

Increasing postsecondary enrollment

A literature review of the effectiveness of outreach programs to improve postsecondary education enrollment and success of underrepresented youth

One year before the authorization of the *Higher Education Act of 1965*, President Lyndon B. Johnson gave a speech at Brown University in which he said that “universal, free, public education is the very foundation upon which our entire society rests today.” That statement is even truer today.

Higher education benefits both individuals and society as a whole. About 80 percent of the fastest growing occupations in the United States require at least some postsecondary education. Individuals with more education are better able to compete for high quality and better paying jobs and more likely to obtain jobs with better working conditions, essential benefits, opportunities for advancement, and job security. As a society, we must have an educated workforce to compete in an increasingly knowledge-based economy. Higher education contributes to lower crime rates, fewer unplanned pregnancies, lower unemployment rates, decreased burden on social services, and increased civic engagement. Those with higher-paying jobs, an outcome of higher education, contribute more to tax revenues.

The achievement gap

Postsecondary enrollment rates have increased substantially over the past three decades, and more low-income students are enrolling in college today than ever before. However, there remains a large and growing gap in the ratio of low-income and higher-income students who enroll, complete credits, and graduate from postsecondary schools.

Achievement gaps related to income and race/ethnicity are found in elementary and secondary school grades and test scores, enrollment in Advanced Placement math and science courses, average SAT scores, and high school graduation rates. Moreover,

the achievement gap has long-term consequences and is becoming an increasingly important issue as these groups make up a growing proportion of the K-12 school population.

The Higher Education Act of 1965 was enacted to increase access to postsecondary education by providing financial assistance. But, recent changes in the federal Pell Grant program have decreased financial aid for low-income students, and at the same time, college tuition costs are rising. Financial aid alone, however, is not enough to level the playing field.

To do that, systematic inequalities in K-12 schools must be addressed. Low-income and minority students are overrepresented in schools that are underfunded and lack resources. As a result, these schools tend to have lower quality teachers and are less likely to offer a challenging curriculum, including rigorous math courses, shown to be one of the most important predictors of college enrollment and success.

Underrepresented youth face a number of impediments to higher education, including lack of access to information and resource networks, fewer neighborhood resources, lack of peer support for academic achievement, segregation, ineffective high school counseling, and low expectations and aspirations.

Research has shown that pre-college outreach programs improve college access for underrepresented students, with one study showing they can double the odds of college enrollment for moderate- to high-risk students. According to results from the National Survey of Outreach Programs, an estimated two million or more students are served in outreach programs across the United States each year.

The majority of programs, most commonly targeted for low-income, first-generation, and minority students, begin to offer services to students in ninth grade or younger; the rest focus on the later years of high school. Program goals include promoting college awareness and attendance, improving academic skills, building student self-esteem, and providing role models. The most common service provided is increasing college awareness, followed by social skills development, campus visits, and cultural activities.

Evaluating outreach programs

Evaluations of outreach programs can help determine how to effectively help as many people as possible with the limited funding available. Yet, empirical data and appropriate use and reporting of data are often unavailable. In their comprehensive review of outreach programs, *Paving the Way* (2001), Gándara and Bial found only 13 programs met an acceptable level of evaluation.

This literature review updates Gándara and Bial's work in this area with a closer look at methodology and quality of evidence. The search conducted for this review found just seven additional programs that had sound evaluations. In determining sound evaluations, this review considered such things as evaluation design, quality outcome measures, and complete reporting of results, both positive and negative.

Key features of effective programs

Prepare students academically – A college preparatory curriculum, especially rigorous math courses, is the most critical variable for helping students gain access to and complete a postsecondary education. Additional strategies include academic counseling, enrichment and remediation, personalized learning environments, and teaching study skills.

Balance academic support with social support – Social support is a predictor of college attendance and completion. Students are more likely to plan to attend college if their friends also plan to enroll, and strong social networks help support students' academic

and emotional development. In addition to peer support, mentors play a key supportive role.

Intervene early – It is critical to intervene early, preferably before high school, in order to facilitate curricular planning.

Encourage parent/family involvement – Students with parents who are knowledgeable about college are more likely to attend college.

Help students navigate the college admissions process – Helping students complete college applications and helping students prepare for entrance exams are important predictors of enrollment.

Provide comprehensive, long-term support – The programs that have the greatest impact tend to be those that offer comprehensive services, are intensive, and require long-term commitment.

Provide financial assistance – Students need adequate financial resources in order to attend and complete college.

Encourage systemic reform – Most outreach programs are peripheral and supplemental to the classroom, which may explain why outreach programs tend to have little effect on students' academic achievement. The most effective programs offer long-term systemic services that are incorporated as part of the regular school offerings, rather than short-term supplemental programmatic services. Research has also shown that linking the secondary and postsecondary educational systems – for example, by aligning high school curricular requirements with college entry requirements – helps low-income and minority students succeed.

