

Pre-College Outreach and Early Intervention

By Laura W. Perna and W. Scott Swail

Both individuals and society at large benefit when an individual earns a college degree.

The benefits to individuals are short term and long term, economic and non-economic. Short-term benefits include enjoyment of the learning experience, participation in athletic, cultural, and social events, and enhancement of social status. Long-term benefits include higher lifetime earnings, more fulfilling work environment, better health, and longer life.¹

Although societal benefits are more difficult to quantify, benefits that spill over beyond the individual cannot be ignored.² One societal benefit is the economic growth associated with the enhanced productivity of labor resulting from higher levels of educational attainment.

Neighborhood effects are another societal benefit. These include reduced crime, reduced dependency on public welfare and Medicaid,

increased volunteerism, greater voting rates, and increased levels of civic involvement. The single most important effect of higher education may well be intergenerational—manifested, for example, in the increased educational attainment of one's children.³

For the individual and societal benefits of higher education to be realized, individuals must have the opportunity and ability to access postsecondary education and persist to degree completion.

More students are going to college, but gaps in access to and success in higher education remain among students of different racial/ethnic groups and socioeconomic status.⁴ These gaps have persisted despite more than 30 years of efforts by governmental and other entities to reduce them.

Historically, federal intervention at the postsecondary level has focused on reducing economic barriers to postsecondary education. The centerpiece of the federal govern-

Laura W. Perna is an assistant professor of higher education in the Department of Education Policy & Leadership at the University of Maryland at College Park. W. Scott Swail is vice president at the Council for Opportunity in Education. Address inquiries to Dr. Perna at 2200 Benjamin Building, College Park, MD 20742 or lperna@wam.umd.edu.

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ment's effort is the student financial aid programs under Title IV of the Higher Education Act of 1965. Two-thirds of the \$68 billion in federal, state, and institutional aid awarded to students in 1999-2000 was subsidized through this Act.

The federal government's reliance upon financial aid as a means for increasing college access assumes that economic variables are among the primary determinants of college enrollment. Yet, a review of relevant research—plus the fact that gaps in access and completion have not been closed despite the resources the federal government has dedicated to closing them—suggests that merely making financial aid available for students to attend college is not enough to ensure that all students have equal access to the benefits associated with earning a college degree.⁵

A range of variables, in addition to financial resources, influences college enrollment behavior. These include educational aspirations, academic achievement, academic preparation⁶, and availability of information about college.⁷

Clearly, a more comprehensive approach is needed to close the gaps in access and completion. Early intervention programs offer an important example of such an approach.

Early intervention programs are designed to provide disadvantaged students with the opportunity to develop the skills, knowledge, confidence, aspirations, and overall preparedness for college early enough in their schooling so as to influence their ultimate educational attainment levels.

Pre-college outreach and early intervention programs are sponsored by the federal government, state governments, not-for-profit organizations, and individual colleges and universities.⁸ The federal government has played a critical role in developing these types of programs.

Established as part of the original War on Poverty during the Johnson administration, the federal TRIO programs—Upward Bound, Talent Search, and the Student Support Services—are designed to help disadvantaged students prepare for and enter higher education. Two-thirds of the students served by TRIO programs must come from families with incomes below \$24,000.

Upward Bound, authorized by Congress in 1964 as part of the Educational Opportunity Act, provides students with academic instruction on college campuses after school, on Saturdays, and during the summer. Currently, about 563 Upward Bound programs serve 44,000 students nationwide.⁹

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Talent Search and the Student Support Services programs were established during the authorization of the Higher Education Act in 1965.

Talent Search, which serves over 300,000 6th- through 12th-grade students at 319 sites across the nation, provides participants and their families with information regarding college admissions requirements, scholarships, and available financial aid. Student Support Services provides counseling and remedial training to students during college. Congress appropriated \$730 million for TRIO programs in FY 2001.

In 1992, the federal government expanded its commitment to early intervention programs by authorizing the National Early Intervention Scholarship Program (NEISP). This program offered matching grants to states for programs providing financial incentives, academic support services and counseling, and college-related information to disadvantaged students and their parents.

Nine state programs were funded under the NEISP: California, Indiana, Maryland, Minnesota, New Mexico, Rhode Island, Vermont, Washington, and Wisconsin. At least six other state governments have sponsored early intervention programs.¹⁰

As part of the 1998 reauthorization of the Higher Education Act, Congress established a new program, Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR-UP), to supersede the NEISP.

