Education Policy Analysis Archives

Volume 9 Number 1 **January 1, 2001** **ISSN 1068-2341**

A peer-reviewed scholarly journal
Editor: Gene V Glass, College of Education
Arizona State University

Articles appearing in **EPAA** are abstracted in the *Current Index to Journals in Education* by the ERIC Clearinghouse on Assessment and Evaluation and are permanently archived in *Resources in Education*.

School Segregation of Children Who Migrate to the United States From Puerto Rico

Luis M. Laosa
Educational Testing Service
Princeton, New Jersey

Abstract

This study examined patterns of school segregation (ethnic/racial, linguistic, and socioeconomic) and other ecological characteristics of the schools that preadolescent children who migrate from Puerto Rico to the United States (New Jersey) attend in this country during the first two years following their arrival (N = 89 schools). The data show that Hispanics/Latinos are the majority of the student body in 43% of the schools; African Americans, in 30% of the schools; and European Americans, in 12% of the schools. Native speakers of Spanish are the majority of the student body in 29% of the schools. Approximately one half of the schools are in economically depressed, highly urbanized areas. Although the schools are on average large, 44% of them enroll above capacity. In most schools the majority of the student body is from economically impoverished families with low levels of parental education. There are, however, wide differences among the schools on

each of these variables. Correlations show that the higher a student body's proportion of Hispanics/Latinos or native speakers of Spanish, the higher is the student body's proportion of pupils from economically impoverished households with low levels of parental education, and the higher the school's likelihood of being crowded and of being located in a poor inner-city area. Similarly, the higher a student body's proportion of African Americans, the higher is the student body's proportion of pupils from low-income families, and the higher the school's likelihood of being in a poor inner-city area. The findings are discussed with regard to implications for policy and hypotheses in need of research concerning possible consequences of school segregation for students' academic, linguistic, social, and emotional development. Also presented is a historical overview, to the present, and discussion of U.S. policies and judicial decisions concerning school segregation, with particular reference to segregation of Hispanics/Latinos.

Introduction

Schools are social institutions ecologically niched in individual communities that are in turn embedded in larger, layered systems. Thus, each school functions as part of a social, cultural, political, and economic environment. What each school is like will be determined in part by this ecology. In the United States, vast ecological differences exist among schools. This subject raises a broad range of issues, including questions about resource allocation, the distribution of power in society, and educational ideologies (see, e.g., Barton, Coley, & Goertz, 1991; Cobb & Glass, 1999; Kennedy, Jung, & Orland, 1986; Laosa, 1984; Minuchin & Shapiro, 1983; Orland, 1994; Puma, Jones, Rock, & Fernandez, 1993; Rutter, Maughan, Mortimore, & Ouston, 1979; Southern Education Foundation, 1995; U.S. Department of Education, 1993b, 1996, 1997). The subject also raises serious questions about the role of schools in creating or maintaining socioeconomic stratification and ethnolinguistic isolation. These considerations bear especially on children from immigrant and other ethnocultural and linguistic minority groups. For many of these children, the school is the first—and perhaps the only—influential point of direct experience with a "mainstream" socializing institution.

In recent years, many reformers and critics of the U.S. system of education have stressed the importance of academic standards, accountability, and student assessment, whereas less attention has been given to other critical dimensions of the ecology of schools. In contrast, ecological approaches stress the context of events and encourage the search for recurrent patterns that describe the characteristics of a system. From this perspective, no unit is considered separable from the system as a whole (see, e.g., Bronfenbrenner, 1979, 1995; Laosa, 1999; Laosa & Henderson, 1991; Minuchin & Shapiro, 1983).

The study reported here examines specific dimensions of the ecology of schools, focusing particularly on the schools attended by children who migrate to the United States from Puerto Rico. Puerto Ricans are the largest Hispanic/Latino population in the Northeast of the United States (Pérez & Martínez, 1993; U.S. Bureau of the Census, 1992, 1996). Because of the special sociopolitical relationship between the two countries, (Note 1) making Puerto Ricans U.S. citizens by birth, Puerto Ricans are not, technically speaking, "immigrants" in the same sense as are entrants from nations under

the jurisdiction of U.S. immigration laws. Yet, Puerto Ricans who migrate to the United States possess all the characteristics of an immigrant group, including a distinct culture and a different language—Spanish. Puerto Ricans in this country, as a group, fare worse than does the U.S. Hispanic/Latino population as a whole—and far less well than the U.S. non-Hispanic/non-Latino White population—on many socioeconomic characteristics, including varied measures of employment, income, and academic achievement (Pérez & Martínez, 1993; U.S. Bureau of the Census, 1994a, b, 1996). The study reported here is guided by the view that in order to gain a better understanding of children's development and adaptation, one must first describe the attributes of the human environments they face.

Particularl y in the United States, critical ecological attributes of schools include the student body's ethnic/racial, linguistic, and socioeconomic composition. National trends show that school segregation of African American children declined dramatically from the mid-1960s through the early 1970s; it then remained to a large extent stable until the late 1980s when, in a reversal of this trend, it began to rise. In sharp contrast, school segregation of Hispanic/Latino children has continued to increase steadily since at least the mid-1960s, when national data on the subject were first collected (Orfield, 1993; Orfield, Bachmeier, James, & Eitle, 1997; Orfield & Yun, 1999; U.S. Department of Education, 1995).

The level of school segregation for Hispanic/Latino children is high across the country; it is highest for the substantially Puerto Rican population of the Northeast, although it is rapidly rising in other regions with significant concentrations of Hispanics/Latinos. African Americans, too, face the highest segregation levels in the Northeast, although they encounter rising levels in other regions because of resegregation trends (Orfield, 1993; Orfield et al., 1997; Orfield & Yun, 1999). The highest levels of school segregation occur in urban areas, particularly in the inner core of cities.

Of greatest concern, national data further show a relationship of ethnic/racial segregation to poverty: Both Hispanic/Latino and African American children are much more likely than European American children to find themselves in schools of concentrated poverty (Orfield, 1993; Orfield, Eaton, & the Harvard Project on School Desegregation, 1996; Orfield et al., 1997; Orfield & Yun, 1999; Orland, 1994; Puma et al., 1993; U.S. Department of Education, 1993b, 1996, 1997). Although *socioeconomic status* (SES) typically refers to the background of individuals, a growing body of research suggests that the SES of a child's school may be as critical an influence on the child's academic achievement as is the SES of the child. Individual differences in children's academic performance have been shown to correlate not only with the children's household SES but also with the SES of their schools' student bodies (Kennedy et al., 1986; Orland, 1994; Puma et al., 1993; U.S. Department of Education, 1993b, 1996, 1997; U.S. General Accounting Office, 1992). For example, on the basis of a nationally representative sample of U.S. elementary students, Kennedy et al. (1986) and Orland (1994) concluded that the higher a school's concentration of economically impoverished students, the higher tends to be the incidence of low academic achievers. This relationship held even after statistically controlling for demographic characteristics of the individual students and of their families (Kennedy et al., 1986, chap. 2; Myers, 1985; Orland, 1994). Other studies lead to similar conclusions (e.g., Puma et al., 1993; U.S. Department of Education, 1993b, 1996, 1997; U.S. General Accounting Office, 1992).

Unlike previous research, the present study focuses on a specific Hispanic/Latino population and follows it longitudinally, centering on a specific chronological age period

and a specific stage in the migration process. The target age is preadolescence, an age when children typically position themselves for the marked physiological and psychological changes of adolescence. Informal observations suggest that academic and psychosocial problems experienced by many Hispanic/Latino and other ethnic/racial minority students emerge during this developmental stage. The target phase of the process of migration and settlement is the first two-year span immediately following arrival in the United States, a phase when stressful demands are often placed on the individual for personal change and adaptation (Laosa, 1990, 1997, 1999).

Specifically, this study examines the following ecological attributes of the schools that preadolescents who migrate from Puerto Rico to the United States (New Jersey) attend in this country during the first two years following their arrival: the ethnic/racial, linguistic, and socioeconomic mix of the schools' student bodies; the degree of urbanness and the economic status of the neighborhoods in which the schools are located; and the schools' size and density-overcrowdedness. Also examined are the associations among these attributes. The data and analyses sought answers to the following questions concerning these schools:

- What is the ethnic/racial composition of the schools' student bodies?
- What is the linguistic composition of the schools' student bodies?
- What are the socioeconomic characteristics of the schools' student bodies?
- In what types of neighborhoods are the schools located?
- Are the schools overcrowded? What is the size of the schools?
- What, if any, are the relationships of the student body's (a) ethnic/racial composition and (b) linguistic composition to the student body's family socioeconomic characteristics? to characteristics of the school's neighborhood? to school crowdedness and school size?

Here I examine several issues pertaining to these questions; it is organized as follows: After a section that briefly notes certain sociohistorical circumstances bearing on the present relationship between the United States and Puerto Rico and on contemporary characteristics of the Puerto Rican population, the next section describes the study's research method and procedures. Next is the presentation of the data analysis results, answering each research question. An extended Discussion section summarizes conclusions from the answers to these questions and considers implications for policy and for students' academic, linguistic, social, and emotional development, identifying hypotheses in need of research; that section also includes a historical overview, to the present, and discussion of U.S. policies and judicial decisions concerning school segregation, with particular reference to segregation of Hispanics/Latinos.

Sociohistorical Context

Puerto Rico was under the colonial rule of Spain for four centuries. Spanish is the language generally spoken in Puerto Rico; it is also the language used as the medium of instruction in Puerto Rico's public schools.

The population of Puerto Rico is composed largely of the descendants of three groups: the Spanish colonizers, the original Amerindian inhabitants—the Arawak people who developed the Taíno culture—and African slaves imported by the colonizers (Mathews & Tata, 1992; Wagenheim, 1970). Sizeable minorities of the three races constitute the extremes of the skin-color spectrum, which blend in the predominant middle. Most Puerto Ricans, therefore, are generally considered "colored" by European Americans. In Puerto Rico, fuzzy lines between racial groups discourage color

discrimination, although the U.S. presence and certain attitudes and practices it has brought to the island appear to have heightened the awareness of racial differences among Puerto Ricans (Rodríguez, 1991; Wagenheim, 1970). Once slavery was abolished in 1873, the law in Puerto Rico opened public places to all (Wagenheim, 1970). Thus, unlike the U.S. mainland with its *de jure* segregation, Puerto Rico did not have racially separate public facilities such as rest rooms, water fountains, or rear sections of public vehicles.

In the second half of the nineteenth century, the United States plunged into international politics and took the road to imperialism—a foreign-policy direction with far-reaching and lasting consequences. These overseas incursions brought under the nation's jurisdiction some eight million people of color in the Caribbean basin, other parts of Latin America, and the Pacific region (Lewis, 1963; Link, 1992; Morison, 1972; Woodward, 1966). (Note 2)

U.S. involvement in Puerto Rico began with the Spanish-American War, a short and relatively bloodless war that ended with the Treaty of Paris in 1898, by which Spain ceded Puerto Rico to the United States. U.S. involvement in the Caribbean region grew in the early part of the twentieth century. U.S. military bases in that area have served to protect U.S. and European interests (e.g., during World War Two) but also provide investment opportunities, often leading to the exploitation of the peoples of the Caribbean and of other parts of Latin America and hence to dependency and resentment (Carr, 1984; Lewis, 1963; Mathews & Tata, 1992; Morison, 1972).

In 1917 the U.S. Congress passed the Jones Act, which gave limited self-government to Puerto Rico and conferred U.S. citizenship collectively on its inhabitants (Carr, 1984; Wagenheim, 1970). U.S. citizens of Puerto Rico elect a representative (i.e., a "resident commissioner") to the U.S. House of Representatives, who may speak but cannot vote except in committees. These citizens are automatically involved in wars declared by the U.S. Congress and led by the U.S. President, in whose elections they cannot participate.

Although Puerto Ricans had migrated to the continental United States before the nineteenth century, only after 1900 did they begin doing so in significant numbers. Annual inflows reached their peaks during the two decades following the end of World War Two, a period when Puerto Rico's agricultural economy was radically transformed into one based on industrial production, as U.S. tax laws encouraged the establishment of new industries (Rodríguez, 1991; U.S. Commission on Civil Rights, 1976; Wagenheim, 1970). Because the number of small farms had been sharply reduced by the introduction of large-scale, single-crop corporate agribusiness, the island had virtually lost its subsistence farming system that could have enabled many families to return to individually self-supporting farming (Moore & Pachon, 1985). Numerous workers left the agricultural sector and moved into cities along the island's coast in search for jobs. Many also migrated to large metropolitan centers in the northeastern United States, responding to those areas' expanding economies and consequent demand for low-skill work, and taking advantage of the low-cost island-to-mainland passenger flights that commercial airlines then began offering (Mathews & Tata, 1992; Wagenheim, 1970). Although annual inflows are currently below the levels reached in the 1950s and 1960s, migration from Puerto Rico to the continental United States inevitably continues, and by all indications will continue into the foreseeable future.

Method

Preparatory Demographic Studies

To inform the development of the sampling plan, a series of empirical demographic studies (e.g., Laosa, 1998) had been conducted regarding children's migratory movements between Puerto Rico and New Jersey. Those studies were necessary because the needed demographic information was not available from centralized sources. The U.S. Immigration and Naturalization Service, a source of statistics on immigration, does not monitor Puerto Rican migration because of the special U.S.-P.R. relationship. The U.S. Bureau of the Census routinely provides demographic information on the Puerto Rican stateside population and on the population of Puerto Rico but no information bearing specifically on the present investigation's more detailed focus. Similar difficulties arose with data from other agencies and organizations that provide national and state statistics.

