

College coaching programs show promise as a way to boost enrollment in higher education.

One of the nation's biggest policy challenges and opportunities centers on the US college-going and graduation rate. Relative to the rest of the Organisation for Economic Co-operation and Development (OECD), the United States has fallen from world-leader status on these two measures to middle of the pack. The Obama administration has pursued a variety of policies to enhance both college going and graduation—policies that include increasing Pell Grants and refundable tax credits (such as the American Opportunity Tax Credit), and providing new information via scorecards that rank colleges on the basis of graduation rates and earnings of their graduates. The colleges of the providing reduction rates and earnings of their graduates.

Economists, education researchers, and other social scientists have spent the last five to 10 years designing and evaluating a variety of innovative measures to encourage college attendance. Some of the more promising interventions include having tax preparers autofill the Free Application for Federal Student Aid (FAFSA), texting college-bound high school graduates to remind them of key deadlines (including course registration and student orientation), and texting college students with reminders to refile the FAFSA each year.³ Other researchers have contacted high-achieving, low-income high school seniors to inform and prompt them to apply to a broad range of selective colleges, including ones where the student was likely to be admitted and receive a substantial amount of financial aid.⁴

A New Approach

In our National Bureau of Economic Research working paper, we investigate a somewhat different and more intensive intervention. We started with the premise that many academically capable high school seniors do not apply to college because they are intimidated by the process, lack parental support, or are stymied by their own tendency to procrastinate. Our intervention attempted to mitigate all three of those problems through an intensive mentoring program.

We teamed up with the New Hampshire Department of Education and high schools throughout the state, all of which were excellent partners. We asked guidance departments to identify seniors who had expressed interest in college but, as of December of senior year, had made little or no progress on filing a college application. We randomly assigned half of the high school seniors to receive help from a Dartmouth undergraduate student who coached the high school student through the application process. The mentors visited the students for one to two hours each week until applications were completed. In addition to college-application coaching, we paid for application fees, College Board fees, and in some cases, we paid students a \$100 bonus for completing the process.

Not surprisingly, being assigned to our mentoring treatment yielded large increases in the likelihood that a student applied to college. Eighty-five percent of students assigned to the treatment group applied to college versus 60 percent of control-group students.

Of even more interest is the fact that our intervention had large impacts on college going, particularly for the women in the sample. Even though only half of the women assigned to the mentoring treatment actually pursued the offer, the treatment women were 14 percentage points more likely to attend college in the first year after high school (that is, 14 percentage points above the baseline college-going rate of 30 percent.) And considering that only half of the assigned women took advantage of the mentorship, the estimated treatment effect of the program for that subset was 28 percentage points.

When we examined effects on attending a four-year college, the results were even more striking. Women assigned to the mentoring treatment were 11 percentage points more likely to enroll in a four-year college. This is almost a doubling of the baseline rate of 14 percent of control-group women enrolling in a four-year college. And again, if we consider women who actually accepted the treatment once offered, the effects are twice as large.

An important question with our intervention is whether, even though we were successful in encouraging students to attend college, they actually persisted in college. It is possible that students are even harmed by a short and potentially expensive spell of college attendance. Our analysis showed that treatment students actually persisted into their second and third years of college at the same rate as control-group students. In other words, the marginal students that we induced to attend college persisted as much (or as little, at 50 percent) as all of the other college-bound students in the sample.

Digging Deeper

Naturally, we wanted to investigate the program further and determine which aspects were the most effective and for which types of students. We tried to pursue these deeper questions by separating the experiment into different components and by surveying the students who were in the sample to learn more about their personality characteristics and their sources of college-going support.

We discovered a number of interesting patterns. Most important, the mentoring program is particularly effective for students who do not or cannot rely on parents and friends for help with college applications. About half of the students in our sample said that they were unable to rely on parents to help with applications, and our treatment effects are much larger for them.

Second, the \$100 cash bonus that we paid students for completing the program was not the primary motivator for completing applications. However, the cash bonus does appear to have been a good incentive to get students in the door to start the process. In cohorts where we removed the cash bonus, student willingness to accept our offering of mentoring fell from 50 percent to a mere 19 percent.

One mystery is why the program is so much more effective for women than for men. On the basis of our sample and American Community Survey data, we believe that high school–educated men in New Hampshire have more access to higher-paying jobs than do high school-educated women.
Our working hypothesis is that the men in our sample are more likely to be drawn into the labor market immediately after high school by relatively highpaying jobs in skilled trades, construction, and manufacturing. Specifically, men in the sample were much more likely

than women to report they had a career path that they preferred to college. And among the non-college-educated workers, the men report average wages that are 30 percent higher.

We also considered interventions that were less intense than one-on-one mentoring. Specifically, we wanted to try nudges that would both inform students as to college opportunities and reduce the fear of the application process.

We tried an intervention in which we offered to aid a randomly chosen set of students by collecting their transcripts and sharing these transcripts with college admissions offices throughout the state. The college admissions offices then sent "likely" letters to strongly encourage qualified students to apply. We found that fewer than 10 percent of the students accepted our offer of help and even those that participated did not have increased rates of application and attendance.

Overall, we have contributed one piece to the complex puzzle of why many academically qualified students do not attend college in the United States. For some high school students, the application process appears to be overly daunting, and they simply need help to navigate the complexity. However, despite the demonstrated value of mentoring, we also believe that reminders, nudges, information provision, and process simplification can play a large role in tackling this nationwide challenge.

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Endnotes

- See Organisation for Economic Co-operation and Development, "Education at a Glance," http://www.oecd.org/education/eag.htm.
- ² See http://www.irs.gov/uac/American-Opportunity-Tax-Credit.
- ³ E. Bettinger et al., "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment," *Quarterly Journal of Economics* 127, no. 3 (2012): 1205–1242.
- ⁴ C. Hoxby and S. Turner, "Expanding College Opportunities for High-Achieving, Low-Income Students" (Stanford Institute for Economic Policy Research Discussion Paper 12-014, Stanford, California, 2013).
- ⁵ S.E. Carrell and B. Sacerdote, "Why Do College Coaching Interventions Work?" (working paper w19031, National Bureau of Economic Research, Cambridge, Massachusetts, 2015).

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