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California Schools 1985-2000

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Abstract

This paper brings attention to a structural dimension of the schooling context that may affect the incorporation process of immigrant youth, namely the growing trend in non-English, minority, and low-income concentration within the schools of non-English-speaking students (LEP). This paper further seeks to explain trends in LEP students’ school composition in terms of changes in the distribution of language-minority students within districts and counties versus changes in the composition of districts and counties in California. We use administrative data about LEP students in California public schools from 1985 to 2000. Four major points arise from this descriptive analysis. (1) Spanish-speaking LEP children attend schools with many more low-income, minority, and LEP students than do other groups, including non-LEP Hispanics and non-Spanish-speaking LEP students. (2) The degree to which Spanish-speaking LEP children attend low-income, minority, and LEP schools has been increasing more over the past decade than other groups. (3) Nearly all the change in school composition can be attributed to shifts in the state-level composition and not changes in the distribution of students across schools and school districts. (4) Nevertheless, the disproportionate concentration of Spanish-speaking LEP students in low-income, high-minority, high-LEP schools (and the growth in this concentration) can be explained primarily by their concentration in certain districts, and secondarily by their concentration in certain schools within school districts.
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Introduction

Diversity in immigrant outcomes, including educational outcomes, has perplexed scholars who study immigrant incorporation and has prompted a shift in focus from individual-level to broader contextual factors to explain variations in patterns of incorporation (e.g., Menjivar 1997, 2000; Portes and Sensenbrenner 1993). A prominent example is the development of the “segmented assimilation” model (Gans 1992; Massey 1995; Portes and Zhou 1993; Portes and Sensenbrenner 1993; Fernandez-Kelly and Schauffler 1994; Fernandez-Kelly 1995; Portes 1998; Waters 1999), which views prolonged experience with racial discrimination as leading some new immigrant groups, particularly Hispanics and blacks, to reject goals for upward mobility. This literature has long recognized that schools constitute important settings within which immigrant children and U.S. born children of immigrants are introduced to the social hierarchies and racial barriers within American society. The purpose of this paper is to bring attention to a structural dimension of the schooling context that may affect the incorporation process of immigrant youth, namely the growing trend in linguistic isolation and concentration of non-English-speaking students in high-poverty, high-minority schools.

Education had been traditionally believed to help bring about immigrant incorporation by equipping new arrivals with the skills and credentials necessary to be successful in the U.S. labor force (Alba and Nee 1999). It is widely recognized that some immigrant groups, particularly some Asian and Jewish groups, have been extremely successful at using education as a vehicle for socioeconomic mobility (Caplan, Choy, and Whitmore 1991; Fejgin 1995; Schneider and Lee
For example, Vietnamese children, together with children from Hong Kong, Taiwan, and Japan, are more likely to remain enrolled in high school than children born in the United States, Europe, and Mexico and Latin America, despite the fact that one-third of Vietnamese children are living in poverty (a level that is twice as high as among U.S.-born children) (Hirschman 2001). However, Hispanics stand apart from most other immigrant groups in that they tend to score lower on standardized tests, are much more likely than other groups, including African Americans, to drop out of high school, and less likely to attend college (Hirschman 2001; Van Hook and Fix 2001). Moreover, these adverse outcomes tend to be more common among those who have lived in the United States for a significant part of their lives (Hirschman 2001), and cannot be entirely explained by individual- or family-level factors.

The persistence of the Hispanic disadvantage has led some education and immigration scholars to argue that schools and neighborhoods produce inequality rather than equalize opportunity. Discussed further below, schooling and characteristics of the schooling context (such as student race/ethnic, linguistic, and poverty composition) may have important socializing effects on students and may affect the particular paths immigrant children take as they adjust to American society. Mary Waters (1999: 335) writes “Within one generation, structured racism—the institutional racism of substandard schools, racially segregated and disinvested neighborhoods, and the discrimination of employers” have often given way to ‘disinvestment’ and oppositional identities in the second generation”

However, the evidence about the characteristics of schools attended by immigrant children, particularly Hispanic immigrant children, tends to be confined to descriptive portraits for single points in time or based on the school characteristics of Hispanics, a group that consists
of both children of immigrants and children of U.S.-born citizens. Researchers have noted that Hispanic students have become increasingly likely to attend minority schools (Logan 2002; Orfield et al 1997). In addition, on the basis of sample data gathered during the early 1990s (NELS:88, 1991/92 wave, PROSPECTS, and the 1993/94 Schools and Staffing Survey), various researchers found that Limited English Proficient (LEP) students tend to be even more segregated than Hispanics (Bennici and Strang 1995), are more likely to attend high-poverty inner-city schools (Moss and Puma 1995), and are more likely to attend schools with other LEP students (Van Hook, forthcoming). With the exception of the Orfield et al. study (which examines Hispanic but not linguistic segregation), this research does not document trends over time. Moreover, this research does not investigate the reasons for the segregation of immigrant and LEP students and their concentration within high-poverty, high-minority schools.

