

Hispanic Students' Educational Experiences and Opportunities During Kindergarten

A Report to the National Task Force on Early Childhood Education for Hispanics

Prepared by

Claudia Galindo
Johns Hopkins University

Sean F. Reardon
Stanford University

December, 2006

This report was funded by the National Task Force on Early Childhood Education for Hispanics, which is funded in turn by a grant from the Foundation for Child Development and additional support from the A.L. Mailman Family Foundation, the Marguerite Casey Foundation, the Peppercorn Foundation, and the Winthrop Rockefeller Foundation. Additional research support was provided to the first author by the AERA Research Grants Program and to the second author by the Carnegie Scholars Program of the Carnegie Corporation of New York. We thank Eugene García, L. Scott Miller, and members of the Task Force's Technical Advisory Committee for very helpful feedback and suggestions, and we thank Joe Robinson and Tara Beteille for exceedingly good research assistance. All errors remain our own.

Executive Summary

In this report we describe Hispanic kindergarteners' educational experiences and opportunities in six policy-relevant areas that may impact students' schooling outcomes: English proficiency, family background, learning environments at home, instructional environments in school, school characteristics, and teacher characteristics. Because Hispanics in the U.S. are not a homogenous group, we examine these characteristics both for Hispanics as a whole and for a number of Hispanic subgroups. We disaggregate Hispanic students based on their national/regional origin (Mexico, Puerto Rico, Cuba, South America, Central America, and other), immigrant generational status (first-generation, second-generation, and third-plus- generation), language used at home (only Spanish, predominantly Spanish, only English, and predominantly English), and socioeconomic status (by quintiles). Of course, these dimensions are not independent—Mexican and Central American students and first and second generation students are more likely to be poor and to come from homes where Spanish is the primary language used than are third generation students and Cuban and South American origin Hispanic students. Readers should be aware of these interdependences while reading this report.

In particular, we focus in the report on the experiences of a set of Hispanic students whose families are recent immigrants to the U.S. and/or who have low exposure to and skill in English. Such students are particularly at risk for school failure in the U.S. because of what might be termed contextual or linguistic disadvantages—disadvantages that arise because of the fact that their cultural expertise and language skills, however strong in their country of origin, are mismatched to their U.S. context. The majority of such students are first- and second-generation Mexican-origin students and students from Central American origins, groups who also have very low average levels of parental education and socioeconomic status, factors which compound the effects of contextual/linguistic disadvantages.

The report relies on data from a nationally-representative longitudinal study conducted by the National Center for Education Statistics – the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K). The ECLS-K contains information, gathered from parent, teacher, and principal surveys, on the home and school experiences of a nationally representative sample of more than 21,000 children who were enrolled in kindergarten in the fall of 1998, 4,000 of whom were of Hispanic origin. This large sample enables us to examine detailed patterns of educational experiences and opportunities of Hispanic students, disaggregated by national/regional origin, immigrant generation, socioeconomic status, and home language use. Throughout this report, we include information on native non-Hispanic White and native non-Hispanic Black students for comparison purposes.

One of the most consistent patterns of findings in this report is that several subsets of Hispanic students—particularly the contextually disadvantaged students and students from families with low socioeconomic status—experience substantially more disadvantaged educational environments along a number of dimensions than do other Hispanic students and non-Hispanic White students.

Among the most significant findings described in this report are the following:

- Overall, half of Hispanic kindergarteners are classified as language minority students and 30% are non-proficient in oral English. Among Hispanic subgroups, Mexican students with foreign-born parents, Central American students, students living in homes where Spanish is the only language spoken, and students in poverty show the highest percentages of language minority and non-English proficiency. In contrast, Puerto Rican and third-plus generation Mexican students are the least likely to be classified as language minority or non-English proficient students.
- Among Hispanic students, contextual/linguistic disadvantage is strongly related to socioeconomic disadvantage, creating a double disadvantage for first-and second generation Mexican origin students, Central American origin students, and students from homes where English is not generally spoken.
- Hispanic students' home environments vary substantially among Hispanic subgroups. Students who are contextually/linguistically and/or socioeconomically disadvantaged have, on average fewer educational resources (books, computers) in their homes, are less likely to have attended center-based child care, and are read to less often by their parents than are more advantaged Hispanic subgroups (South American- and Cuban-origin students, third-generation Mexican students, students from homes where English is the predominant language used). Parental educational expectations, however, are *highest* among the most disadvantaged groups—higher even than the expectations of non-Hispanic White parents, consistent with a pattern of “immigrant optimism” (Fuligni, 1997; Kao & Tienda, 1995).
- School characteristics vary significantly by race/ethnicity and among Hispanic subgroups. Overall, Hispanic students are more likely to be enrolled in public and bigger schools with a higher concentration of minority students and with more school climate problems than are non-Hispanic White students. Among Hispanic subgroups, socioeconomically and contextually/linguistically advantaged groups are more often enrolled in private schools, smaller schools, schools with lower percentages of minority and low-income students, and schools with fewer climate problems than are disadvantaged Hispanic subgroups.
- Hispanic students, on average, have teachers who are similar, in terms of advanced degrees, permanent certification, elementary certification, to the teachers of White students. However, Hispanic students' teachers typically are less experienced than those of non-Hispanic White students. As is true on other dimensions, Hispanic students from contextually/linguistically or socioeconomically disadvantaged families tend to have teachers who, on average, have lower levels of credentials, qualifications, and experience than more advantaged Hispanic subgroups.
- Overall, only a small percentage of Hispanic students have teachers with five or more years experience teaching in bilingual or ESL classes. Even among the contextually/linguistically disadvantaged subgroups of Hispanics, fewer than 25% of students have teachers with five or more years of bilingual education experience, and fewer than one-eighth of students have teachers with five or more years of ESL teaching experience.

Hispanic Students' Educational Experiences and Opportunities During Kindergarten

INTRODUCTION

The rapid growth of the Hispanic population in the United States is perhaps the most significant current demographic trend in the country. Between 1990 and 2000, the U.S. Hispanic population grew by 58%, to a total of 35 million. In 2000, Hispanics accounted for half of the foreign-born population and 12.5% of the total U.S. population. By 2025, Hispanics will account for one-quarter of the U.S. population (Guzman & McConnell, 2002; Martin & Midgley, 1999, 2003; Ramirez, 2004; U.S. Census Bureau, 2000). Even more dramatic has been the growth of the school-age Hispanic population. Now accounting for one-sixth of the school-age population, and over one-fifth of public elementary school enrollments, the number of Hispanic students has grown by 150% in the past 20 years (Inter-University Program for Latino Research, 2002).

Although the growing Hispanic presence in U.S. schools provides a broad set of opportunities for enriching the learning experiences of Hispanic and non-Hispanic children alike, the evidence of substantial achievement disparities between Hispanic and non-Hispanic White students (Reardon & Galindo, 2006, forthcoming) poses substantial challenges to schools and society. These disparities may be the result of differences in both educational opportunities and family background between White and Hispanic students. Many Hispanic students may be at risk of failing in schools because of language barriers, family poverty, low parental education, and unfamiliarity with U.S. schools and society. In addition, many U.S. schools attended by Hispanic students may not provide ideal learning opportunities for English language learners.

Compared to the extensive body of research on the educational experiences of African-American students, we have relatively little systematic, nationally representative data on Hispanic students' educational experiences. Until now, most of the research on Hispanic students' education focuses on their educational attainment or on their educational experiences while in high school and analyzes Hispanics as if they were a single homogenous group. Relatively little is known about Hispanic students' educational experiences in the early school years and how diversity among Hispanics relates to differences in their educational experiences.

In this report, we provide some evidence to begin to fill this gap. We describe Hispanic students' educational experiences and opportunities during kindergarten, taking into account their heterogeneity in country/region of origin, immigrant generational status, socioeconomic status, and language used at home. In particular, we focus in the report on the experiences of a set of Hispanic students whose families are recent immigrants to the U.S. and/or who have low exposure to and skill in English. Such students are particularly at risk for school failure in the U.S. because of what might be termed contextual or linguistic disadvantages—disadvantages that arise because of the fact that their cultural expertise and language skills, however strong in their country of origin, are mismatched to their U.S. context. In other words, although limited English proficiency (and Spanish fluency) and recency of immigration are not disadvantages *per se*, they may disadvantage students within the context of U.S. schools, since these factors make it considerably more difficult for students and their parents to communicate effectively with teachers and take advantage of

learning opportunities within schools. The majority of such students are first- and second-generation Mexican-origin students and students from Central American origins, groups who also have very low average levels of parental education and socioeconomic status, factors which compound the effects of contextual/linguistic disadvantages.

In order to summarize patterns of Hispanic students' educational experiences, we present several individual, school and family characteristics organized into six policy-relevant areas. Most of these indicators have been identified in previous research as relevant for students' educational success in later years.

First, we analyze Hispanic students' English proficiency, which is a key determinant of their educational success (Carliner, 1995; Gándara, Rumberger, Maxwell-Jolly, & Callahan, 2003; Padilla & Gonzalez, 2001; Winsler, Diaz, Espinosa, & Rodriguez, 1999). Specifically, where teachers use English as the only language of instruction, Hispanic students need at least minimum English skills to understand instructional content, to participate in meaningful learning interactions, and to engage in inquiry processes that further learning (Henderson & Landesman, 1992; Rosenthal, Baker, & Ginsburg, 1983). In this report, because the ECLS-K data do not have a direct assessment of English proficiency for all students, we assess Hispanic children's English proficiency using three proxy measures: 1) teacher reports of students' language minority status, 2) parent reports of the language(s) used in the home, and 3) ECLS-K assessments of whether students had adequate oral English proficiency to be tested in English.

Second, we describe Hispanic students' family backgrounds by reporting measures of socioeconomic status and family structure. The impact of the family's socioeconomic background on students' educational outcomes is widely recognized in educational research (Coleman et al., 1966; Kao & Thompson, 2003; Lee & Burkham, 2002). On average, students living in poverty are more likely to receive lower grades and scores on standardized tests, to be retained in grade and drop out from high school than are students from families in higher socioeconomic groups (Entwisle & Alexander, 1993; Garcia, 2001).

Economic advantages are translated into higher educational achievement through mechanisms operating at the family and school levels. At the family level, high-SES parents could provide better educational opportunities, access to resources, and significant role models to their children (Hao & Bonstead-Bruns, 1998). Some high-SES families transmit positive attitudes toward education (Schmid, 2001) and are involved in educational activities that develop children's cognitive skills, such as reading out loud and conversational interactions (Gándara et al., 2003). Likewise, well-educated parents can handle school-related issues (i.e. children's placement, teacher assignments, and retention) more proactively than less-educated parents (Lareau, 1987).

At the school level, high-SES students are more likely to attend better schools than low-SES students. Generally, students from high-SES groups attend schools with a low concentration of minority students, with qualified teachers, smaller classes, outreach programs, and more resources (Hook, Brown, & Kwenda, 2003; Lee & Burkham, 2002; Roscigno, 1998; Schmid, 2001). Also, teachers and school personnel highly value upper class cultural patterns, preferences, attitudes and behaviors and therefore, develop positive attitudes toward these students (Lareau, 1987; Roscigno & Ainsworth-Darnell, 1999; Van Hook & Stamper Balistreri, 2002). In contrast, teachers sometimes develop erroneous assumptions about low-SES parents and students and, therefore, have lower expectations for these students (Feyl & Williams, 1993; Moles, 1996).

Family structure is also associated with students' educational achievement through access and distribution of resources and opportunities. For instance, two-parent families may have more resources to invest in educational activities, and provide more assistance and time to their children's educational needs than single-parent families. Also, the number of siblings at home may impact the amount of resources that each child receives (Portes, 2001; Portes & Hao, 1998; Wojtkiewicz & Donato, 1995). Thus, in this report we describe Hispanic students' family structures in terms of parental presence and the number of siblings at home.

Third, we describe Hispanic students' learning environments at home using three indicators: 1) parents' educational expectations; 2) access to educational resources such as books and computers at home; 3) participation in educational activities such as center-based care and parent-child reading activities.

