

**DRAFT**

**LITERATURE REVIEW**

**THE EFFECTIVENESS OF EARLY AWARENESS  
AND EARLY INTERVENTION INITIATIVES**

**ADVISORY COMMITTEE ON  
STUDENT FINANCIAL ASSISTANCE**

**AUGUST 2004**

## **The Effectiveness of Out-Of-School-Time Strategies in Assisting Low-Achieving Students in Reading and Mathematics**

Lauer, P.A., Akiba, M., Wilkerson, S.B., Apthorp, H.A., Snow, D., & Martin-Glenn, M. *The Effectiveness of Out-Of-School-Time Strategies in Assisting Low-Achieving Students in Reading and Mathematics*. Aurora, CO: Mid-continent Research for Education and Learning. 2003.

<http://www.dpi.state.wi.us/dpi/dlsea/sspw/pdf/ostbsum.pdf>

This study conducted a literature search of all research since 1984 on Out-of-School-Time (OST) strategies that focused on improving reading and math skills for low-achieving or at-risk K-12 students.<sup>1</sup> It initially identified 371 studies, but focused its analysis on 56 of these studies, which used comparison and/or control groups to measure student achievement in reading and/or mathematics.

The report found OST strategies have a statistically significant positive effect on the achievement of the targeted audience for both reading and math. Average reading achievement gains for students was five percentile points. Average mathematic achievement gains for students was six percentile points. The report acknowledged these gains to be small, but attributed this to the relative short duration of OST, in comparison to an overall school day or calendar year.

Grade level influenced how well students benefited from OST strategies. For reading, the largest positive effects (a gain of 10 percentile points) occurred at the early elementary school level (Grades K-2). On the other hand, the largest positive effects (a gain of 17 percentile points) for mathematics occurred at the high school level (Grades 9-12).

Duration of OST's does not influence the effectiveness of the program. For example, reading and mathematic achievement scores were higher for those programs that were more than 45 hours of duration for both reading and math. Yet, programs with the longest duration (more than 210 hours for reading and more than 100 hours for mathematics) had the lowest effects. Delivery method, however, does impact the effectiveness of OST strategies. For example, one-on-one tutoring resulted in the largest gains for reading.

### **The Impacts of Regular Upward Bound: Results from the Third Follow-up Data Collection**

Meyers, D., Olsen, R., Sefor, N, Young, Julie, & Tuttle, Christina. *The Impacts of Regular Upward Bound: Results from the Third Follow-Up Data Collection*.

---

<sup>1</sup> Out-of-school-time (OST) strategies are those that take place outside of the regular school day or school calendar year. For example, after-school, summer, or weekend programs were all considered OST strategies for this study. The purpose of these programs is to improve the achievement level of students in reading and mathematics.

Washington, D.C.: U.S. Department of Education. 2004.  
<http://www.ed.gov/rschstat/eval/highered/upward/upward-3rd-report.pdf>

This report by Mathematica Policy Research, on behalf of the U.S. Department of Education (ED), analyzed a representative sample from 67 Upward Bound projects hosted by two- and four-year colleges. The sample consisted of 2,800 students who were randomly assigned to either an Upward Bound program or control group. The study focused on gathering information about Upward Bound's impact on high school preparation for college enrollment and persistence.

Participation in Upward Bound had no overall effect on the success of students in high school. Participation did not affect total credits earned, credits earned in core subject areas (other than math), honors or Advanced Placement credits earned, grade point averages, or high school graduation rates. However, students with lower educational expectations did increase their high school credits earned in core subject areas by two credits due to participation in Upward Bound. Additionally, these same students earned more credits in honors and Advanced Placement courses due to their participation in Upward Bound.

The report concluded that participation in Upward Bound has no effect on overall enrollment in higher education institutions. However, evidence may indicate that participation in Upward Bound can increase the likelihood of enrollment at four-year colleges by up to six percent.<sup>2</sup> This increase is likely attributed to more students enrolling at four-year institutions as opposed to two-year institutions, as enrollment in two-year colleges declined.

Students with lower educational expectations experience the largest positive effects from participation in Upward Bound. As a result of participating in Upward Bound, the number of students with lower educational expectations who enroll in four-year institutions more than doubled (increased from 18 percent to 38 percent). At the same time, the number of credits students with lower expectations earned at four-year colleges also doubled (from 11 to 22 credits). For students with higher educational expectations, participation in Upward Bound had no effect on their likelihood to enroll in college or on the number of credits they earned at a four-year institution.<sup>3</sup>

Additionally, the longer a student participates in an Upward Bound program the better the outcomes. Students who enrolled but later dropped out of an Upward Bound program in the ninth or tenth grade attended postsecondary education institutions at a rate of 17 percent less than those who remain enrolled in the program until the completion of the

---

<sup>2</sup> The report's authors concluded that this evidence is not conclusive.

