



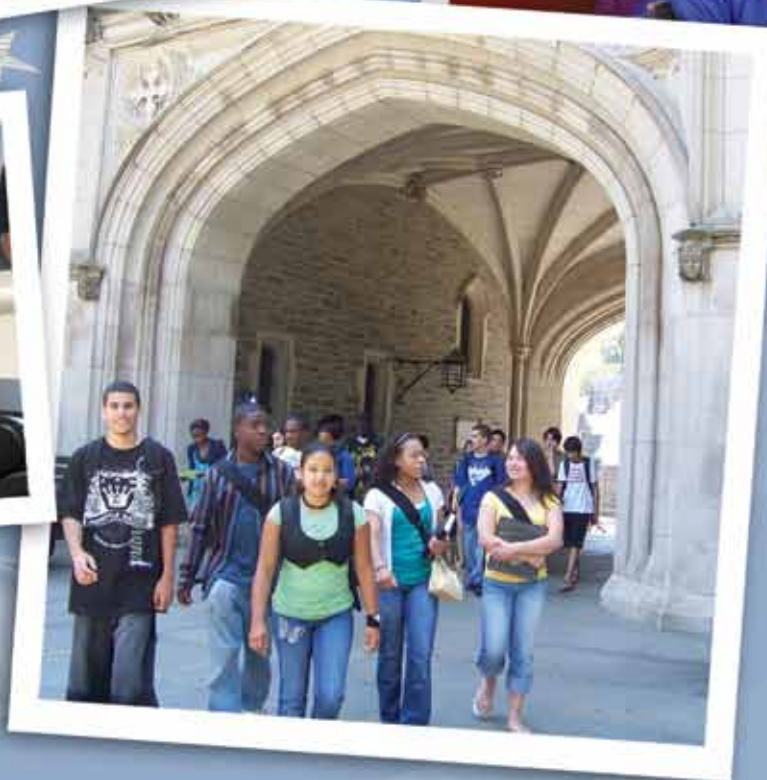
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Developing High-Potential Youth Program: A Return On Investment Study for U.S. Programs



Catherine M. Millett
Michael T. Nettles

ETS • Princeton, NJ
December 2009

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Dear Colleague:

I am pleased to present The Goldman Sachs Foundation's *Developing High-Potential Youth Program: A Return on Investment Study for U.S. Programs*. Since the inception of the Foundation, Drs. Michael Nettles and Catherine Millett, now of Educational Testing Service (ETS), and I have discussed how they might estimate the return on the Foundation's investment in the Developing High-Potential Youth programmatic area.

They have produced this report that examines the work of our U.S. grantees in the developing high-potential youth program areas. This report provides a high-level look at the prominent activities, outcomes, value and impact of seven U.S. grantees who have had young people enter the college admissions process. The underlying question for our work is "Do the Foundation's investments generate a return?"

Their overall conclusion is that the Foundation is investing in effective programs that are models of education, leadership development and entrepreneurial orientation among high-potential youth around the globe.

A handwritten signature in black ink that reads "Stephanie Bell-Rose". The signature is written in a cursive, flowing style.

Stephanie Bell-Rose
President
The Goldman Sachs Foundation

Acknowledgements

We would like to thank the grantees for their excellent work in providing the Foundation with reports throughout the year on their accomplishments and successes. The grantees also have been very helpful in answering follow-up inquiries.

We would also like to thank those at the Goldman Sachs Foundation who have been particularly helpful in our efforts to capture the programs' investments in creating a positive global impact. In particular, we would like to thank Stephanie Bell-Rose for her encouragement and support for this research. Jack Sabater, a consultant to the program, and Lisa Calandra and Brenda Lee of the Goldman Sachs Foundation each have been tremendously helpful in this endeavor.

At Educational Testing Service (ETS), we would like to thank Heather Corcoran, Dhana Venigalla and Laura Ridolfi for their contributions to collecting and structuring the college application, acceptance and admissions data; and Tony Chu for his work on the NCES databases. Richard Coley and Lisa Belfield provided helpful reviews of this report. We also appreciate the good work of the ETS Marketing and Public Affairs (M&PA) team.

Table of Contents

Executive Summary.....	1
The Facts: A Spotlight.....	3
GSF’s Grant Making for Developing High-Potential Youth.....	4
Profile of Student Participants.....	6
Unpacking the Process – It’s as Easy as One, Two, Three.....	6
A Profile of Emerging Accomplishments: College Admissions and Employment.....	7
College Applications.....	8
College Acceptances.....	8
College Enrollment.....	8
Life after College – Employment.....	10
Comparison Groups: Putting Grantees’ Accomplishments in Perspective.....	10
The Return on a College Education Investment.....	11
Individual Benefits from Investing in Education.....	11
Special Benefits of Selective College Education.....	11
Societal Benefits From Individuals’ Investments in Their Education.....	12
Simulating the Return on Investment.....	12
Providing Resources and Aspirations: Did Goldman Sachs Provide Hope?.....	14
A University President’s Perspective.....	14
A Program Director’s Perspective.....	14
A Current Student’s Perspective.....	15
A College Graduate’s Perspective.....	15
Bright Prospects on the Horizon: Other GSF Grantees.....	16
The College Years – Another GSF Investment.....	16
Next Steps.....	17
Appendix A: Estimating the Cost of Preparing a Student for Admission to a Leading U.S. College or University.....	18
Appendix B: Developing High-Potential Youth Programs Profiles.....	19
The I-LEAD Program.....	19
Crimson Summer Academy.....	20
The Next Generation Venture Fund.....	21
New York Metro Region Leadership Academy (NYMRLA).....	22
Princeton University Preparatory Program (PUPP).....	23
Collegiate Scholars Program.....	24
Increasing Access to Postsecondary Education.....	25
Appendix C: Application, Acceptance and Enrollment Rates by Programs.....	26
Appendix D: Analytical Caveats.....	28
References.....	28

Figures

Figure 1: Profile of Selective College Application, Acceptance and Enrollment of 10th Graders in the Educational Longitudinal Study of 2002.....	7
Figure 2: Selective College Application, Acceptance and Enrollment: A Comparison of Students from Developing High-Potential Youth Programs Compared to Grade 10 African American or Hispanic Students with Family Incomes of \$35,000 or less and a B or Higher GPA....	8
Figure 3: Comparison of Selective University Enrollment Rates of Developing High-Potential Youth Students from Four Programs and Their Non-DHPY Peers.....	10
Figure C1: The Percentage of Students at Developing High-Potential Youth Programs Who Applied to a Selective College Compared to Grade 10 African American or Hispanic Students with Family Incomes of \$35,000 or less and a B or Higher GPA as of Fall 2009.....	26
Figure C2: The Percentage of Students at Developing High-Potential Youth Programs Who Were Accepted to a Selective College Compared to Grade 10 African American or Hispanic Students with Family Incomes of \$35,000 or less and a B or Higher GPA as of Fall 2009.....	26
Figure C3: The Percentage of Students at Developing High-Potential Youth Programs Who Enrolled as First-Time Freshmen at a Selective College Compared to Grade 10 African American or Hispanic Students with Family Incomes of \$35,000 or less and a B or Higher GPA as of Fall 2009.....	27

Tables

Table 1: GSF U.S. Grantees: Grant Period and Program Name	4
Table 2: Profile of Program Elements by GSF Grantee	5
Table 3: Selective College and Universities Where GSF-Supported Students Enrolled.....	9
Table 4: The Return on Investment	13
Table A1: How Much Could You Spend to Prepare a Student for College (estimated)?.....	18