It is important to examine trends to assess how the receiving context for immigrant students has changed in recent decades, particularly for the post-1965 era of U.S. immigration. A significant change in the quality and composition of schools attended by immigrants, particularly Hispanic immigrants, may provide support for the segmented assimilation idea that the social and economic incorporation of today’s immigrant cohorts is becoming more problematic, more prolonged, and ultimately, will be less successful than earlier immigrant cohorts. However, constancy in the quality and composition of schools attended by immigrants may provide support for those who argue that linguistic segregation and concentration of non-English speakers in particular schools is not a new phenomenon, and therefore the current schooling context does not pose an additional barrier to assimilation for today’s immigrants (e.g., Crawford 1997).
Furthermore, it is important to discern the source of the patterns observed in school characteristics of immigrants. On the one hand, immigrant children may attend disadvantaged schools because they are unevenly concentrated in certain schools in their districts. Logan (2002) finds that unlike other groups, Hispanics tend to be more segregated in schools than neighborhoods. One reason for this may be that school districts may deliberately pool language minority students in specialized schools. In the past, language education was often used as a pretext for segregating immigrants, in particular Mexican immigrants (Crawford 1997). Since the early 1970s, several states tried to reduce this problem by including English-speaking students in bilingual classrooms. However, these efforts had met with mixed success as desegregation goals sometimes conflicted with the goal of meeting the diverse needs of language-minority students in efficient ways (Donato et al 1993; De Velasco, Fix and Clewell, 2001).

On the other hand, immigrants may be more likely to attend disadvantaged schools simply on account of shifts in the student population composition and broad patterns in race/ethnic and poverty geographical distribution. For example, Orfield et al. (1997) speculate that one reason Hispanics have become increasingly likely to attend high-minority schools may in part be due to the fact that the minority proportion of the student population has increased. Between 1980 and 1997, the proportion of children that may be classified as an immigrant or a child of an immigrant doubled from 10 to nearly 20 percent (Van Hook and Fix 2001). This compositional shift would be sufficient to bring about a change in the composition of schools attended by immigrants even in the absence of changes in the distribution of students across schools. If this were the case, desegregation efforts would have little to no effect on the school
characteristics of immigrant students. Crawford (1997, 1995) reports “as one principal in East Los Angeles explains, bilingual education often has no impact on racial balance: ‘We are 99.9 percent Hispanic. There was no one else to integrate with’.”

This paper maps out the trends in the characteristics of schools among Spanish- and other non-English speaking students in California schools from 1985 through 2000, and explains these trends in terms of changes in the distribution of language-minority students within districts and metropolitan areas (MSAs) versus changes in the composition of districts and MSAs in California. We specifically examine the extent to which students attend schools with high percentages of low-income, minority, and non-English-speaking students. These characteristics are important because research consistently shows a correlation between the race/ethnic and socioeconomic composition of a child’s schoolmates and the child’s academic success (Cook et al. 1984; National Research Council 1989). Minority and non-English concentration may also affect peer-group relationships, and may reduce the reach and level of resources within immigrant students’ social networks (Stanton-Salazar and Dornbusch 1995). The reason for focusing on California and not the entire United States is that the California Department of Education has collected and makes publicly available data on the language status of all students since 1985\(^1\). Other state departments of education collect similar data, but to our knowledge, none except California’s are able to provide data that extends back in time prior to the mid-1990s. Even though it would be helpful to examine other states, the focus on California still provides a useful portrait of the schools attended by a substantial proportion of immigrant

\(^1\) Data collection started in 1982, but complete records on all variables started in 1985.
children. In 1995, 35 percent of all immigrant children and children of immigrants were living in California (Van Hook and Fix 2001).

We focus on LEP students rather than all children of immigrants and immigrant children because very little data are available on the school attendance patterns of immigrants (place of birth is not identified in the California data, for example). Not all immigrant children are LEP (two-fifths are), and not all LEP children are children of immigrants (10% of LEP children are the U.S.-born children of U.S.-born citizens) (Van Hook and Fix 2000). Nevertheless, 90% of LEP students are either children of immigrants or foreign-born immigrant children, and many immigrant students were formerly designated as LEP. By examining LEP students, we capture the most vulnerable immigrant students, many of whom are at a point in their lives when they are still relatively new to the United States and struggling with the task of learning a new language. The composition of their schools may arguably provide the most apt depiction of the institutional context within which incorporation occurs for many immigrant children.

**Background and Conceptual Issues**

Even though the question of whether and how school composition affects immigrant incorporation is not the focus of this research, we briefly review the literature on school composition effects in order to provide a basis for examining school attendance patterns. Research on school composition and segregation has been motivated by studies that consistently show a correlation between the race/ethnic and socioeconomic composition of a child’s schoolmates and the child’s academic success (Cook et al. 1984; National Research Council 1989; Catsambis and Beveridge 2001). Children who attend low status, high-minority schools learn less than children who attend integrated schools. Much of the relationship between school
composition and learning can be attributed to the selection of children from certain family backgrounds into particular schools. But even after controlling for family background, some effects of race/ethnic and poverty composition on learning remain (Bankston and Caldas 1996; Bankston and Caldas 1997; Coleman et al. 1966; Cook et al. 1984; Entwisle and Alexander 1992; National Research Council 1989; Rumberger and Wilms 1992; Catsambis and Beveridge 2001), particularly at high levels of minority concentration (Caldas and Bankston 1998). With respect to Hispanic students, Donato et al. (1993) note that there is a “stubborn relation between school segregation of Chicanos and lowered academic achievement,” including reduced high school graduation rates, and limited college attendance.

