



# IESP POLICY BRIEF

## From One to Eight: A Longitudinal Portrait of the First Grade Class of 1995-1996

### Introduction

More than 86,000 students enrolled in first grade in New York City in the fall of 1995. These students were expected to graduate from high school in June 2007. As we seek to understand why some met this goal while others did not, it is critical to know where they began.

We follow this cohort for their first eight years of schooling: from their first days in fall 1995 through June 2003 when they were expected to complete eighth grade.

What are the demographic characteristics of the first grade class of 1995-96? Who stays and who leaves? Who is held back? What are the academic outcomes for each group?

To answer these questions, the NYU Institute for Education and Social Policy analyzed student-level data provided by the New York City Department of Education for all first through eighth graders from 1995-96 through 2002-03.

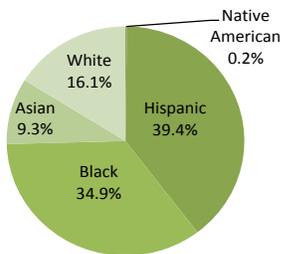
### Key Findings

- Less than six of ten students who enrolled in first grade in 1995-96 and were not in full-time special education, were still attending NYC public schools eight years later.
- Fewer than four out of ten students had sequential grade promotion from first to eighth grade.
- Almost one in ten students had been retained at least once.
- Almost four out of ten students exited the New York City public schools before eighth grade. Among these students three out of ten had been retained or were enrolled at least one grade below their expected grade upon exit.
- Among those who stayed, standard academic progress was associated with higher performance on standardized tests. On average, these were the only students who scored above the grade-mean in both reading and math.
- The proportion of white and Asian students among those who made standard academic progress was higher than in the other groups.
- Discontinuous enrollment and being retained was associated with poor academic outcomes, including lower attendance and lower test scores.

## Demographic Characteristics

As of October 31, 1995 607,483 students were enrolled in the New York City public schools in grades one through eight. Of these, 86,493 (14.2%) were enrolled in first grade; 86,072 students are included for follow up in this study.<sup>1,2</sup>

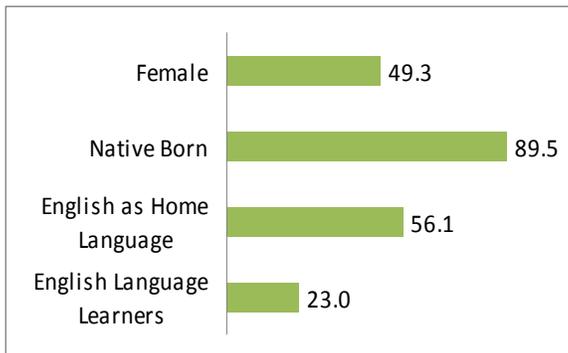
**Figure 1: Ethnicity, First Grade Class, 1995-96**



- The majority of students who were enrolled in first grade in 1995-96 are black or Hispanic.
- Hispanics make up the largest ethnic group (39.4%) followed by blacks (34.9%), whites (16.1%), and Asians (9.3%).

N = 86,072. Numbers add up to 99.4% due to rounding.

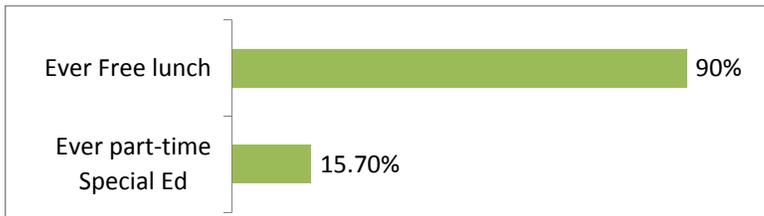
**Figure 2: Demographic Characteristics at Enrollment, First Grade Class, 1995-96**



N = 86,072

- The first grade class is nearly half (49.3%) female.
- Almost 90% of the first grade class is native-born.
- English is the home language for almost six out of ten students.
- Twenty-three percent of students entered as an English language learner (ELL).<sup>3</sup>

**Figure 3: Characteristics over eight years, 1995-2003**



- The majority of those who were enrolled in first grade in 1995-96 were eligible for free lunch for at least one year.
- Almost 16 percent of students received part-time special education services for at least one year during the period they were enrolled.<sup>4</sup>

<sup>1</sup>. 421 students are excluded from the analysis because of missing data.