Executive Summary

- The Goldman Sachs Foundation (GSF) has made investing in the development of high-potential youth a strategic priority.
- The Developing High-Potential Youth (DHPY) Program is funded by the GSF. Its main objective is to increase the number of traditionally underrepresented students who enroll at the top 185 colleges and universities in the United States.
- Since its inception in 2000, GSF has supported 50 programs in six countries with grants totaling \$51.3 million.
- Seven U.S.-based programs that have students who graduated from high school and have been evaluated by the Educational Testing Service (ETS) are profiled. The programs have received nearly \$26.5 million in support and have served nearly 2,000 students, with several more new classes to come in the next couple of years.
- National studies have shown that many high-potential youth do not even put themselves in the running for earning an admissions place at one of the top 185 colleges and universities and would not do so without the support of the type provided by DHPY.
- ETS analyzed the returns to individuals of participating in one of seven GSF-sponsored programs.
- Each of the programs has net returns. There is an overall average return to individuals over their lifetime of \$15 for every \$1 invested, and a range in the returns among the seven programs from \$8 for each \$1 invested to \$24 for each \$1 invested. These returns compared favorably to those of comparable programs in England.
- A university president, a program director, a current student and a college graduate share their insights and reflections on what the Developing High-Potential Youth program has meant to them.
- GSF has supported other programs in the United States as well as in England, Ireland and South Africa that aim to increase access for historically underrepresented groups to the world's leading universities. The graduates of these programs will increase the total number of students that GSF has supported. GSF also has supported the Management Leadership for Tomorrow organization to provide educational opportunities for students during their college years.

*Build an investment plan,
Review your plan,
Check your portfolio, and
Do not let your emotions affect your investment decisions.*

This time-honored advice of a good financial advisor should sound familiar to many investors.¹ Foundations and other philanthropic organizations should heed this advice when they review their charitable and strategic social mission investment portfolios as one criterion in considering which investments should be continued, modified or discontinued. Investments that need to be cut may no longer be in alignment with organizational priorities or may not have generated the desired return.

When The Goldman Sachs Foundation (GSF) made its first strategic social investment decision in 1999, it took note of one of Goldman Sachs' core corporate values: People are its greatest asset. The program's objective was — and is — clear and simple: to increase the number of high-potential young adults from historically underrepresented backgrounds who earn admission to and succeed at selective colleges and universities. GSF *realized an opportunity* to plan and work with initiatives that support youth and *inspire* these young people. GSF had a Return on Investment (ROI) plan from its inception.

This report provides the external evaluation of the return on the investment of GSF's resources in the United States. GSF's investment has also provided hope to and elevated the aspirations of the youth involved — returns that, despite being more difficult to measure, are visible.

This report has eight sections. The first section of the report provides an overview of the importance of developing high-potential youth. Section two reviews GSF's grant-making approach. The third section profiles GSF-supported students and their accomplishments with comparisons to students from a national database. The fourth section provides an overview of the ROI research. In section five, we present our simulation of the ROI for the GSF programs. In section six, which presents a qualitative component for the work, four key stakeholders reflect on what these programs have achieved. Section seven profiles several of GSF's investments in similar programs in the United States and abroad, as well as a program that works with students in their college years. Section eight presents our recommendations for next steps and our summary of what GSF has achieved in less than 10 years.

¹ Source: Fidelity.com

The Facts: A Spotlight

They are smart students, why do they need help getting to college?

If we had a list of the 10 most often asked questions about the “Developing High-Potential Youth Program,” this question would be number one. With so many pressing issues that could merit GSF’s investment dollars, why is helping smart students an investment route worth pursuing? The answer is that without the help of programs such as those sponsored by GSF, many highly able students would not meet their potential — future leaders would be lost. Three propositions may shed light on why this undesired outcome too often occurs.

Proposition 1: Summer Academic Preparation Differentials

The first proposition is that even bright students can fall behind in their intellectual development during the summer; especially when they are economically disadvantaged and their academic pursuits are impeded by distractions of family subsistence and survival. The wistful memories of childhood summers spent with weeks of unscheduled time may very well reflect a bygone era for many and an illusion for many others. Whether it is sports, music and arts, community service or academic programs, many students participate in summer activities. What we are learning is that the payoffs from these activities vary for students.² One important variable is the type and quality of the summer activities in which high-potential youth engage. High-quality summer programs may impact performance in high school courses, performance on admissions tests and outcomes of college admissions.

Proposition 2: Students Do Not Engage in Competition

A second plausible explanation for the paucity of high-potential youth from underrepresented groups in selective colleges and universities is that some low-income high-ability students may not even put themselves in the running (Hann & Price, 2008). In 1988, 66 percent of the eighth-grade National Educational Longitudinal Study of 1988 (NELS:88) sample indicated that they planned to complete a bachelor’s degree or higher, yet 12 years later in 2000, only 26 percent had attained a bachelor’s degree, and only 3 percent had earned a master’s degree or higher (Ingles, Curtin, Kaufman, Alt, Chen, & Owings, 2002). In a recent analysis of SAT® test takers, Hoxby and Avery reported that 60 percent of the nearly 21,000 high-achieving students from low-income families did not apply to selective colleges and universities (Glenn, 2009). The GSF programs provide opportunities for students to see that elite institutions are real possibilities for their future.

Proposition 3: Students and Families Do Not Have Adequate Financial Resources to Prepare Students for College Admissions

The lion’s share of the national dialogue on college costs revolves around paying college tuition. Yet, many families make sizeable investments during the years before students matriculate in college. How much are families spending to help their youngsters prepare for the college admissions process? Borrowing from Voltaire’s *Candide* (1759/1947), in the best of all possible worlds, students and families would have unlimited resources at their disposal to spend on crafting individually tailored programs to prepare for success in the university admissions process, and subsequently at the selected university. Many talented young people are members of families with modest incomes that do not have the financial wherewithal to provide the extra advantages that more financially well-off students have available, or the knowledge of how to help their son or daughter. We estimate that a family could spend \$104,120 over the four-year high school experience to prepare a student for admission to a leading U.S. college or university (see Appendix A).

² Some researchers have even identified learning gaps that occur for high-ability students during the 8 to 10 weeks of summer vacation (Alexander, Entwisle, & Olson, 2007; Cooper, Nye, Charlton, & Lindsay, 1996).

GSF's Grant Making for Developing High-Potential Youth

GSF's grant-making strategy has been to award funds to the highest-quality organizations that share GSF's goal of preparing talented young people for admission to selective colleges and universities. The grantees had established a record of accomplishment in working with youth, and with the support of GSF were able to either expand their efforts (e.g., A Better Chance) or create new opportunities for students (e.g., the I-LEAD program of Bank Street College of Education, or the Next Generation Venture Fund (NGVF) of Johns Hopkins University, Duke University, Northwestern University and the University of Denver). Since its inception in 2000, GSF has supported 50 programs in six countries with grants totaling \$51.3 million.

Seven U.S.-based programs with students who graduated from high school and that have been evaluated by Educational Testing Service (ETS) are profiled in this report (see Table 1 and Appendix B). Over the past nine years, the Foundation has awarded nearly \$26.5 million to these seven U.S. grantees, which have already supported nearly 2,000 students, with several more new classes to come in the next couple of years.

Two facets of the grant program are noteworthy, and reflect the belief in the talent of young people and the importance of providing all students with the same opportunities. First, none of the GSF grant funds is allocated for college scholarships;³ and second, none of the university-based programs guarantees admission to the institution — if students are accepted to their program's home institution, they earned a spot in the freshman class on their own merits.

