What Happens When We Take Data Seriously?

INSTITUTIONAL CONTEXT

A little over a decade ago, less than a third of Georgia State University students were graduating, and students from minority populations, in particular, were floundering. The share of students from an entering class who completed their degrees was 22 percent for Latinos and 29 percent for African Americans. Low-income students were graduating at rates far below those of their middle- and upper-income classmates. At the same time, the university doubled the number of low-income and minority students it enrolls. And when the 2008 recession hit the state of Georgia, Georgia State's funding from state appropriations was slashed by $40 million.

In the face of changing demographics and declining funding, Georgia State University asked a simple question: What if it were to take the troubling student outcomes data seriously? What if it were to use data to diagnose the reasons that students were dropping out and to design and implement innovative interventions to help keep students on track to complete their degrees?

USING DATA TO IMPROVE STUDENT OUTCOMES

GPS ADVISING. In 2010, Georgia State assessed the state of academic advising. The results were sobering. Serving tens of thousands of at-risk students, advisors were simply overwhelmed. Since no one at the university was monitoring the effectiveness of advising thousands of students were failing courses, losing scholarships, and dropping out before any advisor reached out to help. These students were often low-income and first-generation individuals who lacked the context to self-diagnose when they were struggling.

Collaborating with the Education Advisory Board and using ten years of Georgia State student-level data, the university identified past, recurring academic behaviors exhibited by struggling students. For instance, they found that 75 percent of political science majors who earned an A or B in their first political science course at Georgia State went on to graduate on time. By contrast, only 25 percent of political science majors who earned a C in their first course graduated on time, yet the university had passed them on without intervention.

The solution was a new type of data-informed advising platform called GPS Advising that identifies more than 800 challenges and tracks every student daily to see if a problem has emerged. Did students register for the wrong courses? Did they do poorly in a prerequisite course? Are they in a major for which they are academically unprepared? When an alert goes off, an advisor reaches out to the student. Over the past twelve months, academic advisors have initiated more than 51,000 one-on-one meetings with students based on personalized alerts from this new advising platform. Since GPS Advising went live four years ago, the class of 2015 took, on average, about half a semester less to graduate than the class of 2013—saving students almost $10 million dollars in tuition and fees.

ASSOCIATION OF PUBLIC & LAND-GRANT UNIVERSITIES

POSTSEC DATA

Georgia State University

SUMMER SUCCESS ACADEMY. Five years ago, Georgia State learned that 50 percent of students who performed poorly in certain high school classes such as third-year English composition dropped out of Georgia State after one year, leaving with debt and little to show for it. In 2011, Georgia State began admitting these students, about 400 each year, and required them to attend the Summer Success Academy — a 7-week summer program before the start of fall courses. These students take seven credits of college-level, non-remedial courses and are given the full support of GSU's tutoring, advising, financial literacy, and academic skills programs. All students are in learning committees, a practice demonstrated to lead to greater student success. Last year, 87 percent of the academy's students successfully completed their first-year courses and came back for their sophomore year—up 37 percentage points from classes prior to the program.

PANTHER RETENTION GRANTS. Each semester, hundreds of students are dropped from classes due to lack of financial resources to pay fees. A data analysis of these students' GPA, progress toward degree, and student bills revealed that many of these students were academically qualified and on track for graduation and the financial shortages were relatively small—only a few hundred dollars. With an average award of $900, Panther Retention Grants (PRG) cover the gap between what college students can pay and the full costs of their tuition and fees, allowing students to stay enrolled. Eighty-two percent of the seniors who received PRG support last academic year either graduated or were still enrolled one year after receiving the grants.

RESULTS

Thanks to a data-informed, campus-wide commitment to student success, Georgia State's graduation rate has improved by 22 percentage points since 2003. As Figure 1 shows, rates are up 36 points for Latinos (to 58 percent) and 29 points for African Americans (to 58 percent). Latino, African American, low-income, and first-generation students now all graduate at rates at or above that of the student body overall—not just narrowing achievement gaps but closing them.

Georgia State now graduates more Hispanic, Asian, first-generation, and low-income students with bachelor degrees than any other university in Georgia, and for the last four years, it has conferred more bachelor degrees to African-Americans than any other non-profit college or university in the United States.

Figure 1. Graduation Rates by Race & Ethnicity

Legend: ■ Ten Years Ago ■ Today
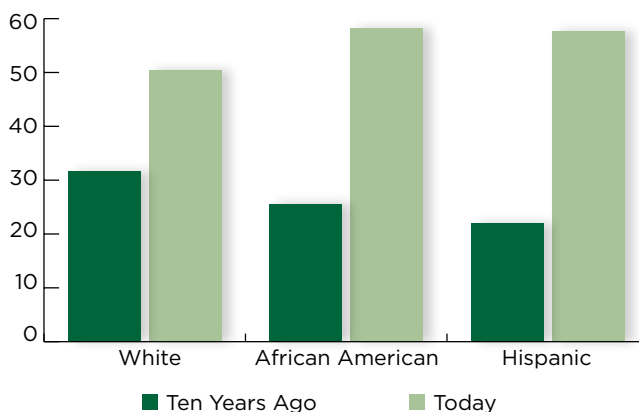
BACHELOR'S DEGREES AWARDED						
	09-10	10-11	11-12	12-13	13-14	14-15	5-YR Change
African American	1,001	1,322	1,440	1,550	1,692	1,825	82%
Pell	1,298	1,648	1,835	2,007	2,052	2,501	93%
Hispanic	196	300	328	372	414	435	123%

LESSONS LEARNED

Georgia State made the following discoveries during their journey:

▶ **Use data to ensure students receive targeted help based on how they did in specific high school and college courses, in their chosen majors, and in their desired careers.** Avoid developing programs to serve large, broad categories of students (e.g., African American males, Latinos, low-income students). Not all students who fall into any one of these broad categories are alike, and institutions risk delivering services that the students do not need or, worse, fail to provide them with the help that they do need.

▶ **Seek possibilities for tracking employment outcomes for students post-completion to design programs that improve career success.** Institutions must have these data for full-time first-year students as well as for part-time students, transfer students, adult learners, and others. Where such data are lacking or outright excluded from our state and federal tracking systems, the initiatives to improve student success are undermined. In short, for big-data approaches to work in helping individual students succeed, universities must be able to track data by *individual* student record across the students' entire educational and post-education careers. Too often, this is not possible – or even prohibited – under current state and federal policies governing student data.