# College Counseling in the Classroom

*A low-cost approach improves postsecondary planning and outcomes*

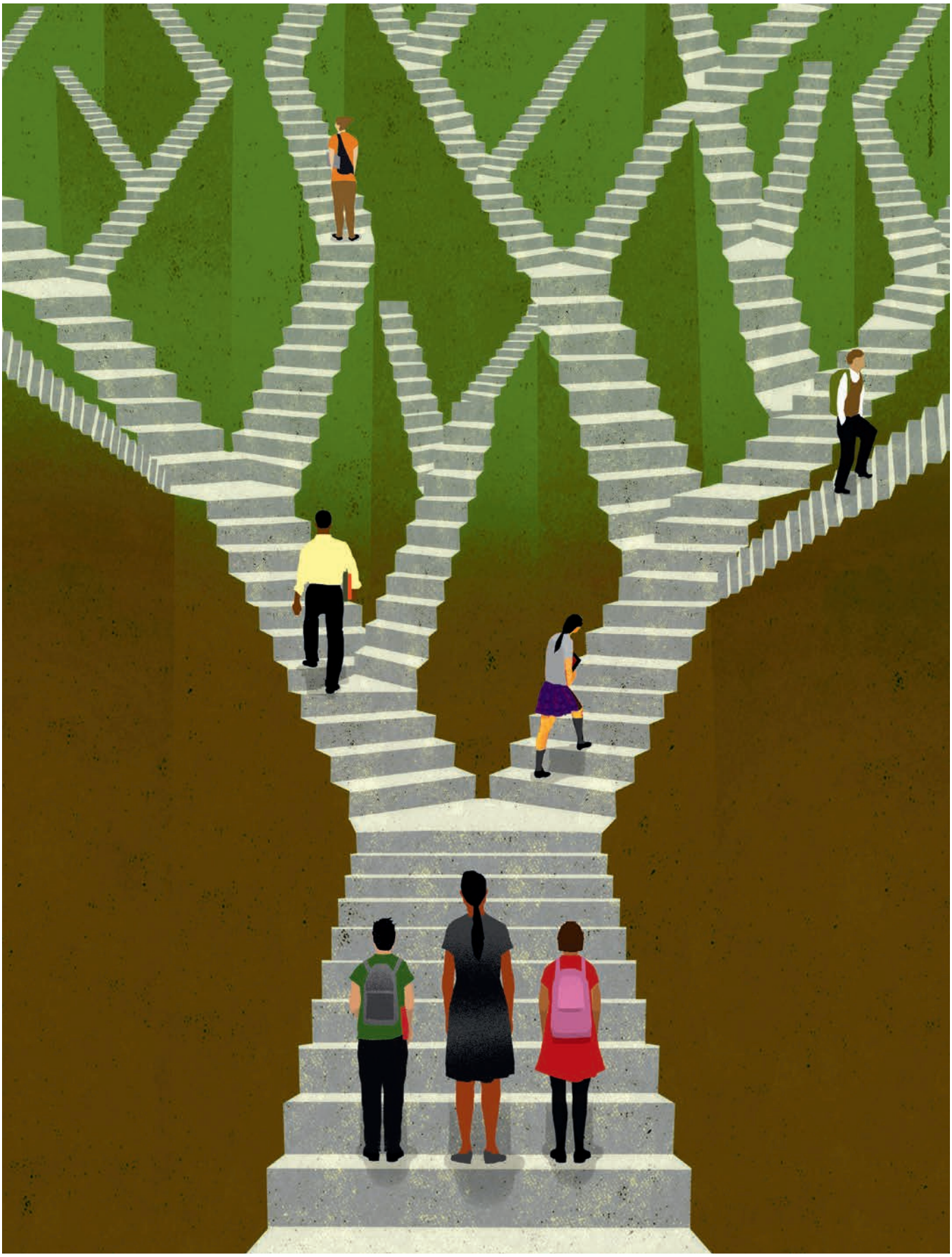
As they approach the end of high school, students face a major life decision. Should they go to college?

