Changing Demographics in the Schools: Wisconsin’s New Latino Diaspora

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The growing presence of Latinos in rural, urban, and suburban communities across Wisconsin is evident in the landscape of the state. A billboard in front of a dairy farm outside of Wisconsin Dells advertises cell phone minutes to Mexico and Central America. Along Jefferson’s Main Street, during the annual “Gemuetlichkeit Days,” German flags wave alongside Spanish signs on the sale booths lining the street. It is no longer necessary to travel to the heart of Milwaukee for authentic Mexican food. Some of the best in the state can be found along Route 41 just outside of Appleton. And Bucky Badger now advertises tortillas in Madison grocery stores.

Wisconsin is not alone in this demographic trend. As 1 of 12 states with greater than 200% growth in its Latino population in the last 20 years, Wisconsin is among several “emerging Hispanic states” scrambling to respond to the needs of growing immigrant communities (Fry & Gonzales, 2008). Driven by economic, political, and legal conditions, the flow of Latino immigration to the United States shifted in the early 1990s, leading to a decline in the percentage of immigrants going to traditional gateway locations (such as California and Texas), while, “the percentage of immigrants going to nongateway states more than doubled” (Marrow, 2005, p.782). These immigration trends have radically altered receiving locations with little recent history of such growth. These immigrant communities constitute what some scholars have called “the New Latino Diaspora” (Murillo & Villenas, 1997; Wortham, Murillo, & Hamann, 2002).

As immigration patterns have shifted, they have influenced school enrollment across the country, leading to a rapid increase of ethnic, racial, and linguistic diversity in the public school system (Fry & Gonzales, 2008). The widespread dispersal of Latino youth across the country has had a profound impact on schools that now serve a rapidly changing demographic. Scholars have been slow to analyze the implications of these changing immigration patterns for public school enrollment.

In this paper, we analyze school enrollment patterns in the state of Wisconsin. We examine demographic trends in Wisconsin public school enrollment over the last decade and discuss the implications of these trends for education in the state. In so doing, we identify emerging challenges for policy and practice and call for increased attention to these growing communities of immigrant youth both within the state and across the country.

**Methods**

This study set out to quantify and describe the population of schools in the state serving the New Latino Diaspora. In order to identify schools throughout the state that were experiencing
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this demographic trend, we first analyzed school-level enrollment data over time for the entire state of Wisconsin. We focused on the key variable of percent of Spanish-speaking English Language Learners (ELLs), which we obtained from the Wisconsin Department of Public Instruction’s data website. We reasoned that looking at the racial identifier of Latino or Hispanic would not necessarily identify students who were recent immigrants, and therefore we used the percent of Spanish-speaking ELLs as a more accurate proxy for members of the New Latino Diaspora. It is worth noting that in so doing, we assumed that those identified as Spanish-speaking ELLs would also likely be fairly recent arrivals from Latin America.

Arguably, the use of this variable to identify recent Latino immigrants may be problematic. Not all schools have effective mechanisms for measuring and identifying ELLs. Students who are not immigrants or children of immigrants may be classified as language learners based on the strength of their English skill. Other schools may not identify students with conversational English who have immigrated with some English skill. As such, schools may over-identify or under-identify, depending on the effectiveness of their identification process. Despite these caveats, given the options, we chose this method as the closest available approximation of the presence of the New Latino Diaspora.

In determining growth in the Spanish-speaking ELL population, we needed to understand the change in the rate of growth over time. Raudenbush and Bryk (2002) critiqued many studies of change that inappropriately “use instruments that were developed to discriminate among individuals at a fixed point in time,” rather than use methods designed to “distinguish differences in rates of change among individuals” (p.161). Since we are looking at the rate of school enrollment change among individual schools, we decided to use hierarchical linear modeling (HLM) to generate a growth rate.

In addition, Raudenbush and Bryk (2002) explained that often, studies of change “collect data at only two time points” (p.161). Rather than calculate differences in the percentage of Spanish-speaking students between the most current year of data and the initial year, we chose to take into account each year of available data. Raudenbush and Bryk (2002) emphasized that the use of multiple time points can increase statistical precision and reduce the standard errors of estimates. They suggested the use of HLM as an appropriate tool to measure growth rates among individuals (or schools), because “these models afford an integrated approach for studying the structure and predictors of individual growth” (Raudenbush & Bryk, 2002, p. 161). In addition, HLM allows for analysis without difficulty when data is missing at particular timepoints, a feature of the state enrollment data caused in part by the opening and closing of some schools, as well as the presence of some missing enrollments.