For immigrant and LEP students, the likely effects of school composition are complex. Organizational models of schools (Barr and Dreeben 1983; Dreeben and Barr 1988) view schools and school systems as making decisions that correspond broadly with the populations they serve. Within this framework, it is hypothesized that curricular material is selected by school districts in ways that broadly match the ability and interests of the students. Particular hiring decisions are made by the school principal to best “fit” the specific needs of the student body. Finally, students are assigned to classrooms and instructional groups that are deemed most appropriate and best match their abilities and interests. These ideas would predict that (1) school districts would be more likely to concentrate LEP students together in the same schools and classrooms, and (2) that by doing so, school districts may be better able to serve LEP (and immigrant) students as they develop expertise in serving non-English speaking students.

On the other hand, the concentration of LEP students could reduce exposure to English-speaking peers and could slow English language acquisition. Also, to the extent the segregation
of LEP students is associated with concentration in high-poverty schools, this could lead to a higher proportion of “difficult” students in schools attended by immigrants. The organizational model of schools would predict that schools with large proportions of “difficult” students may be more likely to adopt curricula that covers less content, hire teachers that are more adept at managing classrooms than covering material, and have classrooms with relatively large “low” ability instructional groups, all of which could ultimately lead to more classroom disruptions, more direct attention paid to low-ability students, less content coverage, and less productive usage of time for instruction to higher-ability students (Barr and Dreeben 1983; Dreeben and Barr 1988), including immigrant students in the process of learning English. To make matters worse, teachers vary considerably in their qualifications and less-prepared teachers are disproportionately assigned to low-income, high-minority schools (Darling-Hammond 1998). Thus, schools with high concentrations of LEP and low-income children may not only present special challenges to school personnel, but teachers in these schools may be less prepared to meet these challenges.

In addition, the concentration and isolation of LEP students within high-minority schools could influence students’ expectations and aspirations for achievement through normative processes that occur among students (Hallinan 1988b). Building on Coleman’s (1988a) conceptualization and application of social capital, this idea asserts that students establish a peer society within which attitudes related to schooling and achievement become normative expectations. Even though students carry achievement orientations from home, the peer society at school can take a life of its own, sometimes outweighing influences of family, community, school resources, and teaching quality, particularly if social capital is lacking at home (e.g., as in
The normative processes model has been used to explain the observed effects of race/ethnic composition. That is, minority group children may bring to schools the negative attitudes and expectations about education that emerge from the social and economic disadvantages of growing up non-white in the United States (Bankston and Caldas 1996; Stanton-Salazar and Dornbusch 1995). Such tendencies are not confined to African American youth. In line with the expectations of segmented assimilation theory, some Hispanic sub-groups (e.g., Puerto Ricans, Mexicans) have been observed to develop “oppositional” cultures perhaps as a way to cope with racism and other barriers to upward mobility (e.g., Fernandez-Kelly and Schauffler 1996; Fernandez-Kelly 1995; Portes 1998; Portes and Zhou 1993). The extent to which immigrant or LEP concentration in a “minority” school is accompanied by a heightening of an “oppositional” versus “achievement-oriented” peer culture remains an empirical question and may vary by immigrant group (Ogbu 1974; 1990; 1991). Nevertheless, the linguistic, race/ethnic, and socioeconomic composition of a school is likely to influence (for good or ill) the character of social relations among the youth (Mouw and Entwisle, 2001) and could influence attitudes about academic achievement and school completion (Stanton-Salazar and Dornbusch 1995).

2 Research that focuses on young children in elementary school shows little to no direct evidence for the normative processes hypothesis (Dreeben and Barr 1988; Hallinan 1988b; Pallas, Entwisle, Alexander, and Stluka 1994). However, part of the reason may be that peer influences do not become strong until children reach adolescence. Another explanation is that pressure to conform to group norms may be offset by students using peer group norms as a basis for making judgements about their own ability to succeed (Felmlee and Eder 1983). That is, lower class, minority, and some immigrant students may “give up” more easily in the face of seemingly “unreachable” norms and expectations for high academic achievement.
Data and Measures

Data. Reliable data on the distribution of LEP students across schools in the United States is difficult to obtain. The Common Core of Data (CCD) is often used in studies of school segregation because it includes a record for every school in the United States rather than a sample of schools. However, the CCD does not include information on the number of immigrant or LEP students. Other data that collects school-level data on the number LEP students focus only on certain grades (NELS: 88, NAEP) or do not contain sufficient numbers of schools to provide reliable estimates (NELS: 88; SASS).

We use newly available administrative data about LEP students in California public schools. Since 1982, the State of California has conducted a “language census” of its public schools. Each year, the number of students designated as Limited English Proficient (LEP) are counted for each school and grade level separately by language (e.g., Spanish, Vietnamese, etc.). In addition, the State of California routinely collects data on other school-level characteristics, including enrollment by grade, race/ethnic composition, and since the late 1980s, the percentage of students who receive cash welfare (AFDC/TANF) or who are eligible to receive free or reduced-price school meals. These data, in other words, contain information about the race/ethnic, poverty, and LEP composition of all schools in California, not just a sample.

Limited English Proficiency. Schools used a variety of methods to identify LEP students, including on the basis of parent requests, teacher referral, home language surveys, oral or written language exams, the student’s previous school record, and achievement test results. According

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3 Ogbu’s (1974; 1990; 1991) research suggests that, unlike youth in “castelike” minorities like African Americans,
to the Schools and Staffing Survey, about 85% of schools with LEP students used more than one method, half used four or more, and 7.6% reported using all of the methods mentioned. Schools with many LEP students were more likely to use home language surveys and oral or written language examinations, and schools with relatively few LEP students were more likely to rely on parent recommendations and teacher referrals (Van Hook, forthcoming).

