

EXPLORING POST-SECONDARY ATTAINMENT: THE SDP COLLEGE-GOING DIAGNOSTIC



FULTON COUNTY SCHOOLS, GEORGIA FEBRUARY 2011

THE STRATEGIC DATA PROJECT

The Strategic Data Project (SDP), housed at the Center for Education Policy Research at Harvard University, partners with school districts, school networks, and state agencies to bring high-quality research methods and data analysis to bear on management and policy decisions.

SDP's theory of action is that if we are able to bring together the right people, the right data, and the right analysis, educational leaders can significantly improve decisions, thereby increasing student achievement.

SDP fulfills this theory of action with three primary strategies:

- 1. Conducting rigorous "diagnostic" analysis on teacher effectiveness and college-going success using agency data;
- 2. Placing top-notch analysts as data fellows in partner agencies for two years;
- 3. Distributing our analytic results and learnings to support broad adoption of methods and data use practices throughout the education sector.

SDP was launched in June 2009 and currently partners with two states, ten school districts and one network of charter management organizations. The project is supported by the Bill & Melinda Gates Foundation.



About the College-going Diagnostic

A few generations ago, a high school diploma opened doors to skilled jobs and middle-class earnings. Today, a college diploma is just as essential. Whether attending a two- or four-year college, technical school, or certification program, higher education has become a critical step to achieving stable employment and financial security in our global, knowledge-based economy.

In the face of these economic changes, it is increasingly important that K-12 educators prepare their students to graduate from high school with the knowledge and skills to enroll in, persist at, and complete higher education. To this end, we at the Strategic Data Project designed the College-going Diagnostic as a means to: 1) better inform district leaders about college enrollment and persistence rates and 2) identify potential areas for action to increase students' levels of academic achievement, preparedness for college, and post-secondary attainment.

This report, which represents a selection of findings from our full diagnostic, illuminates students' enrollment patterns over time and compares these patterns across a variety of student characteristics and academic experiences. The report includes sections on:

- THE SDP EDUCATION PIPELINE AND METHODOLOGY
- SDP College-going Definitions
- Key Findings
- SUMMARY ANALYSES

The College-going Diagnostic represents a partnership between SDP and Fulton County Schools (FCS) to bring data to bear on policy and management decisions. As such, it is neither an exhaustive set of analyses nor a set of specific recommendations to adopt in the district. It is, however, a set of standardized analyses that can help the district better understand its current performance, set future goals, and strategically plan responses.

For the first time in FCS, researchers connected individual student-level data to the corresponding college enrollment data. Therefore, the diagnostic is meant to demonstrate how districts can capitalize on existing data to better inform decision making.

These analyses were completed by members of the research team at the Center for Education Policy Research at Harvard University with the support of FCS staff, the FCS SDP Fellows, and faculty advisors.

A technical appendix can be found online at: www.gse.harvard.edu/sdp.

THE SDP EDUCATION PIPELINE AND METHODOLOGY

The SDP Education Pipeline is a framework used to examine the post-secondary pathway of FCS students.



The first two stages of the pipeline explore first-time 9th grade transitions through high school. We pay particular attention to two critical junctures in students' high school careers: the progression from 9th grade to 10th grade and the progression from 9th grade to high school graduation. The second two stages of the pipeline examine the college enrollment patterns of FCS graduates, including students' initial post-secondary enrollment patterns and their persistence to the second year of college.

This report focuses predominantly on the second two stages of our diagnostic work—the college enrollment and persistence patterns of FCS graduates. We pay particular attention to findings from these sections for two reasons. First, we anticipate college-going analyses highlight student attainment results that are less accessible to FCS presently since post-secondary enrollment data are not captured by the district directly. Second, our preliminary analyses illuminated strikingly similar findings across sections of the diagnostic. We feature a portion of these results to avoid redundancy and highlight key findings.

How does SDP know about college enrollment data for FCS graduates?

We obtain college enrollment data by linking FCS administrative student records to post-secondary enrollment data from the National Student Clearinghouse (NSC).

NSC is a national non-profit organization that provides post-secondary enrollment verification for colleges and universities. The Clearinghouse maintains student enrollment records at over 3,000 institutions of higher education throughout the United States, including career and technical training institutes and 2-year and 4-year colleges and universities. Presently, NSC covers institutions serving 92 percent of all post-secondary students nationwide.¹ However, given that not all institutions are covered and a number of instances in which students change name or social security number, some students may not match with NSC records. Thus, actual enrollment rates are likely to be slightly higher than those shown in this report.

What students were included in this study?

The student data used for these analyses include several cohorts of FCS first-time 9th graders and graduates from traditional high schools, including first-time 9th graders from as early as 2003. In all analyses we take the averages across three cohorts. We intentionally adjust student cohorts across analyses to describe the most current trends in student achievement and attainment in FCS.

