New York City Goes to College
New Findings and Framework for Examining College Access and Success

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EXECUTIVE SUMMARY

Only three decades ago, the top priority for leaders of the New York City school system was clear: to cut the high school dropout rate. Since then, on-time graduation rates have increased dramatically, from 45 percent in 1987 to 70 percent in 2016—when dropout rates reached an historic low of 9 percent (Perlez, 1987; NYCDOE, 2016a, 2016b). Much of the progress occurred over the last decade.

Yet this rapid improvement in high school graduation rates has come in the midst of changes in the global economy, rising educational expectations for all students, and an expansion in the range of postsecondary options. Educational priorities have changed, as have the standards for success. Our new report, the second in the Research Alliance’s New York City Goes to College series, explores how rising high school graduation rates are playing out as students move into and through college.

To do so, the report focuses on the 9th grade cohort as the primary reference point for understanding how the system is changing over time. It uses up to 10 years of enrollment and degree data (through the 2014-2015 academic year), allowing us to report six-year college completion rates. This measure is aligned with similar literature nationwide and reflective of the lengths of time many students require to complete a degree. We use a definition of college enrollment and persistence that includes students who delay or interrupt their enrollment. Importantly, we also examine how patterns of college-going differ across groups of students, reporting on how the college landscape varies by gender, race/ethnicity, and neighborhood income.

In service to this broad perspective, we introduce a new visual representation of students’ pathways through high school and college. Figure ES-1 on the next page presents the 2003 cohort (i.e., the group of students who started 9th grade in any New York City public school in the fall of 2003) as it progressed from the first year of high school toward college completion ten years later. Each circle represents one percent of the original 9th grade cohort. We depict three distinct pathways of initial college enrollment, based on the type of college and the timing of students’ entry. Previous research has found very different persistence and completion rates associated with these factors (Coca, 2014; Bowen, Chingos, & McPherson, 2009; Long & Kurlaender, 2009; Bozick & DeLuca, 2005; Niu & Tienda, 2013).
Figure ES-1 helps visualize potential points for intervention. If we wanted to change the world so that more students attain a college degree, we might work to increase the proportion of students who graduate from high school and enroll in college, improving overall access to higher education. We could also increase the persistence within each of the pathways by helping students stay enrolled—perhaps by implementing more robust academic counseling, or offering more flexible course-taking options that work with students’ lives outside school. Or we could encourage students to pursue relatively more efficient pathways—for example, by enrolling full-time or entering the traditional four-year pathway, where the average student is more likely to earn a degree. Finally, although variations by subgroup are not shown here, we could work to ensure students of all backgrounds were equitably represented in the cohort’s outcomes.

Source: Research Alliance calculations using data from the NYC Department of Education, City University of New York, and National Student Clearinghouse.

Notes: Figure includes all students who enrolled in NYC public schools as first-time 9th graders in 2003 (N=64,152). See Appendix A for a detailed explanation of our sample, methods, and definitions of key outcomes.
Together, these elements comprise a four-part framework—access, persistence, efficiency, and equity—which we use to examine students’ pathways from 9th grade to the end of college. Key findings from this analysis are presented below. For more detailed information, please see our full report.

**Access:** There have been broad improvements in college access, driven largely by rising high school graduation rates. The proportion of 9th graders who enroll in college has increased over time, from 55 percent of students who started high school in 2003 to 61 percent of those who started high school in 2008 (see Figure ES-2 on the next page). This growth is mainly a result of improvements in on-time high school graduation rates, which rose for all of the student subgroups examined in our report. As a proportion of high school graduates, however, college enrollment rates have changed very little over the study period; a consistent 80 percent of graduates from the 2003 through 2008 cohorts enrolled in college within two and a half years of their expected graduation.1

The largest percent increases in both high school graduation and college enrollment have been among the most underrepresented populations—that is, students in the poorest neighborhoods, Black and Latino students, and young men. But these students continue to lag well behind their counterparts in both high school graduation and college enrollment. Among those in the 2008 cohort, more than a quarter of Black and Latino students and young men, and more than a third of students in the poorest neighborhoods still did not graduate.

This means that, despite the strong growth in high school graduation rates, the largest diversion from the pathway to college still occurs during the high school years, rather than during the relatively short transition from high school to college.

**Persistence:** Higher rates of college access have been eroded by somewhat higher rates of departure after one or two years of college. Broad improvements in college access have meant higher proportions of the original 9th grade cohort persisting through college. But persistence has not improved as much as we would expect given the 6-percentage point increase in enrollment from the 2003 to 2008 cohort. As shown in Figure ES-2 on the next page, a third of those gains, about 2 percentage points, were lost within the first two years of college for
In other words, although college access has improved over time, early attrition from college has also grown slightly.

