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A Decade of Change in NYC Schools

Elizabeth Debraggio, Lila Nazar de Jaucourt, Emilyn Ruble, Amy Ellen Schwartz, Leanna Stiefel, Meryle Weinstein[1]

Introduction

Schools are not static entities – reforms are enacted, curriculums change, new principals and teachers arrive and others leave, and, importantly, students exit and enter the school system. These students may be graduating or reaching a terminal grade, beginning school, entering from local private or parochial schools, moving from another district, or emigrating from another country. This brief focuses on the latter group: the immigrant students in New York City (NYC) public elementary and middle schools over the past decade. As the largest and most diverse school system in the country, it is particularly important that education professionals in NYC have a comprehensive understanding of their students and how they are changing.

Key Findings:

- In 2009, 13 percent of NYC's public elementary and middle school students were foreign-born
- The majority of immigrant students in NYC come from Latin America; however, the share from Asian and African countries has increased over the past decade
- Relative to their native-born peers, higher shares of immigrant students are Asian, LEP, and poor
- Differences in performance on standardized exams are related to socioeconomic and demographic differences, not simply nativity
- Immigrants who have been in the school system for at least three years perform at or above the level of their native-born peers
- Immigrants from different regions of the world have different characteristics

The immigrant population in NYC schools hails from 200 countries and contributes unique insights and exposure to an array of different cultural backgrounds and educational experiences. Immigrant students in 2009, however, are different from the

immigrant students at the turn of the century and documenting and describing these changes in their socio-economic backgrounds and educational needs is essential in obtaining the understanding necessary to effectively integrate and educate this important population of students.

The following report presents a statistical portrait of the demographic characteristics and educational experiences of immigrant students in NYC's elementary and middle school grades (1st – 8th grades) during the 2008-09 academic year.[1,2] This report documents the size and diversity of the immigrant population; compares differences between the native-born and immigrant students across a series of socioeconomic, demographic, and academic performance variables; examines differences within the immigrant population related to time in the U.S. and differences in region of origin; and notes similarities and differences between the foreign-born student population in 2009 compared to 2000.[3] Overall, this report documents current information on immigrant students in New York City elementary and middle schools.

The Size and Geographic Diversity of Immigrant Students

Foreign-born students constitute 13% of the elementary and middle school student body in 2009, a slight decrease from 2000. The share of recent immigrants is larger than that of non-recent immigrants in 2009, marking an important shift from 2000.

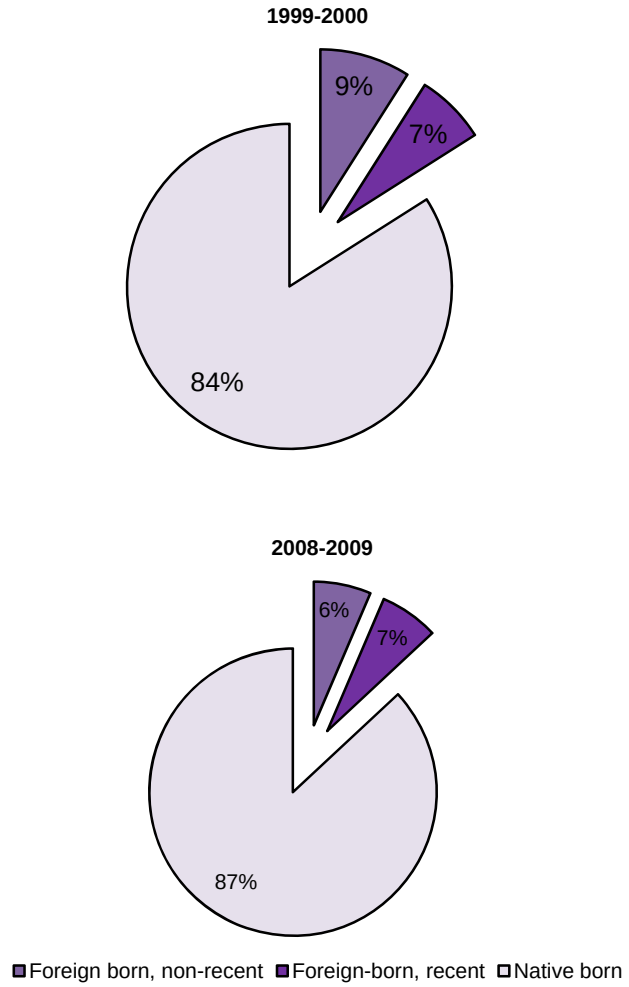
Of the roughly 540,000 students in 1st to 8th grade, 13% are foreign born – a decrease of three percentage points from 2000. Slightly over half (51%) of the immigrant students in 2009 are recent immigrants, defined as those in the U.S. school system for fewer than three years. This contrasts with 2000, where only 43% of the immigrants were recent. The distinction between recent and non-recent immigrants is important for two reasons. First, recent immigrants may face different challenges, having recently entered a new country. Second, this designation entitles schools to receive federal funding to aid these students in their transition from their native countries to the U.S.[4]

While it is impossible to know the precise underlying reason(s) for the increased share of recent immigrants, there are several factors that may contribute. First, total enrollment in NYC public schools declined during this

[1] The following tables and figures are based upon analysis of student level administrative data provided by the NYC Department of Education (NYCDOE) for the 2008-09 academic year.
[2] Hereafter referred to simply as 2009.
[3] See: Conger, Schwartz and Stiefel (2003). *Who Are Our Students: A Statistical Portrait of Immigrant Students in New York City Elementary and Middle Schools*. New York University Taub Urban Research Center. Accessible at: http://www.nyu.edu/steinhardt/iesp/whoareourstudents.pdf
[4] The Emergency Immigrant Education Act of 1984 (EIEA) was enacted in response to the challenges faced by school districts with large numbers of immigrant students. Although immigrants make up a small proportion of the total student population in the United States, immigrants tend to concentrate in particular locations creating unique challenges for specific school districts. The federal government contributes some money to these school districts for educating these children.

time period. If the flow of new entrants decreased at a slower rate than the overall student population, this could increase their representation. Second, this could reflect a trend seen in other research highlighting the growth of immigrant populations in "Rust Belt" cities, such as Detroit, St. Louis, Akron, and Syracuse, whereby established immigrants may be leaving NYC for job opportunities in other locations.[5] Census data show that the rate of growth in the foreign-born population in NYC slowed significantly from 2000-2009 (as compared to 1990-2000), which may provide suggestive evidence for this claim.[6] Third, the increase in school choice may provide alternative options that non-recent immigrants are more aware of and, thus, better able to take advantage of – such as charter, parochial, or private schools. Non-recent immigrant students, therefore, may not be leaving NYC, but may not be enrolling in NYC public schools.