Table 1: GSF U.S. Grantees: Grant Period and Program Name

GRANTEE	GRANT PERIOD	PROGRAM NAME
Bank Street College of Education	June 2000 to June 2009	Institute for Leadership, Excellence and Academic Development (I-LEAD)
Harvard University	September 2005 to September 2007	Crimson Summer Academy
Center for Talented Youth (CTY) at Johns Hopkins University Duke University Talent Identification Program (TIP) Northwestern University's Center for Talent Development (CTD) University of Denver's Center for Innovative and Talented Youth (CITY)	April 2000 to June 2012	Next Generation Venture Fund (NGVF) ⁴
Prep for Prep	June 2000 to March 2009	New York Metro Region Leadership Academy (NYMRLA) and the Prep for Prep/Goldman Sachs Institute for Entrepreneurship
Princeton University	September 2005 to November 2010	Princeton University Preparatory Program (PUPP)
University of Chicago	September 2005 to September 2010	Collegiate Scholars Program/Elements of Entrepreneurship Program
University of Southern California	September 2006 to September 2008	Increasing Access to Postsecondary Education

Source: ETS Evaluation

³ Students who complete the Harvard University Crimson Academy receive a \$3,000 scholarship for use at the college or university of their choice. GSF funds are not allocated for the scholarships.

⁴ From January 2000 to September 2004, CTY conducted the pilot phase of the Next Generation Venture Fund. The accomplishments of the pilot NGVF program are merged with the NGVF program for this report.

As part of its decision to partner with successful and high-quality organizations, the Foundation decided to work with local program experts to design and tailor GSF-sponsored programs to serve specific students. The result is that each program's structure and content reflects the GSF's specifications and the sponsored institution's leadership team's consideration of the preparation and development needs of their students.

While each of the programs retains its individuality, the collection of programs have a common overall approach to increasing the number of high-potential young people who attend selective colleges in the United States (see Table 2). The programs are guided by research on the characteristics of effective college outreach programs (Perna, 2002; Tierney & Hagedorn, 2002). The focus is on rigorous academic preparation, building knowledge about college, teaching life skills and finding the resources required to pay for attending college. The programs work with students and families to prepare them for the application experience at selective colleges. These activities include ensuring that the advantages of a selective college education are well understood, assisting with planning for academic success in high school, helping students generate and execute comprehensive to-do lists to prepare for the college admission process, and identifying colleges which are a good match for students' individual talents, academic interests and institutional preferences. Typically, each year, many programs also plan and execute multiday college tours, providing students with a firsthand look at several different types of college campuses as well as information sessions conducted by college admissions officers.

Table 2: Profile of Program Elements by GSF Grantee

PROGRAM ELEMENTS	I-LEAD	Crimson	NGVF	NYMRLA	PUPP	Collegiate Scholars	Increasing Access to Post-secondary Education
Rigorous academic summer program	Yes	Yes	Yes	Yes	Yes	Yes	Yes
After-school and weekend academic, social and cultural capital enrichment	Yes	Yes		Yes	Yes	Yes	Yes
Online advanced academic courses			Yes				
Secondary school curriculum guidance	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mentoring	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Academic, college admission, financial aid and life skills guidance	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Entrepreneurial education	Yes		Yes	Yes		Yes	
Leadership development	Yes	Yes	Yes	Yes	Yes	Yes	

Note: Blank indicates that this component is either not offered or is not a central element of the program.

Source: ETS Evaluation.

Profile of Student Participants

If one believed everything he/she read in the newspaper, it might be hard to imagine that a pool of talented yet disadvantaged young people exists — students who, with a bit of support, could be catapulted in the college admissions process from the middle-tier colleges and universities into the top tier. The seven grantees profiled in this report have succeeded in identifying, recruiting, enrolling and graduating from their programs young people who may have lacked some resources but who, once provided a variety of resources, blossomed like a beautiful rose.

Three-quarters of the programs literally look in their own backyards to find students who are ideal candidates. Programs typically work with their local public schools or, in the case of Bank Street, Catholic schools to identify students who could benefit from participation in the programs. Several programs operate during the school year either after school or on the weekends, and all of the programs offer programming during the summer. In these programs, the admission process typically mirrors the college admissions process. Selection is often based on grades, teachers' recommendations, and students' own demonstration of their interest and willingness to participate in a rigorous program. In addition, a parent or guardian usually submits materials to demonstrate that they support the student's participation in these rigorous programs.

The Next Generation Venture Fund (NGVF) program takes a slightly different approach to identifying talented young people. NGVF students currently reside in 23 states and Puerto Rico. NGVF plans to have a national recruitment program in the next few years. Students primarily qualify for the NGVF program on the basis of their performance on the SAT or ACT® in the 7th and 8th grades.

One impressive accomplishment of the seven programs is their student retention rates. Almost 90 percent of students have remained in the programs. The following is a thumbnail profile of the students from the seven programs:

- Since 2000, almost 2,000 students have participated in one of the seven programs.
- Forty-six percent of the students are male.
- Thirty-nine percent of students are Hispanic and an additional 37 percent are African American.
- With the exception of the Bank Street College of Education's program, which works mainly with students who attend Catholic high schools with high concentrations of minority students, the majority of students attend public schools.
- Nearly 60 percent of students will be the first generation in their families to earn a bachelor's degree.
- The students' median family income is \$35,000, with 23 percent of students coming from families who meet the U.S. definition of living at the poverty level.

Unpacking the Process – It's as Easy as One, Two, Three

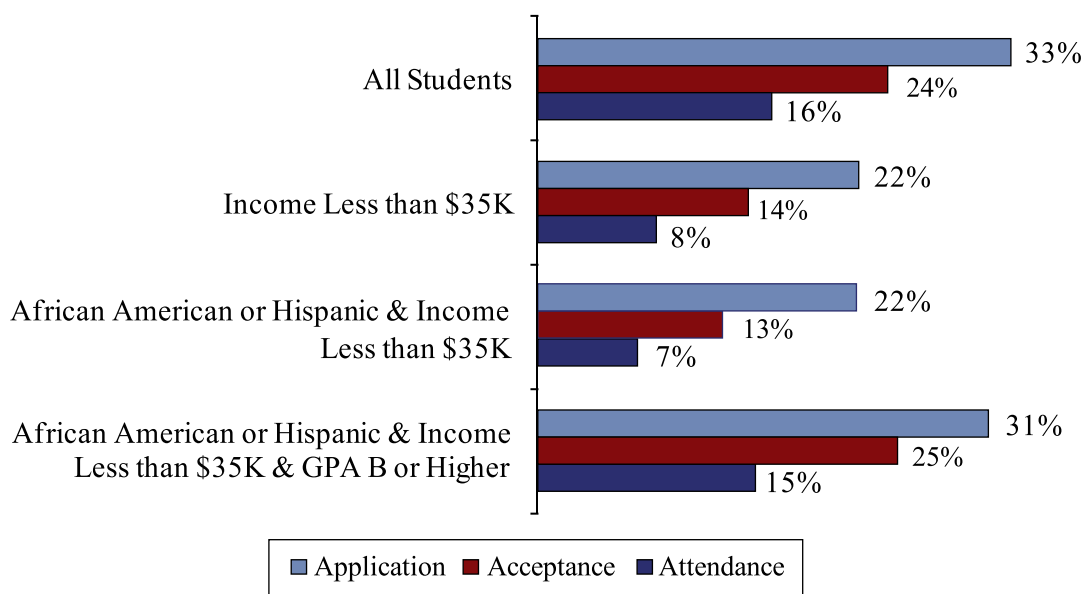
Selective college admissions is a bit like the lottery, in that one can only win the lottery if one buys a ticket. Likewise, one can only enroll at a selective college if one applies and is accepted. It may be useful to unpack the college admissions process into three discrete stages:

- Stage One – student decides to apply to a particular college(s)
- Stage Two – college admissions office(s) decide(s) whether to offer admission
- Stage Three – student decides whether to attend

In order to put the GSF students' achievements into perspective, we wanted to provide a sense of the national landscape. Our options were limited for several reasons. First, the 50 states do not track these data. Second, the College Board® and ACT have data on a subset of students in whom we are interested — those individuals who signal that they have entered Stage One by taking an admissions test. Another option was to identify a nationally representative sample that would allow us to model students' behaviors. The U.S. Department of Education conducts one longitudinal study that tracks the issues we were interested in examining.

