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Exploring the Education Profile and Pipeline for Latinos in New York State

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Using various education and census databases [1] this policy brief explores the Latino education pipeline in New York State and, where possible, uses disaggregated data to analyze the changes in educational enrollment, attainment, and achievement for Latinos between 1990 and 2000. The education pipeline represents the distribution of Latinos nrolled in pre-school through graduate and professional school in New York State as well as the education attainment levels of the adult population over 25 years of age. Disaggregated data provide the best picture of the educational situation of various Latino subgroups as they relate to each other and other racial/ethnic populations in the state. While this report does not focus on the important variables of English language ability and socioeconomic status, it does provide a valuable description of the gap between the educational outcomes desired by all Latinos and the reality which we hope will be useful to both policy makers and practitioners interested in improving these outcomes for Latino New Yorkers.

Paying special attention to education policy changes during the past decade (notably the implementation of the New York States Regents examinations as a graduation requirement) this analysis also calculates the increased probability of dropout for Latino students before and after this policy was implemented and discusses its implications for the Latino community.

While our analysis describes very modest gains in the attainment of bachelor's and advanced degrees for a small number of Latinos who are able to make the transition from high school to college, this brief also reveals that there is a major blockage in the pipeline during this important transition-large numbers of Latinos are dropping (or being pushed) out of high school. We conclude with discussion of the implications of this analysis are for policy makers and the broader community of interest and make some general recommendations.

This brief is organized in three sections:

I. **PROFILE:** Contextualizes Latino attainment levels within the broader population shifts of the adult population (25 +) in New York State between 1990 and 2000, presents the disaggregated (Latino subgroup) attainment levels and analyzes the changes in this population between 1990 and 2000.

II. **PIPELINE:** Presents an analysis of aggregated and disaggregated data that reveal the distribution of Latino students enrolled in preschool through graduate/professional school.

III. **PERFORMANCE:** Combines data from reports from New York State and New York City Education Departments regarding student outcomes with our own calculation of the National Center for Education Statistics Common Core of Data (CCD) revealing the increased probability of Latino dropout.

I. PROFILE
Population Change by Race

The education profile of Latinos in New York State must be understood within the context of broader demographic changes in the total population and their corresponding educational levels. Table 1 reveals important changes in the overall composition of the New York State population during the period between 1990 and 2000.

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1   National Center for Education Statistics (Common Core of Data), U.S. Census Bureau: 1990, 2000 SF-3 Census Data, SF-4 Census Data.

Table 1	TOTAL POPULATION CHANGE BY RACE						
	STATE OF NEW YORK, 1990 AND 2000						
	1990	%	2000	%	Level Change	% Change	Change in %
Total	20,142,198	100.0%	18,976,457	100.0%	-1,165,741	-5.8%	0.0%
White	13,398,003	66.5%	12,891,118	67.9%	-506,885	-3.8%	1.4%
Black	2,860,590	14.2%	2,986,242	15.7%	125,652	4.4%	1.5%
American Indian, Eskimo, Aleut	59,081	0.3%	53,637	0.3%	-5,444	-9.2%	0.0%
Asian or Pacific Islander	689,262	3.4%	1,052,326	5.5%	363,064	52.7%	2.1%
Hispanic	2,151,743	10.7%	2,865,016	15.1%	713,272	33.1%	4.4%
Other	983,519	4.9%	871,882	4.6%	-111,637	-11.4%	-0.3%

Source: 1990 & 2000 US Census Data (SF-3 Release)

Table 2

LATINO EDUCATIONAL ATTAINMENT BY NATIONAL ORIGIN				
STATE OF NEW YORK 2000				
	New York	Latino	Puerto Rican	Dominican
Total:	12,542,536	1,627,113	599,373	276,210
Less than 9th grade	1,005,805	377,392	109,102	84,431
9th to 12th grade, no diploma	1,620,519	354,354	147,294	62,319
High School graduate (inc. equivalency)	3,480,768	384,628	154,194	52,419
Some college, no degree	2,103,404	245,172	97,732	38,640
Associate degree	898,828	78,684	32,455	12,819
Bachelor's degree	1,954,242	113,026	37,476	16,094
Graduate or professional degree	1,478,970	73,857	21,120	9,488
Percent:	100.0%	100.0%	100.0%	100.0%
Less than 9th grade	8.0%	23.2%	18.2%	30.6%
9th to 12th grade, no diploma	12.9%	21.8%	24.6%	22.6%
High School graduate (inc. equivalency)	27.8%	23.6%	25.7%	19.0%
Some college, no degree	16.8%	15.1%	16.3%	14.0%
Associate degree	7.2%	4.8%	5.4%	4.6%
Bachelor's degree	15.6%	6.9%	6.3%	5.8%
Graduate or professional degree	11.8%	4.5%	3.5%	3.4%
		Central American	South American	
	Mexican			Equadorian
Total:	119,157	118,088	223,473	83,561
Less than 9th grade	42,397	38,013	39,850	21,525
9th to 12th grade, no diploma	25,040	23,211	37,213	15,531
High School graduate (inc. equivalency)	26,063	26,827	59,872	21,278
Some college, no degree	10,634	14,710	37,633	12,866
Associate degree	3,001	4,624	11,885	3,934
Bachelor's degree	7,092	6,845	21,591	5,579
Graduate or professional degree	4,930	3,858	15,429	2,848
Percent:	100.0%	100.0%	100.0%	100.0%
Less than 9th grade	35.6%	32.2%	17.8%	25.8%
9th to 12th grade, no diploma	21.0%	19.7%	16.7%	18.6%
High School graduate (inc. equivalency)	21.9%	22.7%	26.8%	25.5%
Some college, no degree	8.9%	12.5%	16.8%	15.4%
Associate degree	2.5%	3.9%	5.3%	4.7%
Bachelor's degree	6.0%	5.8%	9.7%	6.7%
Graduate or professional degree	4.1%	3.3%	6.9%	3.4%