To examine heterogeneity among LEP students, we distinguish students by language groupings that correspond roughly with countries- or regions-of-origin. These languages include Spanish, Chinese, Korean, Vietnamese, and Filipino, which correspond with immigration groups from Mexico and Central/South America, China/Taiwan, Korea, Vietnam, and the Philippines.\(^4\) Most Spanish speakers in California come from Mexico (roughly 82%).

*Poverty Composition.* Unfortunately, the California school data (like most educational administrative data sources) do not provide direct information about the poverty status of students. However, the number of students in each school who receive free or reduced-price school meals has been available since 1989. The school meals program is a federal means-tested benefit program. To qualify, families must have incomes that fall below 185 percent of the poverty threshold, which was around $32,000 for a family of four in 2000. Since the eligibility criteria is based on the poverty threshold and therefore indexed with inflation, the proportion of children participating in the program should provide an indication of changes in low-income concentration in public schools in California. We nevertheless recognize the limitations of this approach in that the proportion of eligible families who *participate* in the school meals program

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Native Americans, Puerto Ricans, and native-born Chicanos, minority youth from “voluntary” immigrant groups develop peer cultures that facilitate achievement and upward mobility.

\(^4\) The Chinese category is composed of those students who speak Mandarin, Cantonese, of Other Chinese Languages; the Filipino category is composed of those who speak Filipino, Tagalog or Other Filipino languages.
may change over time. We are therefore cautious when interpreting changes at the state level in low-income student composition, and focus more on differences between groups in the extent they attend schools with high proportions of children who participate in the school meals program.

School Composition and Distribution of Students. To examine the composition of schools attended by LEP children, we use “P-star” (i.e., “Interaction”) measures rather than its competitor measure, the Dissimilarity Index. The reason is that the “P-star” measures take school composition into account and thus are better at assessing the degree to which two groups (e.g., LEP and minority students) are likely to interact within schools (Lieberson and Carter 1982; Bell, 1954) and have been used extensively in other work on school segregation (e.g., Clotfelter 2001; Orfield et al., 1997) and school composition effects (e.g., Wilson 1985; Smock and Wilson 1991). These measures estimate the proportion of students in group Y in the school of the typical student in group X. In what follows, we use as an example of school composition the average proportion of minority students in the typical LEP student’s school. Despite this, the analysis will examine other characteristics of schools, including the proportion who are eligible for free or reduced school meals and the proportion who are LEP. The average proportion minority in the typical LEP student’s school is calculated as:

\[
P_{ML}^* = \frac{\sum_{s}^{M} L_{x s} \cdot \frac{M_s}{T_{x s}}}{\sum_{s}^{M} L_{s}} \times 100 ,
\]

(1)
where $L_s$, $M_s$, and $T_s$ are, respectively, the number of LEP, minority, and total students in school $s$. No sampling errors were estimated for measures because they are based on the universe of public schools in California and not a sample.

One drawback of using the interaction index is that its value depends heavily on the composition of students in the local area and does not provide a direct indication of student segregation within local areas. For example, “P-star” cannot straightforwardly indicate whether LEP students are more likely to have minority schoolmates than non-LEP students once the race/ethnic composition in the school district or metropolitan area (MSA) is held constant. We use a “gap-based” index of segregation to separate the effects of composition of the school district and metropolitan area from the effects of the distribution of students within school districts. Let $L_s$, $L_d$, $L_m$, and $L_t$ be the number of LEP students in school $s$, district $d$, metropolitan area $m$, and the state $t$; and $q_s$, $q_d$, $q_m$, and $q_t$ the percent minority in school $s$, district $d$, metropolitan area $m$, and the state $t$. Then the difference between $MP^*$ and the percent minority in the state is:

\[
MP^* = \frac{\sum_{s} L_s \cdot (q_s - q_d)}{L_t} + \frac{\sum_{d} L_d \cdot (q_d - q_m)}{L_t} + \frac{\sum_{m} L_m \cdot (q_m - q_t)}{L_t}
\]  

The first term is the portion of the overall difference due to the distribution of students across schools within their districts. The second term is the portion due to the difference between district and MSA enrollments, and the third is the part due to differences between state and MSA
enrollments\(^5\). For each term, positive values indicate greater percentages of minority students in the LEP students’ school, district, or MSA than would be expected if minority students were distributed evenly, while negative values indicate lower percentages than expected. For example, a value of 5.0 for the first term would mean that the average LEP student lives in an MSA that contain five percentage points more minority students than the overall percentage in the state. If the state composition were 20% minority, the average LEP student would live in metropolitan areas with 25% minority students.