Parents' educational expectations might be related to students' educational achievement. Educational expectations reflect parents' general attitudes toward schooling and their belief about the importance of education for social mobility. Thus, it is through encouragement and support that parents with high educational expectations could help their children achieve in school (Fuligni, 1997). Also, school achievement has been related to access to educational resources and activities. Having educational resources at home can be conducive to learning and to positive orientations toward education because they are symbols of the high-value that families place on education and are concrete tools for cognitive stimulation, if they are used correctly (Roscigno & Ainsworth-Darnell, 1999). Additionally, research identifies a series of benefits of reading with young children. Shared reading activities are considered a fundamental condition for later reading achievement that positively impact language use, writing, linguistic awareness and reading comprehension, as well as later reading achievement (Yarosz & Barnett, 2001). Furthermore, participation in center-based child care is associated with better cognitive outcomes later in life, especially for economically disadvantaged students (Caughy, DiPietro, & Strobino, 1994). Children in impoverished environments could receive better cognitive stimulation in high-quality center-based care than at home.

Fourth, we describe Hispanic students' instructional environments in school. We report the percentages of Hispanic students who attend half- or full-day kindergarten and who are first- or second-time kindergarteners. In addition, we describe Hispanic students' participation in instructional programs such as tutoring, ability grouping, and pull-out instruction. Although these programs have different pedagogical objectives, they all aim at increasing students' achievement by giving particular attention or individualized space to students.

Because some Hispanic students have to master a new language at the same time that they need to acquire expected grade-level academic skills (Genesee, 1999), we also analyze Hispanic students' participation in language support programs. Particularly, we report rates of participation in English as second language (ESL) programs. Although the implementation of ESL programs could vary significantly across schools, these programs usually aim at enhancing English skills of non-English speaking students by using a particular curriculum and constantly exposing these students to the unfamiliar language. ESL teachers are not required to master an additional language and they may use students' native language only to give instructions or when it is strictly necessary (Rossell & Baker, 1996).

We report levels of participation in two ESL modalities of instruction: inside the classroom and pull-out. In ESL pull-out, students spend part of the day in a regular classroom, but are pulled out for the rest of the day to receive ESL instruction.

Fifth, we describe some characteristics of schools that serve Hispanic students. School characteristics, such as segregation, climate, and access to resources, as well as instructional practices within schools—including classroom tracking and placement and participation in special programs—may impact students’ learning. For instance, research finds that schools with positive climate, sense of community, and high commitment to school success and students’ well-being show better educational outcomes (Borman & Overman, 2004; Griffith, 2002). To the extent that structural and compositional features of schools (such as poverty and racial/ethnic composition) are related to access to resources and quality teachers, Hispanic students may be particularly disadvantaged. Recent research shows they are increasingly more segregated from non-Hispanic White students than are Black students (Orfield & Yun, 1999) and are likely to attend schools with a high concentration of non-English proficient and poor students (Crawford, 1997; Schmid, 2001; Van Hook & Stamper Balistreri, 2002). Consequently, in this section, we analyze variables such as school type (public or private), size, minority composition, poverty level, and school climate.

Sixth, we conclude the report by investigating teacher characteristics¹—educational attainment, certification, and experience—that are (admittedly crude) proxy measures of teacher quality and skills, and so may be related to students’ learning experiences (Callahan, 2005; Crosnoe, 2005; Gándara et al., 2003; Marks, 2005; Portes & MacLeaod, 1996; Valencia, 2002). Teachers’ educational attainment, certification and teaching experience are related to better teaching strategies that encourage higher-order skills and are responsive to students’ needs (Darling-Hammond, 2000).

In describing the educational experiences and opportunities of Hispanic students using these six policy-relevant areas, we report averages for all Hispanic students as well as for subgroups defined by country/region of origin (Mexico, Puerto Rico, Cuba, South America, Central America, and other), immigrant generational status (first-generation, second-generation, and third-plus- generation),² socioeconomic status (by quintiles), and language used at home (only Spanish, predominantly Spanish, only English, and predominantly English). These breakdowns illustrate the substantial heterogeneity of experience among the Hispanic student population in the U.S. In addition, throughout this report, we include information on native non-Hispanic White and native non-Hispanic Black students for comparison purposes.

¹ The importance of teachers for students’ achievement has been vastly recognized in the literature, although teachers’ effects are mostly found when analyzing what teachers do in class – classroom practices. Because survey research usually does not capture this information, we focus on those input teachers’ variables that are well captured using this research.

² We present generational status analyses only for Mexican students. Cell sizes are too small for other national/regional origin groups to allow detailed national/regional origin-by-immigrant generation analyses.

DATA AND METHODS

Data

The data for this study come from the Early Childhood Longitudinal Study–Kindergarten Cohort (ECLS-K), sponsored by the National Center for Education Statistics (National Center for Education Statistics, 2003). The ECLS-K contains data on a nationally representative sample of roughly 21,400 students from the kindergarten class of 1998-99, representing a cohort born in roughly 1992-93. The ECLS-K data include information gathered from parents, teachers, and school administrators regarding family, school, community, and student characteristics. Although the ECLS-K study includes data on children’s school experiences through fifth grade, in this report we focus on their school experiences and opportunities in kindergarten. More detail on the sample and variable construction is included in the Appendix.

Variables

Throughout the analyses, we use the following definitions to categorize Hispanic students by subgroups (more detail in Appendix):

- Race/Ethnicity. Students are classified as native non-Hispanic White, native non-Hispanic Black, and Hispanic of any race. Hereafter we refer to these groups as White, Black, and Hispanic, respectively. Other groups are omitted from this report.
- Hispanics’ National/Regional Origin. Based on parent responses, students are classified as having origins in Mexico, Puerto Rico, Cuba, South America, Central America, or “other regions.”³
- Immigrant Generation. Students are defined as first, second, or third-plus generation. Students born outside of the U.S. whose mother (or father if data are unavailable for the mother) was born outside of the U.S. are classified as first-generation students.⁴ Students born in the U.S. with mothers born outside of the U.S. are classified as second generation students. Finally, students born to a U.S. - born parent (regardless of where the student was born) are classified as third-plus generation students.
- Socioeconomic Status. A composite SES indicator was created based on measures of the student’s mother’s and father’s educational attainment, mother’s and father’s occupation, and family income (National Center for Education Statistics, 2002, 2003) This measure is divided into quintiles.
- Language Used at Home. Based on parent reports about the language(s) that the mother and father speak to the student (and vice versa), students are defined as living in homes where 1) only English, 2) primarily English, 3) primarily Spanish, or 4) only Spanish is used among family members.

³ Only students with origins in Spanish-speaking countries are categorized as South American or Central American. The Dominican Republic is included in the Central American category.

⁴ Puerto Rican students born in the island are defined as first-generation.

Sample

The sample used in this report includes roughly 14,600 students. From the original ECLS-K kindergarten cohort, we exclude students who are Asian, Other race, or of unknown race. In addition, we exclude White and Black students who have at least one foreign-born parent. Our comparisons will therefore describe race/ethnic differences without the confounding factor of immigrant generation. From the total sample analyzed in this report, 4,006 (27%) are Hispanic, 8,675 (59%) White, and 1,921 (14%) are Black students.

Reflecting somewhat national population proportions, the majority of Hispanics in the ECLS-K sample are Mexicans (66%) followed by Central Americans, including Dominicans, and Puerto Ricans (each accounting for 10% of the Hispanic sample).⁵ Moreover, among Mexican children in the ECLS-K sample, around 70% have foreign-born parents and only 10% are foreign-born children.⁶ See Appendix Table A1 for the distribution of the complete ECLS-K sample analyzed in this report by race/ethnicity, Hispanic national/regional origin, and immigrant generation.

DESCRIPTIVE RESULTS

I. Hispanic Students' English Proficiency

To measure Hispanic students' English proficiency at the start of kindergarten we use three indicators: 1) teacher/school reports of whether a child lived in a non-English-speaking home; 2) an ECLS-K indicator of students' oral English proficiency; and 3) a measure of home language use based on parent reports of the language(s) spoken by the child and parents at home. These three variables are defined as follows: first, students whose school record or teacher indicated that they live in Spanish-speaking homes in kindergarten are defined as language minority students. Second, students from non-English-speaking homes were administered the English Oral Language Development Scale test (OLDS) in the fall of kindergarten (Rock & Pollack, 2002); we define as English proficient those students who either did not take the OLDS (because they were from English-speaking homes) or failed this test (students who scored 36 or less). Third, we use parent responses to four questions regarding language(s) used in the home by parents and the student to construct a measure of home language use. This variable has four categories: only English, predominantly English, predominantly Spanish, or only Spanish. These indicators are each proxy measures of students' English proficiency. While they do not each yield the same estimate of the proportions of students who are proficient, the patterns of differences among Hispanic subgroups are consistent across the three indicators.

As Table 1 indicates, roughly half of Hispanic kindergarteners are defined by their teachers/schools as language minority students, while roughly one-third are deemed non-proficient in oral English by ECLS-K and about one-third of Hispanic parents use only Spanish to speak with their children. There is, however, significant variability in English

⁵ At the national level, Mexicans, Central Americans, including Dominicans, and Puerto Ricans, account for 59.3%, 7.4% and 9.7% respectively of the U.S. Hispanic population (Ramirez, 2004)

⁶ Overall, 72% of Hispanic children live in immigrant families – families with at least one foreign-born parent. The foreign-born population accounts for 11% of the total U.S. population (Larsen, 2004).

proficiency and language use among Hispanic subgroups defined by national/regional origin, immigrant generational status, language used at home, and socioeconomic status. In general, contextually/linguistically disadvantaged students and socioeconomically disadvantaged students have less exposure to English in their homes and lower rates of English proficiency than students of Puerto Rican, Cuban, and South American origins.

As expected, there is also a high correlation between the language used in a student's home and English proficiency. Hispanic students from homes where English is the dominant language have higher levels of English proficiency. Language environment and English proficiency are also strongly related to family socioeconomic status; students from the lowest SES quintile have much lower rates of English proficiency than those from higher quintiles.

Language minority denomination.

Overall, half of Hispanic kindergarteners are defined as language minority, which is not surprising given the large number of Hispanic students with foreign-born parents (see Table A1). Central American students are the most likely to be language minority (76%), followed by Cuban and South American students (68%); Puerto Rican students are the least likely to be so (only 32%). The proportion of language minority Mexican students is 58%.

Moreover, the percentage of language minority students varies by generational status, language used at home, and SES quintile. For instance, among Mexicans, more than 90% of first generation students are language minority compared to only 14% of third-plus generation students. Also, about 71% of Hispanic students in the lowest SES quintile are language minority compared to around 26% of those students in the highest SES quintile.

Oral English proficiency

About a third of Hispanic students are non-proficient in oral English, with Mexican and Central American students the most likely to be non-proficient. About 42% Mexican and Central American students are non-proficient in oral English compared to 22% of Cuban and South American students and 7% of Puerto Rican students.

Additionally, levels of oral English proficiency vary by generational status, SES quintile, and language used at home. More than half (52%) of Hispanic students in the lowest SES quintile are non-proficient in oral English compared to only 5% in the highest SES quintile. Similarly, a lower proportion of English proficient students is observed among Hispanic students living in only-Spanish homes (65%) than among those living in only-English homes (6%).

Language Used at Home

Overall, Hispanic students are equally likely to live in English or Spanish dominant homes; the distribution of Hispanic students by language used at home varies by country of origin, generational status, and socioeconomic status. Among Hispanic students, Mexican and South American students are more likely to live in only Spanish speaking homes (approximately 40%) and Puerto Rican students are more likely to live in only English speaking homes (40%). Also, about half of Cuban students live in homes where English is the dominant or only language, but only 40% of Central American students do so.

(Insert Table 1 here)

II. Students' Family Background

We describe students' family background in terms of socioeconomic status and family structure. Socioeconomic status is measured through four indicators: mean family income, below poverty line, parents' educational attainment, and an overall indicator that includes income and education measures. To analyze students' family structure we describe whether students live in two-biological-parents or single-parent families, and number of siblings at home.

As Table 2 indicates, important differences in family background are observed by students' race/ethnicity. Compared to White students, Hispanic and Black students face important socioeconomic disadvantages. However, while stronger educational disadvantages are observed for Hispanics, larger income gaps are observed for Blacks. Black and Hispanic students also are more likely to live in single-parent families and larger families than do White students. Although, Black and Hispanic students have a similar average number of siblings at home, it is interesting to note that Black students are more likely to live in single-parent families than Hispanic students.

