become the major source of information on how U.S. children and youth are developing and achieving educationally, and on factors contributing to these patterns. The Task Force recommends that, as a strengthening of these federal roles, the federal government:

*Undertake a substantial expansion of Head Start and Early Head Start that will help ensure that low SES Hispanic children have greater access to high quality infant / toddler and pre-K programs.*

Because it cannot be assumed that all the states will put state-funded pre-K programs in place that provide access to pre-K for all low SES children, the federal government should expand Head Start. In addition, because it may be some time before most states fund infant/toddler programs extensively for low SES children, the federal government should continue to play a leadership role in this area. These federal program expansion efforts should ensure that ample growth takes place in Hispanic communities in which many low SES Hispanics reside, including those who are from immigrant families in which the primary language is Spanish.

*Increase investments in efforts to design, test and evaluate infant / toddler, pre-K, and K-3 language and literacy development strategies for low SES Hispanics.*

These investments should be designed to develop more effective strategies not only for low SES Hispanics, but also for other low SES segments of American children that continue to lag academically. They should include funding extensive experimentation with the amount of time low SES Hispanic and other youngsters spend in these programs. High priority should be given to determining how best to build on the primary language of low SES Hispanic children from Spanish-speaking homes. Thus, there should be tests of various English-plus-Spanish strategies in the infant/toddler, pre-K and K-3 periods. Infant/toddler and preschool experiments should assess different combinations of full-day, year-around, and multi-year programs, with an emphasis on finding more effective ways to foster language development, without sacrificing social development and other purposes of early childhood education. These investments also should include testing summer program strategies in the K-3 years concerned with reducing or eliminating summer learning loss among low SES Hispanic and other low SES children. Investments should be made in efforts designed to develop ways to improve infant/toddler program, pre-K, and K-3 articulation.

It is essential that this work be long-term. In recent years, there has been an expansion of federal funding of strategy testing in some areas, but funding of specific tests often is limited to a few years. Much longer tests are often needed in order for individuals and organizations developing strategies to have time to modify them, to test them in more settings, and to follow students for several years. From a cost standpoint, it may be necessary to fund fewer strategy tests so that there is enough money to pay for more long-term testing and high quality evaluations with longitudinal components.

*Underwrite tests of programs designed to produce large increases in the number of: 1) English- and Spanish-proficient and culturally knowledgeable pre-K and K-3 teachers; and 2) pre-K and K-3 teaching specialists in second language acquisition.*

One approach would be for the federal government to award grants to develop such programs to several state governments or state universities in states with large and/or rapidly growing Hispanic populations.

*Create assessments of Spanish language proficiency and development for infants, toddlers, and preschool-age Hispanic children from immigrant families in which Spanish is the primary language of the home; and improve assessments of English proficiency for Hispanic ELLs at the pre-K and K-3 levels.*

In addition to creating and improving Spanish and English assessments for children, the federal government also should underwrite the development of assessments of the Spanish proficiency of Hispanic parents for whom Spanish is their primary language. The student assessments are needed to help develop infant/toddler, pre-K, and K-3 strategies that have stronger English and Spanish language development capabilities for low SES Hispanic ELL youngsters. They also should help ensure that educators are able to assess more accurately the language development skills, progress, and needs of Hispanic ELLs in the K-3 years. The parent assessments are needed to help develop stronger parent education strategies.

*Expand investment in longitudinal studies of young children, such as the ECLS-K and the ECLS-B, in a manner that allows for much more extensive analysis of Hispanics and other groups that are achieving below U.S. norms.*

Well designed longitudinal studies provide enormous insights into the developmental trajectories of Hispanic and other youngsters, as well as into factors that contribute to those trajectories. Yet, neither the ECLS-K nor the ECLS-B samples included a sufficiently large group of Hispanics to disaggregate Hispanics fully by national origin, SES, nativity, generational status, and primary language spoken in the home. They also did not gather information on the proficiency of ELLs in their primary languages. Measures of parental human capital and other resources also were relatively limited. Future longitudinal studies should address these needs.

*Expand U.S. participation in international assessments of student achievement in a manner that would allow much more detailed monitoring of how different segments of the nation's population compare to students in other industrialized nations.*

Particular emphasis should be given to increasing the capacity of international assessments to monitor the relative academic performance of Hispanics and other segments of the U.S. student population, including African Americans, which are performing well below U.S. achievement norms and those of other industrialized nations. For Hispanics, this would require over sampling not only of Hispanics in general, but of several national/regional origin segments. Over sampling also would be required to monitor Hispanic patterns for first, second, and third generation Hispanics, those from all social class segments, and those who are ELLs.