Figure 1: Nativity of New York City's Elementary and Middle School Students, 2000 and 2009



[5] See: Hall, Matthew, Deborah Graefe, and Gordon F. De Jong (2010). "High-Skill Immigration to Industrial Cities: Who Benefits?" Paper prepared for presentation at the 2010 Fall Conference of the Association of Public Policy Analysis and Management (APPAM), Boston MA; and, Massey, Douglas S. (ed). (2008). *New Faces in New Places: The Changing Geography of American Immigration.* New York, NY: Russell Sage Foundation.

[6] According to Census statistics found on the NYC Department of City Planning's website, the foreign-born population in NYC increased 37.8% between 1990 and 2000 (from 2,082,931 to 2,871,032) but only 4.4% between 2000 and 2009 (from 2,871,032 to 2,996, 580). See: http://www.nyc.gov/html/dcp/pdf/census/1790-2000_nyc_total_foreign_birth.pdf and http://www.nyc.gov/html/dcp/pdf/census/acs_socio_2009.pdf

New York City's foreign-born students come from all over the world; however, the overwhelming majority come from Latin America (i.e., Central & South America, non-Spanish South America, and the Caribbean).

While, the city's foreign-born students come from all over the world, students from Central & South America, non-Spanish South America, and the Caribbean constitute 55% of the immigrant students in NYC public elementary and middle schools. Much of this population originates from a single country – the Dominican Republic – which contributes 16% of NYC's immigrant students.[7] In 2009 there are, however, higher shares of immigrants from Asian and African countries and smaller shares from Europe and the former Soviet Union than in 2000.

Table 1: Characteristics of New York City Elementary and Middle School Students, 2000 and 2009

	2000		2009	
	# of Students	% of Students	# of Students	% of Students
Total Students				
Native-born	554,331	84.2%	468,943	86.9%
Immigrant	104,260	15.8%	70,469	13.1%
	658,591	100.0%	539,412	100.0%
Characteristics of Immigrants				
Recent Immigrant	44,760	42.9%	35,718	50.7%
Non-recent Immigrant	59,500	57.1%	34,751	49.3%
	104,260	100%	70,469	100%
Home Regions				
Latin America	17,655	16.9%	13,446	19.1%
Dominican Republic	19,403	18.6%	11,404	16.2%
Caribbean Islands	15,388	14.8%	9,317	13.2%
South Asia	10,917	10.5%	7,616	10.8%
China	7,691	7.4%	6,507	9.2%
Non-Spanish South America	5,221	5.0%	4,593	6.5%
Eastern Asia	4,834	4.6%	4,165	5.9%
Sub Saharan Africa	2,807	2.7%	3,929	5.6%
West Asia + North Africa	3,209	3.1%	3,031	4.3%
Former USSR	9,907	9.5%	2,828	4.0%
Western Europe	2,852	2.7%	2,088	3.0%
Eastern Europe	4,376	4.2%	1,534	2.2%
	104,260	100%	70,458	100%

Note: Immigrants are students not born on U.S. soil. Recent immigrants are immigrant students who have been in the U.S. school system for fewer than three years. The 2008-09 sample includes students registered on October 31, 2008 in the 1st through 8th grades, including full-time special education students; 11 students were excluded because their birthplace was missing or unknown.

[7] Due to the large population originating from the Dominican Republic, we analyze it as a separate category.

Foreign-born students come from 200 countries, but over 70% come from just 15 countries.

The regional frequencies in Table 1 disguise the incredible diversity of the foreign-born students. Table 2 presents the top 15 sender countries for the 2000 and 2009 academic years. In both years, around 70-75% of foreign-born students came from these 15 countries with students from the Dominican Republic representing the largest proportion of foreign-born students in NYC in both years.

In the last decade, the composition of the top 15 sending countries has not changed significantly. The size of the population from these countries does vary though. Consistent with the statistics presented in Table 1, we again see increases in immigrants from Asian countries and Mexico, and a marked decrease in immigrants from Russia, which went from the second largest sender in 1999-00 to the fourteenth in 2008-09.

Table 2: Top 15 Sending Countries of Immigrant Students, 2000 and 2009

		2000		2009	
2009 Rank	**Country**	**# of Students**	**% of Students**	**# of Students**	**% of Students**
1	Dominican Republic	19,403	18.6%	11,404	16.2%
2	China	6,532	6.0%	6,048	8.6%
3	Mexico	5,561	5.3%	5,826	8.3%
4	Guyana	5,036	4.8%	4,475	6.4%
5	Jamaica	6,700	6.4%	3,921	5.6%
6	Bangladesh	3,963	3.8%	3,546	5.0%
7	Ecuador	3,486	3.3%	2,625	3.7%
8	Pakistan	3,589	3.4%	2,352	3.3%
9	Haiti	2,364	2.3%	2,237	3.2%
10	India	3,775	3.6%	1,718	2.4%
11	Trinidad & Tobago	3,365	3.2%	1,656	2.4%
12	Korea (South)	2,214	2.1%	1,364	1.9%
13	Colombia	2,717	2.6%	1,331	1.9%
14	Russia	6,945	6.7%	1,127	1.6%
15	Philippines[8]	1,086	1.0%	1,109	1.6%
	Other Country	27,524	26.4%	19,730	28.0%
Total		104,260	100%	70,469	100%

[8] The Philippines is among the top 15 sending countries in 2009, so despite not making the top 15 in 2000 is included nonetheless.

Immigrants and their Native-born Peers

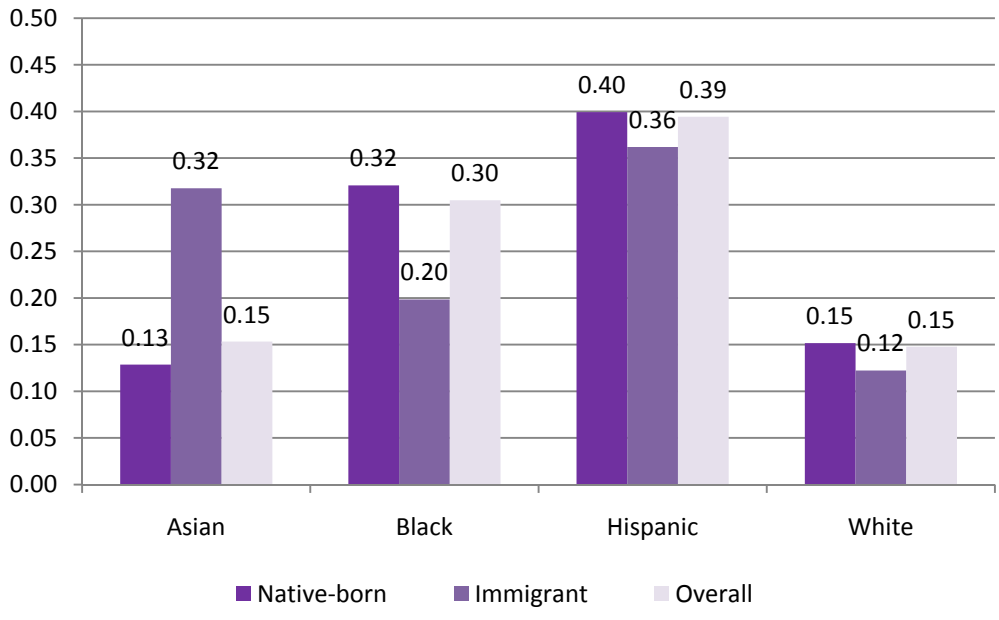
In this section, we explore differences in the demographic characteristics and school performance of native- and foreign-born students, paying particular attention to differences between important subgroups (such as race/ethnicity, poverty and English proficiency).

