College Outreach and Student Outcomes

August 2018

Jessica Howell, The College Board
Michael Hurwitz, The College Board
Jonathan Smith, Georgia State University
The Higher Education Landscape and College Outreach

For many students, postsecondary education holds the key to social and economic mobility. Over the course of a lifetime, individuals with a bachelor’s degree earn nearly $400,000 more, on average, than individuals with a high school degree (Ma, Pender, & Welch, 2016). Research by Chetty et al. (2017) shows that colleges are successfully leveling the playing field; students from high- and low-income families who attend the same college have similar earnings outcomes later in life.

Despite the growing evidence that going to college leads to success, students still struggle with lack of access to information on the road to college. Many incorrectly estimate the cost of college, approach the college search process haphazardly, and are confused by the many steps in the application and enrollment processes (Page & Scott-Clayton, 2016). These potential missteps are especially pronounced for lower-income and first-generation students, and can lead these students to “wrong fit” colleges where they have a lower chance of college success.¹

Over time, many colleges have developed robust student outreach and recruitment programs that help students and families get the facts they need to make more informed college choices. This outreach is a valuable opportunity to correct the inequities and misinformation that has been documented in the research literature. Direct communications to students and families allow colleges to articulate their course offerings, financial aid programs, student services, and campus culture. Through this process, students have the opportunity to learn about the best possible college for their interests and needs. The research summarized in this Brief is among the first to estimate the impacts of such college outreach on students’ choices.

Student Search Service

The College Board’s Student Search Service® (Search) was established in 1972 to facilitate a connection between students and potential colleges and/or scholarship programs. Students who register for the PSAT/NMSQT® or the PSAT™ 10, the SAT®, and/or AP®, and provide contact information including mailing and email addresses, are given the opportunity to opt into Search during every exam registration and while engaging in college planning activities on the College Board’s BigFuture™ website. Students can opt out of Search at any time. Once students agree to participate in Search, colleges may request to license student names by selecting from available criteria. Criteria used by colleges frequently include student-provided information such as expected high school graduation date, cumulative GPA, geography, test score ranges, intended college major, demographics, and responses on student questionnaires regarding collegiate interests. For example, a college may license

¹ For example, see Roderick et al. (2008), Hoxby and Turner (2013), Radford (2013), Smith, Pender, and Howell (2013), Howell, Pender, and Kumar (2016).
the contact information of all residents of Georgia who are currently seniors and who received at least a 1200 on the SAT. After colleges and scholarship organizations license student names, they can engage in affirmative outreach efforts via mail or email, providing information about the college and opportunities available to prospective students. Students have the opportunity to opt out of student search at any time.

Data

The College Board recently analyzed data on SAT test takers in the 2015 and 2016 high school graduating classes. For each student, the dataset includes all assessment scores, demographic characteristics, and SAT score sending choices. SAT score sends are official SAT score reports that students send to colleges as official documentation of their SAT scores, which are an established measure of student interest in a college and likely college applications (Smith, 2017). These data are merged with data from the National Student Clearinghouse (NSC) with which each student ultimately enrolls following high school graduation. NSC data cover over 3,600 colleges and universities, which accounts for over 98% of college students enrolled in the United States.

Participation in the Student Search Service

Students who participate in the Student Search Service have better postsecondary outcomes. Compared to observationally identical students who do not participate in Search, students whose names are licensed sent 5.6% more SAT score reports (an action often considered a proxy for college applications) and were 12% more likely to enroll in a four-year college. The analyses underlying Figure 1 take into account the many differences that might drive a positive relationship between student participation in Search and college outcomes, including high school grades, SAT scores, gender, race/ethnicity, and differences in the high schools that students attend. That means, even if you look within a high school at students with the same gender, race/ethnicity, grades, and test scores, those who are licensed by at least one college via Search are substantially more likely to enroll in a four-year institution after high school graduation than those who are not licensed.

2. In line with the licensing agreement, the College Board monitors colleges’ use of the information.

3. Colleges can and do use Search for non–SAT test taking students who take the PSAT/NMSQT, the PSAT 10, and/or the AP. Our analyses here are limited to the subsample of students who take the SAT since SAT score sending behavior is one of our primary outcomes.
Notes: The estimates are the coefficients from regressions of the above outcomes on a binary variable if licensed at least once using the 2015 and 2016 Student Search Service data. Controls include SAT score, race, parental income and education, cohort, and high school fixed effects.