Among Hispanic subgroups, there is important variability in family background. Compared to Whites, fewer economic disadvantages are observed for Cuban students, South American students, and Hispanic students living in only-English speaking homes. These students also tend to have fewer siblings at home than White students and the remaining Hispanic subgroups. In contrast, Mexican students – particularly those whose parents are foreign-born – and Hispanic students in only-Spanish speaking homes experience the worst socioeconomic conditions. These students have fewer economic resources than do Black students and have parents with lower educational attainment than the average Hispanic student. Paradoxically, these students are as likely as White students to live in two-biological parent families but have more siblings living at home than White students and the remaining Hispanic subgroups.

Additionally, there is a strong correlation between poverty and education on the one hand and immigrant status and language used at home on the other. For instance, first and second generation Mexican students are three times as likely to have parents with less than high school education as third-plus generation Mexican students. Similar gaps are found when we compared Hispanic students living in only-Spanish speaking homes to those living in only-English speaking homes. Finally, there is a correlation, although less strong than the ones observed before, between family structure on the one hand and generational status, language used at home, and SES levels on the other. Students living in immigrant families, Spanish-speaking homes, and in high-SES families are more likely to live with two biological parents than are students with U.S-born parents, in English-speaking homes and in low-SES families.

Overall SES measure.

The composite SES measure in the ECLS-K data is a standardized measure, with a mean of 0 and standard deviation of 1. Based on this measure, Hispanic and Black students have similar SES levels, both lower than White students (see Table 2). Among Hispanics with different national origins, Mexican and Central American students show the lowest SES levels, each about a half a standard deviation below the population average (-0.58 and -0.46, respectively, compared to 0.18 for non-Hispanic White students). In contrast, Cuban and South American students have the highest SES levels (0.15 and 0.02 respectively). Also, there are important gaps in SES levels by generational status, SES quintiles, and language

used at home. Among Mexican students, first and second generation students' SES levels (-0.87 and -0.73, respectively) are over half a standard deviation lower than those of third-plus generation students (-0.18). Similarly, lower SES levels are observed for Hispanic students living in only-Spanish speaking or Spanish dominant homes (-0.80 and -0.49) than for those living in only-English or English dominant homes (-0.21 and -0.16).

Mean income.

Overall, Hispanic students' mean family income is about half that of White students' but 15% higher than Black students. Hispanic students from any subgroup have lower family mean income than do White students. Among Hispanic students with different national origins, Mexican students have the lowest mean family income (\$30,000) followed by Central American students (\$33,000). Cuban and South American students have the highest family mean incomes (\$56,000 and \$45,500 respectively). Additionally important mean income differences are observed by generational status, language used at home, and socioeconomic status. Mexican students with foreign-born parents have significantly lower mean incomes than those Mexican students with U.S.-born parents. Likewise, for Hispanic students living in only-Spanish speaking homes their mean family income is half that of those living in only-English speaking homes.

Moreover, particularly low mean family income is observed for first and second generation Mexican students (\$17,500 and \$25,000 respectively), Hispanic students in the lowest SES quintile (\$16,541), and for those Hispanic students living in only-Spanish homes (\$22,600).

Below poverty line.

Overall, Hispanic students are more likely than White students and less likely than Black students to live under the poverty line. About 10% of White students, 43% of Black students and 35% of Hispanic students live under the poverty line.

As Table 2 shows, among Hispanic students of different national origins, Mexicans and Central Americans have the most students living in poverty (41.5% and 38.8%), whereas Cuban and South American students have the fewest (20.8% and 19.5%). Particularly high proportions of students living below the poverty line are observed for first generation Mexican students (68.8%), Hispanic students living in only-Spanish homes (52%), and those Hispanic students in the lowest SES quintile (62.2%).

Parents' education.

Overall, Hispanic and Black parents have less formal education than do White parents. However, Hispanic students have parents with lower educational levels than do Black students. About 12% of Hispanic and Black parents have a college or higher degree, but 27% of Hispanic parents have not finished high school compared to 13% of Black parents.

Among Hispanic students of different national origins, Mexican and Central American students have parents with the lowest levels of education. Around 33% of both have not finished high school and only 10% of Mexican and 18% of Central American parents have at least a college degree. In contrast, South American and Cuban students have the lowest percentages of parents with only high school education (8.3%, and 5.8%) and the highest proportions of parents with at least a college degree (33.3% and 41.4%).

Moreover, Table 2 indicates significant gaps in educational levels by generational status, language used at home, and SES quintile. About 65% of students in the lowest SES

quintile have parents with less than high school educations compared to 0% in the two highest SES quintiles. Also, only about 5% of foreign-born Mexican parents have a college degree compared to 15% of U.S.-born parents with Mexican origins.

Two biological-parent or single-parent families

About 64% of Hispanic students live in homes with two biological parents compared to 75% of White students and 31% of Black students. Among Hispanic students from different national origins, Mexican and South American students show the highest incidence of two biological-parent families (72% and 75% respectively) and Puerto Rican students show the highest incidence of single-parent families (33%). Additionally, the percentage of two biological-parent families varies by generational status, language used at home, and socioeconomic status. Students of Mexican origin with foreign-born parents are more likely to live in two biological-parent families (74% for first generation and 77% for second generation) than third-plus generation students (61%). Also, 72% of Hispanic students living in only-Spanish speaking homes live with two parents, whereas only 56% of Hispanic students living in only-English speaking homes do so. The incidence of two biological-parent families also increases as SES quintiles increase.

Number of siblings

Overall, there are small differences in the number of siblings at home by race/ethnicity. About 55% of Hispanic and Black students have one or no siblings at home compared to 63% of White students. However, there are more pronounced differences among some Hispanic subgroups. Table 2 reveals that Mexican students have more siblings at home than do Cuban and South American students. About 23% of students of Mexican origin have three or more siblings at home, whereas only 10% of Cubans and 5% of South Americans do so. Similarly, 27% of Hispanic students in the lowest SES quintile have three or more siblings at home compared to only 8% of those students in the highest SES quintile.

Differences in number of siblings at home are less pronounced by generational status and language used at home.

(Insert Table 2 here)

III. Students' Learning Environments at Home

We describe students' learning environments at home through measures of parents' educational expectations, students' access to educational resources at home such as books and computers, and students' participation in educational activities such as reading activities and center-based care. These are, of course, relatively crude measures, but they do indicate some rough differences among students of different subgroups.

In general, there is substantial variability in students' learning environments at home across race/ethnic groups. Most of this variability, however, is related to differences in educational resources and, to a lesser extent, to differences in participation in educational activities. Most parents, regardless of race/ethnicity, have high educational expectations for their children; for Black and Hispanic students, however, these high expectations do not necessarily translate into resources and activities at home that could enrich learning.

Across Hispanic students there are several patterns worth noting. First, students with origins in Central America and Mexico—particularly students whose parents were born

outside the U.S.—have less access to educational resources and activities at home than students of Puerto Rican, Cuban, and South American origins. Second, the most contextually-disadvantaged Hispanic students (i.e. first and second generation Mexicans and students living in Spanish-speaking homes) tend to have parents with *higher* educational expectations than more assimilated Hispanic families (i.e. third-plus generation Mexican origin students and those living in English-speaking homes), but generally have much *lower* access to educational resources and activities than these students from more assimilated families. Finally, there is a strong correlation between socioeconomic status and students' learning environments. High-SES Hispanic students have parents with higher educational expectations, more educational resources at home, and higher rates of participation in educational activities than low-SES Hispanic students. Interestingly, while high-SES students have similar levels of educational resources and activities as White students, their parents have higher educational expectations than do White parents.

Parents' educational expectations.

Table 3 shows little difference in parents' educational expectations across racial/ethnic groups; about 75% of all parents expect their children to obtain a bachelor or higher degree. However, important differences are observed among Hispanic subgroups. Higher expectations are observed among parents of South American, Central American, and Cuban origin (91%, 90%, and 95% expect their children to finish at least college) than for parents of Puerto Rican and Mexican origin (78% and 72%).

Moreover, there is a strong association between parents' educational expectations and SES levels. About 97% of Hispanic parents in the highest SES quintile expect their children to earn at least a college degree compared to 72% of those in the lowest SES quintile. Although less strong, parents' educational expectations (see Table 3) are also associated with generational status and language used at home. For instance, more than 80% of foreign-born Mexican parents expect their children to at least graduate from college compared to 70% of U.S.-born parents with origins in Mexico. Likewise, 75% of Hispanic parents living in only-English speaking homes and 83% of those living in only-Spanish speaking homes expect their children to obtain at least a bachelor degree.

Educational resources at home.

Most parents have high educational expectations for their children. Table 3 indicates, however, important differences in educational resources at home among racial/ethnic groups. Around two-thirds of White students have a computer at home but only one-third of Black and Hispanic students do. Similarly, the average number of books observed in White students' homes is double the number of books in Black or Hispanic students' homes (95, 39, and 42 books, respectively).

Moreover, there are important differences in educational resources at home among Hispanic subgroups. Among Hispanic students with different national origins, Mexican and Central American students have the fewest books (around 35) and are the least likely to own a home computer (28% and 32%, respectively), whereas Cuban and South American students have more books at home (49) and are the most likely to have a home computer (55% and 58% respectively).

As expected, we observed strong correlations between educational resources at home and SES quintiles and language used at home. For instance, Hispanic students in only-Spanish homes have an average of 19 books at home compared to 65 books for those students living in only-English homes. About 78% of Hispanic students in the highest SES

quintile, but only 15% of those in the lowest SES quintile, have a computer at home. Also, educational resources at homes vary by generational status. Third-plus generation Mexican students have significantly more access to educational resources at home than do their first and second generation counterparts.

Center-based care.

As previous research shows, Hispanic students are the least likely to participate in center-based care across racial/ethnic groups. Around 65% of Hispanic students have ever participated in center-based care compared to 80% and 86% of White and Black students, respectively. Also, during kindergarten, we observe a smaller percentage of Hispanic students in center-based care (13%) than of White and Black students (21% and 22%, respectively).

Among Hispanic students of different national origins, Mexican and Central American students have the lowest levels of center-based participation, and Cuban and South American students have the highest level of participation. About 77% of Cuban and South American students have ever been enrolled in center-based care compared to only 58% of Mexican and Central American students.

Additionally, center-based care participation varies by SES quintile, generational status, and language used at home. About 28% of Hispanic students in the highest SES quintile, but only 6% in the lowest, are enrolled in center-based care during kindergarten. Likewise, 71% of Hispanic students living in only-English homes have ever been enrolled in center-based care compared to 50% of those students living in only-Spanish speaking homes. Higher rates of enrollment in center-based care are also observed for third-plus generation Mexican students (71% ever been enrolled and 16% enrolled during kindergarten) than for first and second generation Mexican students (39% and 54% ever been enrolled and 3% and 6% enrolled during kindergarten).

Parents' reading activities.

The frequency of reading activities at home varies by race/ethnicity; around half of White parents read every day to their children compared to 35% and 40%, respectively, of Black and Hispanic parents.

Among Hispanic students of different national origins, South American parents are the most likely to read to their children every day. About 47% of South American parents, but 40% of Mexican and Central American parents and 34% of Puerto Rican parents, read to their children every day.

The frequency of reading activities at home also varies by generational status, language used at home, and –more importantly, by SES quintile. For example, 47% of U.S.-born parents of Mexican origin read to their children every day compared to 33% of those born in Mexico. Similarly, 44% of Hispanic parents living in only-English homes read to their children every day, but only 33% of those living in only-Spanish speaking homes do so. Finally, the frequency of reading activities significantly increases by SES quintiles, where only 32% of parents in the lowest SES quintile read to their children every day compared to 62% of those Hispanic parents in the highest SES quintile.

(Insert Table 3 here)

IV. Students' Instructional Environments in School

In this section we describe some characteristics of the instructional environments of Hispanic students' during kindergarten. For each of the Hispanic subgroups (and for White and Black students, by way of comparison), we describe the percentage of students who are first-time kindergarteners, the percentage enrolled in full-day kindergarten, and the percentages participating in a variety of instructional programs, including ability grouping, tutoring, and small group pull-out instruction. In addition, we report the percentages of Hispanic students in each subgroup who receive ESL services either in or outside their classroom (see Table 4).