Compared to their native-born peers, a higher percentage of immigrant students are Asian and a lower percentage are black.

In 2009, the share of Asian immigrants is almost 2.5 times larger than the share of Asian native-born students. The share of black immigrants is much smaller than the share of black native-born students. The shares of Hispanic and white students are fairly similar across nativity though (the share of Hispanic native- and foreign-born students differs by fewer than four points and the difference for whites is even smaller).

Looking across the two academic years, there was not a significant change in the share of black or Hispanic immigrants. There were, however, increases of approximately 5 percentage points in the share of Asian students (from 8% to 13% for the native-born and from 27% to 32% for the foreign-born). Further, while the share of white foreign-born students exceeded that of white native-born in 2000 (17.5% foreign-born who are white versus 14.8% native-born), in 2009 the reverse is true (12.2% foreign-born who are white versus 15.2% native-born).

Figure 2: Race/Ethnicity of Native-born and Immigrant Students, 2009



While the percentage of limited English proficient (LEP) students increased for all groups from 2000 to 2009, immigrants remain more likely to be LEP. In addition, foreign-born students are slightly more likely to be poor and half as likely to receive special education services.

Approximately 33% -- an increase of 3 percentage points from 2000 -- of all immigrant students are classified as LEP, compared to 9% of the native-born population. The share of LEP native-born students in 2009 also increased from 2000. Immigrants are somewhat more likely to be eligible for free or reduced price lunch, although the shares for both the native- and foreign-born decreased over the ten year period. Notably, the drop was almost twice as large for native-born students (4.7% versus 2.1%). Finally, immigrants in both years are less likely to receive special education services.

Table 3: LEP, Poverty, and Special Education Rates by Nativity, 1999-00 and 2008-09[9]

	% LEP		% Poor		% Special Education	
	1999-2000	2008-2009	1999-2000	2008-2009	1999-2000	2008-2009
Native-born	7.0%	8.8%	85.7%	81.0%	13.1%	12.3%
Immigrant	30.1%	32.6%	89.6%	87.5%	5.6%	6.2%
All	10.7%	11.9%	86.3%	81.8%	11.9%	11.5%

Note: The percent in special education includes both part-time and full-time special education students.
Poor students are those eligible for free or reduced-price lunch.

In a reversal from 2000, native-born students outperformed immigrant students on standardized reading tests in 2009. Immigrant students still outperform native students on standardized math tests.

The performance of immigrant students decreased on both the ELA and math exams between 2000 and 2009. Native-born students outperformed the foreign-born on the reading exam in 2009 and the nativity gap on the math exam is smaller than it was in 2000. This may be due, in part, to changes in exemptions and increased accountability in the *No Child Left Behind (NCLB)* legislation. Higher numbers of foreign-born test takers – and recent immigrants in particular – may explain their lower performance, as these students likely struggle due to language and cultural differences – particularly on the reading exam.

[9] In 2000, LEP classification was based on performance on the Language Assessment Battery (LAB) exam with students scoring below the 40th percentile considered LEP. Beginning in 2003, the NY State Education Department (NYSED) instituted a new exam: the Language Assessment Battery – Revised (LAB – R). Students are now considered LEP on this exam if they fail to score in the "proficient" category on the LAB – R.

Table 4: Student Performance by Nativity, 2000 and 2009

	All			Native-born			Foreign-Born		
	1999-2000	2008-2009	Difference	1999-2000	2008-2009	Difference	1999-2000	2008-2009	Difference
Reading Test									
Average Score	0.000	0.000	0.000	-0.007	0.022	0.029	0.041	-0.138	-0.179
% Took test	86.0%	98.2%	12.2%	93.0%	99.4%	6.4%	68.0%	91.6%	23.6%
Math Test									
Average Score	0.000	0.000	0.000	-0.008	-0.002	0.006	0.045	0.012	-0.033
% Took test	91.0%	99.7%	8.7%	94.0%	99.7%	5.7%	78.0%	99.7%	21.7%

Note: Test scores are measured in z-scores and include all 3rd through 8th grade students who took the tests. Z-scores are calculated by subtracting the average score for all test takers from each student's score and dividing by the standard deviation of scores for all test takers.

Differences in performance on standardized exams are related to socioeconomic and demographic differences, not simply nativity. While disparities by nativity still exist, these are largely overshadowed by differences by poverty, race/ethnicity, and English proficiency.

Test score differences between poverty groups are larger than those between nativity groups. As an example, the difference in the average reading score between *poor* native-born and *poor* immigrant students is 0.119 standard deviations, while the difference between *poor* and *non-poor* immigrants is 0.703 standard deviations (see Table 5).

Table 5: Student Performance by Poverty and Nativity, 2009

	Poor	Nonpoor	Difference
Native-born	-0.139	0.492	0.631
Foreign-born	-0.258	0.445	0.703
Difference	0.119	0.047	
Native-born	-0.155	0.411	0.566
Foreign-born	-0.073	0.499	0.572
Difference	-0.082	-0.088	

Notes: Poor students are those eligible for free or reduced-price lunch. Test scores are measured in z-scores and include all 3rd through 8th graders who took the tests. The participation rates for these exams are not included, as rates for all subgroups are over 90% and generally approach 100%.

Looking across our ten year time period, there are some differences in performance within poverty groups. On the reading test, for example, poor native-born students did worse than poor immigrants in 2000, but the opposite holds in 2009.There were also differences in the nativity gap within poverty group. For example, the gap between non-poor natives and immigrants on the math exam decreased: foreign-born students scored 0.146 standard deviations higher on average in 2000, but only 0.088 standard deviations higher in 2009.

Across all racial/ethnic groups, native-born students outperform immigrants of the same race/ethnicity on reading and math exams in 2009. The within-race differences are particularly large for Asians (0.384 for reading and 0.254 for math) and Hispanics (0.317 for reading and 0.168 for math). There are, however, sizeable and consistent differences across race/ethnicity: regardless of nativity, Asians and whites perform above average on both exams and blacks and Hispanics score below average. These differences between race/ethnicity are often larger than those within-race by nativity: the difference for an Asian immigrant versus a Hispanic immigrant on the math test, for example, is 0.832.