Sample Selection

Based on those demographic studies, a sample of 241 public elementary (Note 3) schools (27 school districts) was drawn to yield a sample as representative as possible of children migrating from Puerto Rico to urban and suburban areas and small towns in the state of New Jersey. The enrollment records of each of these schools were then continually monitored during two full, consecutive academic years (i.e., two annual migration waves). All the children who transferred in from Puerto Rico (regardless of prior migration history) to the third and fourth grades (or the equivalent for ungraded programs) in these schools at any time during those two years were identified within approximately two months of their arrival. Those who met these sample-eligibility criteria and gave informed consents (self and parental) became research participants (i.e., *focal* children). Each focal child was then followed longitudinally (from the date of his or her transfer-in from Puerto Rico), regardless of destination, for two consecutive academic years. Considerable care, time, and effort were devoted to sample identification, recruitment, and longitudinal follow-up. Consequently, as reported elsewhere (Laosa, n.d.), both the participant consent rate and the sample retention rate were quite adequate with respect to scientific sampling standards; there is no reason to suspect significant sample bias.

The children who met the sample-eligibility criteria were found widely and thinly scattered across the sample schools; many of the schools received no children who met these criteria. (Note 4) The analyses reported here are based on the schools that received the focal children directly from Puerto Rico plus the schools that these children subsequently attended stateside during their respective two-year longitudinal spans (N = 89 schools). Almost all are New Jersey public schools because the vast majority of the focal children who transfered out of their initial receiving schools did so either to other New Jersey public schools or back to Puerto Rico.

Variables and Measures

Measurements were taken on each school that focal children attended, as described below. (Note 5)

- **Student body's ethnic/racial composition.** A student body's ethnic/racial composition is indexed by the following seven variables (a school's measurement on a variable is the percentage (Note 6) of the school's student body belonging to the corresponding ethnic/racial category): *African American* (i.e., Black), *Asian/Pacific Islander American*, *European American* (i.e., White/Caucasian), *Hispanic/Latino*, and *other ethnic/racial groups*. *Puerto Rican* and *other Hispanic/Latino* disaggregate the Hispanic/Latino category. The first, second, third, and fifth ethnic/racial categories include only non-Hispanics/non- Latinos.
- **Student body's linguistic composition.** A student body's linguistic composition

is indexed by four variables (a school's measurement on a variable is the percentage (Note 7) of the school's student body belonging to the corresponding linguistic category). Three of them divide the student body by native language: *monolingual native speakers of English*, *native speakers of Spanish*, and *native speakers of other languages*. The fourth linguistic category is *limited-English-proficient/English-language learners (LEP/ELL)*; it identifies the pupils whom the school's officials formally classified as "limited-English-proficient (LEP);" also called "English-language learners (ELL)," this classification can be applied only to pupils who are not native speakers of English.

- **Student body's family socioeconomic characteristics.** To gain a deeper understanding of the construct *socioeconomic status* as it applies to the focal issues—and thus add to its relevance for policy, practice, and theory—the present study examines seven variables that respectively measure particular social, economic, and educational characteristics of the student bodies' families. Previous studies have typically included only one of these variables as a proxy index or else have combined them into a single measure of socioeconomic status or social class. Although these variables are expected to be intercorrelated, it was deemed important for the purposes of the present study to measure and analyze them individually:
    - *Unemployment level* is the percentage (Note 8) of the school's student body living in households in which the householder (Note 9) is unemployed.
    - *Public assistance dependence level* is the percentage (Note 10) of the school's student body living in households receiving public assistance (i.e., welfare).
    - A student body's average family *economic status* is measured on a 5-point scale (1 = low income; 5 = affluent).
    - A school's *fully subsidized lunch eligibility level* is the percentage (Note 11) of the student body eligible for free lunches.
    - *Partly subsidized lunch eligibility level* is the percentage (Note 12) of the student body eligible for reduced-price lunches.
    - *Subsidized lunch eligibility level (fully + partly)* is the aggregate of the last two variables (i.e., the percentage of the student body eligible for fully subsidized lunch plus the percentage eligible for partly subsidized lunch). (Note 13)
    - Finally, *maternal schooling level* is the average level of formal education attained by the student body's mothers or female guardians, measured on a 9-point scale (1 = six years of schooling or less; 9 = doctor's degree).
- **School neighborhood's urbanness and economic status.** Two variables describe the area, or neighborhood, in which the school is located: *urbanness*, a 5-point scale (1 = rural; 5 = inner core of a city), and *economic status*, also a 5-point scale (1 = low-income area; 5 = affluent area).
- **School size and crowdedness.** Four variables pertain to school size and crowdedness: A school's *enrollment size* is the total number of students enrolled in the school in late spring. *Enrollment capacity* is the number of students for which the school was built. A school's *density-overcrowdedness level* is indexed by subtracting the school's enrollment capacity from its enrollment size (thus, a higher positive value signifies denser crowdedness than does a lower positive value). The *crowdedness dichotomy* is a dichotomous variable: 1 = the school is *not* crowded (i.e., density- overcrowdedness level is zero or negative); 2 = the school is crowded (i.e., density-overcrowdedness level is greater than zero).

Data Sources

The data, including the scale ratings, were obtained directly from the schools' principals, primarily through structured questionnaires; however, when necessary the questionnaire approach was supplemented or replaced by telephone calls and by site visits in order to examine school records and to interview principals and other school staff.

Statistical Analyses

The unit of analysis is the (unweighted) individual school. The school is not weighted (i.e., by the number of focal children attending it) in the analyses, since the present focus is on the schools that focal children attend rather than on the focal children per se. (Footnote 4 shows the frequency distribution of focal children on the schools.) The analyses examine individual differences that occur among the schools on the variables. To this end, computed were the frequency distribution of the schools on each variable, its mean, standard deviation, standard error of the mean, and skewness value. Also computed were matrices of correlation coefficients. (Notes 14 & 15) For the purposes of exposition only, the frequency distribution on any variable with a very wide range is summarized in the tables or text below by collapsing the range into a suitable number of grouping intervals; however, for the purposes of computing the statistics and performing the statistical analyses, all the variables are based on the actual detailed data.

Results

The presentation of the analysis results is organized by the research questions.

1. What is the ethnic/racial composition of the schools' student bodies?

The schools attended by the focal children have, on average, a student body that is nearly one-half Hispanic/Latino, one-third African American, 17% European American, 2% Asian/Pacific Islander American, and 2% "other." Specifically, Table 1 shows that of the five broad ethnic/racial composition variables, Hispanic/Latino has the highest mean percentage (i.e., 46.5), signifying that the schools have, on average, a student body that is 46.5% Hispanic/Latino. In finer detail, this table shows that the vast majority of the Hispanic/Latino students in these schools are Puerto Rican. Indeed, the schools have, on average, a student body that is 38% Puerto Rican. Next in descending order of size is the African American mean percentage (i.e., 32.4), followed in turn by the European American (i.e., 17.1) and Asian/Pacific Islander American (i.e., 1.9) mean percentages. (The mean percentage for other ethnic/racial groups is 1.9; this variable is excluded from subsequent analyses.)

Table 1
Student Body's Ethnic/Racial Composition Variables: Means, Standard Deviations, Standard Errors of the Mean, and Skewness Values

Variable	M	SD	SEMean	Skewness
African American	32.4	28.7	3.08	0.58
Asian/Pacific Islander American	1.9	4.1	0.44	3.64

European American	17.1	26.8	2.90	1.91
Hispanic/Latino	46.5	28.8	3.14	0.16
Puerto Rican	(37.5)*	(25.9)	(3.05)	(0.37)
Other Hispanic/Latino	(9.0)*	(17.8)	(2.14)	(2.94)
Other ethnic/racial groups	1.9	6.4	0.69	4.97

Note. *N* = 84–87 schools. A school's measurement on a variable in this table is the percentage of the student body described by the variable. Percentages are within rounding error. [a]Estimated mean.

It also should be noted that the schools differ widely around these averages, as the standard deviations in Table 1 and the summary frequency distributions in Table 2 demonstrate. For example, Table 2 shows the following: About one fourth of the schools have a student body that is over 74% Hispanic/Latino, but at the other end of the distribution, another one fourth of the schools have a student body that is less than 25% Hispanic/Latino. About one third of the schools have a student body with an African American majority, but about one half of the schools have a student body that is less than 25% African American. About one tenth of the schools have a student body with a European American majority, but about three fourths of the schools have a student body that is less than 25% European American.

Table 2
Summary Frequency Distributions of Schools with respect to Student Body's Ethnic/Racial Composition

	African American[a]	**Asian/ Pacific Islander American[b]**	**European American[c]**	**Hispanic/ Latino[d]**
Percent of the school's student body	**Percent of schools**			
75% to 99%	10%	0%	7%	23%
50% to 74%	22	0	6	23
25% to 49%	17	1	9	29
0% to 24%	51	99	78	26

Note. *N* = 84–87 schools. The footnotes to this table describe the extremes of the tails of the distributions and other details. Percentages are within rounding error. [a]In 1% of the schools, the student body is 0.2% African American; in another 1% of the schools, the student body is 94.5% African American. In 30% of the schools, the majority (i.e., over 50%) of the student body is African American. [b]In 48% of the schools, the number of Asian/Pacific Islander American students is zero; in 1% of the schools, the student body is

27% Asian/Pacific Islander American. In 99% of the schools, Asian/Pacific Islander Americans account for less than 15% of the student body. [c]In 7% of the schools, the number of European American students is zero; in 1% of the schools, the student body is 97.4% European American. In 12% of the schools, the majority of the student body is European American. [d]In 1% of the schools, the student body is 1.4% Hispanic/Latino; in another 1% of the schools, it is 98.7% Hispanic/Latino. In 43% of the schools, the majority of the student body is Hispanic/Latino.

2. What is the linguistic composition of the schools' student bodies?

The focal children attend schools in which, on average, monolingual native speakers of English constitute 58% of the student body; native speakers of Spanish, 36%; and native speakers of other languages, the remaining 5% (Table 3).

The correlation coefficients in Table 4 add to the evidence that schools tend to isolate students on the basis of both ethnicity/race and language.

The focal children attend schools in which, on average, students formally classified as limited-English-proficient (or English-language learners; LEP/ELL) constitute 18.5% of the student body (Table 3). This figure, when considered in relation to the mean percentages for the other linguistic- composition variables, shows that, on average in these schools, approximately 45% of the students who are not monolingual native speakers of English are formally classified as LEP/ELL.

Table 3
Student Body's Linguistic Composition Variables: Means, Standard Deviations, Standard Errors of the Mean, and Skewness

Variable	M	SD	SEMean	Skewness
Native speakers of Spanish	35.9	27.3	2.98	0.53
Monolingual native speakers of English	57.7	29.2	3.21	-0.32
Native speakers of other languages	5.2	12.5	1.38	4.88
Classified as LEP/ELL	18.5	13.3	1.44	0.74

Note. *N* = 82–86 schools. A school's measurement on a variable in this table is the percentage of the student body described by the variable. Percentages are within rounding error.

Table 4
Correlations among the Student Body's Ethnic/Racial and Linguistic Composition Variables

Variable	2	3	4	5	6
Ethnic/racial composition					

1: African American	—	—	-.25**	.73***	-.30**
2: European American	—	—	-.21*	-.10	.05
3: Hispanic/Latino		—	.89***	-.28**	.80***
Linguistic composition					
4: Native speakers of Spanish			—	-.38***	.74***
5: Monolingual native speakers of English				—	-.32**
6: Classified as LEP/ELL					—

Note. N = 80–86 schools. The coefficients among the linguistic composition variables and the coefficients of variable 5 with variables 2 and 3 are Spearman rank-order correlations; the other coefficients in this table are Pearson product-moment correlations. The coefficients in this table are based on the variables measured in counts. *$p < .05$ **$p < .01$ ***$p < .001$ (1-tailed tests)

It also should be noted that the schools again vary widely around the mean percentages, as the standard deviations in Table 3 and the summary frequency distributions in Table 5 show. For example, native speakers of Spanish are the majority of the student body in about one third of the schools, but less than 25% of the student body in another one third of the schools. Similarly, monolingual native speakers of English constitute 75% or more of the student body in about one third of the schools, but less than 50% in another one third of the schools (Table 5).

Table 5
Summary Frequency Distributions of Schools on the Student Body's Linguistic Composition Variables

	Native speakers of Spanish[a]	**Monolingual native speakers of English[b]**	**Native speakers of other languages[c]**	**Classified as LEP/ELL[d]**
Percent of the school's student body	**Percent of schools**			
75% to 99%	12%	36%	1%	0%
50% to 74%	19	27	1	4
25% to 49%	30	18	2	23

0% to 24%	39	19	95	73

Note. *N* = 82–86 schools. The footnotes to this table describe the extremes of the tails of the distributions and other details. Percentages are within rounding error. [a]In 1% of the schools, the student body is 0.2% native speaker of Spanish; in another 1% of the schools, the student body is 96.4% native speaker of Spanish. In 29% of the schools, the majority (i.e., over 50%) of the student body is native speaker of Spanish. [b]In 1% of the schools, the student body is 1.6% monolingual native speaker of English; in another 1% of the schools, it is 98.6% monolingual native speaker of English. In 58% of the schools, the majority of the student body is monolingual native speaker of English. [c]In 21% of the schools, there are zero native speakers of languages other than Spanish and English; in 1% of the schools, the student body is 88.7% native speakers of languages other than Spanish and English. [d]In 1% of the schools, there are zero students formally classified as LEP/ELL; in another 1% of the schools, 58% of the student body is formally classified as LEP/ELL.

3. What are the family socioeconomic characteristics of the schools' student bodies?

The schools have, on average, a student body composed largely of students who live in poverty and whose parents have very limited formal education, as Table 6 shows. Specifically, the mean percentages indicate that the schools have, on average, a student body characterized as follows: 42% of the students live in households in which the householder is unemployed; 45%, in households receiving public assistance (i.e., welfare); 60% of the students are eligible for fully subsidized lunch; and 68%, eligible for either fully or partly subsidized lunch. The mean for maternal education shows that the schools have, on average, a student body of which the average formal education level of the students' mothers or female guardians is below high school graduation (and below a General Education Diploma [GED]).