<sup>2</sup>. Due to data limitations we cannot differentiate those enrolled in first grade for the first time from those who were retained in first grade from previous years.

<sup>3</sup>. ELL students are those who were identified as English Language Learners by the Department of Education or who were enrolled in English as a Second Language.

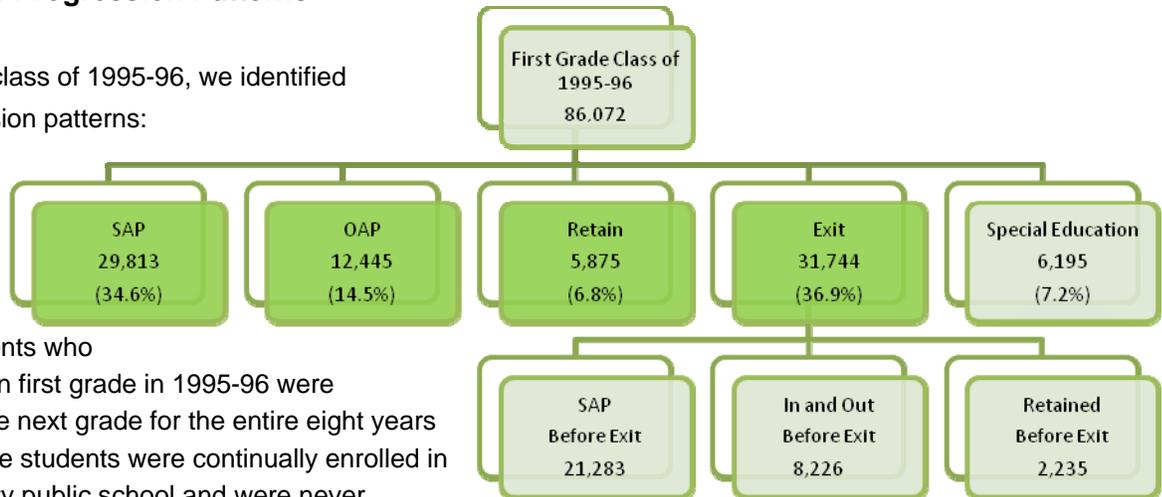
## Academic Progress

**Figure 4: Academic Progression Patterns**

Among the first grade class of 1995-96, we identified five academic progression patterns:

1) **Standard Academic Progress (SAP):**

34.6% of students who were enrolled in first grade in 1995-96 were promoted to the next grade for the entire eight years of study. These students were continually enrolled in a New York City public school and were never retained.



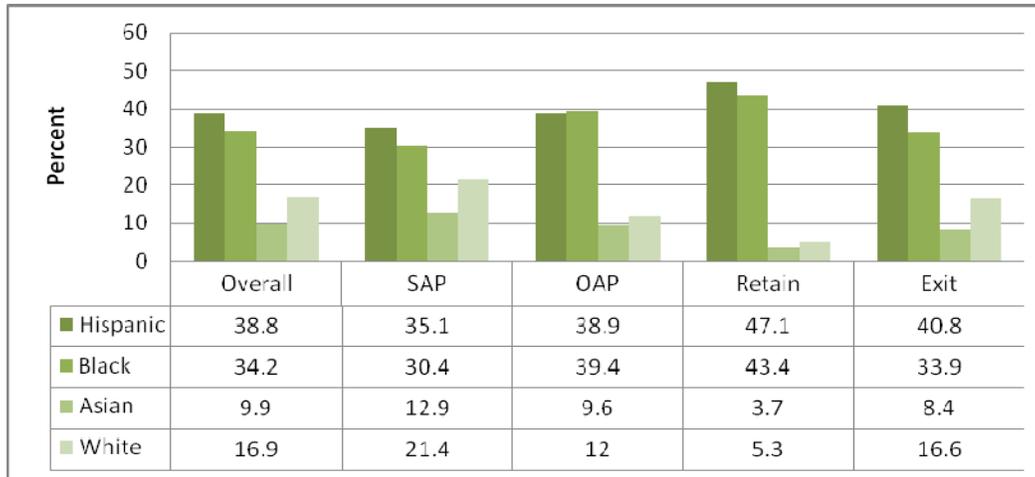
- 2) **Other Academic Progress (OAP):** 14.5% of these students were enrolled in the eighth grade in 2002-2003, despite having been retained at some point or discontinuously enrolled.
- 3) **Retained (RETAIN):** 6.8% students were continuously enrolled for all eight years but had been retained and were in sixth or seventh grade in 2002-03.
- 4) **Exit before October 31<sup>st</sup>, 2002 (EXIT):** 36.9% of students left the NYC public schools before the academic year 2002-2003. We identified three separate groups among those students who exited. The differences between these groups will be considered in more depth in a separate report. Of this group:
- 21,283 students were continuously enrolled and promoted every year before exiting
  - 8,226 students left a NYC public school for at least one year and returned, before leaving the public schools permanently
  - 2,235 students were retained at least once before leaving the public schools permanently
- 5) **Full-time Special Education (SPED):** 7.2% of students in first grade were enrolled in self-contained special education classes or full-time ungraded special education for at least one full academic year after first grade (N=6,195). Because self-contained special education classes are ungraded it is difficult to ascertain academic progress and grade promotion patterns. A separate report on the Special Education Class of 1995 gives a full account of the characteristics and academic history of these students.