<sup>3</sup> It is important to note that students with lower educational expectations comprise approximately 20 percent of all Upward Bound participants.

twelfth grade. For each additional year of Upward Bound that a student completes, the likelihood of them attending a postsecondary institution increases by 9 percent.<sup>4</sup>

### **National Evaluation of GEAR UP: A Summary of the First Two Years**

Westat, Inc. *National Evaluation of GEAR UP: A Summary of the First Two Years*. Washington, D.C.: U.S. Department of Education. 2003.  
<http://www.ed.gov/rschstat/eval/highered/gearup.html>

This report is the first of an upcoming series, which evaluates the effectiveness of GEAR UP on a cohort of students who entered the program during the seventh grade of the 2000-01 academic year. Students from 20 GEAR UP partnership schools were compared to students from similar schools that did not participate in the GEAR UP program.<sup>5</sup>

Students who participate in GEAR UP traditionally attend high poverty schools. A common characteristic of high poverty schools is the high mobility rate of students. Although some schools that participate in GEAR UP have stable student populations, many have turnover rates of 50 percent or higher. This suggests that the attrition problem associated with early intervention programs is related to the mobility characteristic of the student population GEAR UP serves.

Prior to enrolling in the program, 84 percent of GEAR UP students indicated that attending college was “very important.” Fifty-one percent of GEAR UP students prior to enrollment in the program identified themselves as “definitely planning to go to college” and 44 percent expected to enter college or a vocational school immediately following high school. Fifty percent of GEAR UP students prior to enrollment in the program expected to complete a college degree. Students from matching comparison schools that did not participate in GEAR UP had similar response rates to those who did participate in the program.

Fifty-eight percent of GEAR UP participants are from families with annual household incomes of less than \$30,000. Despite limited incomes, most parents of students who participate in the GEAR UP program (87 percent) believe their children will receive some amount of postsecondary education and three-fourths believe their children will earn a bachelor’s degree. The comparison group who did not participate in GEAR UP also had similar response rates.

The most common GEAR UP activities that attract the largest student participation are categorized as low intensity in nature (i.e., one-day college fairs or week-long college visits). There are fewer opportunities for high intensity experiences. For example, only

---

<sup>4</sup> According to a 1996 report by the Mathematica Policy Group, only 80 percent of all students who receive an offer to participate in an Upward Bound program actually enroll. Furthermore, almost 40 percent who do participate drop out within the first 12 months of the program.

<sup>5</sup> A second report from Westat and ED on student academic and behavioral outcomes will be released in 2004. As this report is part of a longitudinal study and students in this cohort are currently enrolled in middle school and high school, information regarding enrollment in college preparatory courses, high school completion, and college enrollment and persistence will not be available for several more years.

one-third of the projects surveyed offered one-on-one guidance to students who needed academic assistance. Additionally, GEAR UP programs have difficulty attracting students to participate in summer programs. GEAR UP programs that provided summer programs reported limited attendance. For example, one GEAR UP project offered 125 summer slots, but was only able to fill 25 to 30 slots. Lack of transportation was cited as a contributing factor for low attendance. Furthermore, over half of the GEAR UP programs surveyed reported difficulties in attracting parents to participate in meetings and events.

### **FY 2005 Program Performance Plan**

U.S. Department of Education. *FY 2005 Program Performance Plan*. Washington, D.C.: Author. 2004.

<http://www.ed.gov/about/reports/annual/2005plan/program.html?exp=0>

Grantees must annually complete performance reports for ED. The agency then compiles this information for all of its various programs into an annual performance plan reporting baseline target goals and actual performance of programs.

In 2003, 35 percent of all parents of GEAR UP students had knowledge of available financial aid. This exceeded the performance target goal set by ED at 32 percent. That same year, 57 percent of all GEAR UP students had knowledge of the academic preparation needed to enroll in college. Forty-four percent of all parents of GEAR UP students had knowledge of this information. Both of these performance indicators exceeded the target goals set by ED by 3 percent.

In 2000, 65 percent of Upward Bound participants enrolled in college and 34 percent of high-risk Upward Bound participants enrolled in college. That same year, 73 percent of Talent Search participants enrolled in college and 57 percent of Educational Opportunity Centers' students enrolled in college. Meanwhile, in 2002 72 percent of Student Support Services students persisted through college. This exceeded ED's target goal of 67 percent. At the graduate school level, in 2002, the graduate school enrollment rate for students who participated in the McNair Post-baccalaureate Achievement program was 39 percent and the persistence rate was 65 percent. These performance indicators exceeded ED's targeted goals by 4 percent and 17 percent, respectively.

### **Oklahoma Higher Learning Access Program: 2002-2003 Year-End Report**

Oklahoma State Regents for Higher Education. *Oklahoma Higher Learning Access Program: 2002-2003 Year-End Report*. Oklahoma City, OK: Author. 2003.