Source: 1990 & 2000 US Census Data (SF-4 Release);
Universe: Latino population 25 years and over

According to the 2000 census the total population of New York State was 18,976,457. This number reflects an overall population decrease of 1,165,741 or 5.8% from 1990. Despite the decline in total population, the Black, Hispanic and Asian populations all increased (cumulatively over 1.2 million), with the largest numerical increase among Hispanics (713,273; 33.1%) and the largest percentage increase among Asians 363,064; 53%). The White[2] population decreased by 506,885 or 3.8%.

Given the dramatic growth of the Latino population, census data also provide a description of the relative educational attainment levels of Latino sub populations, as is observed in Table 2. This table also reveals the sobering reality that there are over twice as many Latinos (in the 25+ population) with less than a high school diploma (731,746) as there are Latinos possessing a high school diploma (384,628).

High school graduate

- Latinos represented 13% of all high school graduates in New York State.
- 23.6% or 384,628 Latinos were high school graduates. This represents less than one in four Latinos in the state.
- Of these, Puerto Ricans represented 40% or 154,194 of all Latino high school graduates, Dominicans represented 14% or 52,419 of all Latino high school graduates, and Mexicans represented 7% or 26,063 of all Latino high school graduates.

Despite a large population increase, Latino high school graduates as a percentage of the total population remained virtually the same between 1990 and 2000. This trend, combined with the increasing number of dropouts described in the third section of this brief, signals a major blockage in the pipeline from high school to college and is cause for serious concern.[3]

Bachelor's degree

- Latinos represented 6% of all individuals possessing bachelor's degrees in New York State
- 6.9% or 113,026 Latinos possessed a bachelor's degree.
- Of these, Puerto Ricans represented 33% or 37,476 of all Latinos with bachelor's degrees; Dominicans represented 14% or 16,094 of all Latinos with bachelor's degrees; Mexicans represented 6% or 7,092 of all Latinos with bachelor's degrees and South Americans represented 19% or 15,429 of all Latinos with bachelor's degrees.

Overall, the percentage of individuals with a Bachelor's degree increased slightly among all groups from 1990 to 2000. However, the percentage increase for Latinos (1.3%) was the lowest among all groups. Despite their overall population decrease, Whites experienced the largest increase in bachelor's degrees at 2.6%, followed by Asians at 2.4%, and Blacks

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2   This refers to the White Non-Hispanic population.

3   It must be pointed out, however, that these data do not account for all of the variation in schooling experience and immigration of Latino youth. Fry (2003, for example, argues that many immigrant students (he estimates 8%) who are claimed as dropouts according to census data never attended US schools or "dropped in" to school - instead pursuing labor force opportunities.

with 2%. Although there are slight improvements among Latinos, other racial groups fared better over the same time period, as Figure 1 illustrates.

Graduate and professional degree

Overall, the percentage of individuals with graduate and professional degrees increased slightly from 1990 to 2000. The percentage of Latinos with a graduate or professional degree increased .8% from 3.7% to 4.5%. Despite their overall population decline, Whites experienced the largest increase in this category at 2.4%, Blacks experienced a 1.3% increase, and Asians experienced the lowest increase of .2%.
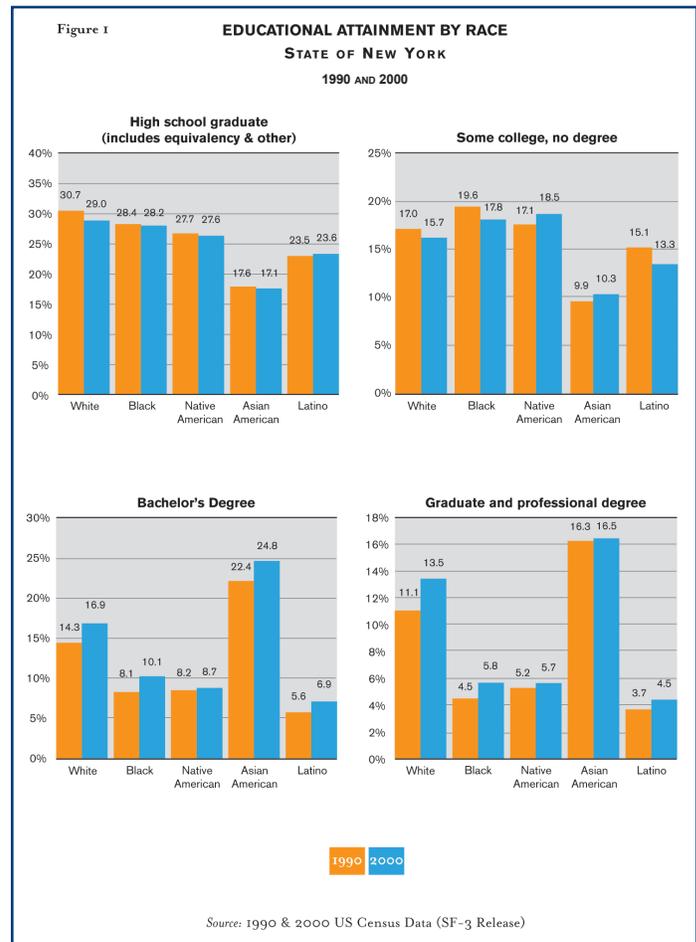
■ Latinos represented 5% of all individuals possessing a graduate orprofessional degree in New York State.