We analyzed the Educational Longitudinal Study (ELS) of 2002–2006, which followed a representative sample of the nation's 10th-grade students through the completion of their high school years and their transition to work and/or postsecondary education, to see if students' paths to selective college enrollment varied depending on their personal backgrounds (see Figure 1). We found that among all 10th graders, 33 percent of students applied to at least one selective college or university,⁵ 24 percent of all students were accepted at a selective university, and 16 percent of all students attended a selective university. These rates drop at each stage of the admission process when family income and race/ethnicity are considered. Students from families with incomes of \$35,000 or lower, as well as African American or Hispanic 10th graders with family incomes of less than \$35,000, had much lower rates of application (22 percent and 22 percent, respectively, compared to all 10th graders [33 percent]); acceptance (14 percent and 13 percent, respectively, compared to 24 percent) and attendance (8 percent and 7 percent, respectively, compared to 16 percent).

Figure 1: Profile of Selective College Application, Acceptance and Enrollment of 10th Graders in the Educational Longitudinal Study of 2002.



Source: ETS's analyses of the Educational Longitudinal Study of 2002.

A Profile of Emerging Accomplishments: College Admissions and Employment

Over the course of the evaluation, we have had the opportunity to visit each of the programs and talk with and survey the students. Through our casual conversation with students and our study of surveys that students complete, we have observed that entering students' knowledge of selective colleges and universities is rather limited. For example, while many students list Harvard and Yale as institutions they would like to attend, few mention other selective institutions such as Dartmouth, Brown or Wesleyan.

⁵ The selective colleges include colleges or universities designated as most competitive or highly competitive in the *Barron's Profile of American Colleges* (2007).

As of June 2009, over 1,200 students had graduated from the GSF programs. The fruit of the work of the seven programs is impressive when compared to the national pool of African American and Hispanic students with a B or higher GPA and from families with incomes less than \$35,000 (see Figure 2 and Appendix C for individual program data).

College Applications

Overall, 91 percent of students from the seven programs applied to at least one selective college or university. This ranged from 79 percent at the Princeton University Preparatory Program (PUPP) to 99 percent at the Crimson Summer Academy program. These applications rates are considerably higher than the 31 percent for the national pool of African American and Hispanic students from families with incomes of \$35,000 or less and a high school GPA of B or better (see Figure 2 and Figure C1 for individual program data).

College Acceptances

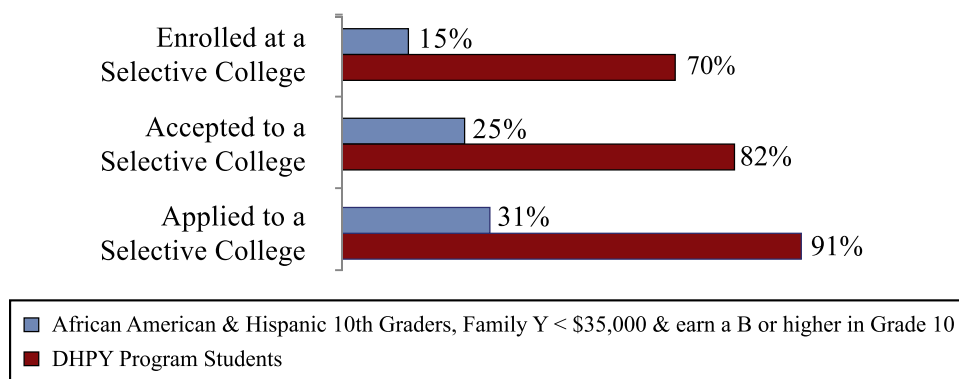
The GSF students were successful in the admissions process. Eighty-two percent were accepted to at least one selective college or university. Among programs, this ranged from 68 percent at PUPP to 92 percent at the New York Metro Region Leadership Academy (NYMRLA). Nationally, 25 percent of their peers who participated in the ELS study were accepted to a selective college or university (see Figure 2 and Figure C2 for individual program data).

College Enrollment

Seventy percent enrolled as a first-time freshman at a selective college; nationally, the rate is 15 percent. The program rates ranged from 60 percent at Increasing Access to Postsecondary Education to 80 percent at NYMRLA (see Figure 2 and Figure C3 for individual program data). One of the noteworthy program accomplishments is the diversity and quality of colleges to which students elect to apply, ultimately attend and successfully matriculate (see Table 3). The list includes all eight Ivy League universities as well as many leading liberal arts colleges and research universities that vary in size, location, academic mission and public/private status.

While the overarching goal of the Foundation is for participating students to attend the best colleges, it recognizes that the choice of which university to attend is an individual student’s decision. The small percentage of students who opt not to enroll in a selective college — after being admitted to one — may do so for sound reasons. For example, some students plan to study a major in which the “best” department is not at a college on the *Barron’s* list of the most competitive colleges. Other students receive very generous financial aid packages from their flagship state university, close to home. Therefore, these data may underestimate the potential of this group to enroll at selective colleges.

Figure 2: Selective College Application, Acceptance and Enrollment: A Comparison of Students from Developing High-Potential Youth Programs Compared to Grade 10 African American or Hispanic Students with Family Incomes of \$35,000 or less and a B or Higher GPA



Source: ETS’s evaluation and ETS’s analyses of the Educational Longitudinal Study of 2002 data.

Table 3: Selective College and Universities Where GSF-Supported Students Enrolled

Agnes Scott College, GA	Hampshire College, MA	Syracuse University, NY
Air Force Academy, CO	Harvard University, MA	Texas A&M University, TX
American University, DC	Haverford College, PA	Trinity College, CT
Amherst College, MA	Hendrix College, AR	Tufts University, MA
Babson College, MA	Illinois Institute of Technology, IL	Tulane University, LA
Barnard College, NY	Johns Hopkins University, MD	Union College, NY
Bates College, ME	Kenyon College, OH	University of Minnesota- Twin Cities, MN
Bennington College, VT	Lafayette College, PA	University of California-Berkeley, CA
Bentley College, MA	Lehigh University, PA	University of California-Irvine, CA
Boston College, MA	Loyola College, MD	University of California- Los Angeles, CA
Boston University, MA	Macalester College, MN	University of California-San Diego, CA
Bowdoin College, ME	Massachusetts Institute of Technology, MA	University of Chicago, IL
Brandeis University, MA	Middlebury College, VT	University of Connecticut, CT
Brown University, RI	Mount Holyoke College, MA	University of Delaware, DE
Bryn Mawr College, PA	Muhlenberg College, PA	University of Illinois-Urbana, IL
California Institute of Technology, CA	New College of Florida, FL	University of Maryland- College Park, MD
Carleton College, MN	New York University, NY	University of Michigan-Ann Arbor, MI
Carnegie Mellon University, PA	Northeastern University, MA	University of North Carolina- Chapel Hill, NC
Case Western Reserve University, OH	Northwestern University, IL	University of Notre Dame, IN
Claremont McKenna College, CA	Oberlin College, OH	University of Pennsylvania, PA
Clemson University, SC	Occidental College, CA	University of Pittsburgh, PA
Colby College, ME	Ohio State University, OH	University of Richmond, VA
Colgate University, NY	Penn State at University Park, PA	University of Rochester, NY
College of New Jersey, NJ	Pepperdine University, CA	University of Southern California, CA
College of the Holy Cross, MA	Pomona College, CA	University of Texas-Austin, TX
Columbia University, NY	Princeton University, NJ	University of Tulsa, OK
Connecticut College, CT	Reed College, OR	University of Wisconsin-Madison, WI
Cornell University, NY	Rensselaer Polytechnic Institute, NY	Vanderbilt University, TN
Dartmouth College, NH	Rutgers University- New Brunswick, NJ	Vassar College, NY
Davidson College, NC	Saint John's College in Annapolis, MD	Villanova University, PA
Denison University, OH	Skidmore College, NY	Wake Forest University, NC
DePauw University, IN	Smith College, MA	Washington University-St. Louis, MO
Dickinson College, PA	Stanford University, CA	Wellesley College, MA
Duke University, NC	Stevens Institute of Technology, NJ	Wesleyan University, CT
Emory University, GA	Stonehill College, MA	Westmont College, CA
Fairfield University, CT	SUNY Binghamton, NY	Wheaton College, MA
Fordham University, NY	SUNY Stony Brook, NY	Williams College, MA
Franklin & Marshall College, PA	Swarthmore College, PA	Yale University, CT
George Washington University, DC		
Georgetown University, DC		
Grinnell College, IA		
Hamilton College, NY		

Source: ETS Evaluation.