<http://www.okhighered.org/ohlap/ohlap-report-02-03.pdf>

The Oklahoma State Regents for Higher Education receive federal grant money from GEAR UP to help fund their Oklahoma Higher Learning Access Program (OHLAP). OHLAP is designed to encourage eighth, ninth, and tenth grade students from low- and moderate-income families to pursue a postsecondary education. The program offers

scholarships to those who successfully maintain a high school G.P.A. of 2.5 or higher, complete required coursework, and exhibit qualities of a model citizen. This report highlights the current status of the program.

Overall enrollment in the program continues to increase. In the 2002-2003 academic year, 7,500 sophomores enrolled in OHLAP, an increase of six percent from the 2001-2002 academic year. The overall number that successfully completes the program also continues to improve. Nearly 4,200 high school seniors qualified for the OHLAP scholarship in 2003. This number increased by over 150 percent from the previous year. Seventy-one percent of the OHLAP's class of 2003 completed program requirements to become eligible to receive a scholarship. The completion rate increased by 4 percent from the previous year.

OHLAP students outperform Oklahoma students. The OHLAP high school graduating class of 2002 had a mean grade point average (GPA) of 3.49. In comparison, all Oklahoma graduating seniors had a mean GPA of 3.00. The average ACT score for OHLAP students is also higher than the average ACT score for the state. The average ACT score for OHLAP students in 2003 was 21.1, while the average ACT score for all Oklahoma students was 20.5. Eighty-six percent of OHLAP graduates during their freshman year of 2002 had a GPA of 2.0 or better. Meanwhile, only 72 percent of all freshmen at Oklahoma colleges and universities earned a GPA of 2.0 or higher.

OHLAP students are enrolling, persisting, and graduating at higher rates than Oklahoma students. In 2002, 79 percent of OHLAP graduates enrolled in college directly after high school. On the other hand, only 58 percent of Oklahoma's class of 2001 enrolled in college directly following high school. During the 2002-2003 academic year, 85 percent of OHLAP recipients were enrolled in college as full-time students. In comparison, only 68 percent of all undergraduate students were enrolled as full-time students. The persistence rate for 2001 OHLAP high school graduates from first to second year of college was 83 percent, while persistence rate for all students was 79 percent. Lastly, the five-year degree completion rate for the OHLAP class of 1998 was 46 percent, while the completion rate for all first time freshmen from Oklahoma that entered college in 1997 was 34 percent.

### **Meeting the Access Challenge: Indiana's Twenty-First Century Scholars Program**

St. John, E. P., Droogsma Musoba, G., Simmons, A. B., and Chung, Choong-Geun. *Meeting the Access Challenge: Indiana's Twenty-First Century Scholars Program*. New Agenda Series, Vol. 4, Num. 4. Indianapolis, IN: Lumina Foundation for Education. 2002.

<http://www.luminafoundation.org/publications/21stcentury.pdf>

The Twenty-first Century Scholars program (Scholars program), established by the Indiana legislature and Governor Bayh in 1990, is designed to encourage low-income students (those who qualify for the federal Free and Reduced Price Lunch programs) to enroll in and graduate from college. Students enroll in the program at the beginning of

the eighth grade and receive a variety of support services from 16 regional service centers, such as tutoring and academic support, career counseling, and campus visits. Students who graduate from high school with at least a 2.0 GPA and who meet the program's behavioral requirements (i.e., no drugs, alcohol, or criminal offenses) become eligible for a scholarship equivalent to full tuition and fees at an Indiana public college or university. Part of the funding for the scholarships comes from a federal GEAR UP grant.

The report discussed program participation levels. From 1995 to 2003 over 65,000 students enrolled in the Scholars program. Yet, only 24,889 students successfully completed the requirements necessary to become eligible for the scholarship. During 1997 to 2000, of those students who met program requirements and qualified for the scholarship, only 75 percent actually enrolled in an Indiana two- or four-year college or university.<sup>6</sup>

The study's authors evaluated the support offered by the 16 regional service centers.<sup>7</sup> They identified workshops (i.e., career, drug prevention, financial aid, and SAT preparation workshops) as the service activity that served the most students per center (2,602 students served per center). This was followed by mailings (2,433 students served per center); mentoring (753 students served per center); and social/cultural events (602 students served per center). On the other hand, activities such as campus visits/tours (222 students served per center) and tutoring or academic support (186 students served per center) served a much smaller group of students per center. The study noted that it appeared a large portion of participants had multiple contacts with a regional service center. Furthermore, the regional centers also provided workshop and support programs for parents. The centers averaged 280 parents for workshop activities and 251 parents for support programs.