Summaries of programs

This briefing highlights six programs deemed to have the strongest evidence of effectiveness. The full report describes 20 programs, ranking them based on the quality of the evaluation and strength of the findings. All of these programs have limitations in their evaluations and are limited in who they serve. A listing of limitations is also in the full report.

Gateway to Higher Education – a four-year secondary school program implemented in New York City high schools. The program provides rigorous pre-college academic preparation to underrepresented minority students who are interested in pursuing majors in science, technology, engineering, and medicine. Both the school day and the school year are extended for participants, who enroll in an additional period of math or science, participate in small group study and after-school tutoring, and attend academic summer programs. Participants are expected to enroll in advanced placement courses and take college entrance exams. Enrichment experiences include internships, social outings, campus visits, college fairs, and research experiences.

Evaluations found that Gateway students were more apt to graduate from high school, take the SAT at least once, and earn a higher combined SAT score than their matched comparison students. Although comparison group data were not available for the college attendance and retention indicators, Gateway students enrolled in and graduated from college at high rates.

Indiana's Twenty-first Century Scholars – a statewide early intervention program designed to help low-income students prepare for and enroll in college. Income-eligible students make a pledge in the eighth grade to meet certain program requirements, and in exchange, the State of Indiana guarantees to cover costs that have not been met through other sources (e.g. financial aid) for students to attend a public college in Indiana (or to cover a like portion of tuition costs for students attending independent colleges). In addition to the tuition incentive, the State of Indiana provides college information and support services, including tutoring, mentoring, college visits, and activities for parents.

A program evaluation found that Scholars were significantly more likely than non-Scholars to enroll in Indiana public and private colleges, and more than twice as likely to receive two-year degrees.

The Quantum Opportunities Program (Pilot) – designed as a social experiment to test if community-based organizations could help increase the educational achievement and social competencies of highly

disadvantaged youth. Students from families receiving public assistance were randomly assigned prior to the start of the program. The program provided year-round services, assistance, and coaching to participants beginning in ninth grade and continuing through high school. Program activities were designed to foster learning, community service, and development. Students were paired with adult mentors and received small financial incentives.

Evaluators found that significantly higher percentages of program participants graduated from high school, enrolled in two-year and four-year colleges, received honors or awards, and participated in community service in comparison to the control group students. The program's effects had increased over time. In addition, a benefit-cost analysis found that for every dollar spent, the program produced over three dollars of benefit.

Sponsor-A-Scholar (SAS) – a college preparatory/college retention program administered by the nonprofit organization Philadelphia Futures. The program serves low-income students of color with average grades who demonstrate motivation and attend one of the participating public high schools in Philadelphia. Students are nominated for participation by school staff and must sign a Statement of Intent upon acceptance to the program. Participants are paired with volunteer adult mentors, who meet with them monthly from ninth grade through the first year after high school. In addition, program staff arrange academic enrichment opportunities, including tutoring, SAT preparation, study skills workshops, college visits, college selection assistance, and summer programs. Upon graduating from high school, SAS participants receive a \$6,000 scholarship that is donated by the mentor or an outside partner.

An evaluation of SAS conducted by Mathematica Policy Research, Inc. found that the program had a positive and significant impact on participation in college preparation activities and on college attendance during the first and second years after high school. The program's impact was largest for students who entered the program with the fewest resources and students who had strong relationships with their mentors.

Talent Search – one of the original federal TRIO programs designed to help low-income, first-generation students enroll in college. The program is low-intensity, focusing primarily on addressing informational barriers. The services offered are limited and vary depending upon the project, but the most common services include academic support, career development, and financial aid assistance.

An evaluation conducted by Mathematica Policy Research, Inc. found participants were more likely to graduate from high school, to apply for financial aid, and to enroll in two-year and four-year institutions than non-participants.

Upward Bound – also a TRIO program (see Talent Search above). Students are usually recommended for participation by educators, social workers, or clergy, and the program serves students in grades 9-12. Upward Bound projects are commonly hosted by colleges and universities, and program implementation

varies considerably. While projects are required to provide instruction in laboratory science, mathematics, composition, literature, and foreign language, other possible services include academic and financial counseling, tutoring, mentoring, financial aid and college application assistance, information on post-secondary educational opportunities, work-study positions, and exposure to cultural events. Participants also receive intensive instructional preparation for college in a six-week summer program.

A national evaluation and follow-up studies conducted by Mathematica Policy Research, Inc. found the program's impact was modest for the average student, but larger for certain groups. For example, Upward Bound significantly increased four-year college enrollment and the number of postsecondary credits earned at four-year colleges and universities for students with lower educational expectations. Longer participation and program completion were associated with better student outcomes.

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For more information

This briefing presents highlights of the *Effectiveness of programs to improve postsecondary education enrollment and success of underrepresented youth, a literature review*. For more information about this report, contact Jennifer Lee Schultz at Wilder Research, 651-603-6385.

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