Unlike the NEISP, GEAR-UP grants are available not only to states, but also to partnerships comprised of local educational agencies representing at least one elementary and one secondary school, one institution of higher education, and at least two community organizations, which may include businesses, philanthropic organizations, or other community-based entities.

The GEAR-UP legislation also includes the "21st Century Scholars Certificate" program. This program, borne out of a bill written by Congressman Chaka Fattah (D-PA) and later endorsed and retitled by President Clinton as the "High Hopes" program, notifies low-income 6th- to 12th-grade students of their expected eligibility for federal financial assistance under the Pell Grant program.

In FY99, \$120 million was appropriated for GEAR-UP—a substantial increase over the \$3.6 million provided for NEISP in FY98. More than 670 partnerships applied for the first GEAR-UP grants in 1999, suggesting that as many as one of every four-year col-

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leges and universities nationwide partnered for the effort. In the end, 180 awards were made. Congress appropriated \$200 million for the second year of GEAR-UP and \$295 million for FY2001, enough funds for a new round of competitive grants.

One of the most important factors in creating successful intervention programs is ensuring adequate financial support. Yet, the Council for Opportunity in Education reports that, although 11 million Americans are eligible for services through TRIO programs, only 5 percent of those eligible are being served due to limited federal funding for these programs.¹¹

Admittedly, early intervention programs can be expensive in terms of both support services costs and scholarship awards. For programs offering scholarship awards and other financial incentives, accurately projecting the costs of future awards is difficult, given possible variations in program participation and eligibility rates as well as escalating college costs.

Nonetheless, ensuring adequate funding for early intervention programs must be a priority. Shortfalls in funding will likely result in cutbacks in program services and/or smaller average financial aid awards to eligible students, thereby reducing at-risk students' motivation for and predisposition toward

college. Insufficient or unstable funding undoubtedly diminishes the effectiveness of these programs.

Some non-governmental entities also sponsor early intervention programs. These include private organizations, foundations, and colleges and universities. One of the most prominent private early intervention programs is Eugene Lang's I Have a Dream (IHAD) Program, established in 1981.

The program originated when Lang, visiting his former East Harlem elementary school, spontaneously guaranteed the 61 students in his presence the financial support to attend college if they graduated from high school. That story—and that promise—has expanded to 180 projects in over 60 cities across the nation, serving more than 13,000 students. IHAD has not only supported the students fortunate enough to take part in the program, but has also led other philanthropists and agencies to establish similar programs.

A 1999 survey sponsored by the College Board suggests that about one fifth of all early intervention programs targeted at low-income students receive some amount of financial support from private foundations.¹²

Colleges and universities also play an important role in early

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intervention. A 1994 survey by the U.S. Department of Education revealed that about one-third of all colleges and universities offer at least one program designed to increase access for educationally and/or economically disadvantaged pre-collegiate students.¹³

The College Board survey suggests that one-quarter of the programs targeting low-income students receive financial support from colleges and universities and more than one-half of the programs receive in-kind support from colleges and universities.¹⁴

Using data from the National Educational Longitudinal Study (NELS), Horn and Chen showed that participating in any type of outreach program during high school nearly doubled the odds of "at-risk" 1992 high school graduates enrolling in a four-year college or university. Other evaluations generally show that college enrollment rates are higher for program participants than for non-participants.¹⁵

Nonetheless, while nearly all programs targeting low-income and historically underrepresented minorities report that they conduct program evaluations,¹⁶ these "evaluations" are typically no more than a tally of the numbers of students participating in particular activities.

One exception is Mathematica's

six-year longitudinal study of Upward Bound. This study showed that program participants generally have higher educational attainment expectations, earn more credits in mathematics and social studies during high school, and earn more credits from four-year colleges.¹⁷

The study also suggests that some groups of students are more likely to benefit than others. For example, Hispanics and whites appear to benefit more than African Americans, and poorer-performing students appear to benefit more than better-performing students.

Mathematica also revealed important challenges. For example, participation in Upward Bound appeared to have no impact on high school grade point average, high school graduation, or college enrollment.

Moreover, about 37 percent of participants dropped out within the first year, and fewer than 45 percent continued through their senior year.¹⁸ While this evaluation provides an assessment of the relationship between participating in one type of early intervention program (Upward Bound) and various outcomes, it does not identify the program components that are associated with particular outcomes.