Looking over time, the variation in nativity gaps within racial/ethnic groups is more pronounced. For example, the gap between native and immigrant Asian students' reading scores grew: in 2000, the difference in scores was 0.235 (versus 0.384 in 2009). The increase is largely driven by the lower performance of Asian immigrants (0.306 in 2000 vs. 0.152 in 2009), as the performance of Asian native-born students remained fairly constant. Similarly, white immigrants' reading scores decreased sharply, from 0.529 in 1999-00 to 0.250 in 2008-09, while white natives' scores barely changed. Hispanic immigrant students also scored lower on the ELA exam in 2009 (-0.266 in 2000 vs. -0.491 in 2009). The lower performance of the Hispanic foreign-born students may contribute significantly to the lower immigrant performance overall, as Hispanics make up the largest proportion of the foreign-born population. There is no difference between the reading scores of black immigrants in 2000 and in 2009.

Table 6: Student Performance by Race/Ethnicity and Nativity, 2009

	Native-born	Foreign-born	Difference
Asian	0.536	0.152	0.384
Black	-0.161	-0.210	0.049
Hispanic	-0.174	-0.491	0.317
White	0.510	0.250	0.260
Asian	0.738	0.484	0.254
Black	-0.278	-0.292	0.014
Hispanic	-0.18	-0.348	0.168
White	0.449	0.363	0.086

Notes: Test scores are measured in z-scores and include all 3rd through 8th graders who took the tests. Z-scores are calculated by subtracting the average score for all test takers from each student's score and dividing by the standard deviation of scores for all test takers

On the math exam, all racial/ethnic nativity groups performed worse in 2009 than in 2000 with the exception of Hispanic native-born students who performed no differently and Hispanic foreign-born students who performed 0.004 standard deviations higher in 2009. The nativity gaps within race/ethnicity, however, are smaller in 2009 than they were in 2000 for Asians, blacks, and Hispanics. The nativity gap for whites increased 0.227 standard deviations, largely due to a decline of 0.338 standard deviations in performance among foreign-born whites (from 0.701 in 2000 compared to 0.363 in 2009). While the performance of native-born whites also decreased, the decline was much smaller (0.111 decline from 0.56 in 2000 to 0.449 in 2009).

Finally, in 2000, foreign-born LEP students scored slightly better than their native-born peers; however, in 2009, they scored much worse on the reading test and slightly worse on the math test.[10] Among the fully English proficient though, immigrants consistently outperformed their native-born peers. Again, the gaps due to English proficiency are larger than those due to nativity. Fully proficient immigrants score 0.123 standard deviations above their fully proficient native-born peers, but 1.377 standard deviations above LEP immigrants.

Table 7: Student Performance by English Proficiency and Nativity, 2008-09

	LEP	Fully EP	**Difference**
Native-born	-0.833	0.081	0.914
Foreign-born	-1.172	0.204	1.377
Difference	0.340	-0.123	
Native-born	-0.672	0.046	0.717
Foreign-born	-0.678	0.315	0.993
Difference	0.006	-0.270	

Notes: Test scores are measured in z-scores and include all 3rd through 8th graders who took the tests. Z-scores are calculated by subtracting the average score for all test takers from each student's score and dividing by the standard deviation of scores for all test takers

Comparisons between Recent and Non-Recent Immigrants

While the previous section compared native-born students to immigrant students, this section examines the experiences of recent immigrants (those in the U.S. for fewer than three years) who face unique difficulties at schools.[11] In this section, we compare recent immigrants to their non-recent immigrant peers and to native-born students to explore differences across these subgroups by race/ethnicity, poverty, and English proficiency.

There are few differences in racial/ethnic composition within nativity groups between 2000 and 2009.

There are some differences in race/ethnicity shares between recent and non-recent immigrants. Notably, while the share of recent Asian and black immigrants have remained fairly constant between 2000 and 2009, there was a sizeable increase in the share of recent Hispanic immigrants and a decrease in the share of white recent immigrants.

[10] Again, this may be due to higher test taking rates. While the percent of reading test takers who are LEP and foreign-born is lower than that of those who are LEP and native-born (78% versus 97%, respectively), the rate is considerably higher than in 2000, when only 22% took the test.

[11] "Recent immigrants" is a designation recognized by the federal government.

Table 8: Characteristics by Recent Immigrant Status, 2000 and 2009

	% Asian			% Black		
	1999-00	2008-09	Difference	1999-00	2008-09	Difference
Native-born	7.9%	12.9%	5.0%	37.9%	32.1%	-5.8%
Immigrant	26.9%	31.8%	4.9%	19.3%	19.8%	0.5%
Recent	30.2%	31.7%	1.5%	20.7%	19.7%	-1.0%
Non-recent	24.3%	31.8%	7.5%	18.3%	20.0%	1.7%
All	10.9%	15.3%	4.4%	35.0%	30.5%	-4.5%

	% Hispanic			% White		
	1999-00	2008-09	Difference	1999-00	2008-09	Difference
Native-born	39.0%	39.9%	0.9%	14.8%	15.2%	0.4%
Immigrant	36.0%	36.2%	0.2%	17.5%	12.2%	-5.3%
Recent	31.6%	37.0%	5.4%	16.9%	11.6%	-5.3%
Non-recent	39.3%	35.4%	-3.9%	17.9%	12.8%	-5.1%
All	38.5%	39.4%	0.9%	15.2%	14.8%	-0.4%

Note: Recent immigrants are foreign-born students who have been in the U.S. School system fewer than three years.

A higher percentage of recent immigrants are LEP compared to non-recent immigrants and native-born students. Recent immigrants have similar poverty rates to their non-recent foreign-born peers.

Unsurprisingly, a higher percentage of recent immigrants (40.1%) than non-recent immigrants (24.9%) and native-born students (8.8%) are classified as LEP. The share of recent immigrants who are LEP, however, decreased over six percentage points from 2000 to 2009. This contrasts with the almost six percentage point increase in the share of non-recent LEP immigrants. Finally, although recent immigrants are slightly more likely to be poor than their non-recent peers, the difference is very small (2%).

Table 9: English Proficiency and Poverty by Recent Immigrant Status, 2000 and 2009

	% Limited English Proficient			% Poor		
	1999-2000	2008-2009	Difference	1999-2000	2008-2009	Difference
Native-born	7.0%	8.8%	1.8%	85.6%	81.0%	-4.6%
Immigrant	30.1%	32.6%	2.5%	89.7%	87.5%	-2.2%
Recent	46.6%	40.1%	-6.5%	90.7%	88.0%	-2.7%
Non-recent	19.2%	24.9%	5.7%	88.9%	87.0%	-1.9%
All	10.7%	11.9%	1.2%	86.3%	81.8%	-4.6%

Note: Poor students are those eligible for free or reduced-price lunch.

Recent immigrants have lower test scores and lower rates of test taking, especially on the reading test.

The performance of recent immigrants on the reading and math tests is considerably worse than their non-recent peers, and this gap has increased since 2000. Fewer recent immigrants took the reading test compared to their non-recent peers in 2009, although significantly more did so than in 2000. In analyzing recent and non-recent immigrants separately, we see that non-recent immigrants do better than native-born students on both

reading and math tests in 2009. This was also true in 2000, though by a larger margin on the reading test and a smaller margin on the math test.