Life after College – Employment

After college admission, one of the next important GSF student accomplishments to track is college graduation. Nationally, selective colleges report a 70 percent average graduation rate at the end of six years (Horn, 2006). While enough time has not passed since GSF awarded its first grant to track a six-year graduation rate, one program has at least reached the four-year milestone, and the early results are promising.

The I-LEAD Program is one of the longest-standing grantees and one of the first to have students successfully complete the program, be admitted to and graduate from college. The first I-LEAD class graduated from college in June 2008. Over the course of their college years, the I-LEAD administrative team has kept in touch with many class members and has good news to report. Nearly 60 percent of students graduated from college in four years and several alumni garnered positions at Fortune 500 companies. Four alumni were offered and accepted positions at Goldman Sachs.

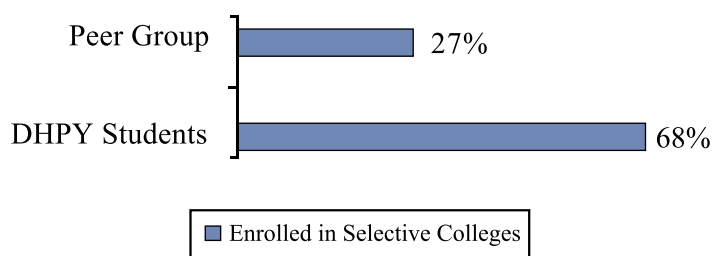
Comparison Groups: Putting Grantees' Accomplishments in Perspective

With a common goal of providing educational opportunities to all of the various groups of students with whom they work, the grant programs were not designed or implemented using a random assignment evaluation design.⁶ Rather, we used a cluster evaluation design that involved expert evaluators and researchers working with program staff to produce evidence to judge the effectiveness of the programs and areas in need of improvement (Barley & Jenness, 1993).

One of the challenges college preparation programs confront is how to answer the questions of (1) whether and how their programs make a difference toward increasing the enrollment of underrepresented students at selective universities, and (2) whether students would have attended selective colleges regardless of participating in the DHPY programs. For example, how much credit for a student's admission to Cornell University can the Princeton University Preparatory Program (PUPP) claim as compared to the high school the student attended? Each DHPY program has considered multiple approaches to forming comparison groups.

Four programs have secured the cooperation of their partner secondary schools. These schools provide demographic and college enrollment information for a group of similarly able and demographically comparable students who are not participants in the Foundation programs. The emerging picture of the accomplishments of the participating students compared to the comparison groups suggests that GSF-funded programs are making a difference (see Figure 3).

Figure 3: Comparison of Selective University Enrollment Rates of Developing High-Potential Youth Students from Four Programs and Their Non-DHPY Peers



Source: ETS Evaluation.

Note: The DHPY students referenced in the above figure are from four programs.

⁶ For additional information on design methodology, please see the U.S. Department of Education's *Report of the Academic Competitiveness Council* (May 2007).

The Return on a College Education Investment

The public has known for quite a while that college pays. We often hear about the advantages of a college education, either an associate's degree or a bachelor's degree, compared to earning a high school diploma. For instance, the average annual income of a high school graduate is \$26,933, compared to \$52,671 for a graduate with a bachelor's degree (U.S. Census Bureau, 2006). The benefits of higher education are typically classified as either individual or societal benefits.

Individual Benefits from Investing in Education

The benefits of a college degree are typically categorized as either having to do with earnings and wealth, or being personal in nature (The College Board, 2008). The financial benefits include higher annual income (Arcidiacono, Bayer, & Hizmo, 2008; Day & Newburger, 2002; PricewaterhouseCoopers LLP, 2005; The College Board, 2008), greater wealth accumulation (Alliance for Excellent Education, 2007),⁷ and the ability to recoup the full cost of college tuition and fees in a relatively short period (Baum & Ma, 2007; The College Board, 2008). The personal benefits range from lower experiences of unemployment to a higher likelihood of working for employers who offer a pension plan and employer-provided health care (Baum & Ma, 2007; The College Board, 2008). Other personal benefits include better health and a longer life (Muennig, 2005; The College Board, 2008; Wong, Shapiro, Boscardin, & Ettner, 2002).

Special Benefits of Selective College Education

Arcidiacono, Bayer, & Hizmo (2008) contend that employers who cannot directly observe candidates' ability use graduating from college as a proxy for ability. For this report, we did not directly measure reputational effects, accumulated social capital, or greater probability of selective college graduates working for employers who have the ability to pay higher wages (Holtom & Inderrieden, 2006). We believe that success at a selective college or university provides an individual with a higher probability for a significant career and a leadership role. A couple of examples provide a rational basis for our thinking. Some of this country's greatest leaders attended the nation's top colleges and universities: 65 percent of U.S. Presidents attended selective colleges;⁸ 56 percent of the CEOs of Fortune 50 companies attended selective colleges;⁹ and 66 percent of Supreme Court Justices attended selective colleges.¹⁰

There is a wage premium associated with the selectivity of the college attended. With one exception (Dale & Krueger, 2002), the bulk of research on the individual earnings benefit associated with selective college attendance has found a positive relationship (Brewer & Ehrenberg, 1996; James, Alsalam, Conaty, & To, 1989; Rumberger & Thomas, 1993; Thomas, 2003; Wales, 1973). Even Dale and Krueger (2002) had one notable finding that supports the work of GSF: Children from low-income families earned more if they attended selective colleges.

One other important opportunity positively associated with selective college attendance is the greater likelihood of pursuing graduate study (Eide, Brewer, & Ehrenberg, 1998; Thomas, 2003). Our analyses of the Baccalaureate and Beyond (B&B) Study (1993/2003) found that 10 years after earning their bachelor's degrees, 47 percent of most selective-college graduates reported either being enrolled in a post-baccalaureate degree program or having earned a post-baccalaureate degree, compared to 29 percent of all other college graduates.

⁷ Household wealth or assets include cash investments (savings and equities, 401(k) accounts and individual retirement accounts), material possessions that hold monetary value (homes, cars, small businesses) and investments in nontangible property such as degrees.

⁸ Source: ETS calculation based on *About the White House Presidents* (United States White House, n.d.) and *Barron's Profile of American Colleges* (2007).

⁹ Source: ETS calculation based on *Where the Fortune 50 CEOs Went to College* (Santo, 2006); *University Top 200 in Full* (Times Online, 2008); and *Barron's Profile of American Colleges* (2007).

¹⁰ Source: ETS calculation based on the list of colleges and universities the U.S. Supreme Court justices graduated from in *Timeline of the Justices* (Supreme Court Historical Society, n.d.) and *Barron's Profile of American Colleges* (2007).

Societal Benefits From Individuals' Investments in Their Education

The typical societal benefits include benefits to the national economy that accrue from the additional income that college graduates earn over their lifetimes; increased government revenues and lowered government spending due to lower rates of participation in government-funded programs such as Medicaid, school lunch programs and food stamps; higher rates of volunteering and voting; and lower rates of crime and incarceration (The College Board, 2008).