We used a two-level model to estimate an overall rate of growth in Spanish-speaking ELL students for the state between 1998–1999 and 2007–2008 and growth rates for individual schools during this period. The first level of the model used annual percentages of Spanish-speaking ELL students to estimate growth rates for each school. The second level of the model estimated a rate of growth in Spanish-speaking ELLs for the entire state. The intercept of the Level 2 model is an estimate of the average percentage of Spanish-speaking ELL population across the state at the first point in time (1998–99). A residual file from the Level 2 model provided separate estimates of parameters for each individual school, including an intercept, or initial status, for each school and a slope, defined as “the growth rate for [each school] over the
data-collection period represent[ing] the expected change during a fixed unit of time” (Raudenbush & Bryk, 2002, p.163). For the model fit for this study, the residual file contained an estimate of the percentage of Spanish-speaking ELL students in 1998, and an estimate of the rate at which the percentage of Spanish-speaking ELL students grew between 1998 and 2008 for each school.

Enrollment data by language learner status was not available before the school year 1998–1999 in state databases. In order to include schools with an upward trend in our analysis, we identified schools with a growth rate of Spanish-speaking ELLs that was greater than the state average. However, several reports on demographic trends defined the wave of immigration leading to the New Latino Diaspora as beginning in the early 1990s. In order to exclude schools with a long history of serving Latino immigrants, while at the same time adjusting for the start of the immigration trend, we identified a group of 472 New Latino Diaspora schools that began in 1998 with a Spanish-speaking ELL population of less than 10% and experienced greater than average growth in enrollment between 1998 and 2008.

In addition to analyzing the demographics of these schools in terms of their growth in Spanish-speaking ELLs, we also examined the range of schools in terms of geographic locale, school type or level, and student enrollment demographics such as percentage of students receiving free and reduced-price lunch. Additionally, we conducted comparisons of these schools to the rest of the schools in the state in order to understand the degree to which these schools are representative of the range of schools in the state. Below, we discuss results from these analyses and implications of these trends.

Anatomy of the Shift: Recent Demographics of Wisconsin Schools

In recent years, shifting immigration patterns have led to the dispersal of Latino immigrants across the state. In the years between 1990 and 2000, the population more than doubled (107%), according to census data (UW Extension & Applied Population Laboratory, 2001). Hence, many schools with little to no tradition of supporting immigrant students have experienced rapid increases in linguistic, cultural, and racial diversity. In the section below, we describe the anatomy of the shift in a statewide analysis of demographic trends over time. In so doing, we emphasize that schools experiencing demographic shift are representative of a range of schools in the state.

Schools Enrolling Spanish-Speaking ELLs: From a Minority to a Majority

In the 1998–1999 school year, the majority of schools across the state (71%) did not enroll any Spanish-speaking ELLs. Only 102 of them (5%) enrolled more than 20 Spanish-speaking ELLs. By 2008, that number more than doubled with 293 schools (13%) enrolling more than 20 Spanish-speaking ELLs. By then, the number of schools without any Spanish-speaking ELLs had become a minority (42%), with 1353 schools (68%) enrolling at least a few Spanish-speaking ELLs. On average, schools across the state experienced 0.18% annual growth in enrollment between 1998 and 2008.

2 These percentages incorporate growth in the overall number of schools in the state from 1927 to 2315 schools. Largely responsible for this expansion in the number of schools in the state was the rapid development of charter schools, with 314 designated charters in 2007-2008. Most of these were listed as virtual schools with very small enrollments. Given the larger n, the growth in schools serving Spanish-speaking ELLs is even more exaggerated.
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Spanish-speaking ELL enrollments. Overall, 24% of schools in the state experienced growth in their enrollment of Spanish-speaking ELLs in the years between 1998 and 2008. While some of these schools had high enrollments prior to 1998, we identified 20% of schools in the state (472) as New Latino Diaspora schools. These schools served no or low percentages of Spanish-speaking ELLs in 1998 and had higher than average rates of growth in enrollment since then.

Although all of these schools have experienced some growth, the degree of growth in these schools ranges from just over the state mean of 0.18% up to 2.7% average annual growth rate in enrollment of Spanish-speaking ELLs, with a mean growth rate of 0.47%. In other words, some of these schools have experienced a rapid and significant shift in their demographics, while others have witnessed a more gradual and less extreme shift. As such, the percentage of Spanish-speaking ELLs enrolled in these schools in 2008 ranges from very low percentages to those with greater than 20% enrollment. Figure 1 illustrates the breadth of percentages, with a mean of 5.96% and a wide range of percentages ($SD=4.75\%$).