Table 10: Student Performance by Recent Immigrant Status, 2000 and 2009

	Reading			Math		
	1999-00	2008-09	Difference	1999-00	2008-09	Difference
Native-born	-0.006	0.022	0.028	-0.007	-0.002	0.005
Immigrant	0.040	-0.138	-0.178	0.044	0.012	-0.032
Recent	-0.143	-0.403	-0.260	-0.294	-0.055	0.239
Non-recent	0.079	0.113	0.034	0.151	0.069	-0.082
All	0.000	0.000	0.000	0.000	0.000	0.000

Notes: Recent immigrants are immigrant students who have been in the U.S. for fewer than three years. Test scores are measured in z-scores and include all 3rd through 8th graders who took the tests. Z-scores are calculated by subtracting the average score for all test takers from each student's score and dividing by the standard deviation of scores for all test takers.

Poverty does not completely explain the disparity in performance for recent immigrants.

As seen in Table 10, recent immigrants have lower test scores than other immigrant students, and, as shown in Table 11 below, this persists even after accounting for poverty. Broadly, whether poor or not, the performance of non-recent immigrants and native-born students is more similar than that of recent and non-recent immigrants. More specifically, while non-recent poor immigrants score 0.157 standard deviations better than their poor native-born peers, they score 0.56 standard deviations above their poor recent foreign-born peers.

Table 11: Student Performance by Poverty and Recent Immigrant Status, 2008-09

		Poor	Non-poor	Difference
Reading	Native-born	-0.139	0.492	0.631
	Foreign-born	-0.258	0.445	0.703
	recent	-0.542	0.252	0.794
	non-recent	0.018	0.592	0.574
	Diff. (NB-FB)	0.119	0.047	
Math	Native-born	-0.155	0.411	0.566
	Foreign-born	-0.073	0.499	0.572
	recent	-0.149	0.418	0.567
	non-recent	-0.008	0.556	0.564
	Diff. (NB-FB)	-0.082	-0.088	

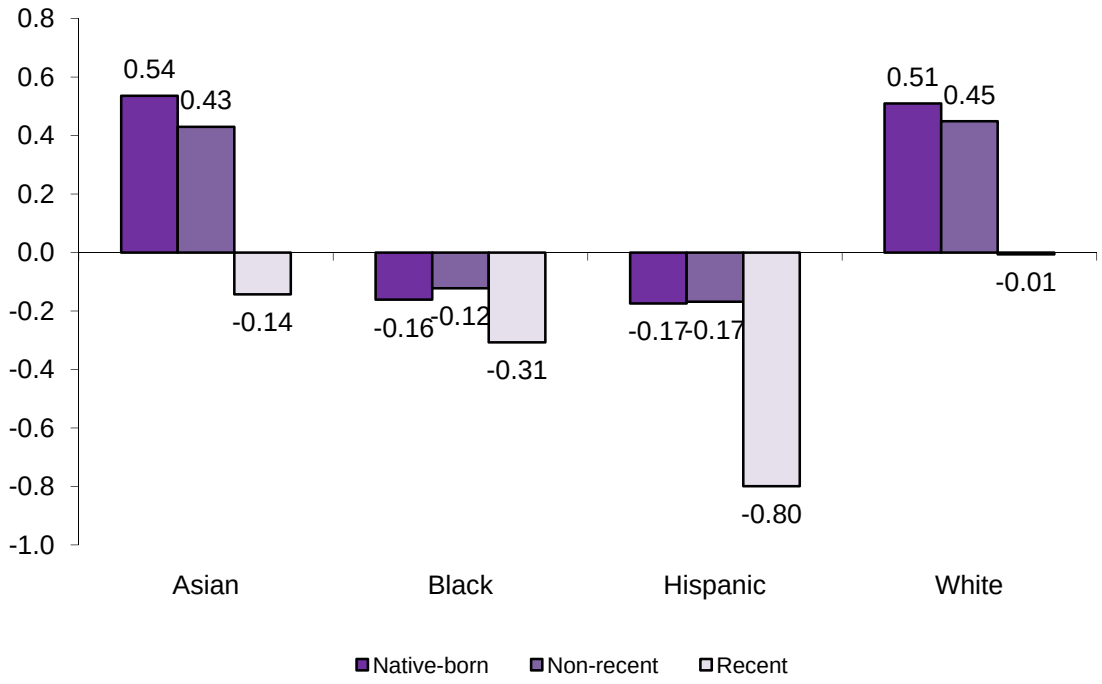
Notes: Test scores are measured in z-scores and include all 3rd through 8th graders who took the tests. Z-scores are calculated by subtracting the average score for all test takers from each student's score and dividing by the standard deviation of scores for all test takers

Again, differences between poverty groups within nativity are larger than those within poverty groups between nativities. The largest within nativity difference is that between recent and non-recent poor immigrants on the ELA exam (0.56 standard deviations); which is smaller than the smallest difference between poverty groups on the ELA exam (0.574 between the poor and non-poor non-recent immigrants). Although differences between nativities persist even when looking within a poverty group, these differences are smaller than those due to poverty.

Performance differs among nativity groups by ethnicity.

Overall, recent immigrants have lower performance regardless of race/ethnicity; however, there is significant variation in performance between students of differing races and nativities. While the recent immigrants perform worse across all racial/ethnic groups, the magnitude of the gap varies. For example, on the math exam Asian native-born students and non-recent immigrants both perform well above the mean, but Asian recent immigrants score below the mean. Further, while native-born Hispanics score similarly to non-recent Hispanics, recent Hispanics score nearly 0.63 standard deviations worse.

Figure 3: Math Test Scores by Race/Ethnicity and Recent Immigrant Status, 2008-09



English proficient students outperform LEP students and English proficient immigrant students consistently outperform their native-born peers.

As shown below in Table 12, differences within nativity groups due to language proficiency are large: fully proficient recent immigrants outperform LEP recent immigrants by 1.401 standard deviations on the reading exam and almost a standard deviation on the math exam (0.915). Non-recent fully proficient immigrants have a slightly smaller test score differential on the reading exam (1.142 standard deviations) and a slightly larger differential on the math exam (1.107 standard deviations) relative to LEP non-recent immigrants.

Table 12: Student Performance by English Proficiency and Recent Immigrant Status, 2008-09

		LEP	Fully EP	Difference
Reading	Native-born	-0.083	0.081	0.165
	Foreign-born	-1.172	0.204	1.377
	recent	-1.253	0.148	1.401
	non-recent	-0.902	0.240	1.142
	Diff. (NB-FB)	1.089	-0.123	
Math	Native-born	-0.672	0.046	0.717
	Foreign-born	-0.678	0.315	0.993
	recent	-0.603	0.312	0.915
	non-recent	-0.790	0.318	1.107
	Diff. (NB-FB)	0.006	-0.270	

Notes: Test scores are measured in z-scores and include all 3rd through 8th graders who took the tests. Z-scores are calculated by subtracting the average score for all test takers from each student's score and dividing by the standard deviation of scores for all test takers

While LEP native-born students outperform their foreign-born peers, the reverse is true among the fully proficient, with a sizeable immigrant advantage. Non-recent, English proficient foreign-born students outperform their fully proficient native-born peers by 0.159 standard deviations on the reading exam and 0.272 standard deviations on the math exam. Although the advantage is slightly smaller, recent immigrants who are English proficient also outperform the proficient native-born.