In many high-income families, the college conversation occurs early and often—and no wonder, because parents probably attended college themselves. These families tap professional networks for recommendations, arrange campus visits, investigate gap years and other postsecondary alternatives, and engage consultants to suggest best-fit schools and polish application essays.

By contrast, students from economically disadvantaged families, whose parents may not have attended college, tend to rely on in-school information and guidance from school counselors. While research shows that effective counselors can boost student outcomes (see "Better School Counselors, Better Outcomes," research, Summer 2020), they typically carry heavy caseloads that limit individual support: The national average is 470 students per counselor and upwards of 1,000-to-1 at schools that serve large numbers of low-income students.

This relative lack of information substantially impacts low-income students' postsecondary success. Many high-achieving low-income students do not enroll in college at all, and those who do often "undermatch," enrolling in less-selective, under-resourced schools where they have a greater probability of dropping out (see "Expanding College Opportunities," *research,* Fall 2013). At the same time, after decades of expecting "college for all," many low-achieving, low-income students enroll in a less-selective college without sufficient information about whether it's the right fit, or if they are prepared to succeed, and quickly drop out—with dire economic effects. Within eight years of leaving high school, 66 percent of students from high-income families earn a degree or credential compared to 26 percent of economically disadvantaged students, federal data show. Meanwhile, one in four U.S. adults under age 40 carries education debt, including a median of between $10,000 and $14,999 for college dropouts.

By JOSHUA HYMAN



BRIAN STAUFFER

How can high schools better support low-income students through this high-stakes decision-making process? Expanding the number of in-school counselors is unlikely given the cost, but what if college planning were part of a school's curriculum and therefore taught by teachers? I designed an experiment that compared post-graduation outcomes among students at high schools randomly assigned to teach, or not to teach, an 18-week college-planning curriculum, either as a standalone class or part of a senior-year humanities course. I find a range of benefits, at a cost of about $8 per student.

The main impact isn't that more students enroll in college; in fact, the initial college-going rate remains about the same. Instead, the course influences *which* students go to college: high-achieving students, defined as having above-median GPAs and scores on the SAT, are 4 percent more likely to enroll in either a two- or four-year college, while low-achieving students are 9.5 percent less likely to enroll.

**A relative lack of information has substantial impacts on low-income students' postsecondary success.**

Students also have higher rates of persistence and are more likely to earn an associate degree within six years of high school graduation. The effects are largest for low-income high achievers, who are 6 percent more likely to enroll in college and 11 percent more likely to earn a two- or four-year degree. At the same time, I also find that while enrollment among low-income, low-achieving students falls by 9.5 percent, there is no decline in the share of those students earning a degree. In other words, offering a college-planning curriculum nudges a greater share of academically prepared students to enroll and succeed in college, while some of the students who would be most likely to drop out opt not to enroll in the first place.

Deciding whether, where, and what to study in college is complex, with uncertain costs and returns and substantial implications for degree attainment, lifetime earnings, and education debt. With a very low cost and estimated benefit of up to $5,410 per student, classroom instruction in college planning is a promising intervention to guide young adults toward their best next steps.

## An Experiment in Michigan

To estimate the effects of a college-planning curriculum, I designed a randomized control trial and worked with partners in Michigan to carry it out. The state superintendent of schools invited every Michigan high school to take part; ultimately 62 schools opted to participate. The nonprofit Michigan College Access Network developed the curriculum and trained course instructors.