## Private Foundations

It is unrealistic to expect the federal government to underwrite all or almost all of the long-term early childhood education strategy design, testing, and evaluation work that should be undertaken over the next 20 years. Owing to the multiple leadership changes and shifts in policy priorities that typically take place at the federal level in a 10- to 20-year period, the federal government may be able to provide only a fraction of the funds for the necessary long-term work. In addition, at least two areas may be very difficult for the federal government to address in a substantial fashion: (1) funding extensive tests of various English-plus-Spanish strategies, and (2) underwriting tests of strategies targeting middle class and high SES Hispanics and African Americans. The political debates over EPS education are a potentially limiting factor for federal investment in strategy development in that area. The high priority that meeting the needs of low SES children has long had in federal education support should, and probably will continue in the future. Thus, federal investment in strategy work that targets middle class and high SES children is likely to be limited, regardless of the children's race/ethnicity.

Historically, private foundations have played a small role relative to the federal government in funding education research and development. Nevertheless, foundations have made some very influential education R&D investments over the years, including in model preschool initiatives such as the High/Scope Perry Preschool. The Task Force believes that large, programmatic investments in early childhood strategy design, testing, and evaluation will need to be made by private foundations in the years ahead, if there is to be a much larger set of proven strategies a generation from now. Consequently, we recommend that several private foundations:

*Fund long-term efforts to design, test, and evaluate infant / toddler, pre-K, and K-3 language and literacy development strategies for Hispanics from all SES levels and from immigrant / nonimmigrant families.*

To ensure that substantial funding will be provided for tests of strategies designed to serve low SES Hispanic ELLs from immigrant families and middle class and high SES Hispanic children, some foundations should give these youngsters high priority. However, regardless of which segments of children are targeted by particular foundations, funding should be provided via formal grant programs designed to provide ten or more years of support for promising approaches in order to maximize the chances of determining if the strategies are able to contribute to meaningful improvements in readiness or achievement for target populations.<sup>193</sup>

*Work to create some new foundations that would specialize in funding in these areas, and thereby ensure that sustained investments in strategy development would be made over the long-term.*

One approach to creating two or three new specialized foundations would be for a few existing foundations to provide seed money to launch them. The seed money would be used over a 5- to 10-year period to establish the foundations, develop their program charters, and to engage in fundraising to create endowments. The community foundation model (which accumulates endowments from many wealthy donors) may offer the best chance of creating these new institutions. However, it also might be possible to persuade a few very wealthy individuals to provide most of the money needed to endow the new foundations.<sup>194</sup>

If a set of these specialized foundations could be established, it would ensure that substantive strategy development work could proceed for several decades, not just the next 20 years or so. Creating these new institutions would take a major effort, but foundations often have pursued difficult agendas with positive results. These new foundations would be chartered to support strategy development for other

groups that continue to lag academically, in addition to Hispanics. This would allow the new foundations to address African Americans and Native Americans at all SES levels.

### Hispanic Organizations

Many Hispanic organizations have long worked to improve educational opportunities for Hispanics, including expanding their access to high quality early childhood education, and they will continue to do so.<sup>195</sup> In the years ahead, however, they should broaden their leadership in several important respects, including: (1) working to improve early childhood education for Hispanic children from all SES levels (although high priority will need to continue to go to low SES Hispanic youngsters, including ELLs); (2) proposing specific early childhood education strategy development work that should be undertaken by the federal government and private foundations; and (3) selectively mounting improvement efforts that go beyond their existing in-house initiatives. Thus, the Task Force recommends that several Hispanic organizations:

*Jointly develop a set of recommendations for specific new or substantially modified approaches to infant/toddler programs, pre-K programs, and K-3 programs for Hispanics that should be tested with funding from the federal government and/or private foundations.*

Priority should be given to proposing approaches for promoting English and Spanish language literacy development among low SES Hispanic youngsters, while at the same time also identifying approaches that show promise of supporting higher levels of language development and achievement among middle class and high SES Hispanic children. This would require several Hispanic organizations to reach agreement about the need for more effective approaches in these areas than are currently available for various segments of Hispanic children. They also would need a working group of experts to develop strategy testing recommendations, such as what EPS approaches should be tested via a two-year, year-around pre-K program structure for low SES Hispanic ELLs; and, what kind of parent support program should be tested with middle class Hispanic parents (many of whom would be first generation middle class) that would be concerned with supporting much more extensive language and literacy development opportunities for their children across the 0-8 years. By offering specific strategy testing agendas to the federal government and private foundations through a common voice, the Hispanics organizations might significantly increase their ability to get a serious hearing from these audiences..

*Jointly develop detailed proposals for state governments for programs to increase the number of English- and Spanish-proficient early childhood educators.*

Developing realistic strategies to be tested would be a valuable service to the states (and possibly to the federal government as well). Similar to the previous recommendation, speaking with a common voice could increase the prospects that the proposed strategies would contribute to substantive state action.

*Become leaders in providing literacy development information, materials, and other support to Hispanic parents in all SES segments.*

Although significant work is being done to assist low SES parents, much more is needed for them, including for low SES parents who have little formal education and who speak only or mostly Spanish. In addition, no organization is set up to serve the growing number of middle class parents and the considerable number of high SES parents. Even though there is much evidence that it is difficult to mount effective programs for low SES parents that support their children's language and literacy development, there are positive examples.<sup>196</sup> In addition, many middle class and high SES parents seem likely to have

the knowledge and skills to make good use of strategies and materials that are designed with their children's needs in mind, and the financial resources to pay for at least some services in this area.

