

## **FLASH RESEARCH REPORT #5**

### **An Examination of the Relationship Between Higher Standards and Students Dropping Out**

#### **KEY FINDINGS**

Whenever standards are raised without the necessary academic and social supports, graduation rates tend to decline and dropout rates increase. The Board of Education of the City of New York raised standards for promotion in 1999 at the same time as the New York State Education Department was also in the process of raising graduation standards.

- While at this time it is too soon to conclusively attribute the observed increase in dropout rates over the last three years to the higher grade promotion standards imposed by New York City and the higher graduation standards being phased in by New York State, this trend is consistent with previous research showing a relationship between higher standards and lower school completion rates.
- Previous research has shown that students who are retained in grade because they did not meet reading and mathematics promotion requirements subsequently drop out of high school at higher rates than non-retained students. Further, sustaining academic growth in students who have been retained requires continued educational and social services to assist students in building upon the gains made as a result of initial programmatic interventions.
- In addition, students who drop out of high school are more likely to be over age by the time they get to high school. Impending dropouts also fail their courses at a higher rate, ultimately failing to amass sufficient credits to be promoted out of Grade 9 or 10 or to pass examinations required for graduation early on in high school.

#### **BACKGROUND**

The Board has instituted higher standards for grade promotion and the Regents are phasing in higher standards for high school graduation. Students currently in high school will need to pass five Regents examinations. Specifically, high school students graduating in June 2001 (who first entered Grade 9 in 1997) must pass Regents examinations in both English and Mathematics with a score of at least 55 in order to obtain a diploma. Final phase-in of the new graduation standards will require students who enter Grade 9 as of September 2001 to pass Regents examinations in five subject areas (English, Mathematics, Global Studies, US History and Government, and Science) with a score of 65 or higher and to meet a language requirement in order to graduate.

The question addressed in Flash Research Report #5 is whether raising standards has an appreciable impact on school completion rates. The relationship between higher graduation standards and the dropout rate will be examined within the context of previous research carried out by the Division of Assessment and Accountability (DAA).

## **METHODOLOGY**

DAA addressed the question of whether the new Regents graduation standards are leading to an increase in the dropout rate by examining evidence from a number of previously conducted studies that considered similar issues. Among these studies was one that examined the impact of promotional "Gates" established at Grades 4 and 7 as part of promotional policy in the early 1980's. The Gates program required that students be promoted from Grades 4 and 7 on the basis of appropriate grade-level performance on citywide reading and mathematics achievement tests. The promotional criteria were first applied to fourth and seventh graders during the 1980-81 school year. Students in those grades failing to meet their promotional criteria were retained and became eligible for placement in promotional Gates classes.

The Gates classes provided students with intensive instruction, particularly in reading and mathematics. The report summarized here examined the subsequent progress of the 1982-83 Gates students in high school.

A second source of evidence was trends in longitudinal dropout and graduation rates during the past 10 years. DAA annually tracks cohorts of students who enter ninth grade in a particular year and examines their school completion status at the end of four years of high school. Students are classified as graduates, dropouts or still-enrolled for a fifth year (or more) of high school at that time. The Class of 2000 cohort is the latest cohort for which four-year school completion outcomes are available.

A third avenue of examination was the characteristics of students dropping out of high school. For this analysis, DAA examined the characteristics of students in the above mentioned longitudinal cohort studies who dropped out of school.

Finally, all of this information informed DAA's examination of the progress of students in the Class of 2001 cohort toward meeting Regents graduation requirements in English and in Mathematics at the end of three years of high school. As noted, this cohort is the first to be required to pass both Regents English and Mathematics examinations in order to graduate.

## **FINDINGS**

### **Impact of the Promotional Gates on High School Performance**

Under the Gates promotional policy established in the 1980's, students in Grades 4 and 7 who failed to attain the promotional criteria in reading and mathematics were retained for a year of intensive remedial instruction.<sup>1</sup> Students who were retained in seventh grade during 1982-83 were tracked through 1986-87 when they would have been expected to be in the eleventh grade. The performance of Gates students was compared to a comparison group consisting of students with similar characteristics who were not in Gates classes. Findings from this follow-up study indicated that by the end of the 1986-87 school year:

- Approximately 40 percent of the Gates students who had been retained because they did not meet reading and mathematics promotion requirements had dropped out of school. In contrast, only 25 percent of comparison group students had dropped out.
- Large percentages of seventh-grade Gates students had not taken either the Regents Competency Test in mathematics or in reading by the end of 1986-87 (nor had the comparison group), indicating a lack of progress toward completing high school.<sup>2</sup>
- The results indicate that while the Gates promotional policy did produce initial increases in student achievement, after the Gates year, students received few, if any, educational or social services to assist them in building on those gains. Further, they failed to continue to make adequate progress. The evaluation concluded that the school system had not provided the educational and social services necessary to ensure that Gates students completed their education in a timely manner.

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<sup>1</sup> A complete description of this study may be found in "A Follow-Up Study of the 1982-83 Promotional Gates Students" available from the Division of Assessment and Accountability. Note that the promotion policy established in 1980 has been superseded by Chancellor's Regulation A-501 updated and issued on October 14, 1999.