The curriculum covers a range of topics and is taught from September through mid-January, when students typically prepare and submit college applications. The first three weeks of the class focus on the costs and benefits of attending college, different school types, and the match between students' qualifications and preferred colleges. Weeks 4–9 guide students through the application process with the goal of completing at least three applications—one reach school, one safety, and one match—in time for submission deadlines. Weeks 10–14 teach how to apply for financial aid, budgeting, and managing finances in college. The final four weeks cover career exploration, résumé building, and the final steps to enroll and succeed in school, including accepting an offer of admission, registering for orientation and placement exams, choosing a smart first-year course schedule, and deciding on a major. While much of the curriculum focuses on application steps to four-year colleges, the curriculum also emphasizes community college enrollment and the process of transferring from two-year to four-year schools.

My experiment took place during the 2016–17 school year. Each participating high school chose how the curriculum was delivered, with the goal of two or more sessions per week for a minimum of 90 total minutes. About half of schools taught the college-planning program during an existing 12th grade class (most commonly English), one in four created a new, standalone class, and 21 percent taught the curriculum during homeroom or a senior advisory period. Schools also could choose which staff taught the class. More than half of instructors were English teachers, and just 7 percent were school counselors. The rest were a mix of classroom teachers and other school staff.

My study includes all 6,704 12th grade students at the 62 schools. This sample is 56 percent white, 36 percent Black, and 5 percent Hispanic, and 53 percent qualify for free or reduced-price school meals. Some 33 percent of students live in a suburb, 27 percent are from rural communities, and 23 percent live in a city. Just four percent of study participants attend a charter school. Study participants have an average 10th grade GPA of 2.49 compared to 2.59 statewide. All students take the SAT, which is required in Michigan, with an average score of 917 for students in my study compared to 996 statewide.

I divided the schools into two equal groups and assigned half to enroll a portion of their grade 12 students in the college-planning curriculum during fall 2016. The class was not required, but schools were asked to enroll at least 50 percent of 12th graders, and ultimately 63 percent of eligible students took part. The other half of schools, the control group, did not offer the curriculum in fall 2016, but instead offered it in fall 2017.

A comparison of postsecondary outcomes for all 2016–17 seniors across both groups of schools provides the causal effects of a school offering the program. I examine effects on college

enrollment, persistence, and degree receipt, as well as on school type and declared major. I use administrative data from the Michigan Department of Education and Center for Educational Performance and Information that include postsecondary enrollment and degree-receipt data from the National Student Clearinghouse and state Student Transcript and Academic Record Repository. I look at whether students enroll in college within four years of high school graduation, and for those who do, whether they persist and earn a degree within six years.