A useful quality of these measures is that they can be used to decompose the percent difference in minority schoolmates over time into parts due to differential distributions vis-à-vis minority students across metropolitan areas, across school districts (within the metropolitan area), and within school districts. The values for equation 3 must first be estimated for at two points in time. Let \( T_1 \) stand for the left-hand side of equation 3 and \( t_1^s, t_1^d, \) and \( t_1^m \) the three terms in the right-hand side for time 1; let \( T_2, t_2^s, t_2^d, \) and \( t_2^m \) stand for the corresponding terms for time 2. Then, the difference in \( p \)-star between time 1 and time 2 can be broken down into three components:

\[
T_2 - T_1 = (t_2^s - t_1^s) + (t_2^d - t_1^d) + (t_2^m - t_1^m).
\] (4)

The first component on the right-hand side represents the amount of the overall change that can be attributed to change in the degree to which minority students are over- or under-represented in the average LEP student’s school given the percent minority in the district (within-district changes). The second component represents change in the representation of minority

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\(^5\) The decomposition method used here provides results that are identical (with respect to the proportions of the total due to each component) to results produced by Clotfelter’s decomposition of “S” (1978, 2001).
students in the average LEP student’s district given the percent minority in the MSA (across-district changes). Finally, the third term represents change in the representation of minority students in the average LEP student’s MSA (across-MSA differences).

Results

School-level Patterns

Between 1989 and 2000, the percentage of public-school children who participated in the school meals program in California increased from 31 percent to 47 percent, or by about 16 percentage points. During approximately the same time period (from 1985 to 2000), the percentage of children who belong to a racial or ethnic minority increased from 46.9% to 63.1%, and the percentage of children classified as LEP nearly doubled from 12.6 to 24.9%. Clearly, California’s schools experienced large demographic shifts such that school children have become poorer, less “white,” and much more diverse linguistically. These changes have presented significant challenges to schools, and are most likely due to the increases in the immigrant population during the last 15 years or so (Van Hook and Fix 2001).

The results show that all race/ethnic/linguistic groups were affected by the changes in state-level composition. Figures 1, 2, and 3 depict for various race/ethnic/linguistic groups the extent to which a typical student attends school with “low-income,” LEP, and minority students from 1985 to 2000. The top panels of the figures display the results separately for five different groups: non-Hispanic whites, blacks, Hispanic non-LEP students, and among LEP students, those speaking Spanish and those speaking other non-English languages. The lower panels show the results for a more detailed set of linguistic groups. As with a rising tide, all groups experienced increases in their school’s low-income, minority, and LEP concentration (see
Figures 1, 2, and 3). This fact alone supports the argument that the schooling context in California has changed in ways that could make it more difficult for schools—as institutions—to effectively teach and promote educational success among all students. For newly-arrived immigrants, the characteristics of schools today may present difficulties that were not as problematic a decade or two ago.

In addition, some groups of children have been more likely than others to attend disadvantaged schools. Of all groups shown, Spanish-speaking LEP students attend schools with the highest levels of low-income, minority, and LEP children. In the 1999-2000 school year, the average Spanish-speaking LEP student attended schools that were about 71 percent low-income. This is about forty-percent higher than other LEP students, other Hispanic students, and blacks (who attended schools that were about 55 % low-income), and more than twice as high as non-Hispanic white students (who on average attended schools that were 30 % low income) (Figure 1, upper panel). The more detailed graph (lower panel) shows that Koreans stand out as the only linguistic group with comparably poor schools as Spanish-speakers. The other Asian-origin linguistic groups attend schools that are much less poor, and Vietnamese-speaking children attend schools that are nearly identical to non-Hispanic whites with respect to low-income concentration.

These patterns are generally replicated in the results pertaining to LEP and minority concentration, in that Spanish- and Korean-speakers tend to attend the most disadvantaged schools (i.e., with the highest percentages of LEP and minority students), non-Hispanic white and Vietnamese tend to go to the most advantaged schools, and the other groups fall somewhere
between. One exception is that non-Hispanic whites stand apart from all other groups—including Vietnamese—in that they typically attend schools with much lower proportions of minority students.

In general, these disparities have been maintained over the past 15 years and, in some cases, the differences have widened. For example, the increase in low-income concentration within children’s schools was greatest for Spanish-speaking LEP students. For non-Hispanic whites, the increase was about 10.3 percentage points, but for Spanish-speaking LEP students, the increase was about 17 percentage points. This was greater than other minority groups, including blacks, non-LEP Hispanics, and non-Spanish-speaking LEP students, who experienced increases in low-income school concentration of 13.8, 14.4, and 13.0 percentage points, respectively.

**District- and Metropolitan Area-level Patterns**

What explains these group differences and trends over time? In particular, we are interested in examining the extent to which the differences and changes arise from the shifting composition of California’s student population versus the uneven distribution of certain groups within school districts or within metropolitan areas. We first simply examine the composition of the average student’s school, district, and metropolitan area. These results were generated with respect to the three different outcomes (low-income, minority, and LEP concentration), but to save space, we show and discuss here only the low-income results (Figure 4). The upper panel shows the percentage of “low-income” students in the typical child’s school from 1989 to 2000. These results are repeated from Figure 1 in order to provide a basis for comparison. The middle panel shows the percentage of low-income students in the typical student’s school district, and
the lower panel shows the percentage low-income in the typical student’s metropolitan area (consistent MSA boundaries are used throughout the time period). In general, the group-level differences are greatest when examining school composition. At the district level, group-level differences remain but to a lesser degree. This suggests that at least part of the explanation for group-level disparities in low-income school composition arises from the fact that some groups are more likely to attend low-income school districts than others. Finally, at the level of the metropolitan area, the results suggest that the various groups differ little with respect to the characteristics of the cities in which they live. Thus, it is unlikely that the group-level differences in school and district composition will be explained much by the uneven distribution of certain groups in certain metropolitan areas.