■ 4.5% or 73,857 of all Latinos possessed a graduate or professional degree.

■ Of these, Puerto Ricans represented 29% or 21,120 of all Latinos with a graduate or professional degree, Dominicans represented 13% or 9,488 of Latinos with a graduate or professional degree; and Mexicans represented 7% or 4,930 of all Latinos with a graduate or professional degree. South Americans represented 21% or 15,429 of all Latinos with a graduate or professional degree.

While there were very modest gains for Latinos and Blacks in the category of graduate and professional degree, it is important to remember that while the overall White population (25+) decreased by 204,235 or 2.2% from 1990 to 2000, the Latino population increased by twice that number (410,458 or 33.7%) and the Black population increased by 101,252 or 6% during the same period. The Asian population also increased from 1990 to 2000 by 254,425 or a remarkable 58%. Figure 1 compares Latino educational attainment and change to other racial/ethnic populations in New York State.

Modest progress is found in the small increase in the percentage of Latinos completing higher education with a 1.3% increase in the number of Latinos possessing a bachelor's degree and a .9% increase in the number of Latinos with a Graduate or professional degree. The census analysis revealed a negligible increase (.2%) in the percent of Latinos possessing a high school diploma from 1990 to 2000 and slight decreases in the percentage of Latinos who had not completed 9th grade or earned a high school diploma (2.6% and 2%, respectively). These data reveal that the small number of Latinos who make it to college and graduate school succeed academically. Our analysis of the transition from high school to college, however, reveals that many more Latino students are being diverted from the higher education pipeline in high school. This phenomenon is further illuminated in section II.

II. PIPELINE

Enrollment data describing the population aged 3 or higher provided by the census presents a broad picture of the distribution of Latinos compared to other racial/ethnic groups (Figure 2) and a comparison among

Figure 1

EDUCATIONAL ATTAINMENT BY RACE
STATE OF NEW YORK
1990 AND 2000

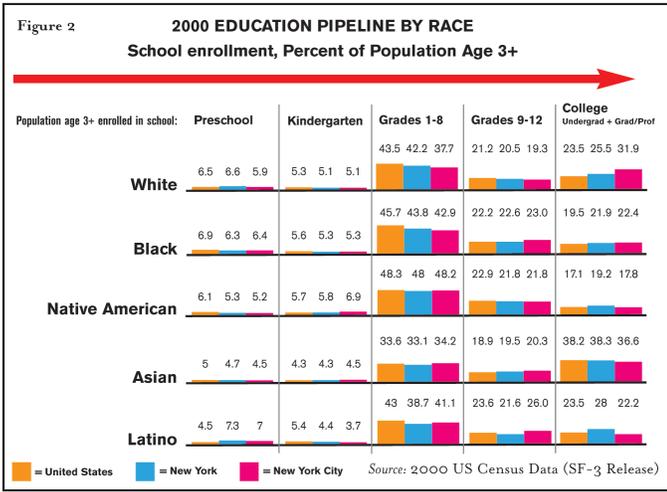Source: 1990 & 2000 US Census Data (SF-3 Release)

Latino national origin subgroups (Figure 3). These figures reflect students enrolled in preschool through graduate school in the year 2000.

Among pre-schoolers, Latinos are over-represented at the city (7%), and state (7.3%) levels relative to the national average (4.5%). At the other end of the pipeline, Latinos are slightly under-represented (by 1.3%) relative to the national average among college and graduate/ professional school enrollments in New York City; however, they are over-represented in this category at the state level (by 4.5%). This is not surprising and corresponds with other data presented in Table 3 that reveal increased high school graduation rates for Latinos residing outside of New York City.

In contrast and despite population decline, White students are over-represented in these higher education categories by 8.4% in New York City and 2% in New York State.

Figure 3 presents Latino national origin subgroups in New York State and reveals that all Latino subgroups are under-represented in preschool relative to the total New York State population. Dominicans are most under represented in preschool by 1.8% in New York State and 1.2% in New York City, while Puerto Ricans

Figure 2 — 2000 EDUCATION PIPELINE BY RACE
School enrollment, Percent of Population Age 3+

Population age 3+ enrolled in school:

	Preschool	Kindergarten	Grades 1-8	Grades 9-12	College Undergrad + Grad/Prof
White	6.5 6.6 5.9	5.3 5.1 5.1	43.5 42.2 37.7	21.2 20.5 19.3	23.5 25.5 31.9
Black	6.9 6.3 6.4	5.6 5.3 5.3	45.7 43.8 42.9	22.2 22.6 23.0	19.5 21.9 22.4
Native American	6.1 5.3 5.2	5.7 5.8 6.9	48.3 48 48.2	22.9 21.8 21.8	17.1 19.2 17.8
Asian	5 4.7 4.5	4.3 4.3 4.5	33.6 33.1 34.2	18.9 19.5 20.3	38.2 38.3 36.6
Latino	4.5 7.3 7	5.4 4.4 3.7	43 38.7 41.1	23.6 21.6 26.0	23.5 28 22.2

= United States = New York = New York City

Source: 2000 US Census Data (SF-3 Release)

Figure 3 — 2000 LATINO EDUCATION PIPELINE BY NATIONAL ORIGIN
New York State, School enrollment, Percent of Population Age 3+