SDP College-going Definitions

We calculate high school completion, college enrollment, and college persistence rates in the following ways:

High School Completion Rate

We track individual students' enrollment through high school to calculate high school completion rates using a cohort-based formula similar to the "compact rate" from the National Governors Association (NGA).² The SDP completion rate divides the number of high school completers (students earning standard diplomas, special education diplomas, and certificates of attendance) by the number of first-time freshmen four years earlier. To identify the "number of first-time freshmen four years earlier," we add together two types of students: 1) students enrolled in a FCS high school in 9th grade and 2) students enrolled in a different district in 9th grade who transferred into FCS at some point during high school. Also following the NGA formula, we exclude students who transferred out of the district between 9th and 12th grade.

Our results differ somewhat from those currently reported by the State of Georgia, which uses a different calculation method known as the "leaver rate." State-calculated completion rates are currently estimated based on aggregate cohort counts rather than counts of individual students. The lack of unique student identifiers statewide has not allowed Georgia to track individual students over time until recently. By tracking individual students over time, the SDP rates offer a more precise estimate of completion for first-time freshman cohorts.

College Enrollment Rate

We report on two college enrollment outcomes for FCS graduates who earn regular diplomas: 1) enrollment in college the fall following high school graduation (seamless enrollers) and 2) enrollment at any point within two years of graduating high school (delayed enrollers). To calculate seamless enrollment, we use October 1st of a student's graduation year as the effective cut-off date for determining college enrollment status. To calculate enrollment within two years, we utilize the date two calendar years from the date of graduation as an effective cut-off date.

College Persistence Rate

We calculate persistence rates for FCS graduates who enroll in college within two years of high school graduation. To calculate these rates we determine whether a student remained enrolled in any college on October 1st one year following their initial enrollment episode.³ Research suggests that students who seamlessly transition from high school to college are more likely to complete a degree than delayed college-goers, thus in some analyses we calculate rates separately for seamless college enrollers and delayed college enrollers.⁴

Key Findings

- I. Districtwide rates of college enrolllment and persistence in Fulton County Schools exceed national averages.
- II. Seamless college enrollment rates vary substantially across FCS high schools.
- **III.** Delayed enrollers are considerably more likely to attend 2-year colleges than seamless enrollers.
- **IV.** Wide variation exists across high schools for student college enrollment rates, even among students with similar incoming achievement levels.
- V. There are significant gaps in college enrollment between white and minority students. However, the gap between white and African American graduates becomes smaller and, in some cases, nearly disappears for students of similar prior academic achievement and economic background.
- VI. FCS high school graduates who delay enrollment or first enroll at 2-year institutions persist in college at substantially lower rates than their peers who seamlessly enroll in 4-year institutions.
- VII. Four out of every 10 FCS graduates attend the same five colleges.

SUMMARY ANALYSES

I. How do first-time ninth graders in FCS progress through high school and college?

Districtwide rates of college enrollment and persistence in FCS exceed national averages.

Out of every 100 9th graders who enrolled in a traditional FCS high school from 2003-04 to 2005-06, 80 completed high school, 58 seamlessly transitioned to college, and 53 persisted to the second year of their post-secondary studies. By comparison, out of every 100 9th graders nationwide, roughly 70 graduate high school within four years, 40 immediately enroll in college, and 30 persist to their second year.⁵

While rates of attainment across FCS lie above national comparisons, students at individual high schools progress at vastly different rates. There is a 57 percentage point gap in college persistence between the top- and bottom-performing high schools in FCS. Many of the subsequent analyses in this report examine school-level variation in greater depth and begin to explore possible explanations for differences observed across high schools.



⁴ Exploring Post-Secondary Attainment in Fulton County Schools

II. How do seamless college enrollment rates vary across high schools in FCS?



Seamless college enrollment rates vary substantially across FCS high schools.

Overall 75 percent of FCS high school graduates seamlessly enroll in college: 67 percent of FCS graduates seamlessly enroll in a 4-year college and an aditional eight percent seamlessly enroll in a 2-year college. The rate for graduates from the school with the highest enrollment—Northview (89 percent) is almost double the rate for graduates from the school with the lowest enrollment rate—Banneker (48 percent). In addition, there are substantial differences in the type of college that graduates attend. For example, while one in four Banneker seamless enrollers attend a 2-year college, fewer than one in 10 Northview seamless enrollers do.

III. How do enrollment rates of seamless enrollers compare to delayed enrollers?

Delayed enrollers are considerably more likely to attend 2-year colleges than seamless enrollers.