Exploring Differences Across Birth Regions

While the previous sections showed differences in characteristics and performance by nativity, they also highlighted the variation within the immigrant population. This section describes this diversity in greater detail by focusing on differences across birth region.[12]

Immigrant students from different regions of the world have very different characteristics.

Students from the Western European, Caribbean, and Non-Spanish South American countries, where English is one of the primary languages, have lower rates of LEP classification (11%, 12%, and 1%). The highest LEP rates are found among students whose native languages are Spanish, Chinese, or another Asian language, with almost two-thirds of the Dominican students in need of English remediation. Other high-needs immigrants

[12] Subgroup analyses of performance across regional groups by race/ethnicity, poverty and English proficiency are presented in Appendix A. A list of countries included in each regional grouping can be found in Appendix B.

include those from China, Central & South America, and West Asia or North Africa. In the middle group, where LEP percentages range from 16% to 28%, students from Eastern Europe have a relatively low rates (16%) while those from South Asia (28%), the former USSR (24%), and Sub-Saharan Africa (24%) are on the higher end of the range.

Students from Central & South America and Non-Spanish South America have the highest poverty rates – above 90%. Over 96% of immigrants from the Dominican Republic are poor. The lowest rates of poverty – lower than the poverty rates of native-born students – are found among immigrants from the three European regions (West Europe, Other Eastern Europe, and the former USSR) and East Asia. The latter is particularly interesting as East Asia includes several developing countries, such as Cambodia and Sri Lanka. Sixty eight percent of East Asians qualify for free or reduced-price lunch, compared to 81% of native-born students.

Most of the racial distributions by birth region are not surprising; the overwhelming majority of students from Sub-Saharan Africa and the Caribbean are black, those from Latin America are Hispanic, those from Eastern Europe and the former USSR are white, and those from Asia are Asian. A few regions, however, are more diverse. For example, 47% of the students from the West European region are white, but 19% are Asian, 23% are Black, and 11% are Hispanic. While, non-Spanish South America contributes a smaller share of the overall student population, it is also quite diverse: 52% Asian, 37% black, 11% Hispanic, and 0.6% white.

Table 13: Characteristics of Immigrants by Birth Region, 2008-09

		Percentage of students who are:					
	% of Students	LEP	Poor	Asian	Black	Hispanic	White
Native-born	86.9%	8.8%	81.0%	12.9%	32.1%	39.9%	15.2%
Immigrant	--	32.6%	87.5%	31.8%	19.8%	36.2%	12.2%
Former USSR	0.5%	24.3%	65.4%	5.2%	2.2%	0.4%	92.2%
Other E. Europe	0.3%	16.4%	66.8%	1.8%	0.5%	1.4%	96.4%
West Europe	0.4%	11.0%	57.8%	18.6%	23.4%	10.8%	47.3%
China Region	1.2%	41.7%	86.6%	98.6%	0.2%	0.5%	0.7%
East Asia	0.8%	16.6%	67.7%	91.3%	5.2%	1.6%	1.9%
South Asia	1.4%	27.5%	89.1%	96.3%	0.7%	1.3%	1.7%
W. Asia & N. Africa	0.6%	40.1%	85.4%	24.3%	3.0%	1.0%	71.8%
Sub-Saharan Africa	0.7%	24.4%	88.9%	4.6%	68.8%	3.3%	23.3%
Dominican Republic	2.1%	60.8%	96.1%	0.2%	0.6%	99.0%	0.1%
Caribbean	1.7%	11.8%	89.2%	6.7%	90.1%	2.8%	0.5%
Non-Spanish S. America	0.9%	0.7%	90.7%	51.8%	36.9%	10.7%	0.6%
Central & South America	2.5%	45.2%	93.2%	2.3%	1.4%	95.4%	1.0%
All	100.0%	11.9%	81.8%	15.3%	30.5%	39.4%	14.8%

Compared to students from Europe and Asia, students from Latin America consistently perform worse on standardized tests.

Students from the Dominican Republic, the Caribbean, Central & South America, Africa, and West Asia score lowest on the math tests. This is generally consistent with 2000, except for students from the West Asia/North Africa region, who scored above average (0.325) in 2000. Broadly, students from regions scoring above average on the math test in 2000 also scored above average in 2009, although the average scores of all these regions decreased.

Results on the reading test vary more between the two academic years, but generally show Dominican, Central & South American, West Asian, African, and Caribbean students perform poorly, with the European and other Asian groups at the other end of the spectrum. Dominicans have the worst scores on both tests, and their scores are much lower than the next lowest subgroup.