Table 6
Student Body's Family Socioeconomic Status Variables: Means, Standard Deviations, Standard Errors of the Mean, and Skewness Values

Variable	M	SD	SEMean	Skewness
Unemployment level	41.6	27.4	2.97	0.33
Public assistance dependence level	44.9	28.2	3.02	0.20
Economic status scale	1.43	0.60	0.06	1.41
Fully subsidized lunch eligibility level	59.8	25.9	2.83	-0.47
Partly subsidized lunch eligibility level	8.6	6.6	0.72	1.38
Subsidized lunch eligibility level (fully + partly)	68.4	26.8	2.94	-0.75

Maternal schooling scale	2.70	1.00	0.11	0.56

Note. *N* = 83–89 schools. A school's family *unemployment level* is the percentage of the student body living in households in which the householder is unemployed. *Public assistance dependence level* is the percentage of the student body from households receiving public assistance (i.e, welfare). The average family *economic status* of a school's student body is measured on a 5-point scale: 1 = low income; 2 = between middle and low income; 3 = middle income; 4 = between middle income and affluent; 5 = affluent. A school's *fully subsidized lunch eligibility level* is the percentage of the student body eligible for fully subsidized lunch. *Partly subsidized lunch eligibility level* is the percentage of the student body eligible for partly subsidized lunch. *Subsidized lunch eligibility level (fully + partly)* is the percentage of the student body eligible for fully subsidized lunch plus the percentage eligible for partly subsidized lunch. *Maternal schooling level* is the average level of formal education attained by the student body's mothers or female guardians, measured on a 9-point scale: 1 = six years of schooling or less; 2 = 7 to 9 years of schooling; 3 = 10 to 11 years; 4 = high school graduate or General Education Diploma (GED); 5 = post-high-school vocational or trade training; 6 = some college; 7 = college graduate; 8 = master's degree; 9 = doctor's degree.

Around each of these means is a wide range of differences among the schools, manifested in Tables 7 through 10. For example, in about two fifths of the schools, the student body is over 74% eligible for fully subsidized lunch, but at the other end of the distribution, in about one tenth of the schools, the student body is less than 25% thus eligible (Table 8). In one fifth of the schools, the student body is over 74% from homes with unemployed householders, but the student body is less than 25% from such homes in about one third of the schools (Table 7). In 8% of the schools, the student body's average maternal schooling level is less than a 7th-grade education, but in 17% of the schools it is high school graduation or a GED (Table 10).

Table 7
Summary Frequency Distributions of Schools on the Student Body's Family Unemployment Level and Public Assistance Dependence Level

	Unemployed householder[a]	**Household on public assistance[b]**
Percent of the school's student body	**Percent of schools**	
75% to 95%	20%	25%
50% to 74%	24	21
25% to 49%	22	23
1% to 24%	34	31

Note. *N* = 85–87 schools. The footnotes to this table describe the extremes of the tails of the distributions and other details. Percentages are within rounding error. [a]In 1% of the schools, the student body is 1% from households in which the householder is unemployed; in another 1% of the schools, the student body is 95% from such households. In 31% of the schools, the majority (i.e., over 50%) of the student body is from households in which the

householder is unemployed. [b]In 2% of the schools, the student body is 1% from households receiving public assistance; in 1% of the schools, the student body is 95% from such households. In 37% of the schools, the majority of the student body is from households receiving public assistance.

Table 8
Summary Frequency Distributions of Schools on the Student Body's Subsidized Lunch Eligibility Variables

	Eligible for fully subsidized lunch[a]	Eligible for partly subsidized lunch[b]	Eligible for subsidized lunch (fully + partly)[c]
Percent of the school's student body	**Percent of schools**		
75% to 100%	39%	0%	52%
50% to 74%	26	0	25
25% to 49%	21	5	12
0% to 24%	13	95	11

Note. *N* = 83–84 schools. The footnotes to this table describe the extremes of the tails of the distributions and other details. Percentages are within rounding error. [a]In 1% of the schools, 2% of the student body is eligible for fully subsidized lunch; in another 1% of the schools, 99% of the student body is so. In 65% of the schools, the majority (i.e., over 50%) of the student body is eligible for fully subsidized lunch. [b]In 1% of the schools, 0.1% of the student body is eligible for partly subsidized lunch; in another 1% of the schools, 31% of the student body is so. [c]In 1% of the schools, 3% of the student body is eligible for either fully or partly subsidized lunch; in 8% of the schools, 100% of the student body is so. In 77% of the schools, the majority of the student body is eligible for either fully or partly subsidized lunch.

Table 9
Frequency Distribution of Schools on the Student Body's Family Economic Status Scale

Student body's average family economic status	Percent of schools
Affluent	0%
Between middle income and affluent	1
Middle income	2
Between middle and low income	35
Low income	62

Note. *N* = 89 schools. Percentages are within rounding error.

Table 10
Frequency Distribution of Schools on the Student Body's Maternal Schooling Scale

Student body's average maternal schooling level	Percent of schools	Cumulative percent
Doctor's degree	0%	0%
Master's degree	0	0
College graduate	0	0
Some college	1	1
Post-high school vocational or trade training	2	3
High school graduate or General Educ. Diploma (GED)	17	20
10 to 11 years	32	52
7 to 9 years	39	91
6 years or less	8	100

Note. *N* = 87 schools. Percentages are within rounding error.

The intercorrelations among the student body's family socioeconomic variables show the expected pattern of consistency among measures of social, economic, and educational status (Table 11); these results add to the evidence supporting the data's construct validity.

Table 11
Intercorrelations among the Student Body's Family Variables

	2	3	4	5	6
1: Unemployment level	.92***	-.58***	.75***	.74***	-.29**
2: Public assistance dependence level	--	-.60***	.80***	.80***	-.34***
3: Economic status scale		--	-.52***	-.52***	.46***
4: Fully subsidized lunch eligibility level			--	.98***	-.36***

5: Subsidized lunch eligibility level (fully + partly)				--	-.36***
6: Maternal schooling scale					--

Note. N = 82–87 schools. The coefficients of variable 3 with variables 1 and 2 are Spearman rank-order correlations; the other coefficients in this table are Pearson product-moment correlations. Variables 1, 2, 4, and 5 are measured in counts for the purpose of computing their intercorrelations; they are measured in percentages for the purpose of computing their correlations with variables 3 and 6. $^{*}p < .05$ $^{**}p < .01$ $^{***}p < .001$ (1-tailed tests)

4. In what types of neighborhoods are the schools located?

The schools are located mostly in highly urbanized areas—areas that are largely poor (Tables 12 and 13). Specifically, 60% of the schools are in the inner core of cities; 28%, in other urban parts of cities; 10%, in suburban neighborhoods; and 1%, in small towns. Forty-six percent (46%) of the schools are in low-income areas; 44%, in neighborhoods of a type characterized by a mix of low and middle income; 7%, in middle-income areas; and the remaining 3%, in neighborhoods comprising a mix of middle income and affluence (Table 13).

Table 12
School's Neighborhood Variables and School's Size and Crowdedness Variables: Means, Standard Deviations, Standard Errors of the Mean, and Skewness Values

	M	SD	SEMean	Skewness
School's neighborhood				
Urbanness scale	4.48	0.73	0.08	1.21
Economic status scale	1.67	0.75	0.08	1.11
School's size and crowdedness				
Enrollment size	677.2	295.8	31.4	0.39
Enrollment capacity	661.7[a]	265.8	29.2	0.38
Density-overcrowdedness level	15.5	205.2	22.5	0.44

Note. N = 88–89 schools for the school's neighborhood variables; N = 83–89 schools for the school's size and crowdedness variables. *Urbanness* is a 5-point scale: 1 = the school is in a rural area; 2 = small town (not suburban); 3 = suburban; 4 = urban part of a city other than its inner core; 5 = inner core of a city. The *economic status* of the neighborhood in which a school is located is measured on a 5-point scale: 1 = low income; 2 = mix of low and middle income; 3 = middle income; 4 = mix of middle income and affluent; 5 = affluent. A school's *enrollment size* is the total number of students enrolled in the school in late spring. *Enrollment capacity* is the number of students for which a school was built. A school's *density-overcrowdedness level* is measured by subtracting the enrollment capacity from the

enrollment size; thus, a higher positive value signifies denser crowdedness than does a lower positive value. [a]Mean adjusted for missing data.

Table 13
Frequency Distributions of Schools on the Neighborhood Urbanness Scale and Neighborhood Economic Status Scale

Neighborhood urbanness scale		Neighborhood economic status scale	
School's location	**Percent of schools**	**School's location**	**Percent of schools**
Inner core of a city	60%	**Affluent area**	0%
Urban part of a city other than its inner core	28	**Mix of middle income and affluent**	3
Suburban	10	**Middle income**	7
Small town (not suburban)	1	**Mix of low and middle income**	44
Rural	0	**Low-income area**	46
Note. *N* = 88–89 schools. Percentages are within rounding error.			

The correlations reported in Tables 14 and 15 show the following relationships: The more highly urbanized a school's neighborhood, the higher is the likelihood of the neighborhood's being poor. The lower a student body's average family economic status and parental schooling level, the higher is the likelihood of the school's being in an economically depressed and highly urbanized neighborhood.

Table 14
Correlations among the School's Neighborhood Variables and School's Size and Crowdedness Variables

	2	**3**	**4**	**5**	**6**
School's neighborhood					
1: Urbanness scale	-.63***	.36***	.34***	.10	.07
2: Economic status scale	—	-.25**	-.16	-.16	-.16
		School's size and crowdedness			
3: Enrollment size		—	.75***	.50***	.48***
4: Enrollment capacity			—	-.20*	-.04

5: Density-overcrowdedness level				—	.76***
6: Crowdedness dichotomy					—

Note. *N* = 83–89 schools. Pearson product-moment correlations. *Urbanness* is a 5-point scale: 1 = the school is in a rural area; 2 = small town (not suburban); 3 = suburban; 4 = urban part of a city other than its inner core; 5 = inner core of a city. The *economic status* of the neighborhood in which a school is located is measured on a 5-point scale: 1 = low income; 2 = mix of low and middle income; 3 = middle income; 4 = mix of middle income and affluent; 5 = affluent. A school's *enrollment size* is the total number of students enrolled in the school in late spring. *Enrollment capacity* is the number of students for which a school was built. A school's *density- overcrowdedness level* is measured by subtracting the enrollment capacity from the enrollment size; thus, a higher positive value signifies denser crowdedness than does a lower positive value. *Crowdedness dichotomy* is a dichotomous variable: 1 = the school is *not* crowded (i.e., density-overcrowdedness level is 0 or lower); 2 = the school is crowded (i.e., density- overcrowdedness level is greater than 0). $^{*}p < .05$ $^{**}p < .01$ $^{***}p < .001$ (1-tailed tests)

Table 15
Correlations of the Student Body's Family Variables with the School's Neighborhood Variables

	School's neighborhood variable	
Family variable	**Urbanness scale**	**Economic status scale**
Unemployment level	.62***	-.58***
Public assistance dependence level	.53***	-.60***
Economic status scale	-.54***	.74***
Fully subsidized lunch eligibility level	.59***	-.56***
Subsidized lunch eligibility level (fully + partly)	.53***	-.54***
Maternal schooling scale	-.42***	.42***

Note. *N* = 84–89 schools for the correlations of the school's neighborhood variables with the unemployment, public assistance, family economic status, and maternal schooling variables; *N* = 82–84 schools for the correlations of the neighborhood variables with the subsidized lunch variables. The coefficients of unemployment level and public assistance dependence level with the school's neighborhood variables are Spearman rank-order correlations; the other coefficients in this table are Pearson product-moment correlations. The unemployment, public assistance, and both subsidized lunch variables are measured in percentages. $^{*}p < .05$ $^{**}p < .01$ $^{***}p < .001$ (1-tailed tests)

5. What is the size of the schools? Are the school facilities crowded?

The schools have an average physical enrollment capacity for 662 students but enroll an average of 677 students (Tables 12 and 16). Forty-four percent (44%) of the schools enroll above capacity; that is, they enroll a higher number of students than the number for which the school was built (Table 17).

Table 16
Summary Frequency Distributions of Schools on Enrollment Size and Enrollment Capacity

	Enrollment size	Enrollment capacity
Number of students	**Percent of schools**	
1,200 to 1,400	4%	5%
1,000 to 1,199	17	8
800 to 999	14	23
600 to 799	17	24
400 to 599	27	23
200 to 399	20	16
86 to 199	1	1
Note. *N* = 83–89 schools. Percentages are within rounding error.		

Table 17
Summary Frequency Distribution of Schools on Density-Overcrowdedness Level

School's density-overcrowdedness level	Percent of schools	Cumulative percent
600 to 680	2%	2%
400 to 599	0	2
200 to 399	17	19
1 to 199	25	44
0	5	49
-1 to -199	40	89
-200 to -399	10	99
-400 to -515	1	100

Note. N = 83 schools. A school's *density-overcrowdedness level* is measured by subtracting the enrollment capacity from the enrollment size; thus, a higher positive value signifies denser crowdedness than does a lower positive value. Percentages are within rounding error.

There are, however, wide differences among the schools on each of these variables, as Tables 16 and 17 show. For example, 13% of the schools have a capacity for as many as 1,000 to 1,400 students, but 17% of the schools, for fewer than 400. Twenty-one percent (21%) of the schools enroll as many as 1,000 to 1,400 students, but another 21%, fewer than 400 (Table 16). Nineteen percent (19%) of the schools enroll 200 or more students above capacity, but 51% of the schools enroll below capacity (Table 17).