This report also evaluated whether enrollment in the Scholars program increased the likelihood of a student enrolling in and persisting through college. The report's authors found that Scholars were more likely than non-Scholars to enroll in Indiana public and private colleges. For example, 64 percent of the Scholar cohort that graduated high school in 1999 enrolled in an Indiana public two- or four-year institution. In comparison, 41 percent of non-Scholars enrolled in an Indiana public two- or four-year institution. Additionally, 15 percent of the 1999 Scholars cohort planned to enroll in an Indiana private college, while only eight percent of non-Scholars planned to enroll in an Indiana private college. Out of the 1999 cohort of scholars, only 15 percent did not identify themselves as planning to enroll in college. On the other hand, 44 percent of non-Scholars did not have plans to attend college.

The authors of the report were able to statistically calculate the likelihood of Scholars enrolling in college versus non-Scholars. A Scholar was 4.43 times more likely to enroll in a public four-year institution than a non-Scholar. A Scholar was also 6.37 times more

---

<sup>6</sup> Another six percent completed program requirements for a scholarship but enrolled out of state.

<sup>7</sup> Only 13 of the 16 regional centers were evaluated, as three did not respond to a survey sent out by the researchers.

likely to enroll in a public two-year college than a non-Scholar. Finally, a Scholar was 6.13 times more likely to enroll in a private college than a non-Scholar.

Additionally, the report noted that both Scholars and non-Scholars who received financial aid were more likely than those who did not receive financial assistance to persist during their first year of school. For the 1999 cohort, 86 percent of Scholars maintained enrollment during their first year of college. At the same time, 89 percent of non-Scholars who received financial aid maintained enrollment during their first year of college. Students who did not receive any financial aid persisted through their first year of college at a rate of 85 percent.

### **Higher Education Outreach Programs: A Synthesis of Evaluations**

Hayward, G., Brandes, B., Kirst, M., & Mazzeo, C. "Executive Summary." *Higher Education Outreach Programs: A Synthesis of Evaluations*. Berkeley, CA: Policy Analysis for California Education. 1997. In "New Direction for Outreach: Report of the University of California Outreach Task Force." A report commissioned by the Outreach Task Force of the University of California, Board of Regents. July 1997. Appendix F, pp. 86-89.

<http://www.ucop.edu/acadaff/otf/appen-f.html>

The report was written to provide an overarching analysis of outreach programs for the University of California's Outreach Task Force. It began by identifying barriers that hinder disadvantaged students from accessing higher education. The report cited the following barriers: lack of information about higher education opportunities; insufficient counseling and advisement; placement and tracking of students in courses that do not prepare them for college; admissions test requirements; course-taking patterns; under-prepared K-12 teachers; low aspirations and expectations; and costs of higher education.

The report also included a discussion of the different types of outreach programs offered through the University of California, the state government, and national programs or the federal government. It identified four main types of outreach programs: student-centered; school-centered; student-centered with a student financial assistance component; and student-centered and school-centered.

In reviewing the various programs, the study identified effective practices of both student-centered and school-centered strategies. The most effective student-centered approaches are: strategically timed; sustained over time; comprehensive, not single-component; and integrated with K-12 schools. The report noted that many student-centered strategies would be feasible for higher education institutions to initiate, such as: early information about college preparation; family involvement; academic counseling; tutoring and mentoring; study skills and specific academic skills; transition programs and summer residential programs; and admissions and placement test preparation. There were three main principles for an effective school-centered approach: staff development to teach and support college preparatory courses; improvement of core curriculum; and staff professional development opportunities at low-performing schools.



Additionally, the study discussed the importance of evaluating outreach programs. It listed the following mechanisms to effective evaluations: a student information system; clearly defined short- and long-term program goals and intended outcomes; explicit program interventions; methodology to isolate intervention effects; and a connection between outcomes and cost.

### **Paving the Way to Postsecondary Education: K-12 Intervention Programs for Underrepresented Youth**

U.S. Department of Education, National Center for Education Statistics. *Paving the Way to Postsecondary Education: K-12 Intervention Programs for Underrepresented Youth*. NCES 2001-2005. Prepared by Patricia Gándara with the assistance of Deborah Bial for the National Postsecondary Education Cooperative Access Working Group. Washington, D.C.: Author. 2001.

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2001205>

The report performed an extensive review of evaluation studies of 33 different early intervention programs offered to students throughout the United States.

The report first identified a number of reasons why low-income and minority students are unable to access higher education. These included: inequalities of familial cultural and social capital; inequality of resources in neighborhoods and communities; lack of peer support for academic achievement; racism; inequalities in K-12 schools; segregation of black and Hispanic students; poor high school counseling; low expectations and aspirations; high dropout rates; and limited financial resources. To counter these obstacles that hinder college access and persistence rates among low-income and minority students, educators and policymakers are investing in early intervention programs.