	Preschool	Kindergarten	Grades 1-4	Grades 5-8	Grades 9-12	Undergraduate	Graduate / Professional
TOTAL POPULATION	6.4 5.0	5.2 5.3	21.5 20.8	20.9 19.8	21.1 21.5	19.7 20.6	5.3 6.2
TOTAL LATINO POPULATION	5.7 5.6	6.2 6.1	24 24	22 22	23 23.5	16.5 16.2	2.7 2.6
PUERTO RICAN	6.0 5.7	6.1 6.1	25.1 25.1	23.4 23.4	23.1 23.6	14.2 14.0	2.2 2.1
DOMINICAN	4.6 4.6	5.2 5.2	22 22.4	21.7 21.6	25.3 25.8	18.9 18.2	2.2 2.2
MEXICAN	5.7 5.8	8.8 9.2	28.7 28.1	21.8 21.7	19.7 19.8	11.6 11.0	2.7 2.3

= New York = New York City

Source: 2000 US Census Data (SF-4 Release)

and Mexicans are slightly below the state and city averages. Despite over-representation of all Latino subgroups enrolled in grades K-8, Latinos are consistently underrepresented in undergraduate and graduate/professional schools by 3.2% in New York State and 4.4% in New York City. Under-representation is substantially greater for Mexicans at the undergraduate level (8.1% at the state level, 9.6% at the city). Finally, while Puerto Ricans and Dominicans are underrepresented at the undergraduate level, Dominicans are represented much closer to the total population (at 18.9% NYS and 18.2% NYC) than are Puerto Ricans, who are represented at 14.2% New York State and 14% New York City. This corroborates a finding by Hernández and Rivera Batiz (2003) that Dominicans in New York City were enrolled in public colleges at a higher proportion than Puerto Ricans.[4]

At the graduate/professional school levels, Latinos are under-represented by half the percentage of the overall population in graduate/professional school in New York State and New York City. While the distribution of Puerto Ricans, Dominicans, and Mexicans in New York City are virtually identical (2.2%), Mexicans in New York State are represented slightly higher in this category.

Tables 3 and 4 describe the geographic distribution of the Latino K-12 population enrolled in New York State in 2002. Latino students enrolled in New York City Schools represent 73% of the statewide Latino K-12 population and 37% of all New York City public school students, they represent only 28.5% of the city's High School diploma recipients (n = 10, 812). Unfortunately, New York City's Department of education produces a lower percentage of Latino high school graduates than 8 other districts which surround it.

A recent New York City Department of Education analysis reported a 20.6% Latino dropout rate — the highest among all groups aside from the tiny American Indian category.[5] While 46% of Latino students were reported as graduating, the study does not indicate what percentage of these students received Regents Endorsed Diplomas (it reported that 33.2% of all graduates received a Regents Endorsed Diploma) and reports that 33.4% of Latino students are still enrolled in a 4th year of high school. Our analysis of state level CCD data presented in section III suggests that the prospects for this 33.4% enrolled in a 5th year of high school are less than optimistic.
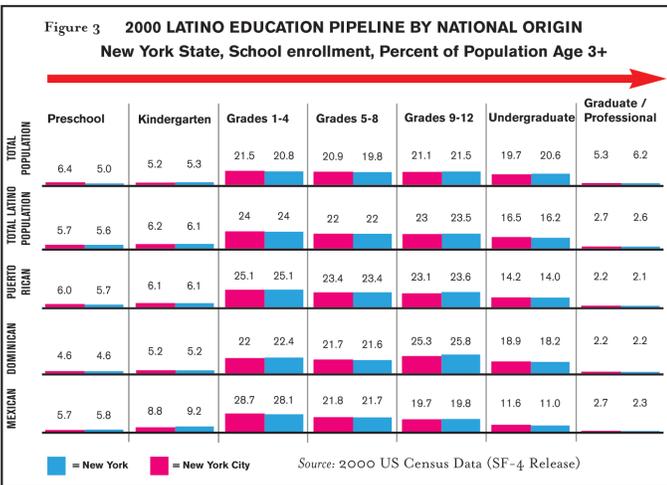
III.   PERFORMANCE

The performance section of this brief describes educational outcomes resulting after the implementation of standardization and accountability systems at the federal, state, and local levels. In 1996, the New York State Board of Regents initiated a standardized accountability system which required students to score 65 to 100 on five Regents Examinations (English, mathematics, global history and geography, U.S. history and government, and science) in order to earn a local high school diploma (55 to 100 with local board approval). Data from the 2003 New York State 655 Report (*Report to the Governor and Legislature on the Status of the State's Schools*), which followed students beginning high school in 1999, reveal that "substantially higher proportions of White and Asian students in the cohort met the graduation requirements. The greatest disparity among racial/ethnic groups was in meeting the mathematics requirement; 86.8 percent of White general education students met the requirement by scoring 65-100 but only 49.1 percent of Black students did so" (p. 170). The percentage of Latino students who met the requirement in mathematics was even lower at 48.6 percent.

In 2003, Latino students met the Regents graduation requirements at a rate slightly below Blacks in the English (56.2% to 57.9%) and math (48.6% to 49.1%) examinations and scored lower than Blacks

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4   Hernández, Ramona & Rivera-Batiz, Francisco (2003) Dominicans in the United States: A Socioeconomic Profile, 2000. Dominican Research Monographs, The CUNY Dominican Studies Institute, p. 8.