The correlations in Tables 14 and 18 show the following: The larger a school, the higher is the likelihood of its being located in a highly urbanized, economically impoverished area. Also, the larger a school, the lower is its student body's average parental schooling level, and the higher is its student body's family unemployment rate.

Table 18
Correlations of the Student Body's Family Characteristics with the School's Size and Crowdedness

	School's size and crowdedness			
Family variable	**Enrollment size**	**Enrollment capacity**	**Density-overcrowd level**	**Crowdedness dichotomy**
Unemployment level	.18*	.20*	.06	.02
Public assistance dependence level	.12	.15	.02	.03
Economic status scale	-.16	-.13	-.06	-.12
Fully subsidized lunch eligibility level	.09	.06	.06	.06
Subsidized lunch eligibility level (fully + partly)	.10	.02	.12	.11
Maternal schooling scale	-.24**	-.27**	.01	-.04

Note. N = 77–89 schools. Pearson product-moment correlations. The unemployment, public assistance, and both subsidized lunch variables are measured in percentages. $^{*}p < .05$ $^{**}p < .01$ $^{***}p < .001$ (1-tailed tests)

6. Correlates of the student body's ethnic/racial composition:

6.1. What are the relationships of the student body's ethnic/racial composition to the student body's family socioeconomic characteristics?

The relative concentration of Hispanics/Latinos in the student body correlates positively with the student body's family unemployment level, public assistance dependence level, and subsidized lunch eligibility level and, congruent with these relationships, negatively with the student body's family economic status scale and maternal schooling scale. This pattern of correlations is largely similar to the pattern of relationships between the relative concentration of African American students and these measures of the student body's socioeconomic characteristics. These correlations are in a direction *opposite* to that of the correlations between the relative concentration of European American students and these measures of the student body's socioeconomic characteristics. In short, these analysis results, reported in Table 19, signify the following:

The higher a school's concentration of Hispanic/Latino pupils, the lower is the student body's average family socioeconomic status and parental schooling level. Similarly, the higher the concentration of African American pupils, the lower is the student body's average family socioeconomic status. In contrast, the higher the concentration of European American students, the more affluent and the more highly educated, on average, are the student body's families.

Table 19
Correlations of the Student Body's Ethnic/Racial Composition with the Student Body's Family, School's Neighborhood, and School's Size and Crowdedness Characteristics

	African American	European American	Hispanic/Latino
Family[a]			
Unemployment level	.47***	-.41***	.52***
Public assistance dependence level	.47***	-.38***	.55***
Economic status scale	-.21*	.58***	-.38***
Fully subsidized lunch eligibility level	.32**	-.30**	.61***
Subsidized lunch eligibility level (fully + partly)	.31**	-.24*	.64***
Maternal schooling scale	.04	.39***	-.43***
School's neighborhood[b]			

Urbanness scale	.25**	-.69***	.46***
Economic status scale	-.22*	.54***	-.34***
School's size and crowdedness[c]			
Enrollment size	-.11	-.16	.25**
Enrollment capacity	.00	-.18*	.08
Density-overcrowd level	-.24*	-.02	.30**
Crowdedness dichotomy	-.19*	-.10	.28**

[a] N = 79–87 schools for the coefficients involving the family variables. The coefficients of the African American variable with the family variables, and the coefficients of the ethnic/racial composition variables with the family economic status scale and the maternal schooling scale are Pearson product-moment correlations; the coefficients of the ethnic/racial composition variables with the other family variables are Spearman rank-order correlations. The unemployment, public assistance, and both subsidized lunch variables are measured in counts for the purpose of computing their correlations in this table; likewise, the ethnic/racial composition variables are measured in counts for the purpose of computing their correlations with the unemployment, public assistance, and both subsidized lunch variables. The ethnic/racial composition variables are measured in percentages for the purpose of computing their correlations with the other variables in this table. [b] N = 83–87 schools for the coefficients involving the school's neighborhood variables. The coefficients of the ethnic/racial composition variables with the school's neighborhood variables are Pearson product-moment correlations. [c] N = 78–87 schools for the coefficients involving the school's size and crowdedness variables. The coefficients of the ethnic/racial composition variables with the crowdedness dichotomy are Pearson product-moment correlations; the coefficients of the ethnic/racial composition variables with the other school size and crowdedness variables are Spearman rank-order correlations. * $p < .05$ ** $p < .01$ *** $p < .001$ (1-tailed tests)

6.2. What are the relationships of the student body's ethnic/racial composition to the characteristics of the school's neighborhood?

The correlations in Table 19 show the following: The higher the concentration of Hispanic/Latino students in a school, the higher is the likelihood of the school's location being an economically depressed and highly urbanized area. An association similar to this occurs between the relative concentration of African American students and these school neighborhood characteristics. In contrast, the higher the concentration of European American students in a school, the *lower* is the likelihood of the school's being located in a poor or highly urbanized neighborhood.

6.3. **Is the student body's ethnic/racial composition related to school size and crowdedness?**

There is little or no relationship between ethnic/racial composition and school size. On the other hand, the student body's percentage of Hispanics/Latinos correlates positively and significantly with the school crowdedness dichotomy (Table 19). These analyses thus show that schools with higher proportions of Hispanic/Latino students are more likely to be crowded (i.e., more likely to enroll in excess of the number of pupils

for which the school was built) than schools with lower proportions of this ethnic/racial group.

7. Correlates of the student body's linguistic composition:

7.1. What are the relationships of the student body's linguistic composition to the student body's family socioeconomic characteristics?

The student body's relative concentration of native speakers of Spanish correlates positively with the student body's family unemployment level, public assistance dependence level, and subsidized lunch eligibility level and, consistent with these associations, negatively with the student body's family economic status scale and maternal schooling scale. These correlations are similar to those between the student body's relative concentration of LEP/ELL students and these measures of the student body's socioeconomic characteristics. In contrast, the student body's relative concentration of monolingual native speakers of English correlates *positively* with the student body's family economic status scale and maternal schooling scale. These results, presented in Table 20, signify the following:

The higher a school's concentration of pupils who are native speakers of Spanish, the lower is the student body's average family socioeconomic status and parental schooling level. Similarly, the higher a school's concentration of LEP/ELL pupils, the lower is the student body's average family socioeconomic status and parental schooling level. In contradistinction, the higher a school's concentration of pupils who are monolingual native speakers of English, the *higher* is the student body's average family economic status and parental schooling level.

Table 20
Correlations of the Student Body's Linguistic Composition with the Student Body's Family, School's Neighborhood, and School's Size and Crowdedness Characteristics

	Native speakers of Spanish	Monolingual native speakers of English	Classified as LEP/ELL
Family[a]			
Unemployment level	.54***	.12	.38***
Public assistance dependence level	.57***	.10	.40***
Economic status scale	-.35***	.25**	-.25**
Fully subsidized lunch eligibility level	.62***	.13	.53***
Subsidized lunch eligibility level (fully + partly)	.65***	.10	.54***
Maternal schooling scale	-.35***	.33***	-.25**

School's neighborhood[b]			
Urbanness scale	.38***	-.34***	.42***
Economic status scale	-.32***	.24*	-.28**
School's size and crowdedness[c]			
Enrollment size	.18*	-.28**	.12
Enrollment capacity	.07	-.08	.04
Density-overcrowd level	.25**	-.37***	.19*
Crowdedness dichotomy	.24*	-.33**	.08

[a] N = 79–86 schools for the coefficients involving the family variables. The coefficients of the linguistic composition variables with the family economic status scale and the maternal schooling scale are Pearson product-moment correlations; the coefficients of the linguistic composition variables with the other family variables are Spearman rank-order correlations. The unemployment, public assistance, and both subsidized lunch variables are measured in counts for the purpose of computing their correlations in this table; likewise, the linguistic composition variables are measured in counts for the purpose of computing their correlations with the unemployment, public assistance, and both subsidized lunch variables. The linguistic composition variables are measured in percentages for the purpose of computing their correlations with the other variables in this table. [b] N = 82–86 schools for the coefficients involving the school's neighborhood variables. The coefficients of the linguistic composition variables with the school's neighborhood variables are Pearson product- moment correlations. [c] N = 79–86 schools for the coefficients of the linguistic composition variables with the school's size and crowdedness variables. The coefficients of the linguistic composition variables with the crowdedness dichotomy are Pearson product-moment correlations; the coefficients of the linguistic composition variables with the other school size and crowdedness variables are Spearman rank-order correlations. * $p <$ .05 ** $p <$ .01 *** $p <$ .001 (1-tailed tests)

7.2. What are the relationships of the student body's linguistic composition to the characteristics of the school's neighborhood?

Table 20 shows the following relationships: The higher a school's concentration of students who are native speakers of Spanish, the higher is the likelihood of the school's location being a low-income, inner-city area. Similarly, the higher a school's concentration of LEP/ELL students, the higher is the likelihood of its location being a poor, highly urbanized area. In contrast, the higher a school's concentration of students who are monolingual native speakers of English, the higher is the likelihood that its location is in the more affluent and less urbanized neighborhoods.

7.3. Is the student body's linguistic composition related to school size and crowdedness?

Table 20 shows that the school crowdedness dichotomy correlates positively with the student body's percentage of native speakers of Spanish, but negatively with the student body's percentage of monolingual native speakers of English. Enrollment capacity is not related to the student body's linguistic composition. These results

demonstrate the following relationships: The larger a school's proportion of pupils who are native speakers of Spanish, the higher is the school's likelihood of being crowded. In contrast, the larger a school's proportion of pupils who are monolingual native speakers of English, the lower is its likelihood of being crowded.

Discussion

In this century, few issues in North America have aroused more intense and bitter controversy, or caused more renting and sustained conflict, than those surrounding ethnic/racial integration generally and school desegregation in particular (see, e.g., Lukas, 1986; Woodward, 1966). At present, more than a century after *Plessy v. Ferguson* and almost half a century after *Brown v. Board of Education*, the fundamental concerns remain unresolved in practice; indeed, they have grown in complexity. In 1896, in the *Plessy* decision, the U.S. Supreme Court codified racial segregation, making it the law of the land. In 1954, in the *Brown* decision, the Court reversed the *Plessy* decision. Current trends, however, point to a *de facto* return to widespread segregated schooling, as the present study shows.

In recent years, the public debate concerning education reform in the United States has given relatively little attention to certain critical attributes of the ecology of schooling, particularly to attributes that bear on the isolation of students by ethnicity/race, language, and family socioeconomic characteristics. These attributes of schooling—and their interrelationships—were examined in the present study, focusing specifically on the schools that children who migrate from Puerto Rico to New Jersey (i.e., focal children) attend in the United States during the first two years following their arrival in this country.

This study shows that there is considerable ethnic/racial segregation of students in many of the schools attended by focal children. Hispanics/Latinos are the majority of the student body in 43% of the schools. European Americans are the majority of the student body in only 12% of the schools. This study further shows that there is considerable isolation by language. Native speakers of Spanish are the majority of the student body in nearly one third of the schools.

Economic impoverishment and low parental education are also salient attributes of the student body in many of the schools. In 65% of the schools, the majority of the student body is eligible for fully subsidized lunch. In addition, many of the schools are located in highly urbanized and economically depressed areas. Nearly two thirds of the schools are in the inner core of cities; most of the remaining third, in other urban parts of cities. Almost one half are in low-income areas.

As used here in reference to the present study's findings, the term *school segregation*, or *school isolation*, does *not* necessarily imply that the school boards or other public school officials caused the ethnic/racial, linguistic, or socioeconomic segregation of students observed in the present study. Regardless of the causes, however, the observed patterns of segregation do not bode well. Insofar as a school does not provide adequate occasions for interethnic interactions, it deprives students of the opportunity to develop the sociocultural knowledge, shared understandings, and behavior patterns that they will need as adults in order to function harmoniously and productively in ethnically heterogeneous settings (Laosa, 1999)—a serious problem for a society as increasingly diverse as ours. Other potential consequences of the observed patterns of ethnic/racial and linguistic isolation are discussed in subsequent sections of

this article.

The present findings gain in significance in the light of previous research suggesting an influence of the student body's socioeconomic status on scholastic achievement (Kennedy et al., 1986, chap. 2; Myers, 1985; Orland, 1994; Puma et al., 1993; U.S. Department of Education, 1993b, 1996, 1997). One may further hypothesize that the ecology of schools can affect not only a child's academic achievement but also his or her long-term social development. For instance, a neighborhood with a high unemployment rate will likely provide limited exposure to successfully employed role models (Brooks-Gunn, Denner, & Klebanov, 1995; Laosa, 1999; Wilson, 1995). Children in such schools are largely cut off from a range of options and opportunities commonly available in middle-class schools.

Based on the available research evidence, a U.S. Department of Education (1993b) report concluded that "teachers in high-poverty schools face special challenges that often undermine their effectiveness" (p. 31). Although studies clearly confirm a relationship between student body poverty and academic achievement, the evidence is weaker concerning the mechanisms, or processes, that may explain this relationship (see, e.g., Barton et al., 1991; Taylor & Piché, 1991; and U.S. Department of Education, 1993b, 1996, 1997, for reviews of research). The data collected in the larger investigation of which the present study is a part will permit analyses to illuminate these processes.

A large size and crowdedness are additional attributes of many schools attended by focal children. The schools attended by the focal children enroll an average of 677 pupils—a much larger figure than the estimated average number of pupils per public elementary school for the United States nationwide, for New Jersey and New York statewide, and for Puerto Rico island-wide; respectively they are 458, 419, 582, and 298 (U.S. Department of Education, 1993a, Table 96). Moreover, 44% of the focal children's schools enroll in excess of the number of pupils for which they were built. These findings must be considered in light of the potential effects of school size and crowdedness on the focal children's academic performance and socioemotional adjustment—an issue for future research. Also needed is research concerning the effects on the focal children of the dramatic size difference between the schools they attend in this country and those in Puerto Rico. Additional issues for future research are considered later.