Simulating the Return on Investment

Unlike individual stock or mutual fund investments, it is not possible to directly track GSF's Return on Investment (ROI). For example, we cannot log into an account to see that GSF's \$2.8 million grant to Prep for Prep is now worth \$1.8 million or \$50.8 million. Rather, our approach is to simulate the return on GSF's investment by making some assumptions based on the grantees' accomplishments to date, as well as on information available on pre-college students from the ELS 2002 study and college graduates from the Baccalaureate & Beyond (B&B) Study. The B&B study is a nationally representative study that followed 1993 U.S. college graduates over a 10-year period to learn about their entry into and progress through graduate-level education and the workforce.

Several researchers have outlined approaches for how to conduct a cost-benefit analysis of college preparation programs, but they lacked the data to conduct such analyses (Swail, 2005; Tierney, Colyar, & Corwin, 2003). Our approach to estimating the return on investment mirrors the approach that the Boston Consulting Group used in their analyses of U.K. programs that were featured in The Sutton Trust's (2007) *Investing for impact: A report on the returns to investments in educational programmes based on work by The Boston Consulting Group*.

We took a threefold approach (see Appendix D for analytical caveats):

- First, we calculated (a) the total cost of providing the program to students (which combines both direct costs supported by GSF as well as by other program supporters) and (b) the number of young people who graduated from the program.
- Second, we calculated the increase in applications and enrollments for students who participated in a GSF-supported program by comparing each program's rates versus the national rates from the ELS analyses presented earlier in the report. For example, the PUPP program has a 79 percent selective-college application rate compared to the national average of 31 percent. This is a 48-point difference.
- Third, based on our analyses of the B&B study, we estimated the lifetime earnings advantage¹¹ for students who graduated from a selective college compared to those who did not. Our lifetime earnings projections were based on being in the workforce for 40 years.¹²

¹¹ Salaries from 1994 to 1997 were based on salaries from B&B 1994 with a 5% annual increase each year during the period. Salaries from 1998 to 2002 were based on B&B 1997 with a 5% annual increase, and salaries from 2003 to 2033 were based on B&B 2003 salaries with a 5% annual increase (National Center for Education Statistics, 1993/2003). The lifetime earnings advantage is estimated to be \$754,003.

¹² This assumption is consistent with the methodological approach of Day and Newburger (2002).

Table 4: The Return on Investment

	TOTAL PROGRAM COST	NO. GRADUATING CLASSES	NO. YOUNG PEOPLE GRADUATED	VALUE GENERATED	RETURN PER \$1 SPENT
PROGRAM					
I-LEAD	\$3,891,876	5	236	\$68,117,234	\$18
Crimson Summer Academy	\$2,988,900	3	81	\$24,918,291	\$8
NGVF	\$5,800,028	6	518	\$101,549,124	\$18
NYMRLA	\$2,585,118	2	83	\$26,441,000	\$10
PUPP	\$1,310,400	4	78	\$14,679,534	\$11
Collegiate Scholars	\$1,984,626	3	133	\$33,644,745	\$17
Increasing Access to Postsecondary Education	\$823,200	2	100	\$19,679,478	\$24
Combined	\$19,384,148		1,229	\$289,029,406	\$15

Source: ETS calculations.

Note: This is program cost and may reflect institution, GSF and other contributions.

As of June 2009, more than 1,200 students had graduated from high school and completed one of the programs (see Table 4). The number of graduating classes varied and ranged from six at the Next Generation Venture Fund to two at NYMRLA and the Increasing Access to Postsecondary Education programs. Each of the programs has net returns. There is an overall return to individuals over their lifetime of \$15 for every \$1 invested. There is variation in the returns from \$8 for each \$1 invested (Crimson Summer Academy) to \$24 for each \$1 invested (Increasing Access to Postsecondary Education).

Our review of the research literature did not generate a comparable study that examined other U.S.-based college preparatory programs. The closest comparison that we can provide is with some of The Sutton Trust-supported programs with similar goals that are conducted in England. The Bristol Summer School and the Cambridge Summer School each aim to increase the number of participants who apply to and take a place at top British universities (e.g., Cambridge and Oxford). The Bristol Summer School had a £9 return per £1 spent, and the Cambridge Summer School had a £14 return per £1 spent. While measuring ROI in this study is imperfect at best, and given the caveats listed in Appendix D and methodological issues, the results produced in this analysis clearly indicate an impressive ROI.

Our analyses of GSF's investments in resources and in the return are now complete. But what about fostering hope? Did the GSF's programmatic investment inspire hope?

Providing Resources and Aspirations: Did Goldman Sachs Provide Hope?

When entering into this philanthropic endeavor, the GSF sought to provide both resources and hope. Rather than attempting to reduce hope to a single number, we asked four stakeholders to tell you how they would evaluate GSF's effort, and whether it provided hope.

A University President's Perspective

Shirley M. Tilghman, president of Princeton University, is a strong supporter of PUPP, the college access program on her campus. Each June, after she awards degrees at the Princeton University Commencement ceremony, she joins the PUPP directors to award PUPP graduation certificates to Princeton area high school graduates who have completed the program — one or two of whom may be entering Princeton University in a few months. We asked President Tilghman what she considered to be the merits of PUPP and its peer programs.

“The issue of enriching the pipeline to higher education is one of great importance. Both the Goldman Sachs Foundation and Princeton have long recognized that overcoming the complex set of obstacles that keep bright students from applying to and thriving at top colleges requires more than a generous financial aid program, test preparation and academic skill development. These young men and women need college ‘preparedness’ that also considers their non-academic needs. The Foundation’s support of programs such as PUPP helps change the lives of students across the country, empowering their families, and improving their communities.”

“The Goldman Sachs Foundation’s unwavering commitment to developing the talents and skills of bright young people from underrepresented groups is inspiring. With the assistance of the Foundation, PUPP has blossomed into a thriving program that provides rigorous academic support and cultural enrichment to academically talented low-income students from Trenton, Ewing and Princeton public high schools.”

“PUPP is truly making a difference in the lives of these students. Over time, programs like PUPP will strengthen the fabric of American society by broadening the pool of applicants to our finest universities. It is heartening to know that the Foundation shares our sense of the importance of this undertaking.”

A Program Director's Perspective

Ms. Kimberly Ransom-Kazembe is the Director of the Collegiate Scholars Program at the University of Chicago. We asked Ms. Ransom to speak on behalf of the many talented and dedicated program directors.

“I am fortunate to have the opportunity to help young people from the Chicago Public Schools gain access to highly selective colleges and universities across the country. It is my passion.”

“Having grown up in Chicago and attended Chicago Public Schools, I understand the barriers that students — particularly low-income, first-generation students — face in trying to leverage the type of mentorship necessary to help them gain access. Certainly including but also beyond grades and test scores, there is a culture that must be cultivated in each individual child and their family that not only tells them highly selective schools ‘are possible,’ but shows them through radical engagement. Their success depends on it.”

“College access programs developing high-potential youth help low-income, first-generation students make history in their own families, schools and communities. I know for sure that, upon graduating college, these young people will begin the work of making history in our world. They have the experiences, education, intellect, creativity, agency, eagerness and determination to be the change makers and leaders of the next generation.”

“To be in a position to provide young people and their families a platform from which to grow beyond stereotypes and statistics is an awesome privilege for me. I am these students. There is no better feeling and no better tangible reward. I’m just happy to help.”

A Current Student’s Perspective

Each year, hundreds of students participate in GSF-funded programs in the United States. We selected David Caceres, a young man from the Next Generation Venture Fund (NGVF) to profile. David is a junior honor roll student at Perth Amboy High School, a public comprehensive high school in urban Perth Amboy, New Jersey. While college is still a year away, David already has his sights set on attending Johns Hopkins, Princeton or Columbia. He wants to study science and medicine in college.

The NGVF program, in which students study one course for three weeks, has been a good match for David. David has a strong interest in and aptitude for mathematics. He was in the highest group of math students in his sophomore class, and one of his favorite extracurricular activities is Mathletes, an academic competition. During his first summer at NGVF, David enrolled in *Algebra and Its Applications*, and in *Geometry and Its Applications* during his second summer. David summarized his experience as follows:

“The Geometry and Its Applications course was a great course. I learned a lot of new things and it will help me when I take Geometry in the fall. I enjoyed making new friends and learning that their interests and challenges are similar to my own.”