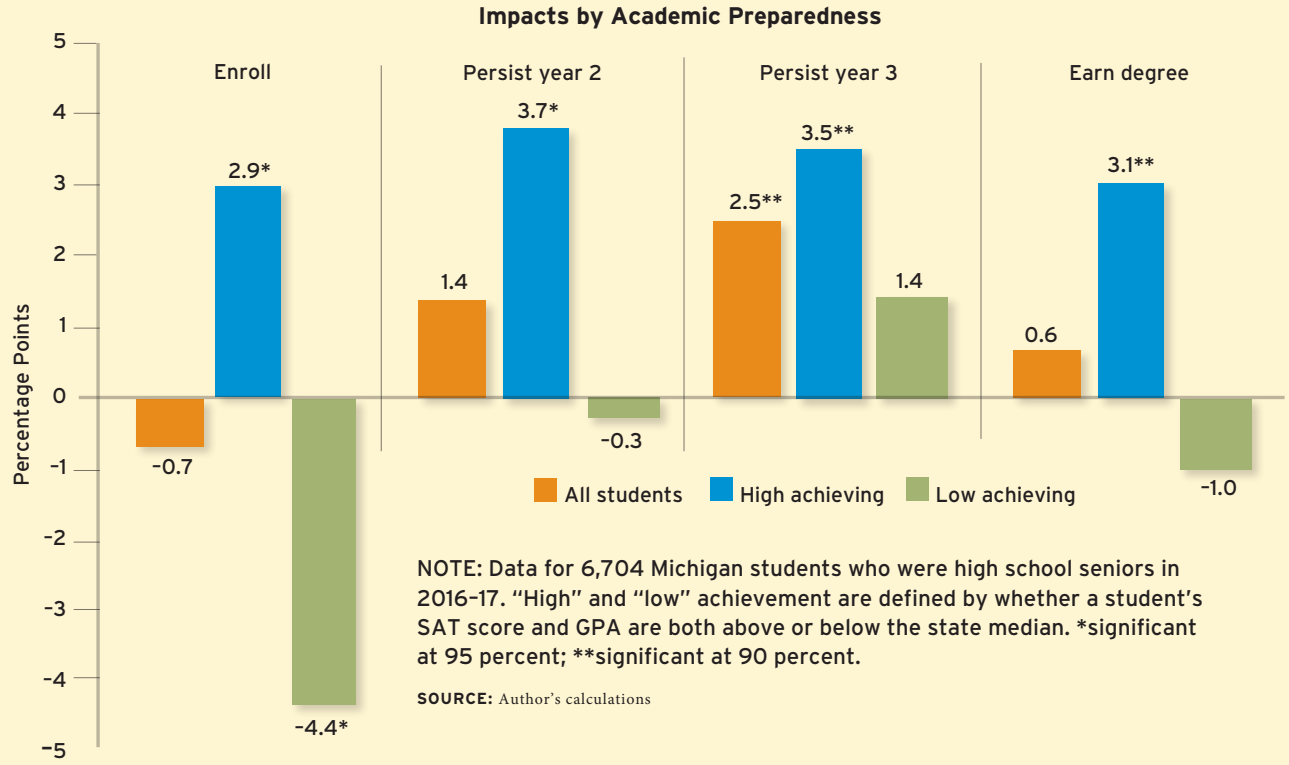
My analysis focused on school-level effects; that is, I compare outcomes for all students at schools that did or did not offer the program, rather than comparing outcomes for individual students who did or did not take the course. This accounts for "spillover effects" across students within a school, where students who take the class share their increased college knowledge with students who don't. I view this as a positive aspect of the program, and one that I want to capture as part of its effects. This scenario also reflects the likely real-world situation where a curriculum is made available but not forced on every student.

## Impacts on College-Going

Offering a college-planning class has negligible effects on overall college enrollment but significant impacts on which students attend and persist in their studies. When high schools offer a college-planning class, high-achieving students are 4 percent more likely to enroll in postsecondary schooling and low-achieving students are 9.5 percent less likely to enroll (see Figure 1). This upward shift in the achievement level of college enrollees is accompanied by positive findings for persistence. Low-achieving students are just as likely to persist through their second year of college and more likely to persist to year three despite the large enrollment reduction. High-achieving

### Stronger Postsecondary Outcomes at High Schools That Teach College Planning *(Figure 1)*

When high schools offer a college-planning class, students' postsecondary outcomes shift in line with their level of academic preparedness. High-achieving students are more likely to enroll, persist, and graduate from college within six years. Low-achieving students are less likely to enroll within four years of high school, but no less likely to enroll for at least two years or to earn a degree, suggesting that the students prevented from enrolling would have quickly dropped out in the absence of the program.




NOTE: Data for 6,704 Michigan students who were high school seniors in 2016–17. "High" and "low" achievement are defined by whether a student's SAT score and GPA are both above or below the state median. *significant at 95 percent; **significant at 90 percent.

**SOURCE:** Author's calculations

students are 7 percent more likely to persist to year three.

In terms of degree receipt, high-achieving students are 8 percent more likely to earn a degree within six years. I find no significant change in the likelihood of low-achieving students earning a degree. Taken together with the reduction in postsecondary enrollment for low-achieving students, these findings imply that the students who the intervention caused not to enroll would have quickly dropped out.

I then compare student outcomes based on both high-school performance and economic disadvantage. Achievement in high school is positively correlated with student economic advantage, raising the possibility that the effects are concentrated among advantaged students, with little or no improvements for economically disadvantaged students.