There are five different types of early intervention programs: private nonprofit, postsecondary education-sponsored or K-16 partnerships, government-sponsored, community-based, and K-12-sponsored. Within each program type there are multiple program components. According to the report, the most common components to early intervention programs are: counseling, academic enrichment, parental involvement, personal enrichment and social integration, mentoring, and scholarships. These program components, when utilized by early intervention programs, address many of the reasons why low-income and minority students are unable to access higher education, as listed above. The report notes however that several reasons (inequality of neighborhood resources, racism, and segregation) are overlooked or are not a central focus of program components.

Counseling appears to be the most common program component, as it was identified in 28 of the programs reviewed by the report. The overall goal of counseling is to provide information to students about postsecondary education so that they will eventually enroll in a college or university. It is offered through individual consultations or peers, staff, or

college representatives that speak to groups of students at workshops and classroom settings. The content of the counseling sessions typically consists of college and/or financial aid advising (23 programs), career advising (9 programs), assistance with college and financial aid application forms (14 programs), and personal advising (11 programs).

Twenty-six of the early intervention programs that were evaluated included an academic enrichment component. The purpose of academic enrichment is to improve a student's academic achievement so that the student is prepared to enroll in college and succeed in college coursework. Programs offer academic enrichment opportunities through summer programs (10 programs), tutoring (16 programs), college-level courses (5 programs), high school or after-school programs (16 programs), assessment (7 programs), and SAT/test preparation (7 programs).

Eighteen of the early intervention programs included a parental involvement component. This indicates that a parent's interest in and influence on a student's education is important to that student's academic achievement and success. Early intervention programs usually included a parental involvement component in order to communicate to parents the goals of a program and the ways that parents can support these goals. There are four main types of parental involvement activities: orientation to the program for parents (7 programs), parents as volunteers (2 programs), programs for parents (13 programs), and parents as programs designers, developers, and staff (4 programs).

Personal integration and social enrichment is an important component to early intervention programs because they help build self-esteem and confidence, and empower students to succeed in their academic courses and achieve long-term career goals. Eighteen of the early intervention programs reviewed rely on the personal integration and social enrichment component. These programs used different types of personal enrichment and social integration strategies: leadership development (6 programs), arts and cultural activities (6 programs), field trips (13 programs), speakers (8 programs), and peer interaction (6 programs).

In theory, mentoring is designed to support improvement in academic performance. The report notes that there is very little evidence that students' grades improve because of mentoring programs. Still, of the early intervention programs reviewed, 13 incorporated a mentoring component. The types of mentoring programs are: peer-based (4 programs), university and/or high school staff and/or faculty (8 programs), volunteers (4 programs), and corporate/professionals (3 programs).

Ten of the early intervention programs reviewed included a financial assistance component in the form of a scholarship. The goal of the scholarships is to reduce cost of attendance and encourage students to enroll in college. Scholarships can be awarded at different monetary levels depending upon student achievement and need or can be awarded on a flat basis. The various sources of scholarships are: universities (2 programs), private/corporate donors (5 programs), and federal/state governments (6 programs).

From the literature review, the authors were able to identify characteristics of effective early intervention programs. The report speculates that effective early intervention programs are capable of at least doubling the college enrollment rates of participants. The most effective programs exhibited one or more of the following characteristics:

- Mentors for students
- Quality instruction and access to challenging courses
- Long-term investments in students
- Understanding cultural differences and backgrounds of students
- Creating a peer group environment for students
- Providing financial assistance and incentives to program participants

Unfortunately early intervention programs also have limitations. The report identified the following weaknesses in early intervention programs:

- Early intervention programs experience high attrition rates. The authors of the report estimate between one-third to one-half of all participants leave their respective programs before graduating from high school.
- Due to limited funds and the labor-intensive nature of services, early intervention programs were only offered to a portion of students within a school or community.
- Boys are underrepresented in early intervention programs. One-third of all participants are males.
- Overall, early intervention programs are nonsystemic in nature.
- Few early intervention programs are successful at raising academic performance or improving students' GPAs or test scores.

Lastly, and possibly most importantly, the report acknowledges that although the link between impediments and program strategies is addressed, the programs reviewed do not provide empirical evidence between program features and student outcomes. When programs note improvement in student achievement, it is not necessarily directly tied to the program components. It is not clear whether the program intervention, selection of students to participate in the program, or some other reason resulted in improvement in student achievement. Programs are typically not successful at evaluating the extent to which they contribute to student success because program evaluations typically lack a comparison, or control, group of similar students. Therefore, evaluators are unable to determine the different outcomes for program participants compared to non-participants.

Furthermore, evaluations of early intervention programs are often short-term and are not longitudinal. In addition, evaluations rarely track the impact that financial assistance has on student persistence. There is also inconsistency in defining program outcomes and in the tools used to measure these outcomes. For example, programs do not have specific or consistent definitions of what "college enrollment" means; some programs count both part-time and full-time enrollment as "enrollment" while others only count the number of participants that are enrolled full-time. Finally, program costs vary greatly and most

programs do not perform a cost-benefit analysis; they only note benefits. When cost per student is not captured it is difficult to evaluate the program's effectiveness.