In general, the rates of exposure to various instructional practices do not vary dramatically by students' race/ethnicity. However, White students generally have lower rates of participation in instructional practices such as ability grouping, tutoring, and small group pull-out instruction, than Hispanic students. Among Hispanic subgroups, though, there are some clear patterns of difference worth noting. First, participation in these instructional programs is typically highest among first- and second-generation Mexican-origin students, Puerto Rican students, and Central American-origin students. Second, we observe greater participation of Hispanic students in reading-related instructional practices than in math-related instructional practices, suggesting that these various instructional practices might be oriented to remediate their lack of English proficiency. Third, while many Hispanic students receive ESL services, particularly first- and second-generation Mexican-origin students and students from homes where English is not spoken, a sizeable proportion of such students do not receive such services. Finally, among Hispanic students, family economic background—more than national origin or home language use—is the strongest predictor of these instructional experiences. Hispanic students from the lower SES quintiles are two to three times as likely to receive tutoring and small group instruction as those in the higher quintiles.

First-time kindergarteners.

Most students are first-time kindergarteners regardless of race/ethnicity: at least 94% of White, Black and Hispanic students have not been held back in kindergarten. Table 4 shows small or nonexistent differences in retention rates by Hispanic national origin, socioeconomic status, and language spoken at home. However, retention rates do vary by generational status. Among Mexican students, 91% of first-generation students are first-time kindergarteners compared to 96% and 95% for second- and third-plus generation students.

Full-day kindergarten.

About 50% of Hispanic and White students are enrolled in full-day kindergarten compared to 79% for Black students. Among Hispanics, Mexican students are the least likely to be enrolled in full-day kindergarten (40%) and Cuban students have the highest percentage of enrollment (96%). Also, full-day enrollment increases by SES quintile. Only 43% of Hispanic students in the lowest SES quintile are in full-day kindergarten compared to 59% for students in the highest SES quintile. Moreover, there are more full-day kindergarteners among Hispanic students living in English or Spanish dominant homes (54% and 52%) than for those students living in only-English or only-Spanish homes (47% and 45%).

Ability-grouping in Reading.

About 50% of students in kindergarten are ability-grouped regardless of race/ethnicity. Overall, Hispanic students are less likely than Black students and more likely than White students to be ability-grouped in reading (see Table 4). Among Hispanic subgroups, Mexican – particularly students whose parents were born outside the U.S. -- and Central American students show the highest percentages of ability-grouping (about 63%) and South American students show the lowest proportion (50%).

Additionally, ability-grouping varies by SES quintile and generational status. About two-thirds of Hispanic students in the lowest SES quintile are ability-grouped compared to 50% of Hispanic students in the highest SES quintile. Also higher rates of ability-grouping are observed for first- and second-generation Mexican children than for their third-plus generation counterparts. No clear trends in ability-grouping are observed by Hispanic students' language used at home.

Math or Reading tutoring.

Tutoring is not a common instructional practice in kindergarten; math tutoring is even less prevalent than reading tutoring. Although no significant differences in tutoring participation are observed across race/ethnic groups, some variation is observed by Hispanic students' national origins, generational status, and socioeconomic status, particularly for reading. For instance, 11% of Mexican and Puerto Rican students are being tutored in reading, but only about 4% of Central American and South American students. Also, Hispanic students with foreign-born parents are twice as likely as those with U.S-born parents to receive tutoring in reading (16% compared to 8%). Similar gaps in tutoring participation are observed between Hispanic students in the lowest SES quintile and in the highest; 11% of students in the lowest quintile compared to only 5% of students in the highest SES quintile are tutored in reading.

Math or Reading pull-out small groups.

Participation rates in pull-out instruction are somewhat higher than those observed for tutoring. About 16% of Hispanic and White students and 20% of Black students receive pull-out instruction in small groups for reading, and about 8% of students – regardless of race/ethnicity– receive pull-out instruction for math.

Among Hispanic subgroups, there is little variation in participation rates in pull-out instruction by generational status and language used at home. Proportion differences in participation by language used at home are less than 2% and by generational status, less than 4%. Somewhat higher participation rate differences are observed by national origin and socioeconomic status. For instance, 19% of Puerto Rican and Central American students receive pull-out instruction for reading, but only 13% of South American students do so.⁷ Also, there is around 8% difference in participation between the highest and the lowest SES quintiles.

ESL services.

Around one-third of Hispanic students receive ESL in school, with ESL inside the classroom more common than pull-out ESL during kindergarten. Around 27% of Hispanic

⁷ For math, rates of participation are 13% for Puerto Rican, 12% for Central American, and 4% for South American students.

students receive in-class ESL, whereas only 7% receive pull-out ESL.⁸ Additionally, significant differences in rates of participation are observed by Hispanic students' national origins, generational status, language used at home, and socioeconomic status. For instance, students of Mexican and Central American origin are more likely to receive in-class ESL services (40%) than Cuban and South American students (34% and 30% respectively). Also, Puerto Rican students have the lowest participation (10%); recall that Puerto Rican students have the highest levels of English proficiency among Hispanic children of different national origins.

Differences in in-class ESL participation by SES quintile, generational status and language used at home are more pronounced than those differences by national origin. Around 47% of Hispanic students in the lowest SES quintile receive in-class ESL compared to only 4% of those in the highest SES quintile. Likewise, 60% of first-generation Mexican students receive this service, but only 7% of third-plus generation Mexican students. Also, the participation difference between Hispanic students in only-Spanish and only-English homes is 52%, with the former more likely to receive ESL in-class than the latter.

Compared to in-class ESL, similar trends of participation are observed for pull-out ESL except for participation differences by national origin. Students of South American origin show the highest rate of participation in pull-out ESL (17%), whereas only 8% of Mexican, Cuban and Puerto Rican students do so.

(Insert Table 4 here)

V. School Characteristics

We describe variation among schools attended by different subgroups of students using several indicators: 1) private/public enrollment, 2) Title 1 school enrollment, 3) school size (number of students in kindergarten), 4) enrollment composition, and 5) school climate. In describing the enrollment composition of schools, we report percentages of White, Black, and Hispanic students in school, as well as percentages of limited English proficiency students and students receiving free or reduced-price lunch. To measure school climate we use Lee and Burkham's (2002) constructs of "*disorganized community location*" and "*safety problems in schools*"; we operationalize these in the way outlined by Crosnoe (2005). The first measure is based on school administrator rates on seven problems in the school neighborhood (1=no problem, 2= somewhat, 3= big problem). The problems were: ethnic or religious differences, excessive litter in streets; public drinking or drug use; heavy traffic; violent crime; vacant houses or buildings, and general crime. Following Crosnoe, we took the mean of the seven items and divided the values into four categories: none (rating of 1), slight (rating of 1-1.5), small (rating of 1.5-2.0) and somewhat or big (rating of 2.0+). The second measure, "safety problems in schools," is also based on school administrator reports on how frequently (a) children had brought weapons to school in the past year, (b) things had been taken by force from teachers or students at or around school, and (c) teachers or students had been physically assaulted. The sum of these measures serves as a measure of safety problems at school.

In general, school characteristics vary considerably by students' race/ethnicity.

⁸ In class and pull-out ESL services are not mutually exclusive; a student can receive both type of instruction.

Compared to White students, Hispanic and Black students are more likely to go to public schools, larger schools, schools with high concentrations of minority students, and schools with climate problems. Although less pronounced, there are some school differences between Black and Hispanic students. Black students go to smaller schools with a higher concentration of poor and Black students. In contrast, Hispanic students go to larger schools with a higher concentration of Hispanic and LEP students.

Moreover, there are considerable variations in school characteristics across Hispanic subgroups. As Tables 5 and 6 indicate, first- and second-generation Mexican students attend schools that might not be able to provide resources and support for learning. About 70% of these students attend Title 1 schools where around 55% of their students are eligible for lunch support, about 38% of their students are defined as LEP, and only 27% are White students. Also, schools that first- and second-generation Mexican students attend are bigger, located in communities with high levels of disorganization, and have safety problems. In contrast, Cuban, Puerto Rican, and South American students are enrolled in schools that might be able to provide better resources for learning. Puerto Rican and South American students attend schools where only about 30% of students receive free or reduced-price lunch and 55% are White students and Cuban students are more likely to go to private schools.

Finally, although there are significant correlations between school characteristics on the one hand and generational status, socioeconomic status, language used at home, and national origins on the other, family socioeconomic status is the strongest predictor of school characteristics.

Private or public school

Hispanic students are as likely as Black students to be enrolled in private schools and less likely than White students. About 9% of Hispanic students are enrolled in private schools compared to 18% of White students. Among Hispanic students of different national origins, those of Cuban and South American origin show the highest percentage of private school enrollment (21% and 16%) and Mexican and Central American students show the lowest percentages (6% and 9%). Interestingly, rates of private enrollment are similar between White students and South American and Cuban students.

As expected, private school enrollment increases steadily as SES levels increase. One-third of Hispanic students in the highest SES quintile, but less than 2% in the lowest SES quintile, receive private education. Somewhat less prominent differences in private school enrollment are observed by generational status and language used at home. Approximately 13% of Hispanic students living in only-English speaking homes go to private schools compared to 4% of those students living in only-Spanish homes. Also, the percentage gap in private enrollment between first- and third-generation Hispanic students is 7%, with first- and second-generation Mexican students less likely to be enrolled in private school.

Title 1 school

Overall, Hispanic students show a higher percentage of Title 1 school enrollment (61%) than do White students (45%) and a lower percentage than do Black students (72%). Among Hispanic subgroups, rates of enrollment in Title 1 schools vary by country of origin, generational status, language used at home, and socioeconomic status. Table 5 shows higher percentages of Title 1 school enrollment among Mexican and Central American students (67% and 61%) than among Cuban and South American students (53% and 38%).

Additionally, rates of Title 1 school enrollment decrease steadily as SES levels increase. Only 31% of Hispanic students in the highest SES quintile are enrolled in Title 1 schools compared to 74% of those in the lowest SES quintile. Enrollment in Title 1 schools is also higher for Hispanic students living in only-Spanish speaking homes (73%) than for those students living in only-English speaking homes (51%). Similarly, first- and second-generation Mexican students are more likely to be enrolled in Title 1 schools (about 71%) than their third-plus generation counterpart (58%).

School size: kindergarten enrollment

In general, Table 5 indicates that Hispanic students are enrolled in larger schools than White and Black students. Hispanic students are enrolled in schools with an average kindergarten enrollment of 113 students, whereas White and Black students' average kindergarten enrollments are 80 and 88 students, respectively.

Among Hispanic students with different national origins, Central American students are enrolled in the largest schools (136 students in kindergarten), and Cuban and Puerto Rican students go to the smallest schools (around 107 students in kindergarten). Additionally, differences in kindergarten enrollment are observed among Hispanic students by generational status, socioeconomic status and language spoken at home. For instance, the average kindergarten enrollment for Hispanic students in the lowest SES quintile is 131 students, compared to 81 students for those in the highest SES quintile. Similarly, Hispanic students living in only-Spanish speaking homes go to schools with a kindergarten enrollment of 129 students, whereas Hispanic students in only-English homes are in schools with a kindergarten cohort of 98 students.

(Insert Table 5 here)

School racial/ethnic, language, and poverty composition.

Overall, Hispanic and Black students attend schools with much higher minority concentrations and proportions of free- and reduced-price lunch eligible students than do White students. However, Hispanic students go to schools with a higher concentration of Hispanic and LEP students, while Black students go to schools with a higher concentration of poor and Black students. For instance, Hispanic students go to schools where 43% of the students receive free or reduced-price lunch, whereas Black students go to school where 58% do. Also, Hispanic students go to schools where 23% are LEP students, but Black students go to schools where only 3% are LEP students.