I find the opposite: Increases in enrollment, persistence, and degree receipt are concentrated among low-income, high-achieving students (see Figure 2). Low-income high achievers are 6 percent more likely to enroll in college, 13 percent more likely to persist to their third year, and 11 percent more likely to earn a degree within six years of high school graduation. This is substantial, given the importance of boosting the postsecondary attainment rates of high-achieving, economically disadvantaged students. I find no such impacts for high-achieving students who are not economically disadvantaged—their rates of enrollment, persistence, and degree receipt do not change with access to a college-planning class at school.

**Deciding whether, where, and what to study in college is complex, with uncertain costs and returns and substantial implications for degree attainment, lifetime earnings, and education debt.**

Overall, the presence of a college-planning class does not boost enrollment among economically disadvantaged students, but I find evidence of improved persistence. Low-income students who enroll in college are about 18 percent more likely to persist to a third year if their high school offers a college-planning class. Low-income, low-achieving students are less likely to enroll in college, but more likely to persist to years two and three. I find no negative effects on degree receipt.

## Effects on School Choice and Major

One channel through which the intervention could increase persistence is by affecting where students enroll. Persistence rates vary dramatically across institutions, with the increased college dropout rate and slowing time-to-degree in the United States over the last few decades due in part to differences across colleges in characteristics such as instructor quality, resources for student support, and peer effects.

I look at whether students enroll in a two- or four-year school, as well as how many students transition between the two. The college-planning curriculum emphasizes both the opportunity to apply community-college credits toward a bachelor's degree and the value of an associate degree in the labor force. I find that it increases the fraction of students enrolling in both a two-year and four-year institution within four years of graduating high school by 27 percent. This impact is largest for low-income, low-achieving students, who are 16 percent less likely to enroll in only a two-year school but 94 percent more likely to enroll in both types of institutions.

While some of this effect is actually due to students attending a four-year and then two-year institution, it is clear that the intervention causes a substantial number of low-achieving, economically disadvantaged students—who otherwise would have enrolled only in a community college—to successfully transition from a community college to a four-year institution.

I next examine effects on the match between student academic preparation and college quality. I consider a "safety" college for a student to be either a two-year college, regardless of a student's SAT score, or a four-year college where the student's SAT score is above the 75th percentile of enrolled students at that school. I consider a "match" college to be a four-year institution where the student's SAT score is between the 25th and 75th percentile. Finally, I consider a "reach" school one where the student's SAT score is below the 25th percentile.

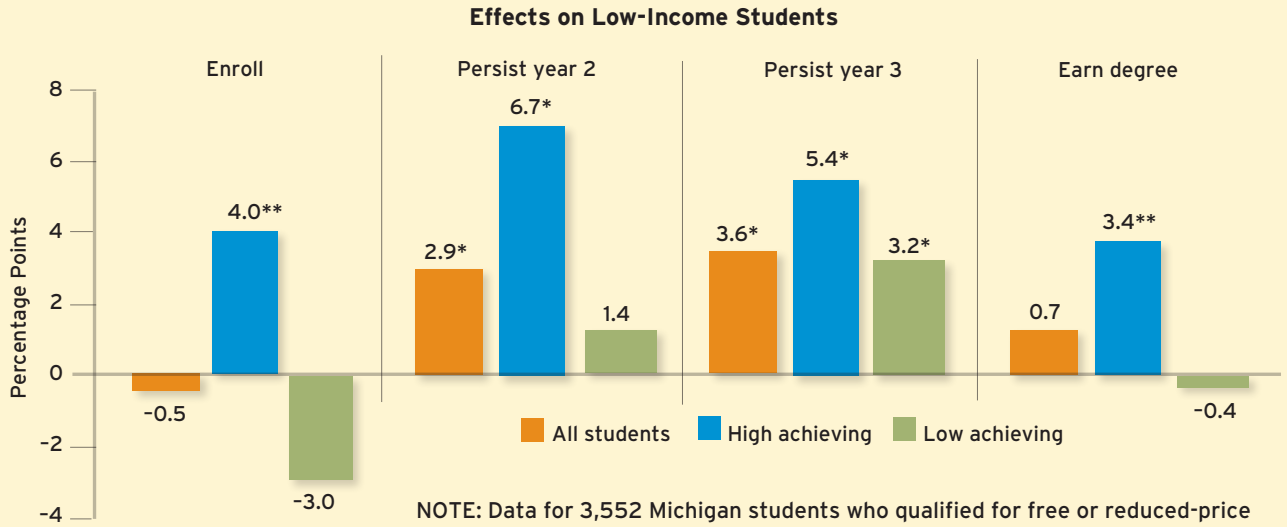
The college-planning curriculum increases the fraction of students who enroll in both a safety and non-safety (either a match or reach) college by 23 percent and decreases the fraction of students who enroll *only* in a safety college by 6 percent, though that difference is not quite statistically significant. Still, this suggests that students who in the absence of the intervention would have only enrolled in a community college or a low-quality four-year institution, instead also enroll at a better-fit college.