The authors of this report describe in greater detail findings from separate evaluations of several of early intervention programs. A summary of each evaluation, and the evaluation source cited in the report, is listed below.

### **The Posse Program (pp. 39-40)**

**Evaluation Source:** Bowman, C., & Gordon, E. *A Connoisseurial Evaluation of the Posse Program*. Pomona, NY: Gordon and Gordon Associates in Human Development, Inc. 1998.

The Posse Foundation is a program in New York City, which from 1990 to 1997 successfully placed 109 students in selective universities throughout the United States. During their senior year, participants enroll in a 34-week training program on skill building, teamwork, leadership, time management, and academic skills. Those who complete the program receive a full-tuition scholarship. The program continues through the completion of a participant's college education, as students are assigned a graduate student mentor and attend Posse retreats and workshops.

Bowman and Gordon evaluated the effectiveness of Posse by specifically examining 41 Posse members enrolled at Vanderbilt University in 1997. These Posse students were compared to 41 randomly selected Vanderbilt athletes and 41 randomly selected Vanderbilt students with similar SAT scores. The mean SAT scores for the athletes (1042) was significantly higher than the mean SAT score for the Posse students (900). The mean GPA for the athletes (3.17) was also higher than the mean GPA for the Posse students (2.93). On the other hand, the Posse students' SAT scores and GPAs were not significantly different from those of randomly selected non-athletes. Non-athletes had a mean SAT score of 922 and had a mean GPA of 2.97. Gordon and Bowman concluded that although Posse students were not performing at high levels, they were performing at similar levels to comparable Vanderbilt students. Furthermore, Bowman and Gordon found that Posse students had a higher persistence rate of 92.7 percent when compared to the non-Posse students' persistence rate of 85 percent.

### **The Puente Program (pp. 46-48)**

**Evaluation Source:** Gándara, P., Mejorado, M., Gutiérrez, D., & Molina, M. *Final Report of the High School Puente Evaluation, 1994-98*. Davis, CA: University of California. 1998.

The Puente program is primarily composed of Hispanic students with different levels of academic achievement from 18 California high schools. Students are recruited to join the program in the ninth grade. The program components include: a two-year college preparatory English class, a Puente counselor, and a

mentoring program. The attrition rate for Puente students is low. Approximately 88 percent of Puente participants are still enrolled in the program when they graduate from high school. The program cost per student (\$500) is considered one of the lowest for an early intervention program.

There were several different study methods used for this evaluation. Nine hundred Puente students were compared to non-Puente students throughout their four years in high school. Students were compared according to their college aspirations, attitudes toward school and achievement, and college preparation. Additionally, 75 Puente students from three schools were compared to 75 non-Puente students from the same schools. The two groups had similar characteristics in terms of the following variables: age, ethnicity, sex, eighth grade GPA, and reading scores.

Puente students expressed being better prepared for college and placed a higher value on a college education than their peers. There was no significant difference between Puente students and their counterparts in regards to high school retention, GPA, and course enrollment. There was a difference, however, in college enrollment. Eighty-four percent of Puente students enrolled in either a four- or two-year college, while only 75 percent of the control group enrolled in a four- or two-year school. A higher percentage of Puente students (43 percent) also enrolled in a four-year college compared to the percentage of the control group (24 percent).

### **College Pathways (pp. 48-49)**

**Evaluation Source:** Center for Higher Education Policy Analysis. *National Study of College Preparation Programs*. “Program Summary: Los Angeles.” Unpublished internal document. 1998.

The College Pathways program works with first-generation, underrepresented students from Los Angeles Unified School District high schools. The program begins in the tenth grade and lasts until the completion of a student’s senior year of high school. Program staff and volunteers visit 10<sup>th</sup> grade English classes each week promoting academic support and providing information about college and financial aid. College visits are included as a component of the program, as students are required to visit at least two colleges or universities per year. In the junior and senior year, the program visits to English classes are reduced to once every two weeks. The program cost per student is \$980.

The Center for Higher Education Policy Analysis evaluated the claims that College Pathways students enroll in four-year colleges and universities at a higher rate than similar non-participants from the district and the state of California. Thirty percent of College Pathways’ participants enrolled in four-year colleges

versus the district rate of 18 percent and the state rate of 14 percent.<sup>8</sup> The review reported a high attrition rate for College Pathways participants. Approximately 29 to 44 percent of original participants, who began the program in the tenth grade, were still enrolled in the program at the end of high school.