Among Hispanic students with different national origins, Mexican and Cuban students go to schools with the lowest concentration of White students (32%) and the highest concentration of Hispanic students (about 55%). These students, also, go to schools with the highest concentrations of students receiving free or reduced-priced lunch (49% and 45% respectively). In contrast, South American and Puerto Rican students go to schools with the highest concentrations of White students (55%), and the lowest concentrations of Hispanic students (24% and 30% respectively). These students, also, go to schools with the lowest concentrations of students receiving free or reduced-priced lunch (29%). Only Puerto Rican students attend schools with the lowest proportions of LEP students (8%) and the highest proportions of Black students.

Additionally, important differences in minority student concentrations, except Black students, are observed by SES quintile, language used at home, and generational status. For instance, a typical Hispanic student in the highest SES quintile attends a school that is 61%

White but 22% Hispanic. This student also goes to a school that is 7% LEP with 20% of students receiving free lunch. In contrast, the average Hispanic student in the lowest SES quintile goes to a school that is 29% White, 56% Hispanic, 35% LEP, and 53% free-lunch eligible.

School climate

Hispanic and Black students are enrolled in schools located in more disorganized communities and with more safety problems than White students. No differences in school climate are observed for Hispanic and Black students.

Moreover, there are differences in school climate across Hispanic subgroups. Although Hispanic students with different national origins go to schools with similar levels of safety problems, these schools are located in communities with different levels of disorganization. Mexican and Central American students go to schools located in more disorganized communities (2.5 and 2.6) than do South American and Cuban students (2.0). Also, higher levels of community disorganization and more safety problems are observed for Mexican students with foreign-born parents, low-SES Hispanic students, and for those living in only-Spanish speaking homes than for students of Mexican origin with U.S.-born parents, high SES Hispanic students and for students living in only-English speaking families.

(Insert Table 6 here)

VI. Teachers' Characteristics

Teachers' characteristics are measured using three crude indicators of teacher quality: educational attainment, certification, and years of teaching experience. For each of the Hispanic subgroups, we describe the percentage of students with teachers who have masters or doctoral degrees, teachers who hold permanent certification (the highest level of certification that a teacher can achieve), and teachers with certification in elementary education. In addition, we report the percentages of Hispanic students in each subgroup with teachers that have five or more years as 1) kindergarten, 2) bilingual, and 3) ESL teachers (see Table 7).

Overall, there is a small variability in teachers' characteristics across students' race/ethnicity. Compared to White students, Hispanic and Black students have teachers with similar educational levels – about one-third have teachers with masters or doctoral degrees. Also, Hispanic and White students have teachers with similar certification types. The main difference between White and Hispanic students' teachers is their experience levels, although this difference is not very pronounced. About 60% of White students have experienced kindergarten teachers compared to 50% of Hispanic students.

Likewise, teachers' characteristics do not vary dramatically among Hispanic subgroups. However, there are some clear patterns worth noting. First, differences in teachers' characteristics vary mostly by students' national origins. For instance, students of Mexican-origin have the highest percentage of teachers with only a bachelor's degree and the lowest proportion of experienced kindergarten teachers. In contrast, South American and Cuban students have the most teachers with master's and doctor's degrees. Also, Cuban students are the most likely to have teachers with elementary certification and South American students are the most likely to have teachers with permanent certification. Second, although there is a relation between teachers' characteristics and SES quintiles,

family socioeconomic status is not a strong predictor of teachers' differences among Hispanic students. Finally, while some Hispanic students have teachers with five or more years of experience teaching bilingual education, particularly first- and second-generation students of Mexican origin, low SES students, and students from homes where English is not spoken do not have experienced bilingual teachers.

Teachers' educational level.

Overall, teachers' educational attainment does not vary by race/ethnicity. About 30% of kindergarteners have teachers with a master's or doctor's degree. Among Hispanic students, teachers' educational attainment varies mostly by national origin. Mexican students, regardless of immigrant generation, have the highest percentage of teachers with only a bachelor's degree. About 70% of Mexican students have teachers with a bachelor's degree, whereas only 49% of South American, 52% of Cuban students, and 55% of Central American and Puerto Rican students do.

Differences in teachers' educational attainment are smaller or nonexistent by language used at home, generational status, and SES quintile.

Teachers' certification.

Overall, teachers' certification does not vary between Hispanic and White students. Around 87% of these students have teachers with elementary certification and 65% have teachers with permanent certification. However, Black students show lower rates of teachers with elementary certification (77%) and permanent certification (60%).

Among Hispanic subgroups, there are small or nonexistent differences in percentages of students with teachers with permanent certification by country of origin, language used at home, and socioeconomic status. Access to teachers with permanent certification, however, varies by students' generational status. About 72% of first- and third-plus generation Mexican students have teachers with permanent certification compared to only 61% of second-generation Mexican students. In contrast, access to teachers with certification in elementary education varies mainly by country of origin and SES levels. For instance, about 80% of Puerto Rican students have teachers with elementary certification, whereas about 90% of Cubans and Mexican students do. Also, the rate of students with teachers with elementary education decreases as students' SES increases. About 90% of Hispanic students in the lowest SES quintile have teachers with elementary certification compared to 80% of Hispanic students in the highest SES quintile.

Teachers' experience - Kindergarten.

Table 7 indicates that about 60% of White students have teachers with five or more years teaching kindergarten compared to 50% of Hispanic and Black students.

Among Hispanic students, important differences in teachers' experience are found by national origin, generational status, and language used at home. Around 59% of Puerto Rican students have teachers with five or more years of experience but only 45% of Mexican and Cuban students do. Also, among Mexican students, only 38% of first-generation students have experienced teachers compared to 43% and 55%, respectively of second- and third-plus generation students. Similarly, higher rates of students with experienced teachers are observed for Hispanic students living in English-speaking homes (56%) than for those students living in Spanish-speaking homes (45%). Teachers' experience does not differ substantially by SES quintile.

Teachers' experience - Bilingual and ESL.

As expected, less than 1% of White and Black students have experienced teachers in bilingual and ESL education. There is, however, a small proportion of Hispanic students who have experienced bilingual or ESL teachers. Only 12% and 6% of Hispanic students have teachers with five or more years teaching bilingual and ESL education respectively. Given the high rate of non-proficiency in English among Hispanic students (see Table 1), these low percentages are alarming.

Moreover, access to experienced bilingual teachers varies among Hispanic subgroups. Among Hispanic students of different national origins, Mexican students – particularly first- and second-generation students -- show by far, the highest rates of students with experienced bilingual teachers (about 24%). Rates of students with experienced bilingual teachers decrease to 9% for Central American students and to less than 5% for the remaining groups. Likewise, students living in Spanish-speaking homes show higher rates of experienced bilingual teachers (23% and 13% for students living in only-Spanish and primarily Spanish homes respectively) than those students living in English-speaking homes (about 5%). Finally, rates of Hispanic students with experienced bilingual teachers decrease as SES levels increase. Only 4% of Hispanic students in the highest SES level have experienced bilingual teachers compared to 19% of those students in the lowest SES quintile.

In contrast, similar difference patterns are not observed when analyzing teachers' ESL experience. In this case, there are only small or nonexistent differences among Hispanic subgroups. For example, 8% of Mexican students, but less than 5% of Cuban, South American and Central American students, have experienced ESL teachers. Similarly, about 9% and 3% of Hispanic students living in only-Spanish speaking and only-English speaking homes have teachers with five or more years teaching ESL.

(Insert Table 7 here)

SUMMARY AND CONCLUSIONS

In this report, we expand previous research on Hispanic students' educational experiences by analyzing patterns of their educational experience in six policy-relevant areas that may affect schooling outcomes: English proficiency, family background, learning environments at home, instructional environments in school, school characteristics, and teacher characteristics. Throughout the report, we pay particular attention to the educational experiences of contextually and linguistically disadvantaged Hispanic students—students whose families are recent immigrants and have low levels of English proficiency.

One of the most consistent patterns of findings in the report is that these contextually/linguistically disadvantaged Hispanic students experience substantially more disadvantaged educational environments and fewer educational opportunities at home and in school than do other Hispanic and non-Hispanic White students. In comparison to both non-Hispanic White and third-generation, English-proficient Hispanic students, contextually and linguistically disadvantaged students typically have families with low socioeconomic status, parents with low levels of education, less access to educational resources and activities at home, bigger schools with higher concentration of minority students, and teachers with lower levels of credentials, qualifications, and experiences. For many Hispanic students, the combination of contextual/linguistic disadvantage with socioeconomic and educational

disadvantages creates a double or triple disadvantage that places them at substantial risk for school failure.

The lack of educational resources at home (books, computers, parental reading) of contextually and linguistically disadvantaged Hispanic students is not particularly surprising, given that these students are primarily Central American- and Mexican-origin recent immigrants in families with few economic resources and low levels of adult literacy (Portes & Rumbaut, 2001). However, the fact that these Hispanic students also tend to attend more disadvantaged schools than more advantaged Hispanic and non-Hispanic White students is troubling, given that the U.S. educational system aims at providing equal opportunities to students regardless of individual characteristics.

As we have shown in other analyses, the Hispanic subgroups experiencing the least positive educational environments (first- and second-generation Mexican-origin students, students with origins in Central America, students with low levels of English exposure and proficiency) also demonstrate the lowest levels of achievement among Hispanic subgroups in math and reading in elementary school (Reardon & Galindo, 2006, forthcoming). It is not clear, however, to what extent these achievement patterns are attributable to students' socioeconomic and linguistic disadvantages, to their lower levels of exposure to positive educational environments, or to some interaction of the two. Given the strong correlations among socioeconomic status, recency of immigration, English proficiency, and educational contexts, it is important for future research to determine how schools might better support the educational success of these most at-risk Hispanic students.

This report merely describes a set of broad patterns that require additional in-depth analyses. In particular, the findings here suggest three main areas for future research. First, there is a clear need to better understand the experiences and opportunities available to the subgroups of Hispanic students that this report identifies as most at-risk—first- and second-generation Mexican-origin students, students with origins in Central America, and students with low levels of English exposure and proficiency. In this group of students, contextual/linguistic, socioeconomic, and educational disadvantages are compounded. It is clear that a better understanding of these students' experiences is needed in order to develop effective opportunities for their success in school.

Second, this report does not address the question of the extent to which the patterns of educational experiences among Hispanic students can account for differences in the educational success of subgroups of Hispanic and non-Hispanic students. Although there is considerable research on the effects of various home and school characteristics on student outcomes, relatively little of such work has focused on their effects for Hispanic students. Given the complex interplay between immigrant status, English proficiency, socioeconomic status and educational outcomes, it is important to examine in more detail the effects of various educational experiences for Hispanic students.

Finally, the results of this report suggest the need for educators and researchers to identify effective curricula, instructional practices, interventions, and policies that will improve the educational opportunities of first- and second-generation Mexican-origin students, students with origins in Central America, and students with low levels of English exposure and proficiency, since these students are the most disadvantaged (contextually/linguistically and socioeconomically) among Hispanic students, and those whose current patterns of achievement in elementary school place them most at risk of subsequent school failure.

Appendix: Data and Methods

Variables

Throughout this report, we use the following definitions:

Race/Ethnicity. Students are classified at each round of the ECLS-K data collection as White, not Hispanic; Black, not Hispanic; Hispanic, and race; Asian, and Other race.⁹ The full sample breakdown by race/ethnicity is shown in Table 1.

Immigrant Generation. ECLS-K students are defined as first, second, or third-plus generation based on a set of questions in the kindergarten, first grade, and third grade parent survey that indicate where they and their parents were born.¹⁰ Students born outside of the U.S. whose responding parent was born outside of the U.S. are classified as first-generation students (island-born Puerto-Rican students are also defined as first-generation students). Students born in the U.S. and whose responding parent was born outside of the U.S. are classified as second generation students. Finally, students born to a U.S. born parent (regardless of where the student was born) are classified as third-plus generation students. Although 26% of Hispanic students in the sample are missing complete information on immigrant generation, in this report we tabulate achievement levels by immigrant generation only among those identified as in the Mexican Hispanic subgroup, among whom 98% have complete immigrant generation information.

Hispanics' National/Regional Origin. We use information on the student and parents' countries of birth not only to categorize students by immigrant generation, but also to identify the country or region of national origin for each Hispanic student.¹¹ Based on

⁹ A small number of students have contradictory information across waves; in these cases we prioritize the Hispanic classification, so students classified as Hispanic at any wave are coded as Hispanic for this report. In addition, we reclassify as Hispanic a small number of students classified as White or Black but who were born (or whose parents were born) in Mexico, Cuba, Puerto Rico, or in any Spanish speaking country in South America or Central America. After these reclassifications, the Hispanic sample increase by around 5% including 4,006 Hispanic students.