A College Graduate’s Perspective

We have had the pleasure of following Ms. Krystal Walker’s educational journey from the beginning. Krystal, whose family emigrated from Jamaica, was a ninth grader at Cardinal Spellman High School when she joined the I-LEAD program in spring of 2001.

“I-LEAD changed my life. When I entered high school I had 10 goals, and one of them was to attend a top university — Harvard. I knew what I wanted but was not aware of all the necessary steps it would take to get there.

“It is one thing to have goals. It is another thing to achieve them. I-LEAD fills that space. I-LEAD led me to so many places that I could not imagine as a ninth grader. Just as important, they stood by me when I hit some tough times and doubted myself.

“I-LEAD led me to Wellesley College through the college planning activities and the guidance of people like Maxine Roberts and Richard Rivera. Until they suggested Wellesley, it was not even on my list. My education and social experiences at Wellesley were amazing. It was the best place for me. I have no regrets that I did not attend Harvard.

“I-LEAD led me to major in sociology. At one of the retreats, we played a social stratification game. As a black woman immigrant, I was always at the bottom of the hierarchy in this game. I was incensed and decided right then and there that I would study sociology in college.

“I-LEAD led me to Goldman Sachs. The I-LEAD staff encouraged us to intern during the summers of our junior and senior years in high school. After attending a mini-finance boot camp at I-LEAD, the Goldman Sachs Human Resources department selected me to be an intern. I did this for two summers.

“Thank you, I-LEAD. When I graduated from the program, I had all the tools that I needed to succeed for life. The most important tool was learning that I define success for myself.”

While Krystal’s journey may not always have been through smooth waters, in our opinion she successfully navigated those waters. She graduated from the I-LEAD program in 2004 and from Wellesley College in 2008, and she is currently an analyst at the Prime Brokerage Department of Goldman Sachs.

Bright Prospects on the Horizon: Other GSF Grantees

While the emphasis in this report has been on programs whose students have completed and navigated the selective-college admissions process, there are other GSF grantees on the horizon. For example, the Manhattanville College Program “Manhattanville Promotes Academic and Life-Long Success” will graduate its first class in 2010.

The DHPY program also includes several international grantees. In South Africa, the University of the Witwatersrand’s Targeting Talent program, which works with 270 students in three provinces, will graduate its first class in 2010. In England, the London School of Economics (LSE), the University of Manchester, the University of Birmingham and the University of Nottingham each worked with students in transitioning to university-level education. Cambridge University and University of Warwick will graduate their first classes in 2011 and 2009, respectively. Trinity College is the sole grantee in Ireland. Trinity graduates have already begun matriculating in university.

The College Years – Another GSF Investment

The Developing High-Potential Youth programs work with students during the critical middle and high school years to prepare them for enrollment in selective colleges and universities. The GSF, however, recognized early that the road to success does not end when admissions envelopes arrive each April. With the longer-term goal of leadership development in mind, GSF has made several investments to support students during their college years — support that is necessary to ensure that high-potential underrepresented students achieve excellence during their college careers. The most substantial of these investments was made to create and support The Goldman Sachs Scholars Alumni Program that is managed by Management Leadership for Tomorrow (MLT). For the past three years, MLT has invited program alumni in college to participate in a series of seminars and developmental events, as well as to join an online community. A host of online services are provided, ranging from advice on how to write an effective resume to how to get a summer job. GSF also has provided funds to Signature Initiative/Developing High-Potential Youth grantees to support follow-up work with their program graduates during the college years.

Next Steps

Perhaps Benjamin Franklin stated it best: “An investment in knowledge always pays the best interest.” (Stevenson, 1967, p. 1057) GSF made an investment in the academic preparation of high-potential youth, and the investment paid off. The average return is \$15 per individual per \$1 invested, with some programs higher and some lower.

From the beginning, GSF has taken a leadership position in this area of college-access programming. Now, the circle of involvement needs to be enlarged. The Business-Higher Education Forum affirmed in its report *Corporate Investments in College Readiness and Access* (Erisman & Looney, 2008) that one of the roles that philanthropic organizations can play is to convene individuals to pursue common interests. The GSF has achieved this through such events as the GSF- and ETS-sponsored conference *Addressing Achievement Gaps: Developing High-Potential Youth Symposium* in 2005; the GSF- and Princeton University-sponsored conference *Opening Doors and Paving the Way Networking Forum* in 2006; and the GSF-, ETS- and Sponsors for Educational Opportunity-sponsored *College Prep Coalition Admissions Summit* in 2005.

From the evidence presented, we conclude that GSF has made in its short lifespan enormous contributions to (1) strengthening programs that support high-potential youth who are economically disadvantaged and in great need of support; (2) inventing models that can be replicated to increase the college preparation and achievement of high-potential youth; (3) increasing the earnings of individuals over what they would have earned without the support; and (4) expanding the pool of underrepresented students in both selective colleges and universities, and subsequently in prestigious work environments.

Appendix A

Estimating the Cost of Preparing a Student for Admission to a Leading U.S. College or University

We estimate that a family could spend \$104,120 over the four-year high school experience to prepare a student for admission to a leading U.S. college or university. We built a budget for a “hypothetical” student named “Brandon.” Like most parents, we wanted the best for Brandon and began the task with no financial constraints. First, we considered private versus public high school attendance. The approximately \$70,000 tuition over four years dissuaded us from selecting the private school option for Brandon (see Table A1). Our decision also was in keeping with one of the central tenets in program selection for the Developing High-Potential Youth Initiative, which is to celebrate the good work of U.S. public schools. The overwhelming majority of GSF programs work with public schools. The exception is the Bank Street College of Education, which works not only with students from public schools, but also with Catholic high school students from urban communities.

Like many parents of public school students, we decided to supplement his education with other activities such as test preparation courses, summer learning opportunities, educational experiences abroad, and even one-on-one college counseling. Our expenditures added up to approximately \$35,000.

Table A1: How Much Could You Spend to Prepare a Student for College (estimated)?

OPPORTUNITIES FOR STUDENTS	ANNUAL	# YRS.	TOTAL
School Tuition Costs			\$69,652
Tuition, Non-sectarian Private High School (4 yrs)	\$17,413	4	\$69,652
Other Educational Related Costs			\$34,468
Summer educational program (4 years)	\$3,200	4	\$12,800
Distance education class (9 months' tuition)	\$1,825	1	\$1,825
International academic experience			\$4,500
University of Virginia's Sorenson Institute for Political Leadership	\$1,250	1	\$1,250
Other camp (4 years)	\$1,000	4	\$4,000
Private tutoring for PSAT® and SAT (48 hours)			\$5,999
Northeast college visit tour			\$2,185
Private admissions consult services (15 hours)			\$1,899
Total Tuition and Other Educational Costs			\$104,120

Source: Authors' own calculations.

Appendix B

Developing High-Potential Youth Programs Profiles

The I-LEAD Program

The Bank Street College of Education’s Institute for Leadership, Excellence and Academic Development (I-LEAD) Program is a pioneering college preparatory initiative for talented students from selected urban parochial high schools in New York City. I-LEAD continues to thrive as it completes its eighth year of providing services. I-LEAD’s success is due to its unique approach in the world of after-school programming, in that high-achieving adolescents need more than academic skills to become successful adults. In addition to the educational opportunities they need, I-LEAD provides access to structured activities during non-school hours, as well as strong advisement services. The provision of these services creates a community in which underserved and underrepresented youth create positive futures for themselves and others by increasing their motivation, embracing personal accountability, and strengthening their academic and leadership skills within the context of civic engagement and lifelong learning.