5   New York City Department of Education: The Class of 2004 Four-Year Longitudinal Report and 2003-2004 Event Dropout Rates. February 2005.

in global history (59.4% to 61.9%), U.S. history (51.9% to 56%), and science (55.9% to 58.5%). In each of these categories, both Latinos and Blacks consistently scored 15-20 percentage points lower than Whites and Asians, while baseline data from earlier Regents years is unavailable. Future reports should reveal whether the achievement gap is closing or widening; although it appears that performance on the Regents is improving.[6] However this analysis also reveals that *the gap between Latino students who pursue the Regents endorsed diploma and those who exit high school before completion is widening*.

Our review of the data confirms what a 2001 New York City Board of Education report stated: "whenever standards are raised without the necessary academic and social supports, graduation rates tend to decline and dropout rates increase."[7] Specifically, our analysis suggests that the institution of the New York State Regents Examinations as a graduation requirement and the draconian policy climate established by the Federal No Child Left Behind Act, while targeted at addressing the achievement gap between White and Asian, and Black and Latino (and Native American) students have in fact contributed to a worsening educational situation by accelerating the probability that all students, and Latino students in particular will drop out.

High school dropout rates

A recent report by the National Center on Education Statistics (2005) describes several viable dropout measures used in education research. The most common-the annual dropout rate, measures the total number of dropouts in a given year divided by the total student enrollment for that year. However, researcher Phillip Garcia (2004) argues that this measure is inadequate at describing the underlying forces contributing to varying dropout rates, especially by grade level and race/ethnicity.

For example, according to the 2003 New York State 655 Report *(Report to the Governor and Legislature on the Status of the State's Schools)* the 2002-03 annual dropout rate for all students in New York State was 4.6%, 8.5% for Latinos, 8% for Blacks, 2.3% for Whites, 4% for Asian-Americans, and 5.9% for Native Americans. These figures, however are insufficient and only indicate a surface level approximation, minimizing disparities across grade levels and racial categories. As a result, the utility of the annual dropout rates by race is cosmetic at best. A closer examination of dropout phenomena is required.

To resolve this empirical shortcoming in the dropout data, using a method developed by Garcia (2004), we constructed a derived dropout rate from CCD level data that incorporates grade-level specific dropout counts by race for 1998 and 2002. These data reveal a more

Table 3 — **LATINO STUDENT ENROLLMENT**
Top 10 New York School Districts, 2002

Rank (n=657)	School District	City	Metro Area (PMSA)	# of Latino Students Enrolled	Latino Share of Total Student Enrollment	Share of Total State Latino Enrollment
1	New York City Public Schools	Brooklyn	New York, NY	400,334	37.1%	73%
2	Yonkers UFSD	Yonkers	New York, NY	12,072	45.7%	2.2%
3	Brentwood UFSD	Brentwood	Nassau-Suffolk	9,825	60.4%	1.8%
4	Rochester City UFSD	Rochester	Rochester	6,977	19.6%	1.3%
5	Buffalo City SD	Buffalo	Buffalo-Niagara Falls	5,365	12.3%	0.9%
6	Newburgh City SD	Newburgh	Newburgh	3,964	30.7%	0.7%
7	Freeport UFSD	Freeport	Nassau-Suffolk	3,291	45.4%	0.6%
8	Hempstead UFSD	Hempstead	Nassau-Suffolk	3,105	43%	0.6%
9	New Rochelle City UFSD	New Rochelle	New York, NY	3,085	30%	0.6%
10	Central Islip UFSD	Central Islip	Nassau-Suffolk	2,980	45%	0.5%

Source: Department of Education, NCES CCD Data

Table 4 — **LATINO HIGH SCHOOL DIPLOMA RECIPIENTS**
Top 10 New York School Districts, 2002

| Rank (n=657)	School District	City	Metro Area (PMSA)	# of Latino HS Diplomas	Latino Share of Total HS Diplomas
1	Brentwood UFSD	Brentwood	Nassau-Suffolk	347	54.1%
2	Tarrytowns UFSD	Sleepy Hollow	New York, NY	56	50.5%
3	Port Chester Rye UFSD	Port Chester	New York, NY	68	46.3%
4	Greenburg Eleven UFSD	Dobbs Ferry	New York, NY	7	33.3%
5	Central Islip UFSD	Central Islip	Nassau-Suffolk	92	33.1%
6	Yonkers City SD	Yonkers	New York, NY	235	32.5%
7	Freeport UFSD	Freeport	Nassau-Suffolk	87	31%
8	Hempstead UFSD	Hempstead	Nassau-Suffolk	45	29%
9	New York City Public Schools	Brooklyn	New York, NY	10,812	28.5%
10	Haverstraw-Stony Point CSD	Garnerville	New York, NY	119	26.9%
...	...	...	...	...	...
39	Rochester City UFSD	Rochester	Rochester	133	13%
53	Sewanhaka Central HS DSRT.	Floral Park	Nassau-Suffolk	116	10.2%
69	Buffalo City SD	Buffalo	Buffalo	126	7.7%

Source: Department of Education, NCES CCD Data

complex picture (as figure 5 illustrates): *The probability of dropping out for all students is greater than widely acknowledged and reported.*[8]

For example, when compared to the reported annual dropout rate, the derived dropout rate reveals that all students, irrespective of racial group, seem to fare worse than originally conceived by the New York State Education Department. The derived high-school dropout rate for all students is more in line with 26.2 percent, or one in every four students in 2002. Among the Latino and Black high school student populations, the picture is more dismal, where nearly one in every two (49.6 percent and 46.3 percent, respectively) will not graduate.

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6 This estimate is based on comparing data from the 2001 655 report that did not provide disaggregated data but reported data on high minority schools, revealing scores in the 53-58% range for the English Regents and the 40-46% range for Math.

