College Readiness: Massachusetts Compiles the Data

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Until recently, the world of K-12 policy rarely intersected with the world of higher education policy. Schools developed standards, curricula, and instructional practices without considering how they might relate to expectations in a college environment, and postsecondary institutions structured their programs and coursework without thinking about how to help students bridge the transition from high school competence to college success. As a result, many students enrolled in college only to find that they needed to take substantial remedial coursework before they could begin to earn college credits, or that they had mastered high school material but were not prepared to meet higher expectations in college. Too frequently, they would grow discouraged and simply drop out.



After years of observing this sobering pattern, high schools and colleges increasingly agree that they share responsibility for ensuring that students leave the K-12 system prepared to be successful in college. However,

First-Semester Remedial Enrollment

Massachusetts Public High School Graduates at Massachusetts Public Colleges, Class of 2005



they often lack information on the nature and magnitude of the problem, particularly how it affects the students actually enrolled in their institutions.

To that end, the Department of Elementary and Secondary Education and the Department of Higher Education have collaborated to develop a school-to-college database that collects information on Massachusetts public high school graduates who enroll in Massachusetts public postsecondary institutions—both two-year and four-year colleges. The database has already demonstrated that it is a powerful tool for policymaking and for helping students to make the leap from high school to college.

The High School Class of 2005

The first report from the database answered a critical question, one that Massachusetts had never been able to answer before: How many Massachusetts public high school graduates enroll in Massachusetts public colleges?

As it turns out, about 19,500 public high school graduates—33 percent of the

graduating class—enrolled in a Massachusetts public college in the fall after their high school graduation. A few hundred more enrolled after taking some time off, but the lion's share of those who enrolled in college within five years of high school graduation do so immediately after high school. Of those 19,500 students, approximately 5,900 enrolled at a University of Massachusetts campus; 4,900 at a state college; and 8,700 at a community college. All but 2 percent of state university and state college students enrolled as full-time degree-seeking candidates; at community colleges, the rate was 80 percent.

The most powerful statistics in the report, however, are on remediation rates. (See "First-Semester Remedial Enrollment.") Students were placed into remedial courses if they score poorly on a placement exam when they arrived on campus; some also elected to enroll in them voluntarily. The report showed that 37 percent of the class of 2005 who went on to public colleges in Massachusetts enrolled in at least one remedial subject during their first semester in college; 15 percent enrolled in at least two. This means that more than one-third of Massachusetts public high school graduates arrived at the state's public colleges and universities not ready to take collegecredit-bearing coursework in at least one subject area.

Remediation rates were substantially higher for community college enrollees, at 65 percent. But the problem is not confined to two-year schools: 22 percent of state college enrollees and 8 percent of state university enrollees took at least one remedial subject in their first semester, too. Mathematics was the most problematic subject; 29 percent of public high school graduates took a remedial course in mathematics, versus 15 percent in writing and 11 percent in reading. Importantly, students who had achieved proficiency on the grade 10 MCAS tests were far less likely to require remediation than those who had scored at Needs Improvement, suggesting that attaining proficiency in high school is an important step toward college readiness.

Access and Success

Another key policy concern in Massachusetts is whether traditionally disadvantaged students, such as those from low-income families or with limited English proficiency, experience equal access to and success in college.

The demographic characteristics of the state's public college enrollees who had attended public high schools were nearly identical to the state's public high school graduating class as a whole. Differences emerged, however, in remediation and reenrollment rates. For instance, nearly 60 percent of African Americans and Hispanics, and more than half of low-income students, who graduated from Massachusetts public high schools enrolled in at least one remedial course in their first semester, as compared with 37 percent of the total cohort. Similarly, while 81 percent of public high school graduates overall reenrolled for a second year, only 71 percent of low-income students did. (See "Remediation and Reenrollment Rates.")

This suggests that high schools are doing well in setting an expectation of college for their graduates but it raises concerns about whether these students have access to a high school curriculum that prepares them adequately to succeed once they arrive on campus.

Digging Deeper

After establishing the statewide patterns of college enrollment and readiness, the state next issued reports to each of 296 Massachusetts high schools that sent 10 or more of their graduates on to Massachusetts postsecondary institutions in fall 2005. These reports offered superintendents and principals their first opportunity to observe the patterns of college enrollment and success for their own schools' students and should serve as a benchmark against which to compare future performance and outcomes.

The reports revealed a wide range of outcomes by high school. For instance, 44 high schools sent fewer than 20 percent of their graduates on to public higher education, while 20 sent 50 percent or more. Similarly, though the average remediation rate was 37 percent statewide, one-fifth of high schools saw 50 percent or more of their graduates taking at least one remedial course in their first semester.

The public colleges also have found uses for the database, requesting reports to improve their understanding of the student bodies from which they draw enrollees. For example, the database allowed them for the first time to know what share of their entering students had taken at least one Advanced Placement course in high school. Previously, they had known only who had taken the AP tests but not how many had been exposed to college-level work without

Remediation and Reenrollment Rates, High School Class of 2005

Group (status in high school)	Percent enrolled in at least one remedial course, first semester in college	Percent reenrolled for a second year in fall 2006
Overall	37	81
African American	59	74
Asian or Pacific Islander	33	83
Hispanic	58	69
White	34	82
Low income	52	71
Special education	63	74
Limited English proficiency	50	80

actually taking the test. The database also allowed the colleges to learn how many of their enrolling students had been placed in special education programs in high school, as well as which high schools send a large share of their graduates to the college and thus might be potential partners for college readiness programs.

Next Steps

Massachusetts education policymakers are already using the information from the database to drive change throughout the educational system. The governor featured the remediation rate in his education policy agenda as a call to action and a key benchmark against which K-12 system performance can be measured. The findings have also spurred the state to define a recommended high school program of studies for college readiness and to invest more heavily in programs that, for example, expose high school students to college-level work through Advanced Placement and encourage simultaneous enrollment in college courses while still in high school.

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Schools and districts are putting the findings to work at the local level as well. Representatives from the state educational agencies are working with schools and districts to help them understand their reports and translate the results into school programs and activities. And districts are developing more partnerships with local public colleges and universities to ease the transition from high school to college. For example, the Berkshire Compact-a Berkshire County partnership uniting local public schools, public colleges, and businessesenables every sixth grader to visit a local college and gives high school students increased opportunities to enroll in college courses free of charge.

Even with all this activity, Massachusetts has only begun to tap the potential of the School-to-College database. The state expects to continue to issue reports to high schools and colleges each year as well as to expand the information available in the database so that it can answer more-sophisticated questions about college preparation and success for Massachusetts public high school graduates. Fall 2009, for instance, will be the first opportunity to learn how many students from the high school class of 2005 graduated on time from four-year schools. With information like that in hand, the database will continue to contribute important information to the educational policy debate in Massachusetts for years to come.

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