Separation and Inequality

The student body's ethnic/racial composition and linguistic composition were found to correlate with the student body's socioeconomic characteristics, with school crowdedness, and with the school neighborhood's characteristics. The larger a school's proportion of pupils who are Hispanic/Latino or native speakers of Spanish, the higher is the school's concentration of pupils from economically impoverished and poorly educated parents, and the higher its likelihood of being crowded and of being located in an economically depressed and highly urbanized area. Similarly, the larger a school's proportion of African American pupils, the higher is its concentration of pupils from low-income families and the higher its likelihood of being in a poor inner-city area. In contrast, the larger a school's proportion of European American pupils, the *lower* is its concentration of pupils from economically impoverished and poorly educated parents, and the *lower* its likelihood of being in an economically depressed and highly urbanized area.

The correlational analyses thus clearly show that separate is *not* equal. School segregation by ethnicity/race is closely associated with school segregation by poverty and by parental education. Similarly, school segregation by language is closely

associated with school segregation by poverty and by parental education. Furthermore, ethnic/racial segregation and linguistic segregation are associated with crowded schools.

A focal child in a school with a relatively high concentration of pupils who are Hispanic/Latino or native speakers of Spanish is likely in a school with a high concentration of pupils from economically impoverished and poorly educated families, a crowded school located in a poor inner-city area. In contrast, a focal child in a school with a relatively high proportion of European American pupils is likely in a school with relatively *few* students from economically impoverished or poorly educated families, a school that is *not* located in an economically depressed or highly urbanized area.

The present findings raise crucial questions concerning equality of educational opportunity, fairness, and social justice— concerns that urgently need the attention of educators, parents, and policy makers. Equal educational opportunity is the fundamental American answer to social and economic inequality, but school segregation by ethnicity/race or language does in effect concentrate poverty and low academic achievement in schools that are not equal—a historical and contemporary fact (e.g., Barton et al., 1991; Bremner, Barnard, Hareven, & Mennel, 1970, 1971, 1974; Forehand, Ragosta, & Rock, 1976; Kennedy et al., 1986; Laosa, 1984; Orfield, 1993; Orland, 1994; Puma et al., 1993; Taylor & Piché, 1991; U.S. Department of Education, 1993b, 1996, 1997). Such schools are often vulnerable to becoming overwhelmed with problems of economically impoverished and poorly educated families isolated in neighborhoods lacking many of the opportunities typically available in other schools. The challenging task of providing access for these children to appropriate and effective schooling so that every student can have a fair chance of becoming a full participant in American society demands high priority (Cárdenas, 1995, 1996; Donato et al., 1991; Network of Regional Desegregation Assistance Centers, 1989; Orfield, 1993; Orfield et al., 1996; Orfield & Yun, 1999).

Differences Among the Schools

It is also important to note that substantial differences among the focal children's schools occur on almost all the variables. The schools differ widely in student body ethnic/racial composition. For example, in about one fourth of the schools, Hispanics/Latinos constitute between 75% and 99% of the student body; yet at the other end of the distribution, in another one fourth of the schools, they constitute less than 25% of the student body. In about one tenth of the schools, European Americans constitute 50% to 98% of the student body, although in about three quarters of the schools they are less than 25% of the student body.

Similarly, the schools differ widely in linguistic composition. For instance, in about one third of the schools, native speakers of Spanish are the majority of the student body, but in about two fifths of the schools they are less than 25% of the student body.

The schools also differ widely in student body socioeconomic characteristics, school size, and density-overcrowdedness. In addition, although to a lesser extent, the schools differ with regard to quality of location.

Needed Research

From the perspective of scientific inquiry, the observed differences among the focal children's schools constitute a series of naturally occurring experiments, raising a compelling question: Will these differences among the schools explain, or statistically predict, individual differences in focal children's learning and adaptation? The present findings point to specific hypotheses in need of systematic research, as next steps in the larger longitudinal investigation of which this study is a part. For example, concerning

the potential influence of the observed ecological attributes of schools on particular dimensions of child outcome, the following hypotheses focus on language development:

The *second-language **motivation** hypothesis* predicts that the strength of the motivation to acquire a second language will vary as a function of the need to communicate through that language. If this hypothesis is correct, then the larger a school's concentration of pupils who are native speakers of Spanish, the weaker will be a focal child's need to use English to communicate with peers, hence the lower the child's motivation to learn English, and hence the slower the child's English-language development rate.

The *second-language **exposure** hypothesis* predicts that the rate of learning a second language will depend on the exposure to that language (i.e., on the frequency, or probability, of opportunities to hear and use the language in functional situations). This hypothesis predicts a relatively slow rate of English-language development in the schools with relatively small proportions of pupils who are monolingual speakers of English. Thus, both hypotheses make the same prediction, namely, a negative relationship between the student body's proportion of native speakers of Spanish and focal children's English-language development rate.

On the other side of the coin is the *native-language loss hypothesis*. According to it, second-language learners will, to the extent that they have limited opportunity to use their native language actively, lose native-language skills (Laosa, 1999). If this hypothesis is accurate, then the smaller a school's proportion of Spanish-speaking students, the fewer will be the focal child's opportunities to use Spanish, and hence the faster the rate of Spanish- language loss.

Especially for the focal population, development of *both* languages is vitally important: English-language development is, of course, critically important for children's academic achievement and psychosocial adaptation in the United States. Because of the special relationship between the two countries, many focal children return to Puerto Rico—establishing a "circular migration" pattern—where they must compete (in school and eventually in the workplace) through the Spanish language. Thus, especially for them, continued Spanish-language development is as critically important as English-language acquisition.

Language development and academic achievement are not the only child outcomes that the school ecology may influence. Psychosocial/affective outcomes may also be influenced. Various hypotheses bear on this point. For instance, according to the *intercultural stress hypothesis*, the cultural "distance" (i.e., the degree of difference) between ecological settings bears on psychosocial adaptation (Laosa, 1999). This hypothesis predicts that the wider the difference between the child's primary culture/language and the school context, the more exacting and hence the more stressful and anxiety-producing will be the school experience. In turn, these high levels of psychological distress will raise the probability of behavioral/emotional problems. If this hypothesis is valid, then focal children in schools with relatively few Hispanic/Latino pupils who are native speakers of Spanish will show a higher prevalence of symptoms of behavioral/affective maladjustment than will the focal children in schools with larger proportions of such pupils.

In short, for focal children, the consequences of relatively intense levels of ethnolinguistic segregation (i.e., high concentrations of Hispanic/Latino, native-Spanish-speaking pupils) may include relatively slow rates of English- language development, but little or no loss of Spanish, and a relatively high probability of healthy behavioral/emotional adjustment. These hypotheses thus illustrate some of the difficult dilemmas that one must confront when addressing the question, What is best for a focal

child? These and other hypotheses can be tested using the longitudinal data from the larger investigation of which this study is a part—an investigation uniquely designed to permit this important and urgently needed scientific research.

School Segregation Policies and Judicial Trends in the United States

According to some historians (e.g., Woodward, 1966), the doctrines of Anglo-Saxon superiority by which some intellectuals and politicians justified and rationalized U.S. imperialism in the Caribbean, Latin America, and the Pacific did not differ in essentials from the race theories espoused by those who sought to justify White supremacy over African Americans. In 1896, two years before the United States acquired Puerto Rico, the U.S. Supreme Court's ruling in the case of *Plessy v. Ferguson* affirmed a vision of a rigidly segregated society. Homer Plessy—of mixed African and European ancestry—had taken an East Louisiana Railway train car seat reserved for Whites; (Note 16) as a consequence, he was jailed for violating a segregation statute that forbade members of either race to occupy accommodations set aside for the other—with the exception of "nurses attending the children of the other race" (as quoted in Kunen, 1996, p. 40). Segregation statutes, or "Jim Crow" laws, constituted a strict code that, as Woodward (1966) noted, "lent the sanction of law to a racial ostracism that extended to churches and schools, to housing and jobs, to eating and drinking. Whether by law or by custom, that ostracism extended to virtually all forms of public transportation, to sports and recreations, to hospitals, orphanages, prisons, and asylums, and ultimately to funeral homes, morgues, and cemeteries" (p. 7). In a nearly unanimous decision on *Plessy*, the Supreme Court declared that laws mandating "equal but separate" treatment of the races "do not necessarily imply the inferiority of either race," and cited the widely accepted propriety of separate schools for White and "colored" children. In lone dissent, Justice John Harlan remarked, "The thin disguise of 'equal' accommodations . . . will not mislead anyone, nor atone for the wrong this day done" (as quoted in Kunen, 1996, p. 40).

From 1896 to 1954 northern and southern state policies and practices confirmed the prediction that Justice Harlan had made in his dissenting opinion in *Plessy*: that the Court's decision would place "in a condition of legal inferiority a large body of American citizens" (as quoted in F. C. Jones, 1981, p. 72). The thin disguise to which he referred endured for a half century until African American plaintiffs in a series of court cases challenged the constitutionality of school segregation (Orfield et al., 1996; Woodward, 1966). The plaintiffs in these cases were attacking not only inequality, but segregation itself (Woodward, 1966). These cases culminated in the 1954 Supreme Court's landmark decision in *Oliver Brown et al. v. Board of Education of Topeka, Kansas*, (Note 17) which reversed a constitutional trend begun long before *Plessy*. The new Chief Justice, Earl Warren, delivered the Court's unanimous opinion in favor of the African American plaintiffs: "We conclude," said the Chief Justice, "that in the field of public education, the doctrine of `separate but equal' has no place. Separate educational facilities are inherently unequal." The plaintiffs had therefore been "deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment" of the U.S. Constitution; consequently, intentional segregation in public schools was unconstitutional (as quoted in Woodward, 1966, p. 147). By thus ruling that *de jure* segregation was unlawful, the *Brown* decision reversed the *Plessy* decision, which rested on the principle that there could be "separate-but- equal" treatment of people (Laosa, 1984; Sitkoff, 1993; Woodward, 1966).

Central to the promise inherent in the *Brown* decision is the belief that ethnic/racial segregation in public education has a detrimental effect on children and "may affect their

hearts and minds in a way unlikely ever to be undone" (as quoted in Woodward, 1966, p. 147)—not because ethnically/racially segregated institutions are inherently inferior but due to continuing structural inequities directly attributable to ethnic/racial prejudice and discrimination (E. R. Jones, 1996).

In the first decade after *Brown* very little desegregation occurred in the South (Rist, 1979). There was open defiance and massive resistance against attempts to implement the *Brown* mandate (Motley, 1995; Sitkoff, 1993; Woodward, 1966). The federal government and the federal district courts in the South did little to pressure the states or the school districts to comply with the constitutional requirements of the *Brown* decision (Orfield et al., 1996; van Geel, 1982, p. 980; Zashin, 1978). Moreover, segregation in the North remained virtually untouched until the 1970s. According to Orfield et al. (1996, p. 8), "Most Northern districts even refused to provide racial data that could be used to measure segregation." For nearly two decades following *Brown*, the Supreme Court denied hearings to school desegregation cases from the North (Note 18) (Orfield et al., 1996), a historical fact illustrating that the legal meaning of desegregation has evolved (see, e.g., Kirp, 1977; Landsberg, 1995; Orfield, 1978; Orfield et al., 1996; van Geel, 1982).

Although the Supreme Court's decision in *Brown* greatly encouraged many Hispanics/Latinos, it did not offer definitive guidance on how to combat discrimination against them (González, 1982; Laosa, 1984). Various issues have arisen in desegregation litigation involving this ethnic/racial group, all hinging on the identifiability of the group and of its members (Levin, Castaneda, & von Euler, 1977; Orfield, 1978; Orfield et al., 1996; Roos, 1977). A central question the courts have asked in judging whether the isolation of Hispanic/Latino students violates the equal protection clause of the Fourteenth Amendment is whether Hispanics/Latinos constitute a group (i.e., a "class") that should be legally treated in the same manner as African Americans (Levin et al., 1977; Roos, 1977). In other words, Are Hispanics/Latinos a group such that discrimination against them violates the equal protection clause? Schools, courts, and policy makers were uncertain how to categorize Hispanics/Latinos for the purposes of civil rights (González, 1982).

In the mid- 1960s momentous changes began to occur: Martin Luther King, Jr., and his organization marched in the early 1960s, and in so doing raised the moral conscience of the nation (Laosa, 1984; Oates, 1982; van Geel, 1982). The administrations of presidents John F. Kennedy and Lyndon B. Johnson provided executive leadership in the battle for civil rights. In 1964 the U.S. Congress passed the Civil Rights Act, which required cutting off federal funds to school districts and other institutions that discriminate: Title VI of the Act states, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance" (78 Stat. 252 [1964]; 42 U.S.C. 2000d [1965]).

An important key to questions of how to combat discrimination against Hispanic/Latino students appeared in the Civil Rights Act of 1964. This law and the authorization it vested on federal agencies to enforce it "by issuing rules, regulations, or orders of general applicability" established a legal basis to regulate matters pertaining to national origin discrimination in addition to race (Civil Rights Act of 1964, as quoted in González, 1982, p. II-3). This law gave federal education officials responsibilities for working with the courts to enforce the *Brown* decision and subsequent decisions requiring racial desegregation. To this end, the then Office of Education (OE) of the U.S. Department of Health, Education, and Welfare (HEW) developed guidelines to ensure compliance with Title VI. Aiding OE's efforts, Congress passed the Elementary and

Secondary Education Act of 1965, which substantially increased the amount of federal assistance to public education, thereby making fund cutoffs a more serious threat (Laosa, 1984; Zashin, 1978).

The Supreme Court, too, provided strong leadership on desegregation during that period. For example, in 1968, the Court declared that discrimination must be "eliminated root and branch" (*Green v. County School Board of New Kent County*, as quoted in Orfield et al., 1996, p. xxii). In 1971, the Court held in *Swann v. Charlotte-Mecklenburg Board of Education* and in *North Carolina State Board of Education v. Swann* that the federal courts could order busing to desegregate schools (Orfield, 1978; Orfield et al., 1996; Zirkel, Richardson, & Goldberg, 1995).