According to one exploratory

More research is required to evaluate the effectiveness of early intervention programs.

study,¹⁹ program administrators believe that the following elements are associated with successful early intervention programs: a clear focus; motivated and committed students; starting early in the educational pipeline; links with school curricula and schedules as well as with other community organizations; adaptation to the particular needs of the students, school, and community; and involved parents.

Administrators have also described several challenges, including sustaining funding, hiring and retaining effective staffs, and incorporating current technology.²⁰

Understanding the nexus between funding and programmatic philosophies is important to sustaining funding for such programs. Whereas funders are typically interested in providing enough funding for programs to become stable and self-sufficient, program administrators are generally interested in extending external funding as long as possible. Building a more compatible and cooperative alliance between funders and programs may help ameliorate these inconsistent attitudes.

Program staffing is also critical to successful programs.²¹ Among the related issues are hiring staff who support the mission and goals of the organization and providing

ongoing professional development. While the College Board survey indicates that about 80 percent of the programs serving low-income students have five or fewer full-time paid staff,²² focus group participants indicated that many programs have high staff turnover rates, in part because of low salaries and limited opportunities for professional advancement.

The use of computers and other information technologies is an emerging issue for many programs. Programs need to build strategic plans for purchasing, upgrading, and using technology. Although most outreach programs focus on developing academic skills, program administrators believe that more attention should be given to developing the technological capacity that complements knowledge acquisition.²³

More research is required to evaluate the effectiveness of early intervention programs, particularly those that, unlike Upward Bound, begin prior to the ninth grade. One area for future research involves identifying the “package” or combination of incentives, support services, and program components that is most effective in accomplishing the goal of increasing access to and success in college for underrepresented groups.

Existing programs offer a wide variety of services, including: col-

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lege awareness; social skills development; career counseling and exploration; preparatory, supplemental, accelerated, and/or college level courses; life skills and goal setting; information about college and financial aid; campus visits and tours; cultural activities; information for parents; tutoring and remediation; critical thinking skills; and admissions test training.²⁴ Some programs also include some type or amount of financial benefit, such as full or partial tuition scholarships, book grants, and other types of financial aid.

We also need to know the most appropriate grade level in which students should become involved in early intervention programs. Though Levine and Nidiffer have suggested that intervention programs must start early, more research is required to determine the most appropriate level at which students should initially become involved in an early intervention program.²⁵

According to the College Board's survey, the most common entering grade for programs that target low-income students, historically underrepresented minorities, and potential first-generation college students is the ninth grade.²⁶

But Cabrera and La Nasa concluded that the college choice process begins as early as the sev-

enth grade and that the process of becoming academically qualified for college begins as early as the eighth grade.²⁷ Because available resources are limited, research should examine the incremental benefits and costs associated with beginning programs at various grade levels.

Research is also needed to identify the characteristics of students to be targeted for participation, particularly whether student eligibility criteria should be limited to financial need and other related risk factors or whether students should also exhibit some level of academic ability.

Based on their evaluation of Maryland's pilot College Preparation Intervention Program, the Institute of Higher Education Policy recommended that student eligibility be defined in terms of both economic and academic criteria, such as standardized test scores, grade point average, and recommendations from teachers and counselors.

The policy institute concluded that by selecting only students with college potential, this program would differentiate itself from other programs that target all disadvantaged students, such as Upward Bound. Thirty-eight percent of programs targeting low-income students also specifically target students with medium or

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high academic achievement.²⁸

Another area for research pertains to the involvement of parents. Program administrators generally believe that parents play a critical role in the success of their programs.²⁹ Among programs that target low-income students, historically underrepresented minorities, and potential first-generation college students, three-fourths offer a parental component and one-fourth require parental participation,³⁰ likely reflecting research showing that parental support and encouragement for higher education are important predictors of college enrollment,³¹ particularly among students at risk of dropping out of high school.³²

Based on their examination of one university-sponsored program, Tierney and Jun concluded that by actively involving parents as well as by incorporating other aspects of their neighborhoods, college preparation programs can be successful in part because they are affirming students' identities.³³

Nonetheless, more research is required to understand not only the particular ways in which parents influence program outcomes, but also the ways in which administrators can effectively encourage parents to become involved.

Finally, more must be learned about the most effective ways that early intervention programs can

leverage existing resources and services to maximize program benefits. Collaboration is limited by the wide range of program sponsors and the small size of most programs. One survey revealed a median number of 82 students in programs administered by individual colleges and universities.³⁴

Some may argue that early intervention programs are too expensive, serve too few students, and are too inefficient, given the high program dropout rates found in the Upward Bound evaluation. But because these programs appear to have the components that research suggests promote college access and degree attainment, early intervention programs may offer a much-needed glimmer of hope for those interested in college success for all Americans.