[Figure 4 here]

We next decompose the difference from non-Hispanic whites and the change over time into various components using the method described in the previous section. Table 1 (top row) shows the difference in low-income, LEP, and minority school concentration between non-Hispanic whites and Black, non-LEP Hispanic, and various LEP linguistic groups for the 1999-2000 school year. For example, Spanish-speaking LEP children on average attended schools that were composed of higher proportions of low-income students (by 41 percentage points) than Non-Hispanic whites. Of this 41-percentage point differential, 13.8 points are due to within-district distributional differences. That is, about one-third of the differential can be attributed to the fact that Spanish speaking LEP students are more likely to be concentrated in low-income schools within their school districts while non-Hispanic white students tend to be concentrated in the higher-income schools within their districts. In addition, 21 percentage points of the
differential are due to distributional differences that occur across districts but within MSA’s. That is, about half of the difference can be attributed to the fact that Spanish speaking LEP children are more likely to go to school in low-income districts than non-Hispanic white children. Only a small portion of the differential—6.5 percentage points or 16 percent—may be explained by the distribution of children across cities throughout the state.

[Table 1 here]

The results in Table 1 show that the disproportionate concentration of LEP students in low-income, high-minority, and high-LEP districts is the most important reason for the uneven distribution of LEP children in these types of schools. This is especially true for Spanish and Korean speaking LEP children. The only exception is Vietnamese speaking LEP children, among whom much of the small difference from majority whites in school composition can be explained by the distribution of children across cities throughout the state.

Nevertheless, it is important to emphasize that a smaller but significant part of the difference in school composition can be explained by the concentration of LEP children in the low-income, high-LEP, and high-minority schools within their districts. Except in the case of Vietnamese children, significant portions of the differential can be explained by the concentration of LEP children within their districts in certain types of schools. In other words, significant changes in school composition could occur if LEP children were distributed more evenly within their school districts, even in the absence of efforts to move LEP children to different school districts. Although the same might be said about black and Hispanic non-LEP students, the within-district effect tends to be much smaller than among LEP students. This
result is consistent with the observation that districts may concentrate LEP students in specialized language schools.

The results in Table 2 focus on changes over time in school composition. The top row of the first panel shows the change in the percentage of low-income schoolmates in the typical child's school between 1989 and 2000. The second row shows the amount of this change that can be attributed to the increase in low-income students in the entire state. This component of change accounts for the bulk of the change in student’s school composition for all groups—the state-composition component is much larger than any of the distributional components. This is important because it shows that much of the change occurring in student’s schools can be linked to the shifting composition of the state, and ultimately, to the growth of the immigrant population.

The next three rows show the overall change due to changes within districts, across districts within MSA’s, and across MSA’s. The results show that Spanish LEP children on average experienced the largest increase (17.1 percentage points) in low-income schoolmates (about one-percentage point higher than the statewide increase). Even though Spanish LEP children have become more evenly distributed within their districts (accounting for a decline of 1.26 percentage points in low-income concentration) they have become more concentrated in low-income districts within cities (accounting for a 2.78 percentage point increase). This is quite different from non-Hispanic whites who experienced only a 10.28 percentage point increase of low-income schoolmates during the same time period. This is not as high as the state level increase of 16.2 percentage points because they have become even less likely to attend low-income districts. Overall, Spanish, Chinese, and Korean LEP children stand out as the only
groups that have experienced a substantial increase in the concentration in low-income districts within cities. On the other hand, Filipino and Vietnamese children stand apart as experiencing the smallest increase in low-income concentration (even less than among non-Hispanic whites), due to their changing distribution at all three levels (within districts, across districts, and across MSAs).

The second panel of Table 2 decomposes the change in the percentage of LEP schoolmates in the typical child’s school between 1985 and 2000. As with low-income concentration, the bulk of the change in school composition is due to changes at the state level. As with the low-income results, Spanish, Korean, and Chinese-speaking LEP children on average experienced the largest increases (13.2, 12.6, and 11.0 percentage point increases respectively), due in large part to their increasing concentration in high-LEP districts (Spanish and Korean) or in high-LEP schools within their districts (Chinese). Filipino- and Vietnamese-speaking LEP children, together with non-Hispanic whites, experience relatively small increases in LEP concentration largely because they have become less likely to attend high-LEP school districts or high-LEP schools.

Finally, for all groups except Chinese- and Korean-speaking LEP students, the disproportionate concentration of students in high-minority schools and school districts has declined. Thus minority and LEP students have become more likely to attend schools and districts with the majority white students who live in their school districts and metropolitan areas. Minority concentration increased across all groups because of increases in the proportion of minority students in the state; if school districts and metropolitan areas had not become more integrated with respect to race, the minority composition of children’s schools (for all groups)
would have increased more than it actually did. Nevertheless, it is important to point out that despite the declines in segregation, LEP and minority students remain much more likely to attend high-minority schools than non-Hispanic white students, and non-Hispanic whites have become even less likely to attend the “minority” school districts within their MSAs. This result seems at odds with the fact that many minority and LEP groups have become more evenly distributed vis-à-vis majority whites across metropolitan areas. But as metropolitan area populations include more minority children, minority school districts would appear more “integrated” (i.e., like the rest of the MSA) and majority white school districts would appear more segregated (i.e., different from the MSA) even if the compositions of both types of districts did not change.