![Figure 1. Percentage of Spanish-speaking ELLs in New Latin Diaspora schools.](image)

**Geographic Distribution of Growth**

These New Latino Diaspora schools are spread geographically across the state. As illustrated in the chloropleth maps in Figure 2, enrollment of Spanish-speaking ELLs spread out across the state in the years between 1999 and 2008.
While several districts in the southeastern part of the state near Milwaukee already served a significant Spanish-speaking population, in the last decade, immigration patterns have led to growing enrollments and the geographic dispersal of Spanish speakers, as you can see in Figure 2. Other populations in central Wisconsin and Green Bay, hubs of the agricultural and food processing industry, grew and spread over the course of the last decade as well. For example, the dark green district in the middle of the state in the 1999 map, the Wautoma Area District, is in a county with a history of migrant agricultural workers who began to settle in permanent agricultural positions in the 1990s. The presence of Spanish speakers in and around Green Bay can be attributed to the hiring practices of the meatpacking industry in the region (Pabst, 2001). Latino communities in southern districts such as Delavan-Darien, Lake Geneva, and Kenosha continued to grow due to chain migration from urban centers of Chicago and Milwaukee (Pabst, 2001). In addition to these districts, several districts with small percentages shown in light green in the 1999 map experienced significant growth, appearing in darker shades in the 2008 map. The large number of districts shaded light green in the 2008 map illustrate the prevalence of low incidence districts currently serving small numbers of Spanish-speaking ELLs. Based on predictions of immigration trends, it is likely that these low-incidence districts will experience growth in the coming years (Fry & Gonzales, 2008).

Of the 12 local education agencies, the Cooperative Educational Service Agencies (CESAs), 11 of them contain schools serving the New Latino Diaspora. Figure 3 compares the percentage of schools within particular CESAs serving the New Latino Diaspora to one another. While some CESAs are clearly more influenced by the shift than others, in most cases, the percentage of schools serving the New Latino Diaspora within any given CESA is fairly substantial, with the exception of CESA 12, in the far Northern region of the state. In CESA 2, the highest percentage of schools are classified as New Latino Diaspora schools, including many schools in the Madison Metropolitan School District and those in surrounding suburbs. CESA 1, serving Milwaukee, Racine, and the historic Latino communities in the state, has experienced less significant dispersal than CESAs 6 and 7. While CESAs in the northwestern parts of the

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3 Defined as schools serving no or low percentages of Spanish-speaking ELLs in 1998 and with higher than average rates of growth in enrollment since then.
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state are less significantly affected, they all support a small and growing number of New Latino Diaspora schools. As such, while some local agencies have experienced greater changes than others, 11 of the 12 CESAs support some schools experiencing growth in their Spanish-speaking enrollments.

![Figure 3. Percentage of schools within CESAs identified as New Latin Diaspora schools based on growth from 1998–2008. From Wisconsin Department of Public Instruction website http://dpi.state.wi.us/lbstat/newmap2.html](image)

**Suburban vs. Urban Environments**

Urban, suburban, and rural areas have all experienced similar rates of growth in the enrollment of Spanish-language ELLs. Nearly one third (29%) of the schools categorized as New Latino Diaspora schools are in rural areas. Out of all rural schools in the state, 16.5% experienced growth. However, the largest number of New Latin Diaspora schools are in suburban areas (39%), characterized by proximity to large cities. Of all suburban schools in the state, 21% of them had growing populations of Spanish-speakers. Urban schools also experienced above average growth, making up 32% of New Latino Diaspora schools, with 26% were categorized as New Latino Diaspora schools.

These findings counter assumptions that immigrants might be drawn solely to rural industries such as agriculture and food processing or to urban centers with greater opportunity and lower cost of living. In fact, immigration is occurring across locales, and even more affluent suburban districts now serve growing populations of Spanish-speaking ELLs. These findings emphasize the reality that schools in all three locales are significantly affected by shifting immigration patterns. For example, the Appendix has a map that highlights enrollment data from
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select schools in the Madison area and illustrates the impact of growth on both the urban center and surrounding suburbs.