Figure 4.1: Math Test Scores by Birth Region, 1999-00 and 2008-2009

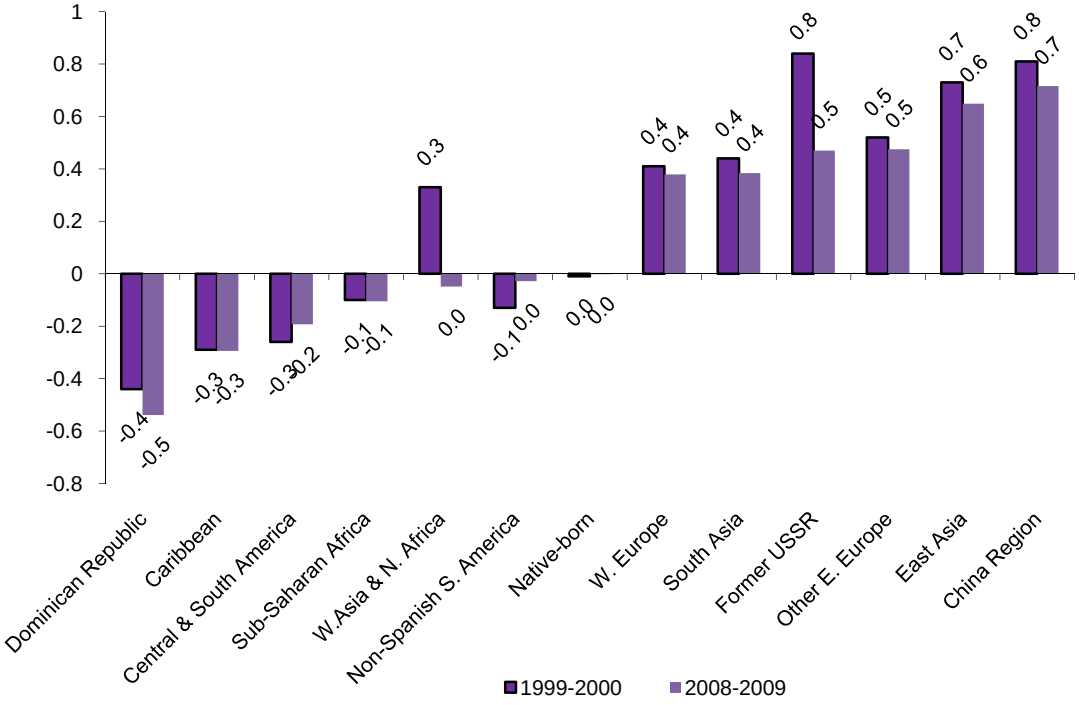
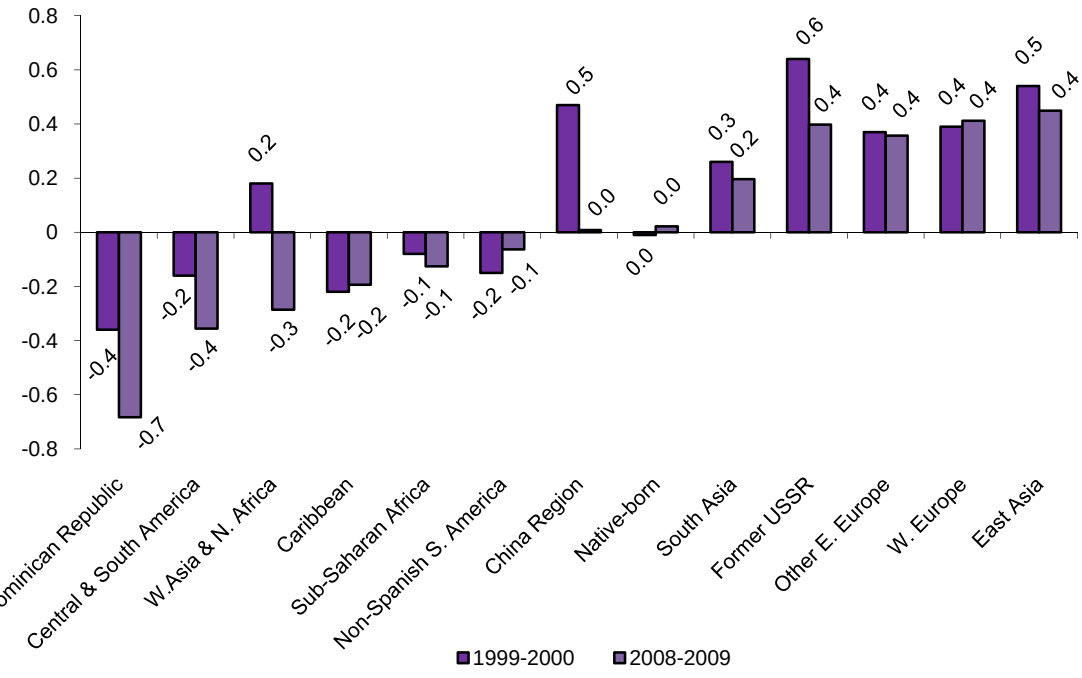


Figure 4.2: ReadingTest Scores by Birth Region, 1999-00 and 2008-2009



Conclusion

This report provides a portrait of the differences between immigrant and native-born students and within the immigrant population over the past decade. While there have been some changes in the composition of students during this period – as well as changes in legislation that impacted test taking – socioeconomic status, race/ethnicity, and language proficiency of immigrants and natives alike shape their school experiences and academic outcomes. Differences due to poverty, language ability, and race/ethnicity are often larger than those between nativity and immigrants who have been in the school system for over three years perform at or above the level of their native-born peers. Previous research further supports this argument: after controlling for student socio-demographic characteristics and educational needs, foreign-born students consistently outperform their native-born peers.[13,14] As a result, the challenges faced by school systems receiving inflows of immigrant students likely depend on the background characteristics and sending region of these incoming students. Targeted policies and programs designed to meet their specific needs will likely be more effective than those aimed at the immigrant population more broadly.

[13] Schwartz, Amy Ellen and Leanna Stiefel (2006). "Is There a Nativity Gap? New Evidence on the Academic Performance of Immigrant Students." *Education Finance and Policy* 1(1): 17-49.
[14] Further research confirms this finding at the elementary, middle, and high school levels, and also shows there is a sizeable immigrant advantage among teen immigrants and native migrants. See, Stiefel, Leanna, Amy Ellen Schwartz, and Dylan Conger (2010). "Age of Entry and the High School Performance of Immigrant Youth." *Journal of Urban Economics*. 67(3): 303-314.

Appendix A: Differences in School Performance of Region Groups within Poverty, Racial/Ethnic, and English Proficiency Groups

Table A1: Student Performance of Immigrants by Birth Region, 2008-09

	Reading	Math
Native-born	0.022	-0.002
Immigrant	-0.138	0.012
Former USSR	0.398	0.470
Other E. Europe	0.357	0.475
West Europe	0.412	0.379
China Region	0.008	0.716
East Asia	0.449	0.649
South Asia	0.196	0.384
W. Asia & N. Africa	-0.286	-0.049
Sub-Saharan Africa	-0.126	-0.105
Dominican Republic	-0.683	-0.539
Caribbean	-0.194	-0.294
Non-Spanish S. America	-0.063	-0.028
Central & South America	-0.356	-0.193
All	0.000	0.000

Table A2: Student Performance by Poverty, Nativity, and Birth Region, 2008-09

	Reading			Math		
	Poor	Non-poor	Difference	Poor	Non-poor	Difference
Native-born	-0.139	0.492	-0.631	-0.155	0.411	-0.566
Immigrant	-0.258	0.445	-0.703	-0.073	0.499	-0.572
Former USSR	0.233	0.766	-0.533	0.295	0.897	-0.602
Other E. Europe	0.214	0.743	-0.529	0.408	0.725	-0.317
West Europe	0.106	0.784	-0.678	0.177	0.657	-0.480
China Region	-0.174	0.808	-0.982	0.688	1.022	-0.334
East Asia	0.370	0.711	-0.341	0.551	0.859	-0.308
South Asia	0.134	0.680	-0.546	0.365	0.935	-0.570
W. Asia & N. Africa	-0.408	0.512	-0.920	-0.143	0.814	-0.957
Sub-Saharan Africa	-0.162	0.128	-0.290	-0.143	0.017	-0.160
Dominican Republic	-0.704	-0.435	-0.269	-0.531	-0.369	-0.162
Caribbean	-0.216	-0.072	-0.144	-0.300	-0.154	-0.146
Non-Spanish S. America	-0.085	0.227	-0.312	-0.043	0.144	-0.187
Central & South America	-0.422	0.170	-0.592	-0.237	0.129	-0.366
All	-0.155	0.488	-0.643	-0.143	0.419	-0.562

Note: Test scores are measured in z-scores and include all 3rd through 8th graders who took the tests. Z-scores are calculated by subtracting the average score for all test takers from each student's score and dividing by the standard deviation of scores for all test takers.