7 New York City Board of Education, Flash Research Report #5: *An Examination of the Relationship Between Higher Standards and Students Dropping Out*.

8 We constructed two series of derived dropout rates by race, one for 1998 another for 2002. These rates were calculated using CCD dropout counts and total enrollment data from the 7th grade to the 8th grade for all student populations by race. The construction of derived dropout rates for 1998 and 2002 allows for an inter-temporal comparison of the effects of the implementation of the Regents as a graduations requirement. We employed 7th and 8th grade data as we believe that several mitigating dropout risk factors introduce themselves to student populations while in junior high or middle school.

Figure 4   2003 NEW YORK REGENTS EXAM PERFORMANCE BY RACE
Percent of Students in Racial Group
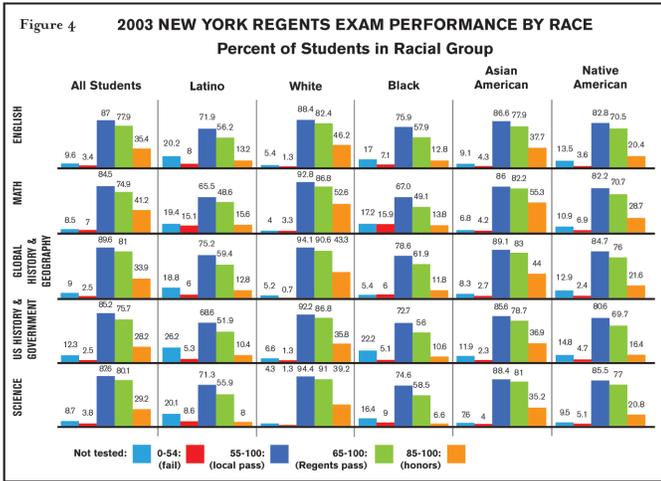
Source: Report to the Governor and Legislature on the status of the state's schools (655 Report) 2003.

Figure 5 INCREASED PROBABILITY OF DROPPING OUT BY RACE
STATE OF NEW YORK

For students in the 7th grade, likelihood of dropping out before the 12th grade:

Before (1998)
- 1 in 6 students likely to drop out
- 1in 3 Latino students likely to drop out
- 1 in 12 white students likely to drop out
- 1 in 4 black students likely to drop out
- 1 in 8 Asian-American students likely to drop out
- 1 in 5 Native-American students likely to drop out

After (2002)
- in in 4 students likely to drop out
- 1 in 2 Latino students likely to drop out
- 1 in 8 white students likely to drop out
- 1 in 2 black students likely to drop out
- 1 in 5 Asian-American students likely to drop out
- 1 in 3 Native-American students likely to drop out

As a result of the new graduation requirements, **EVERYONE** is more likely to drop out particularly Latino and black students

Source: Department of Education, NCES CCD data; author's calculations.

Figure 6   GRADE LEVEL-SPECIFIC DROP-OUT RATES BY RACE
STATE OF NEW YORK, 2002

*Source:* Department of Education, NCES CCD data; author's calculations.

From the derived dropout data, one in every three, or 33.2 percent, of Native-American high school students in New York will not graduate. The corresponding figures for the White and Asian-American student populations also substantially increase when compared to widely reported annual dropout rates. Computing grade-specific dropout rates by race allows us to understand the underlying elements that contribute to the differences among and between overall racial dropout rates. Specifically, we can approximate for a student entering the 7th grade in 1998 what the likelihood is that the student will drop out by the time he or she reaches the 12th grade. What is the equivalent likelihood for the same student entering the 7th grade in 2002 after the Regents examinations were implemented as a graduation requirement? The data are striking, with two major conclusions emanating from the empirical evidence:
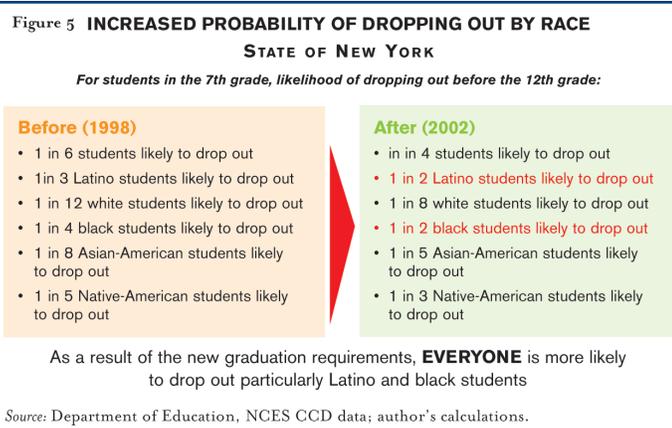
■ As a result of the implementation of the Regents examinations as a graduation requirement, every racial/ethnic population is more likely to prematurely exit high school:
  ■ In 1998, 1 in every 6 7th grade students was likely to drop out by the 12th grade. In 2002, 1 in every 4 was likely to drop out.
  ■ In 1998, 1 in every 12 White 7th grade students was likely to drop out by the 12th grade. In 2002, 1 in every 8 was likely to drop out.
  ■ In 1998, 1 in every 8 Asian-American 7th grade students was likely to drop out by the 12th grade. In 2002, one in every five was likely to drop out.
  ■ In 1998, 1 in every 5 Native-American 7th grade students was likely to drop out by the 12th grade. In 2002, 1 in every 3 was likely to drop out.