Our analysis cannot assess the underlying causes of this shift, whether lack of student preparedness, institutional challenges in serving new student populations, or broad economic conditions. What is clear, however, is that for some students, improved access to college has meant simply delaying their departure from the system until the first or second year of college. This may mean that current students are still better off than their older peers—with improved labor market opportunities (Scott-Clayton & Wen, 2017), credits toward future college work, and knowledge about college that can be shared with others (Attewell, 2007). But it also means that more students are out of the labor market and potentially accruing debt in their early years of college without a degree to show for it. These findings underscore that the early years of college continue to be critical period of reckoning for students as they work toward a degree.
Efficiency: Although four-year colleges remain the primary source of degrees, increasing proportions of students have enrolled in two-year colleges over time. The proportion of students delaying their enrollment in college has dropped. In the 2003 cohort, fully two thirds of the degrees earned went to students who graduated high school on time and enrolled immediately in a four-year college. Yet, as the proportion of students delaying enrollment has decreased over time, we’ve seen more students entering the two-year pathway. What these trends mean for degree attainment patterns of future cohorts remains to be seen. Students who enroll in two-year institutions have historically been far less likely to earn a degree or even to remain enrolled by the end of six years compared with those who attend four-year colleges. But they are still more likely to earn a degree than those who delay college. It is difficult to know how shifting enrollment patterns will influence degree attainment for future cohorts.

This is particularly true in light of several recent initiatives in New York City that have focused specifically on improving the two-year pathway toward a college degree. CUNY has undertaken a comprehensive overhaul of developmental education (also known as remedial education) in its community colleges (CUNY, 2016). It has also launched programs such as the Accelerated Study in Associate Programs (Scrivener et al., 2015) and Guttman Community College (Hertz, 2015), which require full-time enrollment, provide frequent advising and a familiar cohort of classmates, and offer a range of other supports. These more structured environments may ultimately make the student experience more like that in a four-year, residential college and improve the efficiency of the two-year pathway, particularly as these new programs are scaled up.

The data we present in this report largely precede these reforms. Our findings therefore serve as a baseline that can be used to assess how these initiatives are changing New York City’s college landscape and outcomes over time.

Equity: Gaps by gender and neighborhood income have persisted, and there is some evidence that differences by race/ethnicity have actually grown over time. All students have seen improved college access over time, but what these improvements mean as students move into college differs depending on their gender, neighborhood income, and race/ethnicity. Between the 2003 to 2008 cohorts, young men closed the college enrollment gap with young women by about 2 percentage points, from 11 points to just over 9. But these gains disappeared by the
second year of college, as a result of higher departures from the system by young men. During this same time period, students in the poorest neighborhoods closed the college enrollment gap with those from better-resourced neighborhoods by about 3 percentage points, and by the second year of college, the gap between the two groups had narrowed even further. Unfortunately, these improvements were modest in relation to the magnitude of the gap; at the end of our study period, the persistence rate for the poorest students was still 23 percentage points less than that of students from better resourced neighborhoods.

Finally, our data suggest that, even among students with similar neighborhood-income levels, gaps by race/ethnicity have actually grown slightly over time. The 25-percentage point difference in college enrollment between Asians and Latinos (the

Figure ES-3: Changes in Type of Enrollment by Race Over Time, Middle 50% Neighborhood Income, 2003 and 2008 Cohorts (%)

Source: Research Alliance calculations using data from the NYC Department of Education, City University of New York, and National Student Clearinghouse data.

Notes: Figure includes all students who enrolled in NYC public schools as first-time 9th graders in 2003 or 2008, lived in middle neighborhood income census tracts, and who identified as Asian, Black, Latino, or White. (N=64,682). See note 2 below or Appendix B for further information about the neighborhood income variable.
highest and lowest attaining groups) living in middle-income neighborhoods remained unchanged from the 2003 to 2008 cohort, but the gap between the groups after two years of college actually widened from 27 to 29 points.

These trends may relate to what we call in the report “differential engagement in the four-year pathway,” or the fact that White, Asian, and better resourced students tend to take advantage of the relative efficiency of four-year colleges at much higher rates than Black, Latino and poorer students (see Figure ES-3 on previous page). Of course, much of this difference in college-going originates earlier in students’ academic trajectories, with Black and Latino students and those from the poorest neighborhoods attending less selective high schools and having fewer opportunities to prepare for and apply to college (Lewis & Burd-Sharps, 2017). While the root causes of the problem are complex, the highly disproportionate enrollment of underrepresented groups in two-year colleges presents real challenges as the City works toward more equitable college outcomes.

**Implications for Research, Policy, and Practice**

Understanding the role of academic preparation in shaping early college outcomes is an important next step for researchers, practitioners, and policymakers. The years we examine in the current report were a whirlwind of education policy changes in New York City, including the expansion of high school choice, increasing emphasis on charters, strengthening of accountability policies, and a renewed focus on graduating students college- and career-ready. Standards for New York City high school diplomas were increasing even as graduation rates rose precipitously, which suggests that the City has been successful in its push to prepare more students for college. And yet many of the trends we observe in this study beg for explanation in the form of what students know and can do as they make the transition from high school into and through college.