Despite this country's long history of persistent school segregation and other forms of discrimination against Hispanic/Latino students (see, e.g., Carter & Segura, 1979; Donato, Menchaca, & Valencia, 1991; González, 1982; Laosa, 1984; U.S. Commission on Civil Rights, 1971, 1972; Weinberg, 1977), the task of proving to the courts that these discriminatory practices are *de jure* rather than *de facto* was frequently more difficult for this ethnic/racial group than for African Americans. (Note 19) In cases involving discrimination against African Americans in the South, previous state statutes or constitutional provisions requiring segregation of this group had usually existed, and they were widely known and understood and could be readily documented (Laosa, 1984; Orfield, 1978). In order to establish a case of unlawful segregation, therefore, African American plaintiffs have needed merely to show the continued presence of school segregation in school systems formerly segregated by law (Levin et al., 1977; van Geel, 1982). In contrast, Hispanic/Latino plaintiffs have frequently been hindered by a lack of systematic documentation concerning the magnitude of educational exclusion of their group and by unclear understandings of the policies underlying the group's disenfranchisement (González, 1982).

In the absence of a statutory history of *de jure* segregation, Hispanic/Latino plaintiffs in segregation cases have been required to show that they are segregated and that the segregation is attributable to intentional action by school officials or other state authorities. In other words, proving to the courts that the isolation of Hispanic/Latino students constitutes a violation of the equal protection clause has required a showing of *de jure* segregation attributable not to statute but instead to the action of school officials (Levin et al., 1977; Roos, 1977). For example, in *United States v. Texas Education Agency* (1972, as cited in Levin et al., 1977) the circuit court found intentional segregative action by the school district, particularly in the choice of school sites, construction of schools, drawing of attendance zones, and student assignment and transfer policies. The court thus found *de jure* segregation of Hispanic/Latino students despite the absence of a previous statute requiring segregation of this ethnic/racial group, and stated that discrimination in this case was "no different from any other school desegregation case" (as quoted in Levin et al., 1977, p. 76). (Note 20)

The U.S. Supreme Court did not begin to try to untangle the problem of school segregation as it relates to Hispanics/Latinos until 1973, when it tried the case of *Keyes v. School District No. 1* (Denver, Colorado). In *Keyes* the Supreme Court recognized the problem but did not solve it entirely, seemingly saying that at least some Hispanics/Latinos, in some regions, under some conditions, should be recognized as a distinct class:

> There is also much evidence that in the Southwest Hispanos and Negroes have a great many things in common. . . . Though of different origins, Negroes and Hispanos in Denver suffer identical discrimination in treatment

> when compared with the treatment afforded Anglo students. In that circumstance, we think petitioners are entitled to have schools with a combined predominance of Negroes and Hispanos included in the category of "segregated" schools. (*Keyes*, 413 U.S. 189 [1973], as quoted in González, 1982, p. II-7)

In multi-ethnic areas, this recognition has often meant that the degree of segregation in a school depends on the ratio of European American students to the combined number of identified "minority" students in that school (Levin et al., 1977; Roos, 1977). Issues left unresolved by the Supreme Court's ruling in *Keyes* were articulated by Orfield (1978, pp. 203-204):

> The [*Keyes*] decision mentions conditions prevailing in the Southwest. It is unclear whether the same rights extend to Mexican- Americans in cities outside the Southwest. Would evidence that social conditions had changed in a part of the Southwest remove this special constitutional protection for Mexican-American children? Conditions in the region vary greatly on matters ranging from residential segregation to intermarriage, socioeconomic mobility to educational achievement. It is not clear what factors would determine how a particular Hispanic group in a given part of the country should be treated for desegregation purposes.

Although a narrow reading could indeed limit applicability to Mexican Americans/Chicanos in the Southwest, in applying *Keyes* the courts have often "interpreted this aspect of the holding expansively, neither restricting application of the term Hispanic to Chicanos in the Southwest nor requiring a showing of `identical discrimination'" (Teitelbaum & Hiller, 1977, p. 165). Subsequent to *Keyes*, courts in school desegregation cases have typically treated children from other Hispanic/Latino groups—and from certain other ethnic/racial groups as well—as "minority" students (Teitelbaum & Hiller, 1977, p. 165). For example, federal judges in New York and Boston decided that desegregation could be extended to Hispanic/Latino groups that were primarily Puerto Rican (Orfield, 1978, p. 204; Teitelbaum & Hiller, 1977, p. 165).

More broadly, *Keyes* is also significant because, as the Supreme Court's first case on desegregation in the "North," it expanded desegregation requirements to the North and West (Orfield et al., 1996). (Note 21) Before 1970, legal developments had not affected racial segregation patterns outside the South because such patterns had usually been characterized as de facto. In the 1970s, however, the courts were finding—as the Supreme Court did in the *Keyes* case in Denver—that much northern urban segregation was *de jure* segregation based not on statute but instead on specific acts or policies of school boards and other school officials (Brown, 1995; Orfield, 1978).

In the early 1970s, public protests intensified over the potential expansion of school desegregation and over forced transportation (i.e., busing) of students as a means to desegregate. Accordingly, the leadership that the executive and legislative branches of government were providing in desegregation efforts waned. Moreover, by this time, as a consequence of demographic alterations in the ethnic/racial composition of the U.S. population and shifts in residential patterns, many Northern urban school districts, which seldom extend beyond city limits, lacked sufficient numbers of European American children to desegregate (Kunen, 1996; Orfield, 1978). By the time of President Richard Nixon's second term of office, significant progress toward school desegregation had virtually stopped (Orfield et al., 1996; Orfield, 1978; Orfield & Monfort, 1992).

In 1974, the Supreme Court began issuing a series of decisions limiting *Brown*'s reach. For example, in *Milliken v. Bradley* [1974] the Supreme Court erected serious barriers to interdistrict, city-suburban desegregation plans; such plans have aimed to desegregate racially isolated schools that are located in urban areas by drawing students from the surrounding suburban districts. In this Detroit metropolitan case, the Supreme Court prohibited such plans unless plaintiffs could demonstrate that the suburbs or the state took actions that contributed to segregation in the city. Because obtaining such legal proof is often difficult, *Milliken* seriously limits access to the option of drawing students from largely European American suburbs in order to desegregate urban districts that enroll high concentrations of students of color (Orfield et al., 1996). That unconstitutional segregation existed in Detroit was not questioned in this case; in question was the constitutionality of the court- ordered desegregation plan's extending to outlying districts with no history of segregative action on the part of their school boards or local governments (Zirkel et al., 1995). Throughout the country, large numbers of students of color are segregated in urban areas; hence, insofar as *Milliken* puts suburban schools out of reach of these students, it practically ensures their isolation in the cities (Orfield et al., 1997; Orfield & Monfort, 1992; van Geel, 1982).

During the 1980s, the executive branch of the federal government worked actively against mandatory school desegregation; and Congress accepted a proposal from President Ronald Reagan's administration to slash the budget for federal desegregation assistance programs (Orfield et al., 1996). In recent years, neither branch has made a significant school desegregation initiative.

In *Milliken v. Bradley II* [1977] the Supreme Court, facing the challenge of providing a remedy for the Detroit schools, where *Milliken I* had made long-term integration practically impossible, had ruled that a court could order a state to pay for educational programs to repair the harms caused by segregation (Orfield et al., 1996; Zirkel et al., 1995). More recently, however, in *Missouri v. Jenkins* [1995], the Supreme Court ruled that the court-ordered programs designed to improve the quality of education in predominantly poor, predominantly non-White schools in order to make them educationally more equal to other schools, and to increase the attractiveness of schools in order to accomplish desegregation through voluntary choices, should be temporary, and that school districts need not show any actual correction of the educational harms of segregation before such programs can be discontinued (Orfield et al., 1996, 1997). Analyzing this court decision, Orfield and his colleagues (1996, p. xv) concluded that the Supreme Court by allowing, as it did in this case, for the dismantling of the special educational programming that the district had established as a remedy for students in segregated schools, may have signaled that in the future the Court may not even support enforcement of the "separate but equal" doctrine that *Brown* overturned. That is, it seems reasonable to conclude from the apparent underlying philosophy in the Supreme Court's rulings in *Jenkins* and in two other recent cases (i.e., *Board of Education of Oklahoma City v. Dowell* in 1991 and *Freeman v. Pitts* in 1992) that, in issues of school desegregation, the U.S. Supreme Court as presently constituted is pursuing the twin goals of minimizing judicial involvement in education and quickly restoring authority to local and state government, "whatever the consequences" (Orfield et al., 1996, p. 3).

In sum, the urgent focus of public opinion on civil rights lasted only two years, from 1963 to 1965. Vigorous and effective enforcement of school desegregation by the executive branch of the federal government began in 1965 and lasted four years (González, 1982; Laosa, 1984; Orfield et al., 1996). The Supreme Court continued to provide strong leadership on desegregation for four more years, in a series of sweeping decisions from 1969 to 1973—decisions that launched busing as a remedy, extended

desegregation requirements from the South to northern cities, established the right of Hispanic/Latino children to desegregated schools, and declared that it was no longer permissible to delay implementing the Court's mandate to desegregate (González, 1982; Orfield, 1978; Orfield & Monfort, 1992; Rist, 1979; Zirkel et al., 1995). Congressional leadership on civil rights weakened after 1965 as public opinion changed. Efforts toward school desegregation then waned on the part of the three branches of government. Political and legal forces have converged in recent years to effect movement in a direction opposite to that of efforts to desegregate public education (Orfield et al., 1996, 1997; Orfield & Yun, 1999).

School Segregation Trends in the United States

A clear correspondence can be seen, on the one hand, between the foregoing chronology of events pertaining to efforts to desegregate American schools and, on the other, the annual national statistics on the segregation of African American students: During the 1964-1972 period of active enforcement in the southern and border states, a major decline occurred in the segregation of those regions' African American students. The South changed from almost total segregation in 1963 to become the most desegregated region of the country by 1970 (Orfield & Monfort, 1988; Rist, 1979). (Note 22) In the early 1970s the trend toward increased desegregation of African American students virtually stopped. Then, in 1988, a drift toward increased segregation of African American students began (Orfield, 1993; Orfield et al., 1996, 1997; Orfield & Yun, 1999). The corresponding national statistics on the segregation of Hispanic/Latino students show, however, a strikingly different trend, as noted below.

Studies by Orfield and his colleagues and by other researchers show a steady trend in the United States toward increased school segregation of Hispanic/Latino children. This trend is evident since national data on the subject were first collected, in the 1960s. Indeed, since 1980 Hispanics/Latinos have been more likely than African Americans to attend predominantly minority schools. (Note 23) Specifically, nationwide in the 1968-69 academic year, 77% of African American students and 55% of Hispanic/Latino students attended predominantly minority schools; in 1972-73 these figures were 64% and 57%; by 1980-81 they had switched to 63% and 68%. In 1996-97, 69% of African American students and 75% of Hispanic/Latino students attended predominantly minority schools (Orfield, 1993; Orfield et al., 1997; Orfield & Yun, 1999). A similar trend can be observed in other measures of segregation, namely, the percentage of children of each ethnic/racial group in schools with a 90% to 100% minority enrollment (Orfield, 1993; Orfield et al., 1997; Orfield & Yun, 1999; U.S. Department of Education, 1995), and the weighted average percentage of European American students in the schools attended by children of a particular ethnic/racial group (Orfield, 1993; Orfield et al., 1997; Orfield & Yun, 1999).

Needed: Public Awareness, Policies, and Leadership

Some advocates of bilingual education for Hispanic/Latino children have sometimes objected to efforts to desegregate students from this ethnolinguistic group, fearing that such desegregation may weaken support for the bilingual/bicultural education programs that many of these children need. Other advocates and experts on the subject have argued that there is *no* inherent conflict between bilingual/multicultural education and desegregation, that under certain conditions both can be effectively realized—indeed, and that with sufficient will and effort, the aims of both can be achieved synergistically to produce educationally successful, integrated communities. There is an urgent need to inform parents, educators, and policy makers of the reality,

the issues, the potential consequences, and the as-yet- unanswered questions about the existing segregation of ethnolinguistic minority children in our nation's schools.

Heretofore, solutions to the problems of school segregation have been sought almost exclusively through the courts. Certainly, the most significant advances toward desegregation of African American students have been achieved with the considerable help of judicial decisions. At present, however, the problems of school segregation are even more complex and difficult than those of the past. There is also growing evidence that these problems affect multiple ethnic/racial and linguistic groups (perhaps in different ways), including children who migrate from Puerto Rico, as this study shows. Some observers have questioned whether the courts (particularly as they are presently constituted), and the adversarial system on which the judicial structure rests, are still the most effective and appropriate means possible for policy formation in an area as complex as school segregation (cf. Cárdenas, 1995; Fischer, 1982). Be that as it may, it is now painfully evident that desegregation does not guarantee integration, nor ensure full equality of educational opportunity (Brown, 1995; Cárdenas, 1995; Laosa, 1984, 1999; Teitelbaum & Hiller, 1977).

It seems clear, considering the statistical trends and the history of school desegregation efforts, that significant advances in solving problems of school segregation cannot in the foreseeable future be achieved through the courts *alone*. Urgently needed are creative, informed efforts toward the formulation of comprehensive solutions, and concerted leadership to implement them effectively.

Notes

1. For editorial simplicity, the term country is used here as if Puerto Rico and the United States were two distinct countries. Following this usage, the terms United States (U.S.) and American(s) are used exclusively in reference to the 50 states (and the District of Columbia) of the United States and the people therein. Similarly, the term Hispanic/Latino is used exclusively to refer to the Hispanic/Latino population of the 50 states (and the District of Columbia). The present usage does not imply any view regarding Puerto Rico's sociopolitical status, which at present is neither that of an independent nation nor that of a state of the United States. Of the 50 states, New Jersey has the highest Puerto Rican population density and the second-largest proportion of the total Puerto Rican population that resides stateside (Pérez & Martínez, 1993; U.S. Bureau of the Census, 1992, 1993).