**Elementary, Middle, and Secondary Schools Share the Growth**

In describing the anatomy of the shift, it is also important to note that each of the various school types has experienced growth in communities of Spanish speakers. While the majority of schools serving the New Latino Diaspora are elementary schools (62%), elementary schools are also the most common school type in the state. Comparing the percentages of these schools within school types illustrates that in fact, a higher percentage of middle schools (25%) in the state experienced above-average growth in Spanish speaking ELL students than elementary schools (21%). While the fewest high schools are affected (14%), several K–12 schools are identified as experiencing this trend (11%). This analysis highlights the impact of demographic shift across school levels and demonstrates that immigrant youth of all ages are moving into the school system. Given the varying characteristics of different school types, the response to demographic shift across school types likely varies as well.

**Other Immigrant Populations in Wisconsin**

While this widespread dispersal of Spanish-speaking immigrant students represents a recent trend in Wisconsin, schools in the state serve other immigrant communities as well. In particular, a large community of Hmong refugees have resettled in the state. While some Hmong communities have existed in the state for 30 years or more, a recent wave of immigration led to the settlement of some newcomers in parts of the upper midwest (Fennelly & Orfield, 2008).

In 2008, 34% of the schools experiencing growth in Spanish-speaking populations also served some population of Hmong speakers though only a few schools (15%) served more than 10 Hmong speakers. Similarly, a few of these schools also serve other language groups, with 16% of them serving more than 10 ELLs in other language groups. This demonstrates that several of these schools experiencing growth are responding to growing populations of Spanish-speakers in the context of a pre-existing, and in some cases also growing community of ELLs. In most cases, however, these other groups are small, with the largest growth occurring among Spanish-speakers across the state (Zaniewski & Rosen, 1998).

Additionally, the schools serving the New Latino Diaspora are somewhat representative of the range of racial demographics that exists across the state. For example, the percentage of enrollment designated as African American in 2008 within New Latino Diaspora schools was similar to schools across the state. Although the mean enrollment across the state \((M=9.9)\) was higher than the mean enrollment in New Latino Diaspora schools \((M=8.6)\), the range of enrollments was similar, with the majority of schools serving very low percentages of African American students. Enrollments of Native American and Asian students followed a similar pattern, although the mean enrollment of Asian students was slightly higher in New Latino Diaspora schools \((M=3.8)\) than across the state \((M=2.8)\). Additionally, the percentage of non-ELL Hispanic students in New Latino Diaspora schools was higher \((M=5.9)\) than across the state \((M=4.2)\), but mirrored similar enrollment patterns.
While members of the New Latino Diaspora entered schools with varying racial demographics, they were more likely to enter schools with a high percentage of white enrollments. The histograms in Figure 4 compare the percentage of white enrollment in schools serving the New Latino Diaspora to schools across the state. These graphs show that while several schools in the state had a large majority of students of color in 2008, as illustrated by the number of schools at the far left of the distribution in the statewide histogram, schools identified as New Latino Diaspora schools were generally not those with high percentages of students of color. In other words, recent immigration has more profoundly affected schools besides those with high percentages of African American and Latino students in Milwaukee and other urban areas. A similar trend was also noted in a recent demographic analysis of growing immigrant communities in Minnesota (Fennelly & Orfield, 2008). In both cases, immigration to emerging gateways has led to increased school integration. Thus many of the schools serving the New Latino Diaspora are experiencing a large shift in their racial diversity, as well as the growth in linguistic diversity.

![Histograms comparing percentage of white enrollment.](image)

**Figure 4. Percentages of white enrollment.**

Other characteristics of schools serving newcomers mirror the overall demographics of the state, indicating that schools of all types are influenced by this trend. For example, Figure 5 compares the percentages of students qualifying for free and reduced-price lunch in schools that experienced higher than average growth in Spanish-speaking ELL students and in all schools across the state. The mean percentage is 35.7% for the former schools, compared to 35.4%

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4 This is in part due to the way the New Latino Diaspora schools were defined. Those schools with high percentages of students of color are likely to have pre-existing Spanish-speaking ELL communities, which by definition would therefore not be considered New Latino Diaspora schools, since I did not include schools with high percentages of Spanish-speaking ELLs in 1999.
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across the state. Despite assumptions that Spanish speakers are primarily served in low-income settings, these comparisons illustrate that in fact, this is not the case in Wisconsin.