The curriculum emphasizes avoiding "undermatch" in school choice, because community colleges and non-selective four-year institutions tend to have fewer resources and lower graduation rates. However, I find that low-income, high-achieving students are 12 percent more likely to enroll at a safety school. It seems this messaging succeeded in preventing low-achieving students who would have enrolled at these types of institutions from doing so, but not in inspiring low-income, high-achieving students to enroll in more competitive schools.

I also look at students' choice of major. The curriculum covers career exploration, with the goal of identifying high-growth

## Largest Effects for Low-Income, High-Achieving Students *(Figure 2)*

High-achieving, economically disadvantaged students are more likely to enroll and persist in college when their high schools offer a college-planning class. Low-income, low-achieving students are less likely to enroll but more likely to persist. Among all low-income students, high achievers are more likely to earn a degree.




NOTE: Data for 3,552 Michigan students who qualified for free or reduced-price school meals and were high school seniors in 2016–17. See Figure 1 note.

**SOURCE:** Author's calculations

occupations of interest and aligned courses of study. I specifically measure whether more students major in subjects related to high-earning careers: science, technology, engineering, mathematics, economics, and business. Low-income, high-achieving students are nearly 11 percent more likely to enroll in college and pursue one of these majors. There are no increases in the number of students enrolling and majoring in a low-earning field.

## An Efficient Intervention

School counselors are the main source of college advising for low-income high school students but are woefully understaffed in high-need schools. I find that when schools offer a college-planning curriculum for high school seniors taught by teachers, students have greater exposure to four-year institutions, are more likely to enroll in college full time, and additionally, have increased "college knowledge."

While the college-planning curriculum does not increase the number of students earning bachelor's degrees, students are 15 percent more likely to earn an associate degree within six years. The benefits of these credentials far outweigh the program's financial cost.

On average in Michigan, an associate degree increases an individual's annual earnings by $9,753 (in 2022 dollars). In weighing the contribution of the program and assuming a 40-year working life, I find that the net present value of this increase for every student enrolled in a participating school ranges from $2,176 to $2,931. For high-achieving students, who are 19 percent more likely to earn an associate degree, the estimated benefit is nearly twice as large, between $4,016 and $5,410. These net present benefits in lifetime earnings are arguably modest in size, yet they dwarf the program's minimal cost of about $8 per student.

This near-zero financial cost is an important strength of the intervention. Schools serving large numbers of economically disadvantaged students are rarely in the financial position to hire additional counselors or implement a new college-going intervention, even if it is relatively inexpensive on a per-pupil basis. Yet these students are underrepresented on college campuses and arguably most in need of direct support in navigating admissions and enrollment decisions. A college-planning curriculum delivered by classroom teachers represents a promising alternative.

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