[Table 2 here]

**Discussion**

Four major points arise from this analysis. First, Spanish-speaking LEP children attend schools with many more low-income, minority, and non-English-speaking students than do other groups, including non-LEP Hispanics and non-Spanish-speaking LEP students. Second, the results show that degree to which Spanish-speaking LEP children attend such schools has been increasing more over the past decade than other groups, including non-LEP Hispanics and non-Spanish-speaking LEP students. Both of these results are important because they demonstrate how the institutional context within which immigrant children adjust to life in the United States is substantially different (and more impoverished) for Hispanics than it is for other ethnic origin groups, and that it has been growing worse over time. This provides further evidence for the idea purported by segmented assimilation theory that the receiving context for Hispanics presents significantly more barriers to upward mobility than for other groups. However, we caution that
the role of racial discrimination in the production of these segregation patterns is not at all clear or evident from this analysis.

Third, the results show that nearly all of change in LEP student’s school composition can be explained by state-wide compositional changes, and not by increases in segregation. In other words, the schools attended by LEP students have become increasingly composed of low-income, minority, and non-English-speaking students largely because the student population composition in the state has shifted in these directions, primarily a result of international immigration. Moreover, the state-wide demographic shifts appear to have had an overwhelming influence on the schools of all groups of students, including non-Hispanic whites.

Nevertheless, not all groups were affected to the same extent, which leads to our fourth major finding. The disproportionate concentration of Spanish-speaking LEP students in disadvantaged schools (and the disproportionate growth in this concentration) can be explained primarily by their concentration in the low-income, high-minority, high-LEP school districts in the cities in which they live. Their concentration in the low-income, high-minority, high-LEP schools within their school districts is of secondary importance, although not insignificant. This finding is similar to other research results that show that district-level integration efforts would have little effect on black-white school segregation because of the high levels of residential segregation (Clotfelter 2001; Rivkin 1994).

The results presented here may provide a basis for further investigating the role of institutional inequality on educational outcomes in order to better explain inequality in educational outcomes among various immigrant groups. This research may be particularly fruitful if it considers the potentially interacting roles of institutional- and family-level influences.
on children. Previous research suggests that positive parental influence and/or maintaining ethnic family ties may help some immigrant groups overcome their limitations, including the disadvantage of attending an impoverished school (Zhou and Bankston 1998; Gibson 1988; Waters 1999). However, the influences of families may lose out to those coming from schools, particularly if family-level influences are not particularly achievement-oriented or if school-level influences are particularly oppositional. Thus, immigrant groups with a double-disadvantage—both at home and in school—may fare the worst. For example, Spanish-speaking children—who have poor school outcomes—attend the most disadvantaged schools and come from the poorest families (in 1990 42% of Mexican-born children were poor [Hirschman 2001]). Korean and Vietnamese children perform much better in school, but neither group has the double disadvantage. Korean children go to disadvantaged schools but have relatively low poverty rates (18%), while Vietnamese tend to be poor (36%), but attend the most advantaged schools of all the LEP groups (Hirschman 2001).

Hispanics may bear the brunt of institutional disadvantage in part because of their demographic circumstances. Among immigrants, Hispanics are the most numerous, tend to be poor, and tend to be residentially segregated and isolated along the lines of both ethnicity and poverty (although not to the extent of African-Americans) (Logan 2002). These characteristics produce a situation in which it is nearly impossible for school districts in “Hispanic areas” to not be mostly poor, mostly minority, and mostly non-English-speaking. Hispanics in such areas tend to demographically overwhelm school districts. Smaller immigrant groups, such as some Asian groups, may be equally poor and equally residentially segregated, but because of their smaller size, do not dominate entire school districts. For example, although Vietnamese children come
from families that are almost as poor as Hispanic children, they attend schools that are similar in low-income composition to those attended by non-Hispanic whites.

This argument could lead to the conclusion that the continuing dominance of immigration from Mexico and Central America has adverse effects on Hispanics and therefore, immigration should be limited. Possibly. But this position may overlook benefits to population size and concentration, such as political influence and the development of enclave economies. In any case, more targeted policies apart from changing U.S. immigration admissions could make a small difference. Residential segregation need not translate automatically into school segregation if district boundaries are drawn in ways that incorporate diverse neighborhoods. Policies can be enacted that would restrict the degree to which cities may be fragmented into many school districts. For example, Florida has a policy of using county boundaries as school district boundaries, which may lead to lower isolation of LEP students than would otherwise be the case. Short of re-drawing existing district boundaries, efforts could be made to restrict the formation of new school districts in exclusive neighborhoods. In addition, desegregation measures within existing school districts could have modest effects on the degree to which LEP children are isolated. This would not necessarily mean that school districts would have to increase busing practices, but may simply involve a policy of no longer deliberately concentrating LEP students.