After accounting for delayed enrollers, an additional nine percent of FCS gradutes enroll in college- a combined seamless and delayed enrollment rate of 84 percent. Among seamless enrollers (*above graph*), we observe a 41 percentage point difference between the highest enrollment rate (Northview) and the lowest (Banneker). But when including delayed enrollers, this variation decreases to only 24 percentage points.

This increase in enrollment is due in large part to an increase in 2-year college-going. That is, while most seamless enrollers attend 4-year colleges, among delayed enrollers, a larger proportion attend 2-year colleges. Again, we observe variation across high schools with 11 percent or more of Banneker, Creekside, and Tri-Cities' gradutes attending 2-year colleges on a delayed schedule and only two percent of Chattahoochee, Northview, Roswell and Milton's graduates enrolling in 2-year colleges on a delayed schedule. Although not as large, similar variation exists across high schools in delayed 4-year college going rates.

College Enrollment by High School Seamless and Delayed Enrollers



IV. Do differences in student achievement upon entering high school explain the variation in college-going rates across high schools?

Wide variation exists across high schools for student college enrollment rates, even among students with similar incoming achievement levels.

Academic achievement in middle school, as measured by 8th grade standardized test scores, explains much of the variation in college enrollment in FCS. Just 47 percent of high school graduates scoring in the bottom quartile on the 8th grade math and ELA CRCT exams enrolled in college, compared to 90 percent of high school graduates scoring in the top quartile. However, prior student achievement does not fully explain college-going differences.

Enrollment rates diverge substantially across many high schools even when comparing rates among students with similar incoming academic achievement. For example, among bottom quartile students, enrollment rates vary from 32 percent to 70 percent. Moreover, when comparing bottom quartile to top quartile students, bottom quartile students in some high schools have a higher seamless college enrollment rate (such as 70 percent) than top quartile students in other high schools (such as 64 percent).



V. Are racial gaps in college-going evident in FCS?

There are significant gaps in college enrollment between white and minority students. However, the gap between white and African American graduates becomes smaller and, in some cases, nearly disappears for students of similar prior academic achievement and economic background.

Figures are presented on the next page.

Seamless college enrollment rates for Hispanic/Latino, African American, and white FCS graduates are 37 percent, 62 percent, and 88 percent, respectively, with a disparity between white and African American students of 26 percentage points (*not shown*). The gap between white and African American is largely explained by differences in academic achievement upon entering high school (*top left graph next page*) as well as differences in family income between racial groups. Among top and bottom CRCT quartile students eligible for free- or reduced-price lunch, however, the difference completely disappears (*top right graph next page*).

Hispanic/Latino students continue to enroll in college at far lower rates than their peers and this trend persists even after accounting for their academic achievement and income status relative to their white and African American peers. This persistent disparity may reflect additional obstacles to college-going which Hispanic/Latino graduates disproportionately encounter.

V. Are racial gaps in college-going evident in FCS? (Continued)





8th Grade CRCT Composite Score Quartile

VI. How do persistence rates to the second year of college vary across FCS high schools?



FCS high school graduates who delay enrollment persist in college at substantially lower rates than their peers who seamlessly enroll.

Across all high schools, persistence rates are considerably higher among seamless enrollers than delayed enrollers. On average, less than 63 percent of delayed enrollers persisted to their second year of college; in contrast, over 91 percent of seamless enrollers persisted to their second year of college. In fact, the highest persistence rate among delayed enrollers (74 percent at Chattahoochee) is three percentage points lower than the lowest persistence rate among seamless enrollers (77 percent at Banneker).

Among seamless enrollers, graduates who first enroll at 2-year institutions persist in college at substantially lower rates than their peers who enroll in 4-year institutions.

Persistence rates among seamless enrollers are higher for students first attending 4-year institutions than students first attending 2-year institutions. There is little variation in persistence rates for students who seamlessly enrolled in 4-year colleges as virtually all high schools have rates of 80 percent or more.

VII. What are the top-enrolling post-secondary institutions for FCS graduates?

4-Year	Name of Institution	Percent Enrollment	Number of Students
College/	UNIVERSITY OF GEORGIA	10.8	1,149
University	GEORGIA INSTITUTE OF TECHNOLOGY	8.4	890
First	GEORGIA STATE UNIVERSITY	8.2	878
Attended	GEORGIA SOUTHERN UNIVERSITY	7.1	753
	GEORGIA COLLEGE AND STATE UNIVERSITY	4.1	437
	KENNESAW STATE UNIVERSITY	4.0	426
	VALDOSTA STATE UNIVERSITY	2.9	314
	UNIVERSITY OF ALABAMA	2.7	283
	AUBURN UNIVERSITY	2.5	263
	UNIVERSITY OF WEST GEORGIA	2.1	226
	FORT VALLEY STATE UNIVERSITY	1.6	171
	UNIVERSITY OF SOUTH CAROLINA	1.4	147
	GAINESVILLE STATE COLLEGE	1.1	116
	SAVANNAH STATE UNIVERSITY	1.1	113
	ALBANY STATE UNIVERSITY	0.8	88
	OTHER	30.3	3,231
	Total		9,485
2-Year	Name of Institution	Percent Enrollment	Number of Students
College	GEORGIA PERIMETER COLLEGE	6.5	696
First	ATLANTA METROPOLITAN COLLEGE	1.4	150
Attended	ATLANTA TECHNICAL COLLEGE	0.9	91
	CHATTAHOOCHEE TECHNICAL COLLEGE	0.2	23
	GWINNETT TECHNICAL COLLEGE	0.2	21
	OTHER	1.7	183
	Total		1,164