<sup>2</sup> In order to receive a high school diploma during the 1980's, all students in New York State were required, at the minimum, to pass a Regents Competency Test (RCT) in reading and in mathematics. The RCT in mathematics was generally taken in the ninth grade, while the RCT in reading was generally taken in the eleventh grade. By 1986-87, seventh grade Gates students might have been expected to have taken at least the RCT in mathematics.

## **An Examination of Trends in Longitudinal Dropout and Graduation Rates**

DAA has longitudinally tracked students' progress toward school completion for over a decade. The attached table summarizes the percentage of students in specific classes or cohorts who graduate on-time at the end of four years of high school, drop out, or remain enrolled in school for a fifth year (or more). As indicated in this table, the longitudinal dropout rate has increased for the second consecutive year. The dropout rate increased a full 2 percentage points from 17.5 in the Class of 1999 to 19.5 in the Class of 2000. This increase in dropout rate is occurring at the same time that the Regents have raised graduation standards and the Board has raised promotion standards.

### **Characteristics of Students Dropping Out of High School**

Previous longitudinal research<sup>3</sup> on the Class of 1992 has shown that:

- More than two-thirds of the dropouts were over age for grade at the time of entry into high school, and more than half were found to be in ninth or tenth grade at the time they dropped out. It would appear that these students had been held over one or more times in elementary or middle school;
- Less than 30 percent of the dropouts had ninth grade Spring 1989 reading scores at or above the 50<sup>th</sup> percentile (i.e., grade level); and
- Only slightly more than one fourth of the dropouts had met the mathematics requirements for graduation from high school.

These findings--that the majority of dropouts are over age for grade at the time of entry into high school and drop out principally in ninth or tenth grade--have been replicated repeatedly.

### **Performance of the Class of 2001 Regents Cohort After Three Years**

The most recent available data that can be used to examine the relationship between higher standards and school completion rates is students' performance on the State's English and Mathematics Regents examinations. As noted, students in the Class of 2001 must achieve a score of at least 55 on both the English and Mathematics Regents examinations in order to graduate.

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<sup>3</sup> A complete description of this research can be found in "The Cohort "Report: Four-Year Results for the Class of 1992 and Follow-Ups of the Classes of 1989, 1990, and 1991 and The 1991-92 Annual Dropout Rate" available from the Division of Assessment and Accountability.

A preliminary look at the progress toward meeting graduation requirements made by general education students in the Class of 2001 shows that, at the end of three years, 59 percent have met the graduation requirement in English and 55 percent have met the Mathematics graduation requirement. This compares with 55 percent of the Class of 2000 who had met the English requirement at the end of three years and 47 percent who had met the lower Mathematics requirement (i.e., students in the Class of 2000 could have met graduation requirements by passing the RCT in mathematics, a test of minimum competency) after three years of high school.

Although the percentage of students meeting Regents requirements is slightly higher for the Class of 2001 than it was for the Class of 2000 at the end of three years, 20 percent—11,687 students--of the Class of 2001 has taken and failed the Mathematics Regents examination at this point, and another 25 percent of the cohort—15,059 students—has not yet taken the test. If the same rate of passing is maintained for the students who have not yet taken the Mathematics Regents examination, and the typical re-test pass rate is attained by students who previously failed, over 15,500 students in the cohort will not meet the Mathematics graduation requirement after four years in high school. At this rate of passing the Mathematics Regents examination, approximately 44 percent of the Class of 2001 would graduate on time, compared to 50 percent for the Class of 2000. Moreover, this estimate may be based on overly optimistic assumptions, since previous research has shown that students who wait until the last year of high school to take the Mathematics Regents examination have the most trouble passing.

## **CONCLUSIONS**

Research has consistently shown that increasing standards has an impact on the high school completion rates of the most at-risk students—those who enter high school over age and who do not amass sufficient high school credits to be promoted to the next grade. Further, these students are more likely to take and fail, or not even to take, tests required for graduation at the same rates as other students. While programmatic interventions have shown some success in increasing the academic performance of at-risk students, sustaining initial gains requires that educational and support services be maintained for these students. If interventions are not consistently carried out for at-risk students, then students who are not able to keep up tend to give up and become dropouts.

**Comparison of Four-Year Outcomes for the  
Classes of 1991 through 2000**

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<b>Class of:</b>	<b>% Dropouts</b>	<b>% Graduates</b>	<b>% Still-Enrolled</b>	<b>Total N</b>
1991	20.5	51.0	28.5	59,228
1992	19.1	50.7	30.2	60,161
1993	18.4	49.7	31.9	61,359
1994	18.3	50.7	31.0	63,159
1995	18.1	48.2	33.7	65,254
1996	16.4	48.3	35.3	66,536
1997	15.9	48.4	35.7	66,703
1998	15.6	49.7	34.6	63,803
1999	17.5	50.1	32.4	65,748
2000	19.3	49.9	30.8	67,072

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Note. Students who were discharged from the school system are not included in these results. Data include August graduates.

- The dropout rate has increased for the second consecutive year. The dropout rate for the Class of 2000 is a full two percentage points higher than that of the Class of 1999.