Approaches that focus merely on addressing the financial needs of students are clearly not sufficient to level the educational playing field and provide access to the individual-level economic and non-economic benefits associated with earning a college degree or generate the societal-level benefits.

Although much more research is required to identify the particular attributes and characteristics of the most effective early intervention programs, support for and commitment to these programs

must be sustained.

By continuing to support these programs while engaging in rigorous systematic research on a range of different programs, we will be working to ensure that the costs of

these programs will be more than offset by the resulting short- and long-term benefits realized not only by individual participants, but also by society at large. ■

Endnotes:

¹Bowen, 1980; Leslie and Brinkman, 1988; McPherson, 1993.

²Bowen, 1997.

³*Ibid.* 1997.

⁴Although the representation of African Americans and Hispanics among enrolled students and degree recipients is still below their representation in the traditional college-age population, progress has been made. About 71 percent of African Americans and Hispanics now enroll in some form of postsecondary education within two years of their scheduled high school graduation, compared to 76 percent of whites (Berkner & Chavez, 1997). Because only about 22 percent of students transfer from a two-year to a four-year institution within five years (Nettles, Perna, & Freeman, 1999), considering the type of institution in which students enroll is also important. A smaller share of Hispanics than African Americans and whites have been found to enroll in a four-year college or university within two years of graduating from high school (31 percent versus 42 percent and 47 percent, Berkner & Chavez, 1997).

College enrollment rates also continue to be higher for students from families with higher incomes and higher levels of parental education. More than three-fourths (77 percent) of students from high-income families enroll in a four-year college or university within two years of their high school graduation, compared with only one-third (33 percent) of low-income students (Berkner & Chavez, 1997). About 71 percent of students whose parents are college graduates enroll in a four-year institution, compared with only 26 percent of students whose parents have no more than a high school diploma.

As with enrollment rates, persistence rates vary by socioeconomic status and race/ethnicity. Data from the Beginning Postsecondary Student Survey show that 41 percent of first-time, full-time freshmen in 1989 with high socioeconomic status attained a bachelor's degree within five years, compared with only 6 percent of first-time, full-time freshmen with low socioeconomic status (Berkner, Cuccaro-Alamin, & McCormick, 1996). Only 17 percent of African American students and 18 percent of Hispanic students attained a bachelor's degree within five years of matriculating, compared with 27 percent of white students.

⁵Gladieux & Swail, 1998.

⁶Adelman (1999) concluded that the quality and intensity of the high school curriculum is a more important predictor of bachelor's degree completion than test scores or class rank, particularly for African American and Latino students.

⁷After controlling for other variables related to college enrollment decisions, some research shows that students are less likely to enroll in college when their parents lack accurate information and knowledge about financial aid (Ekstrom, 1981; Higgins, 1984; Flint, 1993).

⁸Perna, Fenske, & Swail, 2000

⁹Myers & Schirm, 1999.

¹⁰Fenske, Geranios, Keller, & Moore, 1997.

¹¹The Council for Opportunity in Education, 1996.

¹²Perna & Swail, 2001.

¹³Chaney, Lewis & Farris, 1995.

¹⁴Perna & Swail, 2001.

¹⁵Horn and Chen, 1998; Fenske, et al, 1997.

¹⁶Perna & Swail, 2001.

- ¹⁷Myers & Schrim, 1999.
¹⁸*Ibid.* 1999.
¹⁹Swail & Perna, 2000.
²⁰*Ibid.* 2000.
²¹*Ibid.* 2000.
²²Perna & Swail, 2001.
²³*Ibid.* 2000.
²⁴Chaney, et al., 1998; Swail & Perna, 2000.
²⁵Swail & Perna, 2000; Levine and Nidiffer, 1996.
²⁶Perna & Swail, 2001.
²⁷Cabrera and La Nasa, 2000.
²⁸Perna & Swail, 2001.
²⁹Swail & Perna, 2000.
³⁰Perna & Swail, 2001.
³¹Hossler, Braxton, & Coopersmith, 1989; Hossler, Schmit & Vesper, 1999.
³²Choy et al., 2000.
³³Tierney and Jun, 2001
³⁴Chaney, et al., 1998.

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