The following analyses focus on the 79,887 students who were in general education classes and followed one of the progression patterns one through four outlined above.

<sup>4</sup>. Because information on Part-time Special Education was not included in the data files of 1995-96 we developed an overall measure identifying "ever" receiving Part-time Special Education during the length of their enrollment.

## Demographic Characteristics by Academic Group

**Figure 5: Ethnicity by Academic Group, First Grade Class, 1995-96**



- While black and Hispanic students represent less than 75% of the overall student population they are over 90% of the retained students.
- White and Asian students are over-represented in the SAP group compared to other groups.

**Table 1: Demographic Characteristics by Academic Group**

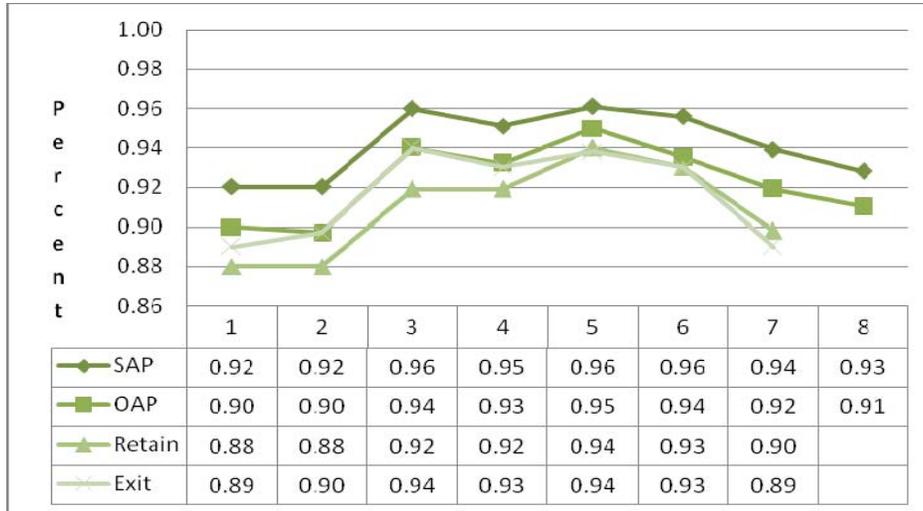
	Overall	SAP	OAP	Retain	Exit
<b>Characteristics at enrollment</b>					
Female	50.7	53.4	52.5	43.9	48.6
Native-Born	89.2	90.0	87.5	92.3	88.4
English as home language	55.8	56.1	55.9	55.1	57.7
Entered English Language Learner	22.4	19.4	22.4	31.1	23.6
<b>Other characteristics over 8 years, 1995-2003</b>					
Ever Free Lunch	89.2	87.0	94.9	98.8	86.7
Ever Part-time Special Education	10.2	7.2	8.9	28.1	10.3

N=79,887

- Almost all students who had been retained had received free lunch at some point during the eight years.
- Almost one-third of those who had been retained were ELL students compared to 19.4 percent of these who made standard academic progress.
- Twenty-eight percent of those who have been retained received part-time special education services.