2. Giving rise to these developments were several significant ideological, economic, and political currents in the United States: As the end of the nineteenth century approached, there were changes in thought about the nation's mission and its destiny. The nation had become a world power because of its prodigious economic growth (Link, 1992; Morison, 1972). After the disappearance of the "American frontier," the conviction grew that the country needed to find new outlets for an ever increasing population and agricultural and industrial production. Advocates of sea power argued that "future national security and greatness" depended upon a large navy supported by bases throughout the world (Link, 1992, p. 248). Social Darwinists advanced the view that the world is a jungle, with international rivalries inevitable, and that only a strong nation could survive (Link, 1992; Morison, 1972). Added to these arguments were those of idealists and religious

leaders who believed that Americans had a duty to "take up the White man's burden" and to carry their assertedly superior culture "to the backward peoples of the world" (Link, 1992, p. 248; Morison, 1972; Woodward, 1966). It was against this background that the Spanish-American War of 1898 propelled the United States along the road to war and empire (Lewis, 1963; Link, 1992; Morison, 1972)—a war that, although brief and relatively bloodless, had far- reaching and long-lasting political and diplomatic consequences. These overseas incursions brought under the nation's jurisdiction some eight million people of color, "a varied assortment of inferior races," as the Nation described them, "which, of course, could not be allowed to vote" (1898, as quoted in Woodward, 1966, p. 72).

3. More specifically, schools with at least one third- or fourth-grade class (or the equivalent for ungraded programs). This study focuses on public and not private schools because a previous study (Laosa, 1998) showed that of the total population of elementary-school transfers-in from Puerto Rico to New Jersey, only a tiny proportion are transfers-in to non-public schools.

4. Below are the annual distributions of children transferring in from Puerto Rico to the third and fourth grades (or the equivalent for ungraded programs) in the sample of New Jersey schools. To avoid inflating these counts, if a child transferred in from Puerto Rico more than once during the course of the investigation, the child was counted only once.

Number of children	**Number of schools**	
	Year 1	**Year 2**
0	169	177
1	27	21
2	16	8
3	9	8
4	5	9
5	4	4
6	5	4
7	3	3
8	0	3
9	2	1
10	0	2
11	0	1
12	0	0
13	0	0

14	1	0

5. The data describe the school at the time that focal children attended it; if the school had focal children more than one academic year, then the analyses selected the data corresponding to the first academic year that the school had focal children.

6. Counts rather than percentages were used in computing this variable's correlations with certain other variables; see footnote 15.

7. Counts rather than percentages were used in computing this variable's correlations with certain other variables; see footnote 15.

8. Counts rather than percentages were used in computing this variable's correlations with certain other variables; see footnote 15.

9. Consistent with the usage adopted by the U.S. Bureau of the Census, the term householder (rather than head of household) is used in the presentation of data that had previously been presented with the designation head (e.g., U.S. Bureau of the Census, 1994b, p. A-2).

10. Counts rather than percentages were used in computing this variable's correlations with certain other variables; see footnote 15.

11. Counts rather than percentages were used in computing this variable's correlations with certain other variables; see footnote 15.

12. Counts rather than percentages were used in computing this variable's correlations with certain other variables; see footnote 15.

13. Counts rather than percentages were used in computing this variable's correlations with certain other variables; see footnote 15.

14. Two matrices of correlation coefficients were computed: a matrix of Pearson product-moment correlations and a matrix of Spearman rank-order correlations; depending on the shape of the observed frequency distributions on a given pair of variables, either one type of coefficient or the other is reported; the two coefficients are very similar or practically identical to each other for the vast majority of the pairs of variables. Variables with distributions too skewed to yield meaningful coefficients were excluded from the correlation matrices.

15. To avoid the spurious correlation that may occur between variables that share in common the same variable denominator (McNemar, 1969, pp. 180-182), whenever two variables shared in common the same variable denominator, the correlation between them was computed using counts rather than percentages. The Appendix presents the descriptive statistics based on counts for these variables.

16. In the United States, persons of mixed European and African ancestry are generally considered Black/African American (i.e., "non-White"). This system of racial classification differs from the predominant conceptions of race and of racial identification in Puerto Rico; for a discussion of these conceptions see Rodríguez

(1991).

17. Four separate cases from Kansas, South Carolina, Virginia, and Delaware were consolidated and decided in the 1954 case of Brown v. Board of Education. In each case, African Americans sought admission to the public schools of their community on a nonsegregated basis. Kansas, by state law, permitted but did not require segregated schools. The other three states had state constitutional and statutory provisions that required the segregation of Blacks and Whites in public schools (Zirkel, Richardson, & Goldberg, 1995).

18. The nature of racial segregation in the North differed from that in the South: Typically in the South, school segregation was required by state constitutional or statutory provisions.

19. The term "*de jure* segregation" generally refers to segregation that has had the sanction of law; that is, segregation directly intended by law or otherwise issuing from an official racial classification. The term comprehends situations in which the activities of school authorities have had a racially discriminatory impact contributing to the establishment or continuation of school segregation. The term "*de facto* segregation" is limited to what is "inadvertent and without the assistance or collusion of school authorities" and not caused by state action (Black, Nolan, Nolan-Haley, Connolly, Hicks, & Alibrandi, 1990, pp. 416, 425). State action refers to action by the government, including action by a public school system or its agents (Zirkel et al., 1995, p. 208).

20. Similarly, in Cisneros v. Corpus Christi Independent School District (1970, Texas), the circuit court had found *de jure* segregation to exist, noting that the

> de jure nature of the existing pattern of segregation within the Corpus Christi Independent School District has as its basis state action of a non-statutory variety—that is, the school board's active pursuit of policies that not only do nothing to counteract the effect of existing patterns of residential segregation in view of viable alternatives of significant integrative value, but, in fact, increase and exacerbate the district's racial and ethnic imbalance. There has been a history of official school board acts which have had such a segregative effect. (Cisneros, 1970, as quoted in Levin et al., 1977, p. 76)

Thus, once the necessary intentional segregative actions were found, coupled with a high concentration of Hispanic/Latino students in some schools, a *prima facie* case of unlawful segregation was established (Levin et al., 1977).

Cisneros is the first circuit court case to hold that Hispanics/Latinos must be considered an identifiable minority group for purposes of desegregation; that is to say, that the principles enunciated in Brown v. Board of Education apply to Hispanics/Latinos as well as to African Americans. This decision prevented school officials in Corpus Christi from claiming that they had desegregated a school by placing in it only African American and Hispanic/Latino (i.e., Mexican American) students (González, 1982; Levin et al., 1977).

21. Keyes is the first Supreme Court opinion addressing de jure segregation in a city (Denver, Colorado) located in a state where at the time of Brown v. Board of

Education the public schools were not segregated pursuant to state statutory authority (Brown, 1995, p. 650). Many of Denver's public schools were segregated, although the city's school system had never been operated under a state constitutional provision or law that mandated or permitted school segregation (Zirkel et al., 1995, p. 113).

22. Significantly, prior to 1964 no systematic data on the implementation of Brown were collected. The general consensus among those who studied this period is that fewer than 1% of all African American students in the eleven southern states attended desegregated schools (i.e., schools that White/European American students also attended; Rist, 1979, p. 4). In the same academic year (1964-65) of the passage of the Civil Rights Act, the first private efforts at collecting desegregation data on these states began. The findings from those efforts suggest that 2% of all African American students in these states were in desegregated schools. In 1965-66 the federal government began to collect data; that year, 7% of the South's African American students were in desegregated schools (Rist, 1979, p. 4). Then the pace of desegregation in the South quickened: The first national statistics on school desegregation became available with the 1968-69 academic year. That year 23% of African American students nationwide were in majority-White schools, in contrast with 18% in the South alone. Within two years the shift was dramatic as the South had 39% of its African American students in majority-White schools, compared with 28% in the northern and western states (Orfield, 1978, pp. 56-57; Orfield & Monfort, 1992, p. 13; Rist, 1979, p. 4).

23. A predominantly minority school is one in which more than half of the school's combined enrollment is African American, American Indian/Native American, Asian/Pacific Islander American, or Hispanic/Latino (Orfield, 1993, p. 5).

References

Barton, P. E., Coley, R. J., & Goertz, M. E. (1991*). The state of inequality* (Policy Information Report). Princeton, NJ: Educational Testing Service.

Black, H. C., Nolan, J. R., Nolan-Haley, J. M., Connolly, M. J., Hicks, S. C., & Alibrandi, M. N. (1990). *Black's law dictionary* (6th ed.). Saint Paul, MN: West Publishing.

Bremner, R. H., Barnard, J., Hareven, T. K., & Mennel, R. M. (Eds.). (1970). *Children and youth in America: A documentary history: Vol 1. 1600-1865.* Cambridge, MA: Harvard University Press.

Bremner, R. H., Barnard, J., Hareven, T. K., & Mennel, R. M. (Eds.). (1971). *Children and youth in America: A documentary history: Vol 2. 1866-1932.* Cambridge, MA: Harvard University Press.

Bremner, R. H., Barnard, J., Hareven, T. K., & Mennel, R. M. (Eds.). (1974). *Children and youth in America: A documentary history: Vol 3. 1933-1973.* Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature*

and design. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, Jr., & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 619-647). Washington, DC: American Psychological Association.

Brooks-Gunn, J., Denner, J., & Klebanov, P. (1995). Families and neighborhoods as contexts for education. In E. Flaxman & A. H. Passow (Eds.), *Changing populations, changing schools. Ninety-fourth yearbook of the National Society for the Study of Education* (Part 2, pp. 233-252). Chicago: University of Chicago Press.

Brown, K. (1995). Revisiting the Supreme Court's opinion in *Brown v. Board of Education* from a multiculturalist perspective. *Teachers College Record, 96,* 644-653.

Cárdenas, J. A. (1995). *Multicultural education: A generation of advocacy.* Needham Heights, MA: Simon & Schuster Custom Publishing.

Cárdenas, J. A. (1996). Ending the crisis in the K- 12 system. In L. I. Rendón & R. O. Hope and associates (Eds.), *Educating a new majority: Transforming America's educational system for diversity* (pp. 51-70). San Francisco: Jossey-Bass.

Carr, R. (1984). *Puerto Rico: A colonial experiment.* New York: Random House.

Carter, T. P., & Segura, R. D. (1979). *Mexican Americans in school: A decade of change.* New York: College Entrance Examination Board.

Cobb, C. D., & Glass, G. V (1999). Ethnic segregation in Arizona charter schools. *Education Policy Analysis Archives* [On-line journal], *7*(1). Available: http://epaa.asu.edu/epaa/v7n1/

Donato, R., Menchaca, M., & Valencia, R. R. (1991). Segregation, desegregation, and integration of Chicano students: Problems and prospects. In R. R. Valencia (Ed.), *Chicano school failure and success: Research and policy agendas for the 1990s* (pp. 27-63). London: Falmer.

Fischer, L. (1982). The courts and educational policy. In A. Lieberman & M. W. McLaughlin (Eds.), *Policy making in education. Eighty-first yearbook of the National Society for the Study of Education* (pp. 56-79). Chicago: University of Chicago Press.

Forehand, G. A., Ragosta, M., & Rock, D. A. (1976). *Conditions and processes of effective school desegregation* (Report No. PR-76-23. Final report prepared for the Office of Education, U.S. Department of Health, Education, and Welfare). Princeton, NJ: Educational Testing Service.

González, J. M. (1982). *Hispanics, bilingual education and desegregation: A review of major issues and policy directions.* Unpublished report to the U.S. Commission on Civil Rights.

Jones, E. R. (1996). Foreword. In G. Orfield, S. E. Eaton, & the Harvard Project on School Desegregation, *Dismantling desegregation: The quiet reversal of Brown v. Board of Education* (pp. vii-ix). New York: The New Press/Norton.

Jones, F. C. (1981, Spring). External crosscurrents and internal diversity: An assessment of black progress, 1960- 1980. *Daedalus,* 71-101.

Kennedy, M. M., Jung, R. K., & Orland, M. E. (1986). *Poverty, achievement, and the distribution of compensatory education services.* Washington, DC: U.S. Government Printing Office.

Kirp, D. L. (1977). Law, politics, and equal educational opportunity: The limits of judicial involvement. *Harvard Educational Review, 47*, 117-137.

Kunen, J. S. (1996, April 29). The end of integration. *Time,* pp. 39-45.

Landsberg, B. K. (1995). The federal government and the promise of *Brown*. *Teachers College Record, 96,* 627-636.

Laosa, L. M. (1984). Social policies toward children of diverse ethnic, racial, and language groups in the United States. In H. W. Stevenson & A. E. Siegel (Eds.), *Child development research and social policy* (pp. 1- 109). Chicago: University of Chicago Press.

Laosa, L. M. (1990). Psychosocial stress, coping, and development of Hispanic immigrant children. In F. C. Serafica, A. I. Schwebel, R. K. Russell, P. D. Isaac, & L. B. Myers (Eds.), *Mental health of ethnic minorities* (pp. 38-65). New York: Praeger.

Laosa, L. M. (1997). Research perspectives on constructs of change: Intercultural migration and developmental transitions. In A. Booth, A. Crouter, & N. Landale (Eds.), *Immigration and the family: Research and policy on U.S. immigrants* (pp. 133-148). Mahwah, NJ: Erlbaum.

Laosa, L. M. (1998). *Child migration from Puerto Rico to public and private schools in the United States: Sampling a difficult-to-reach population* (Research Rep. No. 98-24). Princeton, NJ: Educational Testing Service.