Increased attrition during the early years of college, for example, suggests the need for further research on the changing meaning of the high school diploma, the role of high school quality in student enrollment and success, and the impact of recent CUNY developmental education reforms. In other words, how is academic preparation shaping early outcomes as students work toward a college degree? Is the role of academic preparation different for students attending two-year rather than four-year colleges? How are these dynamics implicated in the inequities we observe in college outcomes? And to what extent will recent reforms at CUNY shift the directions of
trends we observe in this time period? We see these questions as some of the most urgent and complex lines of inquiry that we hope to pursue in future work.

Flexible, non-continuous, and lengthy periods of enrollment require a wider lens for measuring student outcomes. Substantial numbers of students in the study period enroll well after high school graduation, take time off from college, and remain enrolled after the ten-year timeframe we used for this report. To the extent that underrepresented students are disproportionately likely to take these non-traditional pathways, accurately measuring these forms of postsecondary participation is an important part of supporting a more equitable high school-to-college system. Absent this shift, we may be undercounting the participation of underrepresented students in the postsecondary system—and undervaluing the institutions that serve them.

We also need to better understand enrollment patterns and the reasons behind them if we are to help long-term enrollees complete their degrees. As much as 8 percent of the 2003 9th grade cohort (a little more than 15 percent of all enrollees) were still enrolled in college six years after high school graduation, and these students represent real potential improvements in the degree attainment rate if they are able to eventually finish their degrees.

Improvements in one area of the system may mean trade-offs in another. The trends we discuss throughout the report also raise a set of broader questions about how to think of the values of access, persistence, efficiency, and equity in relation to each other. There is some indication in our findings that, at least in the short term, access, persistence, and efficiency may be somewhat countervailing forces. Simultaneously widening access, helping students remain enrolled for longer periods, and making the process by which students earn their degrees smoother and faster is a challenging task. The institutional flexibility that makes it possible for previously unrepresented students to attend college may be the very flexibility that makes the system less efficient. Yet, in New York City and around the country, it has become common to refer to the twin policy goals of moving students into and through college, improving both access and success, when these goals may require different policy approaches.
Even more troubling, perhaps, broad improvements in college access have not necessarily produced more equitable outcomes for historically underrepresented groups as they have moved into and through the first years of college. Although we have seen gains in high school graduation and enrollment among all students, regardless of background, more advantaged students have been able to maintain these gains as they have transitioned into college in ways that underrepresented students have not. Figuring out how to promote more equitable outcomes is a central challenge facing the City’s policymakers and educators.

These are tradeoffs that are worth discussing more explicitly in our public policy conversations. Whether the City aims for broad college access for all students, higher overall degree attainment irrespective of duration of enrollment, more expeditious degree completion, or more equitable outcomes for underrepresented students—the decision will almost certainly require policymakers to balance a variety of competing values and institutional priorities.

**Conclusion**

New York City has made extraordinary progress in its high school graduation rates in the last decade and a half—and these changes have in turn driven improved college access for students who, even 20 years ago, would never have had the opportunity to enroll. As patterns of college-going grow more complex, however, and as policymakers and practitioners set their sights on a college completion agenda, it is crucial that we begin to widen our scope of analysis to understand how changes in access are influencing persistence and degree attainment. Although these findings surface a number of compelling research questions, our most critical challenge in the coming years is likely to be addressing the vast differences in college outcomes for underrepresented groups of students. It is a challenge that begins well before the transition from high school to college and one that the Research Alliance will continue to examine in future work.
Notes

1 New York City generally outperforms other large cities in its rates of college access, although most cities report the percentage of on-time high school graduates who enroll in immediately college (as opposed to our focus on the 9th grade cohort). For example, in Boston, 57 percent of on-time high school graduates enrolled in college immediately in 2007; in Dallas, this number was 60 percent; and in Baltimore, it was 49 percent—compared with the 71 percent of New York City graduates who enrolled in college that same year (Sum et al., 2013; Dallas Independent School District, 2013; Durham & Olson, 2013).

2 Given differences in access, persistence, and efficiency by neighborhood income, we chose to limit our investigation of disparities by race/ethnicity to students living in neighborhoods with median incomes between $30,424 and $56,491—the middle of our income distribution. Controlling for neighborhood income in this way allows us to begin to isolate the role that race plays for students in generally similar economic conditions. See our full report for a more complete discussion.

3 Figure ES-1 shows 9 percent of the cohort still enrolled without a degree at the end of 2013, but this is due to rounding within each pathway. Three percent of the cohort are still enrolled from the four-year pathway, 2.6 percent of the cohort are still enrolled within the two-year pathway, and 2.7 percent are enrolled within the delayed pathway.

References


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