¹⁰ Parents were not asked their country of birth in the kindergarten parent survey. In the first grade parent survey, only the parent responding to the survey (usually the mother) was asked. In the third grade parent survey, the respondent was asked to report country of birth for both parents. For students who left the ECLS-K sample prior to third grade (roughly 25% of the total sample), then, we lack information on the country of birth for one or both parents. If information is available for neither parent, we classify students as 'second/third generation' if the student was born in the U.S., and first generation if born outside the U.S. If information is available for only one parent, we use that as the parents' place of birth (realizing that we cannot be sure both parents were born in the same place). If information is available for both parents' country of birth, we use the mother's place of birth to classify students' immigrant generation. Finally, if the student's country of birth is not reported, but the parent(s) were foreign-born, we classify the student as first generation.

Roughly 23% of the total ECLS-K sample (roughly 26% of Hispanic students) cannot be unambiguously categorized as first, second, or third-plus generation. Most of this missing data (17% of the total sample) is a result of the fact that the kindergarten parent survey did not ask about the parent's country of birth (it was asked in the first and third grade surveys), so we cannot distinguish second from third-plus generation students among those who left the sample prior to the spring of first grade (about a fifth of the total sample).

¹¹ In addition to being asked where they and the student were born, parents were asked in the first grade survey whether the student was a member of a Hispanic group, and if so, "which Spanish/Hispanic/Latino group best describes [the child's] origin?" Response options were: a) Mexican, Mexican-American or Chicano; b) Puerto Rican; c) Cuban; and d) other Spanish/Hispanic/Latino group. In order to categorize Hispanic students by their national origins, we first use information on the student's, mother's, and father's country of birth (in that

parent responses to these questions, we classify students as having national origins in Mexico; Puerto Rico; Cuba; South America, Central America,¹² or elsewhere. “Other Hispanic” origin includes a small and heterogeneous group of students with ancestries in Spain, Brazil, Guyana, or Dominica, for example. It also includes students for whom country of birth information is missing and whose parents defined them as members of an “other Spanish/Hispanic/Hispanic group” in the question about Hispanic group membership.

Roughly a third of the Hispanic students in the sample are missing information on national origin. Most of these cases occur because a) the child was born in the U.S. and parent country of birth and Hispanic subgroup information is missing from the first and third grade parent surveys (mostly because the student left the sample prior to first grade); or b) both child and parent were born in the U.S. and the Hispanic subgroup information is missing (because only asked in first grade).

Socioeconomic Status. For the ECLS-K, a continuous measure of socioeconomic status was created based on a composite of the student’s mother’s and father’s educational attainment, mother’s and father’s occupation, and family income. The measure was constructed for kindergarten, first, and third grade. In this report, we use the average of the kindergarten and first grade composite measures, divided into quintiles.

Language Used at Home. Although it would be informative to have some measure of Hispanic students oral and written proficiency in both Spanish and English, ECLS-K does not contain ideal measures of orally and literacy. Students from non-English-speaking homes were given the English Oral Language Development Scale (OLDS) assessment to determine whether they could be administered the reading and math assessments in English, but because not all students were given the OLDS, we cannot use it to categorize students’ English fluency unless we make some assumptions about the English skills of the students not administered the OLDS. In addition, students who did not meet the proficiency criterion of the English OLDS were also administered the Spanish OLDS assessment, but again, only a subset of the Hispanic sample was given the test, so it is not useful for categorizing students by Spanish fluency.

Instead, we use here a measure of the language(s) spoken by the student and his or her parent(s) in their home. Parents were asked what language each of the mother and father speak to the child, and what language the child speaks to each of the mother and father. Possible responses for each question were 1) only English, 2) primarily English, 3) primarily Spanish, and 4) only Spanish. We averaged the parent responses to these four questions (coded 1-4; alpha reliability=0.96), and then categorized the resulting continuous variable into the same four categories by rounding it to the nearest whole number.

Sample

Table A1 describes the distribution of the ECLS-K sample by race/ethnicity, Hispanic national origin, and immigrant generational status. Of note for our purposes here

order), and then, if these are unavailable, we use the parent response to the Hispanic group membership question

¹² Only students with origins in Spanish-speaking countries are categorized as South American (Brazil, French Guiana, Guyana and Suriname are excluded) or Central American (Belize is excluded). The Dominican Republic is categorized for our purposes here in the Central American category.

is the large sample of Hispanic students. There are roughly 4,000 Hispanic students in the sample, of whom roughly 2,600 can be categorized by national origin and generational status. In the analyses that follow, statistics for “Hispanics” as a group use data from all 4,000 Hispanics in the sample; statistics for subgroups rely only the relevant identified sub samples. Mexican-origin Hispanics are by far the largest group of Hispanics, and the only group for whom we have adequate sample sizes to disaggregate patterns by immigrant generation.¹³

Table A1: ECLS-K Sample Sizes, by Race & Hispanic National/Regional Origin and Immigrant Generation

Race/National Origin	Immigrant Generation					Total
	1st	2nd	3rd+	2nd/3rd	Un-known	
White, Not Hispanic	87	511	8,675	1,784	602	11,659
Hispanic, any Race	279	1,574	1,106	679	368	4,006
Mexican Origin	174	991	518	22	10	1,715
Cuban Origin	11	58	25	2	1	97
Puerto Rican Origin	19	97	120	1	6	243
Central American Origin	27	234	0	0	9	270
South American Origin	29	115	0	0	3	147
Other Hispanic Origin	10	63	99	10	0	182
Origin Unknown	9	16	344	644	339	1,352
Black, Not Hispanic	30	149	1,921	746	359	3,205
Asian	150	642	104	260	195	1,351
Other Race	25	191	667	180	73	1,136
Race/Ethnicity Unknown	0	8	7	4	33	52
Total	571	3,075	12,480	3,653	1,262	21,409

Methods

For this report, we report descriptive measures – average and percentages. Because the ECLS-K study follows a stratified and clustered sample design rather than a simple random sample design,¹⁴ we use Stata survey commands, which take into account the complex structure of the ECLS-K sample design by specifying stratification levels, sampling units, and sampling weights. Before running any descriptive analyses, we specify the stratum and primary sample unit identifiers, as well as the weight variable. Because we are analyzing Hispanics students’ educational experiences and opportunities while in kindergarten, we use “*c2tenstr*” as the stratum and “*s2_id*” as the primary sample unit identifiers. All descriptive statistics are weighted by the ECLS-K child cross-sectional kindergarten wave 2 weights (ECLS-K variable *c2cm0*) to adjust for sample weighting.

¹³ Note also that the absence of third-generation South and Central American-origin Hispanics in the sample is an artifact of the way national origin and immigrant generation data were collected. Students whose parent(s) reported being born in the U.S. were identified as third+ generation students. For these students, national origin was determined by the question regarding group membership (see above), for which South and Central American were not available responses (only Mexican, Cuban, Puerto Rican, and Other were available options). Thus, third generation students with origins in South or Central American would be coded as Other or Unknown national origin.

¹⁴ For a detailed description of the ECLS-K sample design review (National Center for Education Statistics, 2001)

Table 1: Hispanic Students' Language Proficiency

	Language Minority	Non-proficient in Oral English	Language Spoken at Home			
			English Only	Predominantly English	Predominantly Spanish	Spanish Only
Race / National Origin / Generation						
Hispanic, any Race	50.2	29.6	31.8	19.4	19.3	29.5
Mexican Origin	58.7	42.3	23.8	16.2	20.0	40.1
Mexican, 1 st generation	91.2	78.2	6.8	2.3	15.8	75.2
Mexican, 2 nd generation	76.9	56.1	8.3	13.0	25.6	53.1
Mexican, 3 rd generation	13.7	3.4	57.6	26.8	10.6	4.9
Puerto Rican Origin	32.2	7.0	39.6	27.2	18.3	14.9
Cuban Origin	67.9	22.2	18.8	31.8	23.5	25.9
South American Origin	68.4	22.7	21.1	15.9	23.3	39.7
Central American Origin	75.8	43.2	17.3	24.4	30.7	27.6
Other Hispanic Origin	24.4	3.2	51.6	24.2	13.0	11.2
Language spoken at home						
English only	13.6	6.3	100.0	0.0	0.0	0.0
Bilingual: English dominant	30.2	5.8	0.0	100.0	0.0	0.0
Bilingual: Spanish dominant	67.0	34.4	0.0	0.0	100.0	0.0
Spanish only	87.4	65.3	0.0	0.0	0.0	100.0
Hispanic SES quintile						
Quintile 1 (low)	70.9	51.9	20.2	21.7	39.8	66.2
Quintile 2	45.8	23.2	22.2	23.3	24.4	16.3
Quintile 3	35.1	13.4	21.7	23.3	16.1	8.4
Quintile 4	24.5	6.5	22.6	18.2	12.7	5.3
Quintile 5 (high)	26.2	4.4	13.0	13.4	6.8	3.6

Source: Authors' tabulations of data from the ECLS – Kindergarten Cohort of 1998-1999. Sample includes Hispanic students of any race and Black and White students born to a U.S.-born parent. All statistics are weighted by cross-sectional weight c2cw0. Hispanic students are disaggregated by national/regional origin, socioeconomic (SES) quintiles and language used at home, and Mexican students are disaggregated by generational status.

Table 2: Hispanic Students' Family Background

	SES indicators					Family Structure			
	Overall measure	Mean income (\$)	Below poverty (%)	Education: < than HS (%)	Education: college+ (%)	Two biological parents(%)	Single-parent (%)	Siblings: 0-1 (%)	Siblings: 3+ (%)
Race / National Origin / Generation									
White, Not Hispanic, 3rd+ Gen	0.183	62,797	9.2	3.6	38.6	74.9	13.8	62.5	10.9
Black, Not Hispanic, 3rd+ Gen	-0.428	28,001	43.0	13.3	12.1	30.9	52.4	54.8	19.7
Hispanic, any Race	-0.430	34,057	35.1	26.5	12.7	63.7	24.1	55.3	18.0
Mexican Origin	-0.580	30,210	41.5	34.3	8.6	71.8	18.5	49.8	22.5
Mexican, 1st generation	-0.874	17,476	68.8	47.2	3.0	73.8	15.8	53.7	24.0
Mexican, 2nd generation	-0.732	24,940	47.7	42.3	6.4	77.4	15.2	46.8	23.9
Mexican, 3rd generation	-0.179	44,243	21.1	13.7	14.7	61.3	25.0	55.0	18.3
Puerto Rican Origin	-0.282	43,534	27.5	13.9	17.8	50.6	33.1	56.9	13.2
Cuban Origin	0.145	56,038	20.8	8.3	41.4	66.9	21.2	75.3	10.1
South American Origin	0.020	45,535	19.5	5.8	33.3	75.3	17.6	72.0	5.2
Central American Origin	-0.457	33,349	38.8	33.5	18.6	67.8	22.7	54.2	17.7
Other Hispanic Origin	-0.139	44,523	16.9	14.2	23.6	61.6	27.8	56.4	11.9
Language used at home									
English only	-0.159	47,352	21.6	13.3	18.5	55.5	26.7	61.7	15.9
Bilingual: English dominant	-0.213	38,833	25.4	16.5	17.7	63.3	26.8	57.2	12.9
Bilingual: Spanish dominant	-0.487	29,750	35.9	25.8	13.4	66.1	23.4	53.1	18.5
Spanish only	-0.795	22,644	52.0	47.3	7.4	72.1	20.0	49.2	22.7
Hispanic SES quintile									
Quintile 1 (low)	-1.022	16,541	62.2	63.6	0.3	61.5	28.3	44.5	27.0
Quintile 2	-0.500	29,277	28.8	6.5	1.3	63.1	24.2	56.2	15.2
Quintile 3	-0.151	40,547	13.6	2.2	8.8	60.7	26.7	64.3	10.8
Quintile 4	0.248	54,479	6.5	0.0	36.8	68.0	15.8	66.4	10.7
Quintile 5 (high)	1.024	91,979	2.5	0.0	86.6	75.3	10.1	69.4	8.4
Sample size	14004	13,684	13684	14004	14004	13356	13684	12350	12350

Source: Authors' tabulations of data from the ECLS – Kindergarten Cohort of 1998-1999. Sample includes Hispanic students of any race and Black and White students born to a U.S.-born parent. All statistics are weighted by cross-sectional weight *c2cm0*. Hispanic students are disaggregated by national/regional origin, socioeconomic (SES) quintiles and language used at home, and Mexican students are disaggregated by generational status.