At this point in time, the implications of isolation and concentration of Limited English Proficient students (or “English Language Learners”) in low-income, high minority schools for English language acquisition, school completion, educational attainment, and social incorporation are unclear. However, the stakes are high. If isolation and concentration were to
hinder schools’ ability to service immigrant children or bring about negative social and educational outcomes for immigrant children, this could have far-reaching implications for the United States, including affecting the viability of the future labor force and the growth of the poverty population.
References


Figure 1
Average Percentage Low-Income Schoolmates Among California School Children, 1985-2000

Race/Ethnic and Broad Linguistic Groups

Detailed Linguistic Groups
Figure 2
Average Percentage LEP Schoolmates Among California School Children, 1985-2000

Race/Ethnic and Broad Linguistic Groups

Detailed Linguistic Groups
Figure 3
Average Percentage Minority Schoolmates
Among California School Children, 1985-2000

Race/Ethnic and Broad Linguistic Groups

Detailed Linguistic Groups
Figure 4

Average Percentage Low-Income Schoolmates Among California School Children, 1989-2000

Percentage Low-Income Students in Typical Child's District Among California School Children, 1989-2000

Percentage Low-Income Students in Typical Child's MSA Among California School Children, 1989-2000
### Table 1
Decomposition of the Difference from Non-Hispanic Whites, California Schools, 2000

<table>
<thead>
<tr>
<th>Difference from Non-Hispanic Whites</th>
<th>Black</th>
<th>Hispanic Non LEP</th>
<th>Spanish</th>
<th>Chinese</th>
<th>Filipino</th>
<th>Korean</th>
<th>Vietnamese</th>
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<tbody>
<tr>
<td>Difference in the Percentage Low-Income Schoolmates Due to Difference in Distribution:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Within Districts</td>
<td>4.99</td>
<td>5.91</td>
<td>13.76</td>
<td>7.58</td>
<td>4.98</td>
<td>13.21</td>
<td>-4.40</td>
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<tr>
<td>Across Districts, within MSA's</td>
<td>16.13</td>
<td>17.50</td>
<td>20.99</td>
<td>12.13</td>
<td>11.32</td>
<td>21.02</td>
<td>1.25</td>
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<td>Across MSA's</td>
<td>4.04</td>
<td>8.28</td>
<td>6.51</td>
<td>-3.59</td>
<td>-1.13</td>
<td>5.09</td>
<td>5.96</td>
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<td>Difference in the Percentage LEP Schoolmates Due to Difference in Distribution:</td>
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<tr>
<td>Within Districts</td>
<td>-0.32</td>
<td>1.94</td>
<td>13.57</td>
<td>8.15</td>
<td>8.26</td>
<td>12.70</td>
<td>3.06</td>
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<tr>
<td>Across Districts, within MSA's</td>
<td>9.32</td>
<td>8.53</td>
<td>16.10</td>
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<td>13.64</td>
<td>3.96</td>
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<td>Across MSA's</td>
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<td>3.71</td>
<td>3.63</td>
<td>8.14</td>
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</tr>
<tr>
<td>Within Districts</td>
<td>6.76</td>
<td>5.91</td>
<td>10.18</td>
<td>7.74</td>
<td>5.61</td>
<td>10.86</td>
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<td>20.49</td>
<td>17.50</td>
<td>22.79</td>
<td>19.78</td>
<td>22.71</td>
<td>22.29</td>
<td>8.03</td>
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<td>Across MSA's</td>
<td>7.84</td>
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<td>9.58</td>
<td>5.95</td>
<td>9.65</td>
<td>8.64</td>
<td>12.70</td>
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### Table 2
Decomposition of the Change in the Composition, California Schools, 1985 to 2000

<table>
<thead>
<tr>
<th></th>
<th>Non-Hispanic White</th>
<th>Non-Hispanic Black</th>
<th>Hispanic Non LEP</th>
<th>Limited English Proficiency</th>
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<tbody>
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<td>Due to Change in Distribution:</td>
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<tr>
<td>Within Districts</td>
<td>-1.67</td>
<td>-0.18</td>
<td>-0.64</td>
<td>-1.26 3.58 -3.16 -3.80 -4.98</td>
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<tr>
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<td>-1.18</td>
<td>-0.98</td>
<td>2.78 2.29 -1.17 2.28 -4.92</td>
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<tr>
<td>Across MSA's</td>
<td>-0.42</td>
<td>-1.11</td>
<td>-0.18</td>
<td>-0.66 -5.59 -3.09 -0.74 -1.34</td>
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<tr>
<td>Due to Change in Distribution:</td>
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<td></td>
</tr>
<tr>
<td>Within Districts</td>
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<td>-0.07</td>
<td>-1.98</td>
<td>-1.06 1.28 -3.42 -1.03 -2.13</td>
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<td>Across Districts, within MSA's</td>
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<td>-0.54</td>
<td>1.70 -0.15 -2.87 1.01 -3.46</td>
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<td>Across MSA's</td>
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<td>0.34 -0.82 -1.07 -1.22 2.00</td>
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<td>Due to Change in the State Level Composition</td>
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<tr>
<td>Due to Change in Distribution:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Within Districts</td>
<td>-0.95</td>
<td>-2.33</td>
<td>-2.10</td>
<td>-2.34 2.45 -1.85 0.01 -0.61</td>
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<tr>
<td>Across Districts, within MSA's</td>
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<td>-5.73</td>
<td>-2.75</td>
<td>-3.57 4.36 -3.20 -1.25 -2.57</td>
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<td>Across MSA's</td>
<td>-0.49</td>
<td>-3.91</td>
<td>-1.93</td>
<td>-2.64 -1.28 -1.42 -0.35 -1.68</td>
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</tbody>
</table>

* Change between the years 1989 to 2000.