### **Project GRAD: Graduation Really Achieves Dreams (pp. 53-55)**

**Evaluation Source:** Opuni, K. *Project GRAD: Graduation Really Achieves Dreams, 1997-1998 Program Evaluation Report*. Houston, TX: Project GRAD. 1998.

Project GRAD is a systemic program that works with students from their first days in elementary school through high school. The focus of the program is on having a strong curriculum in reading and math, instructional environment, and parental involvement.

The study evaluated three feeder school systems in the Houston area.<sup>9</sup> It found significant improvement in teachers' expectations of students and a 74 percent decrease in discipline referrals to the principal's office since the 1994-1995 school year. Project GRAD students from the original cohort as well as those in the tenth grade scored higher on the Texas Assessment of Academic Skills (TAAS) test than non-Project GRAD participants. The report also noted that the longer students remain in the Project GRAD program, the higher the likelihood that they will attain achievement above grade-level standards and guidelines. Since the creation of Project GRAD, the feeder schools have successfully doubled the number of graduating high school seniors and four times as many students are enrolling in college. Project GRAD is still susceptible to obstacles, particularly the high mobility rate of both teachers and students. This impacts the consistency and duration of services that students receive.

### **Indiana Career and Postsecondary Advancement Center (pp. 57-59)**

**Evaluation Source:** Gillie, S. *An Extensive System for Postsecondary Encouragement*. Indianapolis, IN: Indiana Career and Postsecondary Advancement Center. 1999.

The Indiana Career and Postsecondary Advancement Center (ICPAC) is a statewide initiative to improve postsecondary education attainment for Indiana residents. ICPAC focuses on three main strategies or components:

- It offers an information and awareness campaign to all Indiana families about postsecondary education opportunities. The

---

<sup>8</sup> It is important to note that the Center for Policy Analysis had difficulty in verifying this information due to inadequate record keeping by College Pathways.

<sup>9</sup> A feeder system is where students attend multiple elementary schools. The primary schools then promote students to a handful of middle schools. Students then transition into one or two high schools.

information flows to students beginning in the seventh grade and continues through the twelfth grade.

- ICPAC works to restructure the statewide high school curriculum to require more college preparatory courses in its Core 40 program.
- It reduces the cost of attendance for students and families by offering scholarships through the 21<sup>st</sup> Century Scholars program.

ICPAC has been successful at increasing the number of students who enrolled in college preparatory courses. The number of students who enrolled in the Core 40 program between 1994-1995 and 1997-1998 increased by 26 percent (from 11 percent to 37 percent).

### **Statewide Evaluation of Florida's College Reach-Out Program. Annual Report: 1995-96 Cohort**

Postsecondary Education Planning Commission. *Statewide Evaluation of Florida's College Reach-Out Program. Annual Report: 1995-96 Cohort*. Tallahassee, FL: Author. 1998.

<http://www.cepri.state.fl.us/pdf/stwide%20eva.fl.%20coll.reachout%20pro.%20%20jan.98.pdf>

Florida's College Reach Out Program (CROP) is a statewide initiative for disadvantaged students in grades six thru 12. Students enrolled in the program receive academic enrichment and career and personal counseling opportunities. In 1995-1996, 46 of the 67 Florida counties participated in CROP, which totaled more than 6,200 students.

The evaluation compared both 1995-1996 CROP high school graduates with non-CROP graduates from the same year and 1991-1992 CROP graduates with non-CROP graduates from the same year.

The 1991-1992 CROP cohort performed similarly to the 1991-1992 non-CROP group. Postsecondary enrollment was 52 percent for students in the CROP cohort and 49 percent for non-CROP students. In addition, the five-year retention rate for CROP students was 27 percent while the rate for non-crop participants was 25 percent. Finally, the five-year degree completion rate for both groups was identical (six percent for an associate's degree and 3 percent for a bachelor's degree). Given the similarities in performance outcomes, the evaluators concluded that CROP may be leveling the playing field for low-income students.

On the other hand, the 1995-1996 CROP cohort outperformed their non-CROP counterparts. Fifty-one percent of CROP high school graduates enrolled in higher education, while only 43 percent of the non-CROP group attended a two- or four-year school. In fact, 36 percent of CROP graduates enrolled in a four-year school versus 29 percent for the non-CROP group.

## **ACT's Educational Planning and Assessment System Case Study: Preparing Oklahoma Students for the Future**

ACT Educational Services. *ACT's Educational Planning and Assessment System Case Study: Preparing Oklahoma Students for the Future*. Iowa City, IA: Author. 2004.  
<http://www.act.org/path/policy/pdf/oklahoma.pdf>

During the early 1990s, in an effort to improve academic preparation and college attendance rates, the state regents of Oklahoma raised college admissions standards and applied ACT's Educational Planning and Assessment System (EPAS) to regularly assess student academic progress. The number of required high school courses to attend college in Oklahoma was increased from 11 to 15. At the same time, the state implemented a voluntary program for school districts to monitor and track student academic progress. Districts evaluate students through assessment tests in the eighth grade (EXPLORE), tenth grade (PLAN) and eleventh or twelfth grade (ACT). The assessment tests are used as benchmarks to gauge student academic progress and college readiness. At the same time, the assessment tests offer data, guidance, and feedback to students, parents, teachers, and district officials in identifying areas where students are struggling and need additional academic support and tutoring.