Laosa, L. M. (1999). Intercultural transitions in human development and education. *Journal of Applied Developmental Psychology, 20*(3), 355-406.

Laosa, L. M. (n.d.). *Psychosocial stress and Hispanic immigrant children's coping and adaptation to their role as students: Puerto Rican migration. Progress report.* Princeton, NJ: Educational Testing Service.

Laosa, L. M., & Henderson, R. W. (1991). Cognitive socialization and competence: The academic development of Chicanos. In R. R. Valencia (Ed.), *Chicano school failure and success: Research and policy agendas for the 1990s* (pp. 164-199). New York: Falmer.

Levin, B., Castaneda, S., & von Euler, M. (1977). Legal issues related to school desegregation and the educational concerns of the Hispanic community. Desegregation and education concerns of the Hispanic community. Conference report (pp. 75-89). Washington, DC: National Institute of Education, U.S. Department of Health, Education, and Welfare.

Lewis, G. K. (1963). *Puerto Rico: Freedom and power in the Caribbean.* New York:

Monthly Review Press.

Link, A. S. (1992). Imperialism, the progressive era, and the rise to world power, 1896-1920. *The new encyclopaedia Britannica: Macropaedia* (15th ed., Vol. 29, pp. 248-253). Chicago: Encyclopaedia Britannica.

Lukas, J. A. (1986). *Common ground: A turbulent decade in the lives of three American families.* New York: Random House.

Mathews, T. G., & Tata, R. J. (1992). Puerto Rico. *The new encyclopaedia Britannica: Macropaedia* (15th ed., Vol. 29, pp. 755-761). Chicago: Encyclopaedia Britannica.

McNemar, Q. (1969). *Psychological statistics* (4th ed.). New York: Wiley.

Minuchin, P. P., & Shapiro, E. K. (1983). The school as a context for social development. In E. M. Hetherington (Ed.), *Handbook of child psychology: Vol. 4. Socialization, personality, and social development* (pp. 197-274). New York: Wiley.

Moore, J., & Pachon, H. (1985). *Hispanics in the United States.* Englewood Cliffs, NJ: Prentice-Hall.

Morison, S. E. (1972). *The Oxford history of the American people: Vol. 3. 1869-1963.* New York: New American Library.

Motley, C. B. (1995). The legacy of *Brown v. Board of Education*. *Teachers College Record, 96,* 637-643.

Myers, D. E. (1985). The relationship between school poverty concentration and students' reading and math achievement learning. In M. M. Kennedy, R. K. Jung, & M. E. Orland (1986), *Poverty, achievement, and the distribution of compensatory education services* (Appendix D, pp. D-16 to D-60). Washington, DC: U.S. Government Printing Office.

Network of Regional Desegregation Assistance Centers. (1989). Resegregation of public schools: The third generation. Portland, OR: Author/Northwest Regional Educational Laboratory.

Oates, S. B. (1982). *Let the trumpet sound: The life of Martin Luther King, Jr.* New York: New American Library.

Orfield, G. (1978). *Must we bus? Segregated schools and national policy.* Washington, DC: Brookings Institution.

Orfield, G. (1993). The growth of segregation in American schools: Changing patterns of separation and poverty since 1968. Alexandria, VA: Council of Urban Boards of Education, National School Boards Association.

Orfield, G., Bachmeier, M., James, D. R., & Eitle, T. (1997). Deepening segregation in American public schools. Cambridge, MA: Harvard Project on School Desegregation, Harvard University.

Orfield, G., Eaton, S. E., & the Harvard Project on School Desegregation. (1996).

Dismantling desegregation: The quiet reversal of Brown v. Board of Education. New York: The New Press/Norton.

Orfield, G., & Monfort, F. (1988). Racial change and desegregation in large school districts: Trends through the 1986-1987 school year. Alexandria, VA: Council of Urban Boards of Education, National School Boards Association.

Orfield, G., & Monfort, F. (1992). Status of school desegregation: The next generation. Alexandria, VA: Council of Urban Boards of Education, National School Boards Association.

Orfield, G., & Yun, J. T. (1999). Resegregation in American schools. Cambridge, MA: Civil Rights Project, Harvard University.

Orland, M. E. (1994). Demographics of disadvantage: Intensity of childhood poverty and its relationship to educational achievement. In J. I. Goodlad & P. Keating (Eds.), *Access to knowledge: The continuing agenda for our nation's schools* (Rev. ed., pp. 43- 58). New York: College Entrance Examination Board.

Pérez, S. M., & Martínez, D. (1993). State of Hispanic America 1993: Toward a Latino anti-poverty agenda. Washington, DC: National Council of La Raza.

Puma, M., Jones, C. C., Rock, D., & Fernandez, R. (1993). Prospects: The congressionally mandated study of educational growth and opportunity (Interim report prepared for the U.S. Department of Education, Planning and Evaluation Service). Bethesda, MD: Abt Associates.

Rist, R. C. (1979). Introduction. In R. C. Rist (Ed.), *Desegregated schools: Appraisals of an American experiment* (pp. 1-11). New York: Academic Press.

Rodríguez, C. E. (1991). *Puerto Ricans born in the U.S.A.* Boulder, CO: Westview Press.

Roos, P. (1977). Issues in desegregation remedial order for Hispanos. Desegregation and education concerns of the Hispanic community. Conference report (pp. 29-35). Washington, DC: National Institute of Education, U.S. Department of Health, Education, and Welfare.

Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (1979). *Fifteen thousand hours: Secondary schools and their effects on children.* Cambridge, MA: Harvard University Press.

Sitkoff, H. (1993). *The struggle for Black equality: 1954-1992* (Rev. ed.). New York: Hill and Wang.

Southern Education Foundation, Panel on Educational Opportunity and Postsecondary Desegregation. (1995). Redeeming the American promise: Report of the Panel on Educational Opportunity and Postsecondary Desegregation. Atlanta, GA: Author.

Taylor, W. L., & Piché, D. M. (1991). Shortchanging children: The impact of fiscal inequity on the education of students at risk (Report prepared for the Committee on Education and Labor of the U.S. House of Representatives; Serial No. 102-O).

Washington, DC: U.S. Government Printing Office.

Teitelbaum, H., & Hiller, R. J. (1977). Bilingual education: The legal mandate. *Harvard Educational Review, 47,* 138-170.

U.S. Bureau of the Census. (1992). 1990 Census of population. General population characteristics: United States (1990 CP-1-1). Washington, DC: U.S. Government Printing Office.

U.S. Bureau of the Census. (1993). 1990 Census of population and housing. Population and housing unit counts: United States (1990 CPH-2-1). Washington, DC: U.S. Government Printing Office.

U.S. Bureau of the Census. (1994a). Educational attainment in the United States: March 1993 and 1992 (Current Population Reports, Series P20-476; by R. Kominski & A. Adams). Washington, DC: U.S. Government Printing Office.

U.S. Bureau of the Census. (1994b). The Hispanic population in the United States: March 1993 (Current Population Reports, Series P20-475; by P. A. Montgomery). Washington, DC: U.S. Government Printing Office.

U.S. Bureau of the Census. (1996). Statistical abstract of the United States: 1996 (116th ed.). Washington, DC: U.S. Government Printing Office.

U.S. Commission on Civil Rights. (1971). Ethnic isolation of Mexican Americans in the public schools of the Southwest (Report 1 of the Mexican American Education Study). Washington, DC: U.S. Government Printing Office.

U.S. Commission on Civil Rights. (1972). The excluded student: Educational practices affecting Mexican Americans in the Southwest (Report 3 of the Mexican American Education Study). Washington, DC: U.S. Government Printing Office.

U.S. Commission on Civil Rights. (1976). Puerto Ricans in the continental United States: An uncertain future. Washington, DC: Author.

U.S. Department of Education. (1993a). Digest of education statistics, 1993 (NCES 93-292). Washington, DC: National Center for Education Statistics, U.S. Government Printing Office.

U.S. Department of Education. (1993b). Reinventing Chapter 1: The current Chapter 1 program and new directions (Rep. of the National Assessment of Chapter 1 Independent Review Panel). Washington, DC: U.S. Department of Education, Office of Policy and Planning.

U.S. Department of Education. (1995). Findings from The Condition of Education 1995: No. 4. The educational progress of Hispanic students (NCES 95-767, by T. M. Smith). Washington, DC: National Center for Education Statistics, U.S. Government Printing Office.

U.S. Department of Education. (1996). Urban schools: The challenge of location and poverty. Executive summary (NCES 96-864, by L. Lippman, S. Burns, & E. McArthur, with contributions by R. Burton, T. M. Smith, & P. Kaufman). Washington, DC:

National Center for Education Statistics, U.S. Government Printing Office.

U.S. Department of Education. (1997). Findings from The Condition of Education 1997: No. 10. The social context of education (NCES 97-981, by B. A. Young & T. M. Smith). Washington, DC: National Center for Education Statistics, U.S. Government Printing Office.

U.S. General Accounting Office. (1992). Remedial education: Modifying Chapter 1 formula would target more funds to those most in need (GAO/HRD-92-16). Washington, DC: Author.

van Geel, T. (1982). Judicial decisions. In H. E. Mitzel, J. H. Best, & W. Rabinowitz (Eds.), *Encyclopedia of educational research* (5th ed., Vol. 2, pp. 974- 982). New York: The Free Press.

Wagenheim, K. (1970). *Puerto Rico: A profile.* New York: Praeger.

Weinberg, M. (1977). *A chance to learn: A history of race and education in the United States.* New York: Cambridge University Press.

Wilson, W. J. (1995). Jobless ghettos and the social outcome of youngsters. In P. Moen, G. H. Elder, Jr., & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 527-543). Washington, DC: American Psychological Association.

Woodward, C. V. (1966). *The strange career of Jim Crow* (2nd Rev. ed.). Oxford, England: Oxford University Press.

Zashin, E. (1978, Winter). The progress of Black Americans in civil rights: The past two decades assessed. *Daedalus,* 239-262.

Zirkel, P. A., Richardson, S. N., & Goldberg, S. S. (1995). *A digest of Supreme Court decisions affecting education* (3rd ed.). Bloomington, IN: Phi Delta Kappa Educational Foundation.

About the Author

Luis M. Laosa
Principal Research Scientist
Educational Testing Service
Turnbull Hall, 8-R
Rosedale Road
Princeton, New Jersey 08541

Email: llaosa@ets.org
Phone: (609) 734-5524

Luis M. Laosa has conducted extensive research in varied Hispanic/Latino communities (Chicano/Mexican American, Puerto Rican, Cuban American) throughout the United States and in Mexico and South America. His current studies include a large-scale longitudinal project focusing on child migration, supported in part by the William T.

Grant Foundation and the Spencer Foundation. He is the author of numerous scientific and scholarly publications and is often sought as scientific and technical advisor to government agencies, universities, research centers, and philanthropic foundations. He is a fellow of the American Psychological Society and of the American Psychological Association (in the divisions of developmental psychology, educational psychology, general psychology, and ethnic-minority psychology). Other honors include a Martin Luther King, Jr./César Chávez/Rosa Parks Visiting Professorship at the University of Michigan, receipt of the Educational Testing Service's Senior Scientist Award, and induction into the Phi Kappa Phi Honor Society. Dr. Laosa has served on the editorial boards of *Review of Educational Research, Child Development, Developmental Psychology, Journal of Educational Psychology, Psychological Bulletin*, the *Journal of Applied Developmental Psychology, Early Education and Development*, and *Journal of School Psychology*. He received his Ph.D. (1971) from the University of Texas at Austin (specializing in cross-cultural psychology, personality/social development, educational psychology, measurement, and research methodology); completed a postdoctoral residency in clinical and community psychology at the University of Texas Medical School, Health Sciences Center, at San Antonio; and received his certification in school psychology and his professional certification and license in general psychology. He was chief school psychologist in a large school district and has served on the clinical faculty of the Department of Psychiatry of the University of Texas Medical School and on the faculty of the Graduate School of Education of the University of California, Los Angeles. He has been on the research staff of Educational Testing Service in Princeton, New Jersey, since 1976, where at present he holds the post of principal research scientist.

Acknowledgment

The research presented here was made possible in part by a research grant from the William T. Grant Foundation to the author. The data presented, the statements made, and the views expressed are solely the responsibility of the author. This study is part of the author's large-scale longitudinal research project focusing on children who migrate to the United States from Puerto Rico

Appendix
Descriptive Statistics for Variables Measured in Counts: Means, Standard Deviations, Standard Errors of the Mean, and Skewness Values

Variable	M	SD	SEMean	Skewness
Student body's ethnic/racial composition				
African American	216.1	231.2	24.79	1.42
European American	99.4	164.6	17.75	3.24
Hispanic/Latino	336.4	287.6	31.38	1.27
Student body's linguistic composition				
Native speakers of Spanish	253.1	248.6	27.12	1.41

Monolingual native speakers of English	360.5	244.4	26.82	1.06
Classified as LEP/ELL	130.7	127.2	13.72	1.84
Student body's family socioeconomic status				
Unemployment level	293.5	249.2	27.03	1.21
Public assistance dependence level	315.9	250.0	26.80	1.04
Fully subsidized lunch eligibility level	404.8	252.0	27.50	0.66
Subsidized lunch eligibility level (fully + partly)	461.7	276.1	30.31	0.59
Note. *N* = 83–87 schools. The figures in this appendix are based on the variables measured in counts.				

The World Wide Web address for the *Education Policy Analysis Archives* is **epaa.asu.edu**

General questions about appropriateness of topics or particular articles may be addressed to the Editor, Gene V Glass, glass@asu.edu or reach him at College of Education, Arizona State University, Tempe, AZ 85287-0211. (602-965-9644). The Commentary Editor is Casey D. Cobb: casey.cobb@unh.edu .

EPAA Editorial Board

EPAA Spanish Language Editorial Board