■ The Latino and Black student populations experienced the greatest increase in dropout rates:
  ■ In 1998, 1 in every 3 Latino 7th grade students was likely to drop out by the 12th grade. In 2002, 1 in every 2 was likely to drop out.
  ■ In 1998, 1 in every 4 black 7th grade students was likely to drop out by the 12th grade. In 2002, 1 in every 2 was likely to drop out.

As illustrated in figure 6 we find that the majority of Latino and Black students are dropping out somewhere between the 9th and 10th grades, where nearly 1 in 4 10th graders dropout — 24.2 percent (9,455 students) for Latinos, 22.1 percent (9,870) for Blacks. This finding reflects a general total student population trend, where 11.6 percent (25,466) or nearly 1 in every 10 10th graders drops out, *but for Latinos and Blacks the 10th grade dropout rate is substantially higher than the total student population*. Once enrolled in high school, the grade-level-specific dropout rate for the White student population remains steady at about 3.7 percent in grades 10 (4,494), 11 (4,160), and 12 (4,024) substantially below their minority
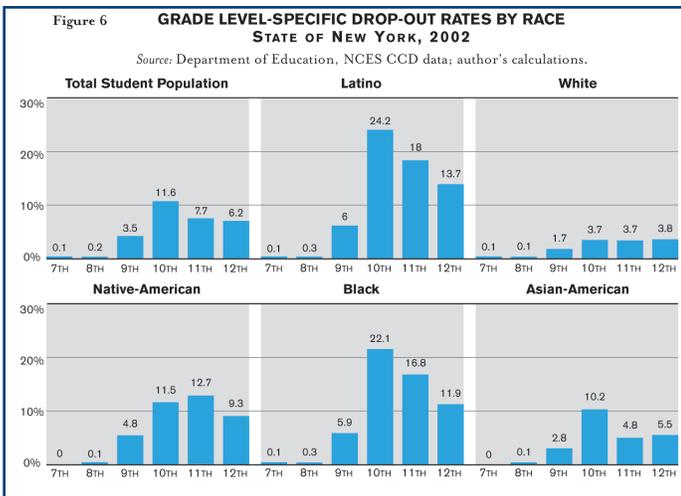
counterparts. Most Native-American students, about 12.7 percent (72) of all Native American 11th graders, drop out in the 11th grade.

While the overall effectiveness of the New York State Regents graduation requirement is yet to be determined; the CCD data allow for a first-order analysis of the implications of this implementation on minority student populations in New York State. We now have empirical evidence that large numbers of Latino students are disengaging from secondary education.

CONCLUSION

While presenting a rare disaggregated picture of the Latino educational condition in New York State, this brief has focused its attention on understanding this condition through the use of descriptive statistical data. There are crucial areas of investigation that we have consciously neglected, such as socioeconomic data and the experiences of English language learners which will be given attention in future analyses. Finally, such an analysis of data neglects the perspectives of practitioners, community members, and the students themselves who are the ostensible beneficiaries of education policy. Research that documents the ground level experiences of students and educators serves to compliment this analysis.

This policy brief reveals that dramatic population changes, particularly thegrowth of the Latino population in New York State, have converged with the implementation of high-stakes, accountability policies to constrain the probability that Latino students will graduate from high school and successfully make the transition to post secondary education. The low representation of Latinos among New York State's residents who possess a bachelor's or advanced degree despite the large numbers of students enrolled in K-12 schools suggests that a major blockage in the pipeline to higher education exists. This blockage is characterized by the acceleration in school exit beginning in the 10th grade when students are first required to take Regents examinations resulting in a spike in the grade level specific dropout rates for Latinos seen in figure 6.

A 2002 Census Bureau report states that the earnings of Latinos who finish high school are 43 percent higher than those of Latinos who drop out of school. This statistic is a distressing reflection of the economic condition of the Latino community in New York State and its relationship to educational attainment. As the Latino population continues to grow this statistic is prophetic if not predictive of certain economic stagnation for a dynamic and hard working community which claims its right to the American Dream-one that can only be accomplished through high quality education. Given the outcome of the New York State Supreme Court's decision in the Campaign for Fiscal Equity, the following recommendations provide ideas as to which investments are likely to yield significantly improved outcomes for Latino students in New York State.

RECOMMENDATIONS

While this brief describes modest gains in the attainment of bachelor's and advanced degrees for Latinos it also reveals that there is a major blockage in the pipeline to higher education — whereby large numbers of Latinos are leaving high school before graduating. The increased probability of Latino dropout has major implications for labor force participation and community development. The creation of a safety valve for Latino students is necessary. A dual strategy that focuses on the pipelines' inputs and outputs is recommended.

Enhancing the *inputs* or educational investments requires specific resources targeted at Latino achievement at both the student and structure levels. Such resources at the student level include extended day, after school, and year round instruction for Latino students assessed below grade level. Such supports must begin in the early grades for students identified as needing improvement in reading and math. On the structural level-the districts and secondary schools least successful at graduating Latino students must be identified and targeted for intensive support including the hiring of high quality teachers, professional development, and multicultural/multilingual instruction.

Enhancing the pipeline's *outputs* involves evaluating and re-considering the way in which high school graduation is determined and establishing graduation criteria which consider multiple measures of student proficiency including performance assessments, course grades, and teacher recommendations. Such an approach to graduation allows greater flexibility for students to demonstrate they have met high academic standards and will establish a safety valve for Latino students and other vulnerable populations allowing them to demonstrate their achievement through multiple measures including alternative assessments, grades, teacher recommendations, and Regents Examinations.