Table 3: Hispanic Students’ Learning Environments at Home

	Parents’ Educational Expectation: BA or more (%)	Educational Resources		Center-Based Care (%)		Parents Read to Child: days per week (%)	
		Books (#)	Computer (%)	ever	currently	3-6 days	everyday
Race / National Origin / Generation							
White, Not Hispanic, 3rd+ Gen	73.9	95	66.3	79.2	21.3	38.1	49.1
Black, Not Hispanic, 3rd+ Gen	73.2	39	32.0	85.9	22.1	32.3	35.3
Hispanic, any Race	78.3	42	33.8	63.1	13.4	31.0	39.2
Mexican Origin	77.5	36	28.1	58.0	9.0	30.6	36.9
Mexican, 1st generation	85.2	12	10.3	39.0	3.1	22.7	33.3
Mexican, 2nd generation	81.0	26	22.7	54.3	6.2	31.6	32.9
Mexican, 3rd generation	69.8	65	45.2	71.4	16.1	31.3	46.9
Puerto Rican Origin	72.0	46	44.2	70.1	19.8	35.9	34.1
Cuban Origin	95.0	49	54.7	77.8	24.2	31.0	40.9
South American Origin	90.8	49	58.0	77.4	17.5	26.8	46.8
Central American Origin	90.1	35	31.5	56.5	11.5	27.8	39.7
Other Hispanic Origin	79.7	60	47.3	76.4	22.9	29.8	49.8
Language spoken at home							
English only	74.7	65	48.4	71.3	19.7	32.8	44.2
Bilingual: English dominant	75.4	51	43.6	70.8	17.1	33.8	42.8
Bilingual: Spanish dominant	79.5	33	30.6	61.8	11.9	32.1	36.5
Spanish only	82.8	19	19.1	50.4	5.5	26.8	33.3
Hispanic SES quintiles							
Quintile 1 (low)	72.1	20	14.6	51.2	5.9	25.8	31.9
Quintile 2	74.0	39	27.4	63.0	9.5	31.6	39.3
Quintile 3	78.7	53	44.8	72.0	20.8	36.5	40.4
Quintile 4	91.3	72	63.1	75.5	23.9	39.7	45.5
Quintile 5 (high)	97.2	85	77.7	82.7	28.2	29.2	62.4
Sample size	12283	12222	13341	12324	12329	12332	12332

Source: Authors’ tabulations of data from the ECLS – Kindergarten Cohort of 1998-1999. Sample includes Hispanic students of any race and Black and White students born to a U.S.-born parent. All statistics are weighted by cross-sectional weight *v2m0*. Hispanic students are disaggregated by national/regional origin, socioeconomic (SES) quintiles and language used at home, and Mexican students are disaggregated by generational status.

Table 4: Hispanic Students’ Instructional Environments in School

	First time KG	Full day KG	Ability grouped reading	Special Programs					
				Tutored Reading	Tutored Math	Pull-out groups: Reading	Pull-out groups: Math	Pull-out ESL	In class ESL
Race / National Origin / Generation									
White, Not Hispanic, 3rd+ Gen	96.0	51.7	46.4	6.5	3.9	15.5	6.8	0.0	0.0
Black, Not Hispanic, 3rd+ Gen	94.3	79.0	65.7	9.2	5.7	20.4	9.4	0.0	0.0
Hispanic, any Race	94.6	48.7	61.4	9.9	6.0	17.0	9.2	7.1	27.3
Mexican Origin	95.6	39.8	63.2	10.7	6.4	15.8	8.0	7.6	38.5
Mexican, 1st generation	90.5	45.7	68.3	15.5	9.1	19.5	10.0	17.3	59.9
Mexican, 2nd generation	96.2	36.5	65.1	10.4	6.9	15.2	8.1	8.7	52.2
Mexican, 3rd generation	97.3	44.4	57.3	8.3	4.1	15.4	7.4	2.0	6.5
Puerto Rican Origin	93.6	67.7	56.9	10.6	7.5	19.8	13.1	8.8	9.5
Cuban Origin	93.0	96.1	58.4	8.2	7.8	15.9	7.6	7.8	31.0
South American Origin	91.2	66.2	49.6	4.1	3.4	12.8	3.9	16.7	18.8
Central American Origin	93.8	60.7	63.4	3.8	2.3	18.3	11.6	11.3	33.7
Other Hispanic Origin	94.5	51.7	60.0	8.6	4.7	15.2	8.3	3.3	3.7
Language spoken at home									
English only	94.5	47.0	60.2	11.1	6.4	17.6	9.3	1.0	6.0
Bilingual: English dominant	94.6	54.0	57.9	7.7	5.0	16.6	9.4	5.2	7.5
Bilingual: Spanish dominant	93.7	51.5	61.8	8.8	4.9	16.9	9.4	10.2	33.8
Spanish only	95.5	45.0	65.6	11.8	7.0	15.4	8.0	13.6	58.0
Hispanic SES quintiles									
Quintile 1 (low)	94.6	43.2	66.5	11.4	7.0	19.5	10.5	11.2	46.6
Quintile 2	93.8	48.1	61.5	10.8	7.0	16.8	9.4	6.4	22.7
Quintile 3	93.7	52.6	60.0	12.3	7.6	15.9	8.8	4.9	15.2
Quintile 4	96.5	53.0	54.0	6.0	3.3	12.7	6.9	2.9	7.3
Quintile 5 (high)	95.8	58.5	50.1	5.0	2.2	11.4	4.4	3.4	3.8
Sample size	12330	13829	13157	13419	13417	13404	13408		

Source: Authors’ tabulations of data from the ECLS – Kindergarten Cohort of 1998-1999. Sample includes Hispanic students of any race and Black and White students born to a U.S.-born parent. All statistics are weighted by cross-sectional weight *c2m0*. Hispanic students are disaggregated by national/regional origin, socioeconomic (SES) quintiles and language used at home, and Mexican students are disaggregated by generational status.

Table 5: Hispanic Students' School Characteristics

	Private school (%)	Title 1 school (%)	Kindergarten enrollment (number)
Race / National Origin / Generation			
White, Not Hispanic, 3rd+ Gen	18.1	45.2	80
Black, Not Hispanic, 3rd+ Gen	8.3	71.8	88
Hispanic, any Race	9.3	61.1	113
Mexican Origin	5.9	66.6	112
Mexican, 1st generation	3.1	71.6	125
Mexican, 2nd generation	4.0	70.6	121
Mexican, 3rd generation	10.1	57.6	90
Puerto Rican Origin	11.1	48.6	108
Cuban Origin	21.2	52.5	107
South American Origin	16.2	38.8	113
Central American Origin	8.7	60.5	136
Other Hispanic Origin	13.3	48.0	89
Language spoken at home			
English only	13.5	50.5	98
Bilingual: English dominant	11.5	57.6	112
Bilingual: Spanish dominant	8.6	64.6	111
Spanish only	3.9	72.5	129
Hispanic SES quintiles			
Quintile 1 (low)	1.4	74.1	131
Quintile 2	6.1	67.8	116
Quintile 3	14.2	54.0	103
Quintile 4	20.5	40.7	86
Quintile 5 (high)	33.1	30.7	81
Sample size	14004	12109	11549

Source: Authors' tabulations of data from the ECLS – Kindergarten Cohort of 1998-1999. Sample includes Hispanic students of any race and Black and White students born to a U.S.-born parent. All statistics are weighted by cross-sectional weight *c2w0*. Hispanic students are disaggregated by national/regional origin, socioeconomic (SES) quintiles and language used at home, and Mexican students are disaggregated by generational status

Table 6: Hispanic Students' School Characteristics

	Minority Composition (%)				School Climate		
	White	Hispanic	Black	LEP	Free lunch eligible	Disorganized Community Location	Safety problems in school
Race / National Origin / Generation							
White, Not Hispanic, 3rd+ Gen	83.2	5.1	8.1	2.1	22.9	1.8	0.19
Black, Not Hispanic, 3rd+ Gen	33.9	5.7	57.2	2.5	58.3	2.4	0.25
Hispanic, any Race	40.2	43.7	10.3	22.9	42.8	2.3	0.24
Mexican Origin	32.4	53.6	8.2	30.1	49.0	2.5	0.23
Mexican, 1st generation	28.2	57.2	8.5	40.8	56.2	2.8	0.31
Mexican, 2nd generation	25.7	60.7	8.0	36.5	53.8	2.6	0.24
Mexican, 3rd generation	46.4	38.2	8.5	15.3	38.0	2.1	0.21
Puerto Rican Origin	53.9	24.5	19.4	8.1	29.1	2.3	0.28
Cuban Origin	32.5	55.7	10.8	22.4	44.4	2.0	0.27
South American Origin	54.0	29.7	11.7	16.7	28.8	2.0	0.24
Central American Origin	40.8	43.0	11.4	25.7	37.4	2.6	0.27
Other Hispanic Origin	53.0	25.3	11.6	9.1	31.6	2.0	0.20
Language spoken at home							
English only	58.4	25.2	10.3	9.3	32.3	2.1	0.21
Bilingual: English dominant	41.1	40.1	11.8	16.8	40.3	2.2	0.23
Bilingual: Spanish dominant	33.0	50.4	10.6	24.4	47.9	2.4	0.22
Spanish only	25.8	59.1	9.5	37.6	54.1	2.6	0.29
Hispanic SES quintiles							
Quintile 1 (low)	28.9	55.6	10.5	34.7	52.7	2.6	0.29
Quintile 2	39.9	43.8	10.1	21.9	45.9	2.4	0.23
Quintile 3	47.9	34.6	10.8	14.4	37.3	2.1	0.24
Quintile 4	53.2	31.1	9.5	11.2	31.3	2.0	0.19
Quintile 5 (high)	60.8	22.1	9.4	6.8	20.1	1.9	0.11
Sample size	11552	10923	11589	11605	11813	11974	8980

Source: Authors' tabulations of data from the ECLS – Kindergarten Cohort of 1998-1999. Sample includes Hispanic students of any race and Black and White students born to a U.S.-born parent. All statistics are weighted by cross-sectional weight *c2w0*. Hispanic students are disaggregated by national/regional origin, socioeconomic (SES) quintiles and language used at home, and Mexican students are disaggregated by generational status.

Table 7: Hispanic Students' Teacher Characteristics

	Education		Certification		Teaching Experience		
	Bachelor- some years beyond	Master- PhD	Highest (permanent)	Elementary education	Kindergarten 5+ years	Bilingual 5+ years	ESL 5+ years
Race / National Origin / Generation							
White, Not Hispanic, 3rd+ Gen	62.1	31.4	66.3	86.4	59.3	0.4	0.4
Black, Not Hispanic, 3rd+ Gen	62.5	30.2	59.5	77.1	51.6	0.5	0.5
Hispanic, any Race	63.0	29.9	64.8	87.4	49.5	11.6	5.9
Mexican Origin	70.3	24.8	64.8	89.1	46.1	17.8	8.3
Mexican, 1st generation	68.3	22.4	72.4	88.9	38.1	24.2	12.0
Mexican, 2nd generation	71.6	24.9	60.6	89.4	42.9	23.3	10.0
Mexican, 3rd generation	68.6	25.1	71.5	89.2	54.7	5.5	4.5
Puerto Rican Origin	55.0	36.7	69.0	80.4	58.7	3.8	0.5
Cuban Origin	52.2	43.3	66.1	91.3	44.7	1.2	4.6
South American Origin	48.7	42.7	68.8	83.6	52.4	4.3	2.9
Central American Origin	55.2	36.3	61.2	84.6	52.8	8.9	1.1
Other Hispanic Origin	55.9	38.3	72.4	84.8	64.8	6.6	3.3
Language used at home							
English only	60.4	30.5	69.1	84.9	55.6	3.4	2.7
Bilingual: English dominant	61.5	31.7	66.6	89.7	53.0	5.7	6.1
Bilingual: Spanish dominant	64.1	28.6	60.7	85.7	46.2	12.6	7.4
Spanish only	65.5	29.7	63.5	89.1	45.0	22.9	8.7
Hispanic SES quintile							
Quintile 1 (low)	64.5	29.2	63.3	89.9	46.5	18.4	7.6
Quintile 2	62.2	31.3	67.9	88.4	50.6	10.1	5.3
Quintile 3	62.0	29.7	64.7	85.8	55.0	7.4	5.8
Quintile 4	65.8	26.0	66.9	84.0	53.3	4.0	4.3
Quintile 5 (high)	56.4	33.5	61.0	79.1	47.9	3.5	3.2
Sample size	12832	12832	13118	12938	13539	13538	13538

Source: Authors' tabulations of data from the ECLS – Kindergarten Cohort of 1998-1999. Sample includes Hispanic students of any race and Black and White students born to a U.S.-born parent. All statistics are weighted by cross-sectional weight *c2m0*. Hispanic students are disaggregated by national/regional origin, socioeconomic (SES) quintiles and language used at home, and Mexican students are disaggregated by generational status.