One additional license causes shifts in students’ SAT score sending behavior and college choice. Figures 2 and 3 show the causal effect of colleges’ outreach, enabled by Search, on students’ choices, among students who have opted in to Search. Overall, students whose information is licensed through Search are 23% more likely to send their SAT scores to a licensing college and 22% more likely to enroll in a licensing college compared to identical students who also met the college’s Search criteria but were not licensed and also opted in to Search.4

Importantly, Figures 2 and 3 also show that the positive impact of Search is largest for student subgroups who are historically underrepresented and under-resourced. For example, black and Hispanic students who receive Search–enabled college outreach are 46% and 66%, respectively, more likely to send their SAT scores to the licensing colleges than identical black and Hispanic students who do not receive Search–enabled college outreach. Figure 2 also shows that students from lower-income families with less educated parents and lower SAT scores are also more responsive in their SAT score sending choices than identical students who are not licensed.5

4. The base rate of SAT score sending to the licensing college is less than 0.5%, so 23% is roughly a 0.1 percentage point increase. Similarly, a 22% increase in enrollment probability reflects a 0.02 percentage point increase on top of a base rate of 0.1%.

5. In related research, Moore and Cruce (2017) show that opting into ACT’s analogous program to Search (the Educational Opportunity Service), which should increase the number of times a student is licensed, increases ACT score sends. Moore and Cruce (2017) do not disaggregate their results for different student subgroups or look at how college enrollment choices are affected.
Figure 3 shows students’ responsiveness to college outreach when it comes to actually enrolling in college. For example, relative to identical black peers who are not licensed through Search, black students whose information is licensed and who receive college outreach are 43% more likely to enroll in the licensing institution. The strong SAT score sending response to college outreach among Hispanics observed in Figure 2 dissipates substantially at the enrollment stage in Figure 3; Hispanic students who receive outreach from colleges are 5% more likely to enroll in the licensing college than identical Hispanic students who do not receive Search–enabled outreach.

Notes: Figures 2 and 3 are based on Howell, Hurwitz, and Smith (2018), research that utilizes more than 1,000 "natural experiments" involving 1.7 million students who were naturally sorted into treatment and control groups in colleges’ Search licensing requests when the colleges’ Search criteria returned more students than the colleges wanted to license.
Additional Evidence on College Outreach

National Hispanic Recognition Program

The National Hispanic Recognition Program (NHRP) is a College Board program that operates through the Student Search Service to support colleges’ identification of and outreach to the highest scoring 11th-grade Hispanic students every year. Research by Gurantz, Hurwitz, and Smith (2017) shows that the Search–enabled college outreach to NHRP scholars causes high-achieving Hispanic students to enroll in colleges that they might not have ordinarily considered. For example, high-achieving Hispanic scholars who achieve the NHRP designation are 16% more likely to enroll in a college that recruited them via the Student Search Service than their otherwise identical high-achieving Hispanic peers who just missed being eligible to receive the NHRP scholar designation. These students are also substantially more likely to enroll in a four-year institution, an out-of-state college, and a public flagship. As a result of these shifts in enrollment patterns, the Student Search Service has helped NHRP scholars find colleges that were a better academic and financial fit, and increased on-time bachelor’s degree completion for high-achieving Hispanic students by nearly 3%, compared to those who were not designated by NHRP.

6. The National Hispanic Recognition Program identifies the top 2.5% highest scoring Hispanic students on the PSAT/NMSQT, which results in approximately 5,000 NHRP scholars each year.
Conclusion

This Brief provides an overview of the evidence that students who receive college outreach enabled by the College Board’s Student Search Service are more likely to enroll in four-year colleges and universities, and more likely to apply and enroll in the licensing college than identical students who did not receive Search–enabled outreach from those institutions. A rough cost-benefit analysis reveals that, for the average college utilizing Search, attracting an additional applicant costs approximately $400 and generating an additional enrollee would cost the average college $2,000 in outreach costs. These estimates are very much in line, if not just below, documented per student spending on recruitment, marketing, and outreach per applicant and enrollee (Silber, 2016).

Overall, the evidence presented here sheds light on the positive impact of one of the largest college outreach efforts in the United States. The evidence indicates that college outreach via the Student Search Service can play an influential role in students’ transition to college and in shaping the higher education landscape. Moreover, it can help colleges achieve their goal of recruiting a desirable and diverse student body.

Cost-benefit analyses assume a $0.40 per student licensing fee, which is approximately the average Search cost over the period of this study.
References


Notes:

The research highlighted in this brief is based upon a larger project by Howell, Hurwitz, and Smith (2018) that is under review at a peer-reviewed academic journal. The full research paper is available from the authors upon request.

Cost-benefit analyses assume a $0.40 per student licensing fee, which is approximately the average search cost over the period of this study.