Although EPAS is voluntary, over 95 percent of Oklahoma's students (nearly 85,000) attended schools that participated in the program in 2003. Evidence indicates that the EPAS programming is producing positive results for the state:

- **More students are taking the ACT college entrance exam.** For the high school class of 2002, 72 percent of all graduates took the ACT. This was a 25 percent increase from the 1992 graduating class.
- **ACT scores have risen.** Average ACT scores rose from 20.0 in 1992 to 20.5 in 2002. This increase outpaced the average growth nationwide.
- **More minority high school students are taking core coursework.** The percentage of African Americans and Native Americans who enrolled in core classes have increased by 13 percent and seven percent, respectively, since the implementation of EPAS.

### **The Role of Social Capital in Youth Development: The Case of "I Have a Dream" Programs**

Kahne, J. & Bailey, K. "The Role of Social Capital in Youth Development: The Case of "I Have a Dream" Programs." In *Educational Evaluation and Policy Analysis*, Vol. 21, No. 3. pp. 321-343. Fall, 1999.  
[www.aera.net/pubs/eepa/abs/eepa2134.htm](http://www.aera.net/pubs/eepa/abs/eepa2134.htm)

I Have a Dream (IHAD) sponsors more than 160 programs in 60 cities throughout the United States. It serves more than 12,000 students. Each individual program site has flexibility over program design, but all sites must contain scholarships, counseling, mentoring, and tutoring components. Students typically begin the program in the third



grade and continue participating in IHAD until the completion of their senior year of high school. IHAD program costs per student, excluding the scholarship element, range from \$1,000 to \$3,000.

This evaluation reviewed two Chicago area IHAD school sites over a two and a half year period (from the start of the eleventh grade to the completion of the twelfth grade). Students began these programs in the sixth grade and were compared to students from the previous sixth grade class. This comparison was chosen because all sixth grade students from both schools participated in IHAD. Participants of IHAD had higher high school graduation rates (71 percent and 69 percent) than the control groups (37 percent and 34 percent).

### **Evaluation of the GE Fund College Bound Program**

Balis, L., Melchior, A., Sokatch, A., & Sheinberg, A. *Expanding College Access, Strengthening Schools: Evaluation of the GE Fund College Bound Program*. Waltham, MA: Brandeis University, Center for Human Resources. 1999.  
[http://www.ge.com/foundation/GEFund\\_CollegeBound.pdf](http://www.ge.com/foundation/GEFund_CollegeBound.pdf)

The College Bound program offers five-year grants, ranging between \$250,000 and \$1 million to 19 high schools in 17 communities throughout the United States. Each school is given flexibility to develop their own program, though they must contain curriculum and structural changes, opportunities for professional development, and enrichment activities. The program targets a diverse group of ethnic students. On average 45 percent of participants are white, 39 percent black, and 13 percent Hispanic. Forty-three percent of participants are typically eligible for the federal free and reduced price lunch programs.

The evaluation consisted of site visits to 17 College Bound locations, analysis of school data on college attendance rates, and telephone surveys of 361 College Bound graduates. The author's of this study reported that successful College Bound programs were those that were able to create a whole-school approach to the program as opposed to a more selective or targeted approach. The capacity for a strong leader to monitor and direct the program as well as good relationships with local partners strengthened the overall success of a program. The most common changes in practice, curriculum, or instruction for schools were creating partnerships with a college or a university (93.3 percent of schools surveyed), in-school tutoring/homework assistance (93.3 percent of schools surveyed), and changes to computer labs and equipment (86.7 percent). The most frequent College Bound Activities were college visits (100.0 percent of schools surveyed), individual college counseling (93.3 percent of schools surveyed), SAT/ACT preparation courses (93.3 percent of schools surveyed), and tutoring (93.3 percent of schools surveyed).

Of the sites that had enough data from which the authors could draw a conclusion, seven out of ten significantly increased their college enrollment rates. The biggest increase was at schools that previously had college enrollment rates below 50 percent. Four out of five of these schools more than doubled their college enrollment rates. Students who

completed the College Bound program were more likely to attend college (76 percent enrollment rate) than all high school graduates nationwide (71 percent enrollment rate). College Bound students also had a higher college first-year retention rate (88 percent) than the national first-year persistence rate of 70 percent. In fact, College Bound students are less likely to drop out of college (27 percent drop out rate) than the national average (37 percent drop out rate).