References

- Borman, G., & Overman, L. (2004). Academic Resilience in Mathematics among Poor and Minority Students. *The Elementary School Journal*, 104(3), 177-195.
- Callahan, R. (2005). Tracking and High School English Learners: Limiting Opportunities to Learn. *American Educational Research Journal*, 42(2), 305-328.
- Carliner, G. (1995). *The Language Ability of U.S. Immigrants: Assimilation and Cohort Effects* (Working Paper No 5222). Washington DC: National Bureau of Economic Research.
- Caughy, M., DiPietro, J., & Strobino, D. (1994). Day-Care Participation as a Protective Factor in the Cognitive Development of Low-Income Children. *Child Development*, 65, 457-471.
- Coleman, J., Hobson, C., McPartland, J., Mood, F., Weinfeld, F., & York, R. (1966). *Equality of Educational Opportunity*. Washington, D.C.: U.S. Government Printing Office.
- Crawford, J. (1997). *Best Evidence: Research Foundations of the Bilingual Education Act*. Washington D.C.: National Clearinghouse for Bilingual Education.
- Crosnoe, R. (2005). Double Disadvantage or Signs of Resilience? The Elementary School Context of Children from Mexican Immigrant Families. *American Educational Research Journal*, 42(2), 269-303.
- Darling-Hammond, L. (2000). New Standards and Old Inequalities: School Reform and the Education of African American Students. *The Journal of Negro Education*, 69(4), 263-287.
- Entwisle, D., & Alexander, K. L. (1993). Entry into School: The beginning School Transition and Educational Stratification in the United States. *Annual Review of Sociology*, 19, 401-423.
- Feyl, N., & Williams, D. (1993). Minority Parents and the Elementary Schools: Attitudes and Practices. In N. Feyl (Ed.), *Families and Schools in a Pluralistic Society*. New York: State University of New York Press.
- Fuligni, A. (1997). The Academic Achievement of Adolescents from Immigrant Families: The Roles of Family Background, Attitudes and Behavior. *Child Development*, 68, 352 - 363.
- Gándara, P., Rumberger, R., Maxwell-Jolly, J., & Callahan, R. (2003). English Learners in California Schools: Unequal resources, unequal outcomes. *Educational Policy Analysis Archives*, 11(36), Retrieved from <http://epaa.asu.edu/epaa/v11n36/>.
- Garcia, E. (2001). *Hispanic Education in the United States. Raíces y Alas*. New York: Rowman and Littlefield Publishers.
- Genesee, F. (1999). *Program Alternatives for Linguistically Diverse Students*. Santa Cruz, California: The Center for Research on Education, Diversity and Excellence.
- Griffith, J. (2002). A Multilevel Analysis of the Relation of School Learning and Social Environments to Minority Achievement in Public Elementary Schools. *The Elementary School Journal*, 102(5), 349-366.
- Guzman, B., & McConnell, E. (2002). The Hispanic Population: 1990-2000 growth and change. *Population Research and Policy Review*, 21(1-2), 109-128.
- Hao, L., & Bonstead-Bruns, M. (1998). Parent-Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students. *Sociology of Education*, 51, 175-198.

- Henderson, R., & Landesman, E. (1992). *Mathematics and Middle School Students of Mexican Descent: The Effect of Thematically Integrated Instruction* (No. rr05). Santa Cruz: Center for Research on Education, Diversity and Excellence. University of California.
- Hirschman, C. (2001). The Educational Enrollment of Immigrant Youth: A Test of the Segmented Assimilation Hypothesis. *Demography*, 38(3), 317-336.
- Hook, V., Brown, S., & Kwenda, M. (2003). *One Step Forward, Two Steps Back: The Increase in Immigrant Child Poverty from 1970 to 2000*. Paper presented at the Population Association of America, Minneapolis.
- Inter-University Program for Latino Research. (2002). *The Latino Population: 1990-2000*: Inter-University Program for Latino Research.
- Kao, G., & Thompson, J. (2003). Race and Ethnic Stratification in Educational Achievement and Attainment. *Annual Review of Sociology*, 29, 417-442.
- Kao, G., & Tienda, M. (1995). Optimism and Achievement: The Educational Performance of Immigrant Youth. *Social Science Quarterly*, 76(1), 1-19.
- Lareau, A. (1987). Social Class Differences in Family-School Relationships: The Importance of Cultural Capital. *Sociology of Education*, 60, 73-85.
- Larsen, L. (2004). *The Foreign-Born Population in the United States: 2003* (Current Population Reports P20-551 <http://www.census.gov/prod/2004pubs/p20-551.pdf>). Washington DC: U.S. Census Bureau.
- Lee, V., & Burkham, D. (2002). *Inequality at the Starting Gate: Social Background Differences in Achievement as Children Begin School*. Washington D.C.: Economic Policy Institute.
- Marks, G. (2005). Accounting for Immigrant Non-Immigrant differences in Reading and Mathematics in Twenty Countries. *Ethnic and Racial Studies*, 28(5), 925-946.
- Martin, P., & Midgley, E. (1999). Immigration to the United States. *Population Bulletin*, 54(2).
- Martin, P., & Midgley, E. (2003). Immigration: Shaping and Reshaping America. *Population Bulletin*, 58(2).
- Moles, O. (1996). New National Directions in Research and Policy. In A. Booth & J. Dunn (Eds.), *Family and Schools Links. How do they Affect Educational Outcomes?* Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- National Center for Education Statistics. (2001). *ECLS-K, Base Year Public-Use Data File, Kindergarten Class of 1998-99: Data Files and Electronic Code Book (Child, Teacher, School Files), and User's Manual*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- National Center for Education Statistics. (2002). *User's Manual for the ECLS-K First Grade Public-Use Data Files and Electronic Codebook (No. NCES 2002-135)*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- National Center for Education Statistics. (2003). *User's Manual for the ECLS-K Third Grade Restricted-Use Data File and Electronic Codebook*. Washington D.C.: U.S. Department of Education.
- Orfield, G., & Yun, J. (1999). *Resegregation in American schools*. Boston: The Civil Rights Project, Harvard University.
- Padilla, A., & Gonzalez, R. (2001). Academic Performance of Immigrant and U.S. Born Mexican Heritage Students: Effects of Schooling in Mexico and Bilingual? English Language Instruction. *American Educational Research Journal*, 38(3), 727-742.
- Portes, A. (2001). The two Meanings of Social Capital. *Sociological Forum*, 15, 1.
- Portes, A. & Hao, L. (1998). E Pluribus Unum: Bilingualism and language loss in the second generation. *Sociology of Education*, 71, 269-294.

- Portes, A. & MacLeoad, D. (1996). Educational Progress of Children of Immigrants: The Role of Class, Ethnicity and Social Context. *Sociology of Education*, 69(4), 255-275.
- Portes, A. & Rumbaut, R. (2001). *Legacies. The History of the Immigrant Second Generation*. Berkley, Los Angeles: University of California Press.
- Ramirez, R. (2004). *We the People: Hispanics in the United States*. (Census 2000 Special Reports CENSR-18 <http://www.census.gov/prod/2004pubs/censr-18.pdf>). Washington DC: U.S. Census Bureau.
- Reardon, S., & Galindo, C. (2006). *Patterns of Hispanic Student Achievement in the Early Elementary Grades*: National Task Force on Early Childhood Education for Hispanics. The Arizona State University.
- Reardon, S., & Galindo, C. (forthcoming). Patterns of Hispanic Students' Math Skill Proficiency in the Early Elementary Grades. *Journal of Latinos and Education*.
- Rock, D., & Pollack, J. (2002). *Early Childhood Longitudinal Study - Kindergarten Class 1998 - 99 (ECLS-K), Psychometric Report for Kindergarten Through Third Grade*. Washington D.C.: U.S. Department of Education, National Center for Educational Statistics.
- Roscigno, V. (1998). Race and the Reproduction of Educational Disadvantage. *Social Forces*, 76, 1033-1061.
- Roscigno, V., & Ainsworth-Darnell, J. (1999). Race, Cultural Capital and Educational Resources: persistent Inequalities and Achievement Returns. *Sociology of Education*, 72, 158-178.
- Rosenthal, A., Baker, K., & Ginsburg, A. (1983). The Effects of English Background on Achievement Levels and Learning Outcomes among Elementary School Students. *Sociology of Education*, 56(4), 157-169.
- Rossell, C., & Baker, K. (1996). The Educational Effectiveness of Bilingual Education. *Research on the Teaching of English*(30), 7-74.
- Rumbaut, R. (1995). *Immigrants from Latin America and the Caribbean: A Socioeconomic Profile* (CIFRAS No. 6). East Lansing, Michigan: Julian Samora Research Institute, Michigan State University.
- Rumbaut, R. (1997). Assimilation and Its Discontents: Between Rhetoric and Reality. *International Migration Review*, 31(4), 923-960.
- Schmid, C. (2001). Educational Achievement, Language Minority and the New Second Generation. *Sociology of Education*, 73(Extra Issue), 71-87.
- U.S. Census Bureau. (2000). *The Hispanic Population in the United States* (Population Characteristics). Washington DC: U.S. Census Bureau.
- Valencia, R. (2002). Current Realities of the Chicago Schooling Experiences. In R. Valencia (Ed.), *Chicano School Failure and Success. Past, Present and Future* (2nd ed., pp. 3-51). New York: Routledge.
- Van Hook, J., & Stamper Balistreri, K. (2002). Diversity and Change in the Institutional Context of Immigrants Adaptation: California Schools 1985 - 2000. *Demography*, 39, 639 - 654.
- Van Hook, J., Brown, S., & Kwenda, M. (2003). One Step Forward, Two Steps Back: The Increase in Immigrant Child Poverty from 1970 to 2000. *Paper presented at the Population Association of America*.
- Winsler, A., Diaz, R., Espinosa, L., & Rodriguez, J. (1999). When Learning a Second Language Does Not Mean Losing the First: Bilingual Language Development in Low-Income, Spanish-Speaking Children Attending Bilingual Preschool. *Child Development*, 70(2), 349-362.

- Wojtkiewicz, R., & Donato, K. (1995). Hispanic Educational Attainment: The Effects of Family Background and Nativity. *Social Forces*, 74(2), 559-574.
- Yarosz, D., & Barnett, W. (2001). Who Read to Young Children?: Identifying Predictors of Family Reading Activities. *Reading Psychology*, 22, 67-81.
- Zhou, M. (1997a). Growing Up American: The Challenge Confronting Immigrant Children and Children of Immigrants. *Annual Review of Sociology*, 23, 63-95.
- Zhou, M. (1997b). Segmented Assimilation: Issues, Controversies and Recent Research on the New Second Generation. *International Migration Review*, 31(4), 975-1008.
- Zhou, M. (2001). Progress, Decline, Stagnation? The New Second Generation Comes of Age in Strangers at the Gate. In R. Waldinger (Ed.), *New Immigrants in Urban America*. Berkeley, Los Angeles: University of California Press.