Finally, in addition to considering education an instructional process, it must also be understood as a cultural and linguistic process. In this regard, the social, cultural, and linguistic resources of Latino students and communities must be incorporated in the formal curriculum, pedagogy and assessment systems of school systems that serve Latinos.

REFERENCED WORKS

Fry, Richard (2003) Hispanic Youth Dropping Out of U.S. Schools: Measuring the Challenge. Pew Hispanic Center.

Garcia, Phillip; *An Evaluation of Student Information Websites for K-12 Public Schools in Illinois*; The Institute of Latino Studies, 230 McKenna Hall, University of Notre Dame, Notre Dame, Indiana 46556 (May 2004);

Hernández, Ramona & Rivera-Batiz, Francisco (2003) *Dominicans in the United States: A Socioeconomic Profile, 2000*. Dominican Research Monographs, The CUNY Dominican Studies Institute.

New York City Board of Education, Flash Research Report #5: An Examination of the Relationship Between Higher Standards and Students Dropping Out.

Orfield, Gary (Ed.) (2004) Dropouts in America: Confronting the Graduation Rate Crisis. Cambridge, MA. Harvard Education Press.

The State University at Albany & The State Education Department, Albany, NY (May 2004); *New York State of Learning: A Report to the Governor and The Legislature on the Educational Status of the State's Schools - 2003 New York State 655 Report*.

US Department of Education, National Center for Education Statistics, Institute for Education Sciences (NCES 2005-105); *National Institute of Statistical Sciences/Education Statistics Services Institute Task Force on Graduation, Completion, and Dropout Indicators - Final Report*.

US Department of Education, National Center for Education Statistics, Institute for Education Sciences (NCES 2004-333); *Documentation to NCES Common Core Data Public Elementary/ Secondary School Universe Survey: School Year 2002-03, Preliminary File May 2004*.

APPENDIX

One-year vs. derived drop-out rates: The Garcia Method[9]

In precise terms, the one-year drop-out rate is defined as the ratio of the number of dropouts in grades 9-12 during the school year (numerator) and the sum of all enrollments (denominator) at the beginning of the school year.

However, as researcher Philip Garcia states,
"The utility of the one-year dropout rate is limited. It does show the proportion of a high school student body at extreme academic risk during a year; but it does not show the odds of leaving high school without a diploma after starting high school as a freshman. In terms of valid contrasts, the integrity of comparisons declines as the distribution of students across grades differs. Schools with growing numbers of 9th grader enrollments will exhibit spuriously high one-year dropout rates, and schools with declining 9th grade enrollments will exhibit spuriously low one-year dropout rates. The reason for this is that the probabilities for dropping out usually increase as high school students grow older."

With 1998 and 2002 New York data, one can derive an estimated dropout rate using the Garcia method for new freshmen by executing the following steps with grade-specific dropout data gathered during one school year:

1. Subtract each grade-specific dropout rate from 100% to produce five (grades 7-12) probabilities of staying enrolled (i.e., p1, p2, p3, p4, p5).

PROBABILITY OF STAYING ENROLLED

1998	7th	8th	9th	10th	11th	12th	2002	7th	8th	9th	10th	11th	12th
Total	1.00	1.00	0.98	0.95	0.93	0.97	Total	1.00	1.00	0.96	0.88	0.92	0.94
Latino	1.00	1.00	0.96	0.90	0.83	0.95	Latino	1.00	1.00	0.94	0.76	0.82	0.86
White	1.00	1.00	0.99	0.98	0.97	0.97	White	1.00	1.00	0.98	0.96	0.96	0.96
Black	1.00	1.00	0.97	0.91	0.86	0.96	Black	1.00	1.00	0.94	0.78	0.83	0.88
Asian	1.00	1.00	0.98	0.97	0.94	0.98	Asian	1.00	1.00	0.97	0.90	0.95	0.95
Nat Am	1.00	1.00	0.97	0.94	0.89	0.96	Nat Am	1.00	1.00	0.95	0.89	0.87	0.91

2. Compute the probability for staying enrolled for five successive years (i.e., p1* p2* p3* p4* p5) and multiply the product by 100.

PROBABILITY OF STAYING ENROLLED

1998	Grades 7 to 12	Grades 9 to 12		2002	Grades 7 to 12	Grades 9 to 12
Total	0.84	0.84		Total	0.74	0.74
Latino	0.68	0.68		Latino	0.50	0.50
White	0.91	0.91		White	0.87	0.88
Black	0.73	0.73		Black	0.53	0.54
Asian	0.87	0.87		Asian	0.78	0.79
Nat Am	0.78	0.78		Nat Am	0.67	0.67

3. Subtract from 100% the derived probability rate for staying enrolled to generate the probability for dropping out.

PROBABILITY OF DROPPING OUT (%)

1998	Grades 7 to 12	Grades 9 to 12		2002	Grades 7 to 12	Grades 9 to 12
Total	16.12	16.05		Total	26.38	26.19
Latino	31.70	31.59		Latino	49.78	49.59
White	8.75	8.72		White	12.52	12.36
Black	21.12	27.00		Black	46.51	46.27
Asian	12.65	12.62		Asian	21.51	21.40
Nat Am	21.99	21.88		Nat Am	33.31	33.24

The conventional wisdom is that the eventual derived dropout rate represents the kind of dropout rates the public expects to see on school report cards. It is certainly the kind of dropout rate educational researchers expect reported.

9   Garcia, Phillip; *An Evaluation of Student Information Websites for K-12 Public Schools in Illinois*; The Institute of Latino Studies, 230 McKenna Hall, University of Notre Dame, Notre Dame, Indiana 46556 (May 2004).