![Box plot](image)

**Figure 1. Comparison of % eligible for subsidized lunch in 2008.**

An analysis of enrollment size suggests that immigration trends may contribute to stability in districts with declining enrollment. On average, total school enrollment in Wisconsin declined with a mean loss of 15 students per school between 1998 and 2008. Across the state, the majority of schools experienced some decrease (61%). Of those schools identified as serving the New Latino Diaspora, 57% experienced decline, but this trend was less extreme with a mean loss of 10 students per school. This trend of less extreme decline suggests that immigration may contribute to stabilizing enrollment and, in some cases, increasing enrollments for schools that might otherwise have experienced a more extreme loss of student population. Considering the key role enrollment plays in school budgets, the presence of these immigrant students in many cases supports what would otherwise be a rapidly decreasing school budget.

The demographic analysis above highlights the widespread dispersal of Latino immigrants within Wisconsin schools and counters the assumption that particular kinds of schools in particular parts of the state are experiencing growth. Instead, this analysis shows that schools experiencing a new and rapid influx of Spanish-speaking students in many ways mirror the full range of schools across the state. While every school in the state has not experienced this growth, we illustrate here that nearly every kind of school has. For many schools, demographic shifts lead to increasing diversity and stability of enrollments. The characteristics of the shift likely influence the ways in which schools choose to respond to their changing demographics. In the next section, we discuss the implications of this trend for education.
Implications of the Shift

Schools across Wisconsin with little recent history of serving immigrant students are now being asked to support a growing community of these youth, who bring racial, ethnic, and linguistic diversity to the schools they join. Considering the differences in the daily life of various schools, one can only assume that these demographic trends are met with different responses in different school contexts. What are the implications of this demographic analysis for school practice, policy, and future research?

Schools Must Adapt Their Methods

The demographic shift described in this paper has major implications for schools and education practice, as educators and administrators must adapt to support newcomers. In schools with little experience supporting the linguistic and academic needs of immigrant youth, the organization must make difficult decisions about how best to serve newcomers and their families. Schools must develop new programs and decide how to integrate newcomers into existing school structures. In addition, the districts need to support teachers as they learn new methods of instruction, evaluation, and assessment. The challenge of responding to demographic change may be exacerbated by a lack of access to resources more readily available in traditional gateway locations (Capps et al., 2005; Quiñones-Benitez, 2003). In their report for the Urban Institute, a group of researchers speculated that “the institutional capacity to teach newcomer and non-English-speaking children may be more limited in new immigrant destinations than in traditional gateway communities that can draw on networks of bilingual and ESL teachers, curricula, and other resources” (Capps et al., p.35). Regions of the new immigration are often linguistically isolated and have difficulty attracting bilingual support (Wortham, Murillo, Hamann, 2002). This isolation means that, unlike staff in traditional immigration gateways, many of the teachers working with new Latino immigrants have had no prior exposure to Latino culture (Gibson, 2002). Additionally, administrators likely have little experience with program design for immigrant students or experience supporting immigrant families. Much of the literature available about the best educational practices of working with Latino students assumes a wealth of resources that simply do not exist in many of the communities. As a result, schools in the New Latino Diaspora must figure out how best to respond to changing demographics without much guidance or resource.

State Must Revisit its Policies Given Current Environment

The widespread dispersal of immigrant students across the state has implications for the design and implementation of state policy, as well as the work of state and local education agencies. In light of this trend, the state bilingual education policy, designed at a time when very few schools supported immigrant youth, has now become relevant in many more districts that it was initially intended for. While the policy mandates the establishment of a bilingual program staffed by at least one ESL or bilingual licensed teacher, the policy emphasizes local control and offers little guidance to schools about how best to design programs. Based on our demographic analyses, we argue that given the diversity and degree to which schools have been and continue to be influenced by this shifting demographic trend, the educational system across the state must consider a coherent policy strategy to promote effective practices in response to this trend. Furthermore, our analysis highlights that, given the variation in schools, a differentiated policy
response is appropriate to ensure support for the range of schools experiencing rapid demographic shift.

**Schools and State Need Support from Education Researchers**

We argue for increased attention to these implications in education research. While a growing body of ethnographic work focuses on schools in new immigrant destinations (e.g. Wortham, Murillo, Hamann, 2002), our analysis of Wisconsin enrollment patterns emphasizes the need for cross-context studies that speak to the varying responses in the wide range of schools that have been influenced by these enrollment patterns. This research might inform the design of support for newcomers, as well as offer insight into how state and external agencies might better meet the needs of schools serving members of the New Latino Diaspora.
References


Appendix

Coxcomb Representation of Growth in Madison Area Schools

Figure A1. Coxcomb representation of growth in Madison area schools. Map created at the University of Wisconsin–Madison Cartography Lab.