Table A3: Student Performance by English Proficiency, Nativity, and Birth Region, 2008-09

	Reading Test Scores			Math Test Scores		
	LEP	**Fully EP**	**Difference**	**LEP**	**Fully EP**	**Difference**
Native-born	-0.833	0.081	-0.914	-0.672	0.046	-0.717
Immigrant	-1.172	0.204	-1.377	-0.678	0.315	-0.993
Former USSR	-0.931	0.602	-1.532	-0.538	0.752	-1.290
Other E. Europe	-0.786	0.507	-1.293	-0.382	0.622	-1.004
West Europe	-0.676	0.497	-1.172	-0.413	0.464	-0.877
China Region	-1.338	0.649	-1.987	0.173	1.096	-0.923
East Asia	-0.777	0.600	-1.377	-0.151	0.791	-0.942
South Asia	-0.970	0.452	-1.422	-0.641	0.698	-1.339
W. Asia & N. Africa	-1.360	0.193	-1.553	-0.847	0.427	-1.274
Sub-Saharan Africa	-1.131	0.116	-1.246	-1.001	0.163	-1.164
Dominican Republic	-1.272	-0.036	-1.236	-0.942	0.038	-0.980
Caribbean	-1.074	-0.119	-0.955	-1.092	-0.197	-0.894
Non-Spanish S. America	-0.867	-0.058	-0.809	-0.886	-0.023	-0.863
Central & South America	-1.123	0.100	-1.223	-0.730	0.198	-0.928
All	-0.963	0.096	-1.059	-0.675	0.077	-0.751

Note: Test scores are measured in z-scores and include all 3rd through 8th graders who took the tests. Z-scores are calculated by subtracting the average score for all test takers from each student's score and dividing by the standard deviation of scores for all test takers. Selected regions select at least 90% of all students in the racial/ethnic group.

Table A4: Student Performance by Race/Ethnicity, Nativity, and Birth Region, 2008-09

	Reading Test Scores	Math Test Scores
Asian	0.425	0.660
Native-born	0.536	0.738
Immigrant	0.152	0.484
South Asia	0.199	0.391
China Region	0.007	0.723
East Asia	0.490	0.711
Non-Spanish S. America	-0.002	0.081
W. Asia / N. Africa	-0.507	-0.261
Black	-0.165	-0.279
Native-born	-0.161	-0.278
Immigrant	-0.210	-0.292
Caribbean	-0.223	-0.330
Non-Spanish S. America	-0.174	-0.205
Sub Saharan Africa	-0.247	-0.283
Hispanic	-0.214	-0.203
Native-born	-0.174	-0.180
Immigrant	-0.491	-0.348
Dominican Republic	-0.687	-0.539
Latin America	-0.378	-0.212
White	0.480	0.438
Native-born	0.510	0.449
Immigrant	0.250	0.363
Former USSR	0.424	0.510
Other E. Europe	0.371	0.481
W. Asia / N. Africa	-0.195	0.055
West Europe	0.617	0.509
Sub Saharan Africa	0.164	0.336

Appendix B: Countries Included in Regional Groupings

Former USSR
- Azerbaijan
- Belarus
- Georgia
- Kazakhstan
- Kyrgystan
- Moldova
- Russia
- Tajikistan
- Turkmenistan
- Ukraine
- Uzbekistan

Eastern Europe
- Bosnia & Herezegovina
- Bulgaria
- Czech Republic
- Croatia
- Estonia
- Serbia
- Hungary
- Lithuania
- Latvia
- Montenegro
- Macedonia
- Poland
- Romania
- Slovenia
- Slovak Republic
- Yugoslavia

Western Europe
- Australia
- Austria
- Bermuda
- Belgium
- Canada
- Denmark
- Ireland
- Finland
- France
- Germany
- Greece
- Iceland
- Italy
- Luxembourg
- Monaco
- Malta
- Netherlands
- Norway
- New Zealand
- Portugal
- San Marino
- Spain
- Sweden
- Switzerland
- United Kingdom

East Asia
- Burma
- Brundei Darussalam
- Bhutan
- Cambodia
- Sri Lanka
- Fiji
- French Polynesia
- Indonesia
- Japan
- Kiribati
- North Korea
- South Korea
- Laos
- Macao
- Micronesia
- Mongolia
- Marshall Island
- Maldives
- Malaysia
- Nepal
- Papua New Guinea
- Philippines
- Solomon Island
- Singapore
- Thailand
- Vanuatu
- Vietnam

South Asia
- Bangladesh
- India
- Pakistan

Western Asia/North Africa
- Armenia
- Afganistan
- Algeria
- Bahrain
- Cyprus
- Egypt
- Iran
- Israel
- Iraq
- Jordan
- Kuwait
- Lebanon
- Libya
- Morocco
- Oman
- Qatar
- Saudi Arabia
- Syria
- United Arab Emirates
- Tunisia
- Turkey
- Yemen
- South Yemen

Sub-Saharan Africa
- Albania
- Angola
- Botswana
- Burkina Faso
- Benin
- Burundi
- Chad
- Congo
- Zaire
- Cameroon
- Comoros
- Central African Republic
- Djibouti
- Equatorial Guinea
- Ethiopia
- Gambia
- Gabon
- Ghana
- Guinea-Bissau
- Guinea
- Ivory Coast
- Kenya
- Liberia
- Lesotho
- Madagascar
- Malawi
- Mali
- Mauritius
- Mauritania
- Mozambique
- Niger
- Nigeria
- Namibia
- Rwanda
- Seychelles
- South Africa
- Senegal
- Sierra Leone
- Somalia
- Sudan
- Tonga
- Togo
- Tanzania
- Uganda
- Swaziland
- Zambia
- Zimbabwe

South America
- Argentina
- Belize
- Bolivia
- Brazil
- Chile
- Columbia
- Costa Rica
- Ecuador
- El Salvador
- Guatemala
- Honduras
- Mexico
- Nicaragua
- Paraguay
- Peru
- Panama
- Uruguay
- Venezuela

Caribbean Islands
- Antigua and Barbuba
- Barbados
- Bahamas
- British West Indies
- Cuba
- Dominica
- French West Indies
- Guadeloupe
- Grenada
- Haiti
- Jamaica
- Netherlands Antilles
- St. Kitts & Nevis
- St Lucia
- St Vincent
- Trinidad & Tobago
- British Virgin Islands

Non-Spanish South America
- French Guiana
- Guyana
- Surinam

China
- China
- Hong Kong
- Taiwan

Dominican Republic
- Dominican Republic

For more information contact:

The Institute for Education and Social Policy
Steinhardt School of Culture, Education, and Human Development | New York University
665 Broadway, Suite 805 | New York, NY 10012

Phone: 212.998.5880 | **Fax:** 212.995.4564 | **Email:** iesp@nyu.edu | **Website:** steinhardt.nyu.edu/iesp

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