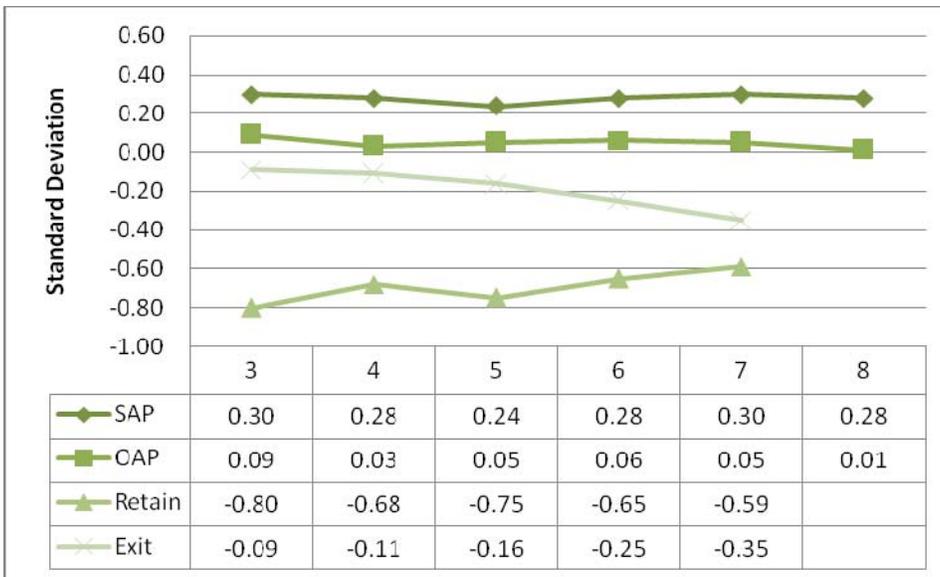
## Outcomes

**Figure 6: Percent of Days Attended, Grades One through Eight by Academic Group**



- Attendance is significantly higher among the SAP and OAP groups, compared to the retained group.
- Attendance begins to decline in year six for all groups.

**Figure 7: Math Scores, Grades Three through Eight, by Academic Group<sup>5</sup>**



- Students in the SAP group score significantly higher than students in the other three groups. Additionally, this group is the only one that consistently scores above the mean.
- Students who reached eighth grade after missing one or more years of enrollment or were retained and then skipped a grade (OAP) score significantly lower than in the SAP group.

- Over time, the math scores of the retained students improve slightly, but their scores remain negative and lowest among all groups.
- Math scores among the exit group decline over time, while scores improve or remain stable for the other three groups.

<sup>5</sup>. Patterns for math and English Language Arts (ELA) results are similar. Individual results on the ELA and math tests were converted to Z scores by grade for all students in a given grade in a given academic year. The results indicate the number of standard deviations a student's score is above or below the grade mean. This allows comparisons of individual scores from different normal distributions represented by, for example, third grade students in all the public schools in New York City.

## Implications

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Our analysis provides several key insights.

First, only about one third of the first graders of 1995-96 made standard academic progress - in which a student is continuously enrolled in a New York City public school and progresses sequentially from first to eighth grade. *Thus, standard academic progress is the exception rather than the rule.* The primary school years of almost two-thirds of NYC's public school students will include retention, participation in special education, and/or enrollment in private schools and/or schools in other school districts.

Second, since only about half of the cohort of first graders were enrolled as eighth graders eight years later, the success (or failure) of policies and programs provided in the early grades and aimed at improving high school readiness cannot be measured by the performance of the 8th grade class as a whole. A substantial portion of 8th graders will have entered New York City schools after the first grade. Student attrition means that a significant amount of the impact of early grade programs will be felt in schools other than those in the NYC district where students are ultimately enrolled.

Third, while virtually all of the retained students are poor, highlighting the link between poverty and academic success, demographic differences between students who exit prior to high school and those who remain are, on average, relatively small. There are, however, consistent differences in their performance on standardized tests. Perhaps most interesting, exiting students earn lower scores than others and this disparity is larger at higher grades. Thus, the evidence does not support the hypothesis that the "best" students leave.

Meryle Weinstein, Juliana Pakes, Christine Donis-Keller and Amy Ellen Schwartz contributed to this brief.

For more information contact:

**The Institute for Education and Social Policy**

Steinhardt School of Culture, Education, and Human Development | New York University  
82 Washington Square East, 7<sup>th</sup> Floor | New York, NY 10003

Phone: 212.998.5880 | Fax: 212.995.4564 | Email: [iesp@nyu.edu](mailto:iesp@nyu.edu) | Website: [steinhardt.nyu.edu/iesp](http://steinhardt.nyu.edu/iesp)

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