### Education Researchers

Should the federal government and/or some private foundations begin to invest much more—and more systematically—in the design, testing, and evaluation of infant/toddler, pre-K, and K-3 literacy and language development strategies for Hispanics, the individuals who will do most of the work are education researchers and practitioners. Experts from several fields (such as reading, second language acquisition, and parenting) would be needed to determine what should be tested and how over the medium- and long-term, in order to produce steady growth in the number of proven strategies for improving early childhood education outcomes for Hispanics. In many cases, this work would necessarily address needs of children from other racial/ethnic groups, since needs of groups overlap and children from different groups are commonly in the same infant/toddler programs, preschools, and elementary schools.

To stimulate interest and discussion of what a much expanded long-term early childhood education R&D agenda for the federal government and foundations should be, the Task Force recommends that, building on existing evidence, education researchers:

*Propose specific combinations of tests of infant / toddler, pre-K, and K-3 approaches to language development that would provide varying amounts and kinds of such opportunities for low SES children, including low SES Hispanics.*

In these proposed strategy tests, time would be a major variable. For example, the mix of proposed pre-K approaches to be tested might include one-year and two-year, half-day and full-day, and school-year and year-around pre-K programs. These proposed strategy tests also would engage central language development issues, such as how to provide low SES youngsters with greater access to vocabulary and general knowledge development of the kinds that are commonly available to high SES children. And, they would include different combinations of direct work with children and parents, as well as multiple tests of each approach that would be directed by different teams, so that there would not be overreliance on the work of one team or the results of one test. They would involve long-term evaluations and include time to modify promising approaches, so that the tests were of well-developed versions of the strategies. This work also would need to test strategies under circumstances that are not unusually positive in terms of the resources available. The objective would be to develop strategies that will be meaningfully better, on average, than current approaches in a range of early childhood education settings.

*Suggest a set of tests of English-plus-Spanish approaches for the infant / toddler, pre-K, and K-3 years that would be designed to provide much better information on their effectiveness and their feasibility of use.*

This set of tests would allow extensive testing of different transitional bilingual and dual immersion programs in different elementary school and pre-K settings. It also could involve testing in schools and pre-Ks that mainly serve low SES Hispanic children, including large numbers of ELLs; and it could include testing in schools and pre-Ks in which Hispanic ELLs are a significant group, but the overall student population is mainly English-speaking and diverse in terms of SES and race/ethnicity.

*Propose a set of tests of the use of second language acquisition specialists for schools and classrooms in which EPS strategies would not typically be appropriate.*

These tests would be undertaken in schools that have many languages or in which the group of Hispanic ELLs is small. There would be a need to test both the effectiveness of second language strategies in the hands of teachers who are well versed in them and the effectiveness of various ways in which specialists can help large numbers of teachers learn to use them.

*Suggest a set of tests of promising strategies, which would be designed to determine the kinds of variations in outcomes that should be expected with their use on a widespread basis over time.*

One purpose of this set of tests would be to determine if the benefits remain sufficiently robust across many settings for the approaches to be true “proven” strategies—ones that typical groups of educators could use effectively with a reasonable amount of training and ongoing support. Another purpose of the tests would be to identify ways in which the approaches would need to be modified to take into account variations in circumstances. An additional purpose would be to determine the types and extent of initial training and ongoing support that would be required to use the strategies effectively. Yet another purpose would be to develop a precise description of the benefits, so that there would be good understanding among educators, policymakers and other key parties about what the strategies can and cannot accomplish.



*“If our American way of life fails the child, it fails us all.”*

~ Pearl S. Buck

## NOTES

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- 8 Reardon, S.F., and Galindo, C. (2006). *Patterns of Hispanic Students' Math and English Literacy Test Scores*. Report to the National Task Force on Early Childhood Education for Hispanics.
- 9 Low SES children achieve at much lower levels academically than middle class and high SES children in industrialized and other nations that participate in international studies of achievement. See for example, Hampden-Thompson, G., and Johnston, J.S. (2006). "Variation in the Relationship Between Nonschool Factors and Student Achievement on International Assessments." *Statistics in Brief*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
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- 61 Although data for African Americans have not been presented here, their overall achievement patterns also are generally much lower than those of Whites and they have substantial within-class gaps with Whites as well. (The Black-White within-class gaps are generally considerably larger than Hispanic-White within-class gaps.) The full report by Reardon and Galindo (2006) is available on the Task Force website at: <http://www.ecehispanics.org>. The report includes extensive data on several racial/ethnic groups, including African Americans.
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# Para nuestros niños

National Task Force on Early Childhood Education for Hispanics

La Comisión Nacional para la Educación de la Niñez Hispana

National Task Force  
on Early Childhood  
Education for Hispanics

c/o Mary Lou Fulton  
College of Education  
Arizona State University  
PO Box 870211  
Tempe, AZ  
85287-0211

480.965.1315 v  
480.965.9144 f

[www.ecehispanic.org](http://www.ecehispanic.org)

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