Four out of every 10 graduates attend the same five colleges.

Four out of every 10 FCS graduates who seamlessly enroll attend one of five institutions in Georgia—the University of Georgia (UGA), the Georgia Institute of Technology (Georgia Tech), Georgia State University, Georgia Southern University, or Georgia Perimeter College. Almost six in 10 students enrolling in a 2-year college attend Georgia Perimeter College. We also observe that most FCS graduates attend colleges within Georgia; the top eight colleges and universities that enroll the most FCS graduates are all in Georgia. Furthermore, 12 of the top 15 most frequented 4-year colleges are in Georgia and all five of the top 2-year colleges are in Georgia.

Notes

Endnotes

1. The only institutions in Georgia with enrollments exceeding 1,000 students that do not participate in NSC are American InterContinental University, South University, The Art Institute of Atlanta, Beulah Heights Bible College, Bauder College, and Luther Rice Bible College and Seminary.

2. The National Governors Association "Compact Rate" is a four year, adjusted cohort graduation rate used to determine the percentage of on-time high school graduates from a given four-year student cohort. It is widely considered a valid and reliable formula and has been adopted by several states to improve the consistency and accuracy of graduation rate reporting. For more information on the "Compact Rate," see National Governors Association (2005), Graduation Counts: A Report of the National Governors Association Task Force on State High School Graduation Data; and National Governors Association. (2009), Implementing Graduation Counts: State Progress to Date, 2009.

3. This persistence outcome is not dependent on maintaining enrollment at the same institution from one year to the next. Therefore, we consider a student to have persisted to the second year of any college if we observe that student enrolled at any college over the course of two subsequent years.

4. Adelman, Clifford (February 2006). "The Toolbox Revisited: Paths to Degree Completion from High School through College". Washington, D.C.: U.S. Department of Education, Office of Vocational and Adult Education.

5. These estimates were calculated in 2002 by the National Center for Higher Education Management Systems (NCHEMS) and provide the best available national comparisons. However, NCHEMS's data collection, methodology, and analysis approach differ from ours substantially, thus we encourage caution when comparing FCS-specific rates to these national estimates.

Figure Notes

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I. Sample: 2003-04 through 2005-06 first-time ninth graders. Post-secondary enrollment outcomes from NSC matched records. All other data from FCS administrative records.

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II. Sample: 2007-08 through 2009-10 FCS graduates with a regular diploma. Post-secondary enrollment outcomes from NSC matched records. All other data from FCS administrative records.

III. Sample: 2005-06 through 2007-08 FCS graduates with a regular diploma. Post-secondary enrollment outcomes from NSC matched records. All other data from FCS administrative records.

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IV. Sample: 2007-08 through 2009-10 FCS graduates with a regular diploma. Post-secondary enrollment outcomes from NSC matched records. All other data from FCS administrative records.

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V. (*top left*) Sample: 2007-08 through 2009-10 FCS graduates with a regular diploma. Post-secondary outcomes from NSC matched records. All other data from FCS administrative records.

V. (*top right*) Sample: 2007-08 through 2009-10 FCS graduates with a regular diploma that we ever observed eligible for free or reduced lunch in FCS. Post-secondary outcomes from NSC matched records. All other data from FCS administrative records.

V.I (*middle*) Sample: 2004-05 through 2006-07 FCS graduates with a regular diploma. Post-secondary enrollment outcomes from NSC matched records. All other data from FCS administrative records.

VI. *(bottom)* Sample: 2006-07 through 2008-09 FCS graduates with a regular diploma that seamlessly enrolled. Post-secondary enrollment outcomes from NSC matched records. All other data from FCS administrative records.

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VII. Sample: 2007-08 through 2009-10 FCS graduates with a regular diploma who seamlessly enrolled. Post-secondary enrollment outcomes from NSC matched records. All other data from FCS administrative records.

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QUESTIONS REGARDING THE FCS COLLEGE-GOING DIAGNOSTIC?

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