Program Activities and Participant Profile

9th GRADE	<ul style="list-style-type: none"> • Recruiting/Application Process • Advanced Academic Summer Session (3 weeks) 	<p>I-LEAD Program Profile</p> <p>Bank Street College of Education New York, NY</p> <p>Total per student program cost: \$16,491</p> <p>Gender: Female: 46% Male: 54%</p> <p>Race: African American: 39% Hispanic: 49% Other: 12%</p> <p>Admission grade: 9th</p> <p>Attend Catholic high schools: 100%</p> <p>Home state: NY</p> <p>Median income: \$40,000</p> <p>Percent with family income under \$21,200: 18%</p> <p>At least one parent with bachelor’s degree: 39%</p> <p>Program persistence/completion rate: 83%</p> <p>Number of graduating classes during grant period: 5</p> <p>Selective College Enrollment: 73%</p>
10th GRADE	<ul style="list-style-type: none"> • Advanced Academic Saturday Academy (2 times per month) • After-school Academic Enrichment • PSAT Prep Classes I • Science Labs • Summer Options – travel abroad, college programs, leadership experiences, community service • Quantitative Reasoning Seminars • Weekend Leadership Retreats 	
11th GRADE	<ul style="list-style-type: none"> • Weekend Leadership Retreats • PSAT Prep Classes II • SAT Prep Enrichment • College Essay Writing Workshop • SAT Preparation Course • College Tours • Quantitative Reasoning Seminars • Summer Options – travel abroad, college programs, leadership experiences, community service • Workshops for parents and students on financial aid and application process 	
12th GRADE	<ul style="list-style-type: none"> • Weekend Leadership Retreats • College and Career Planning • College Application Process Workshops – Financial Aid, Interviewing Skills, College Survival Series 	

Crimson Summer Academy

Harvard University’s Crimson Summer Academy is a three-year program that provides intensive academic preparation to high-potential students from underrepresented groups attending Boston and Cambridge public and parochial high schools. GSF has supported these students’ participation in rigorous academic summer programs for which they can eventually receive college credit, as well as weekend tutoring and community/cultural events throughout the school year. Harvard students and guidance counselors provide additional support.

Program Activities and Participant Profile

9th GRADE	<ul style="list-style-type: none"> • Recruiting/Application Process • Laptop Training 	<p>Crimson Summer Academy Program Profile</p> <p>Harvard University Cambridge, MA</p> <p>Total per student program cost: \$36,900</p> <p>Gender: Female: 51% Male: 49%</p> <p>Race: African American: 21% Hispanic: 33% Other: 46%</p> <p>Admission grade: 9th</p> <p>Attend public high schools: 93%</p> <p>Home state: MA</p> <p>Median income: \$24,048</p> <p>Percent with family income under \$21,200: 39%</p> <p>At least one parent with bachelor’s degree: 21%</p> <p>Program persistence/completion rate: 91%</p> <p>Number of graduating classes during grant period: 3</p> <p>Selective College Enrollment: 75%</p>
10th GRADE	<ul style="list-style-type: none"> • Crimson Summer Academy (5 weeks residential) <ul style="list-style-type: none"> – Field trips and cultural events – Writing and Public Speaking Seminars – Digital Photography – College planning • Weekend tutoring and community/cultural events throughout academic year • Mentoring by Harvard students and guidance counselors during academic year • Harvard Model Congress in March 	
11th GRADE	<ul style="list-style-type: none"> • Crimson Summer Academy (6 weeks residential) <ul style="list-style-type: none"> – Writing and Critical Reading Seminars, Science Labs, Debates – Digital Photography – College and career planning • Weekend tutoring and community/cultural events throughout academic year • Mentoring by Harvard students and guidance counselors during academic year • Harvard Model Congress in March • Week-long college trip in April 	
12th GRADE	<ul style="list-style-type: none"> • Harvard Summer School (8 weeks residential) <ul style="list-style-type: none"> – Take 1–2 4-credit courses at Harvard • Senior Sundays, college trips and community events during academic year • Parent financial aid nights during academic year 	

The Next Generation Venture Fund

The Next Generation Venture Fund (NGVF) supports gifted young people from underrepresented backgrounds who have the potential — if assisted — to succeed in the classrooms of competitive institutions, as well as in professional careers and in leadership roles. The five-year investment in each student starting in eighth grade provides a program of academic instruction and individualized education planning and counseling. Students attend summer school programs on participating college campuses, where they enroll in advanced and college-level courses focusing on analytical, quantitative, writing and reasoning skills. Through this experience, talented students are able to build a peer network and foster lasting bonds via a culture of achievement. Additionally, NGVF scholars engage in career and leadership development programs designed to encourage educational and professional aspirations.

Program Activities and Participant Profile

7/8th GRADE	<ul style="list-style-type: none"> • Recruiting/Application Process • Rigorous academic summer program • Parent Training Workshops 	<p>The Next Generation Venture Fund Program Profile</p> <p>Duke University (Durham, NC) Johns Hopkins University (Baltimore, MD) Northwestern University (Evanston, IL) University of Denver (Denver, CO)</p> <p>Total per student program cost: \$25,000</p> <p>Gender: Female: 54% Male: 46%</p> <p>Race: African American: 37% Hispanic: 41% Other: 22%</p> <p>Admission grade: 8th</p> <p>Attend public high schools: 79%</p> <p>Home states include: CA, CO, CT, DC, FL, IL, KS, MA, MD, MO, NJ, NC, NY, PA, VA, TX</p> <p>Median income: \$32,410</p> <p>Percent with family income under \$21,200: 28%</p> <p>At least one parent with bachelor's degree: 51%</p> <p>Program persistence/completion rate: 89%</p> <p>Number of graduating classes during grant period: 6¹³</p> <p>Selective College Enrollment: 65%</p>
9th GRADE	<ul style="list-style-type: none"> • Advanced Academic Saturday Academy • Personalized high school curriculum guidance • Academic guidance • Online advanced academic course • Rigorous academic summer program 	
10th GRADE	<ul style="list-style-type: none"> • Academic guidance • Mentoring/Entrepreneurship education • Rigorous academic summer program (optional) 	
11th GRADE	<ul style="list-style-type: none"> • Academic guidance • SAT Preparation Course 	
12th GRADE	<ul style="list-style-type: none"> • Academic, college admission, financial aid, and life skills guidance 	

¹³ First 4 NGVF classes were from the pilot study.

New York Metro Region Leadership Academy (NYMRLA)

The New York Metro Region Leadership Academy (NYMRLA) was established as a program of Prep for Prep to recruit promising 12- and 13-year-old students from suburban public schools in the New York metro region. Through a rigorous 14-month preparatory component including two seven-week residential summers, all-day Saturday classes and an array of leadership development opportunities, the program prepared students for accelerated and Advanced Placement courses in high school. NYMRLA's mission was to create a foundation for strong academic performance as talented students enter secondary school that will enable them to satisfy the admission criteria of top-ranked colleges.

Program Activities and Participant Profile

7th GRADE	<ul style="list-style-type: none"> • Recruiting/Application Process • Advanced Academic Summer Session (7 weeks) 	<p>New York Metro Region Leadership Academy Program Profile</p> <p>Prep for Prep New York, NY</p> <p>Total per student program cost: \$31,146</p> <p>Gender: Female: 52% Male: 48%</p> <p>Race: African American: 35% Hispanic: 45% Other: 20%</p> <p>Admission grade: 7th</p> <p>Attend public high schools: 100%</p> <p>Home states: CT, NJ, NY</p> <p>Median income: \$65,000</p> <p>Percent with family income under \$21,200: 8%</p> <p>At least one parent with bachelor's degree: 53%</p> <p>Program persistence/completion rate: 71%</p> <p>Number of graduating classes during grant period: 2</p> <p>Selective College Enrollment: 80%</p>
8th GRADE	<ul style="list-style-type: none"> • Advanced Academic Saturday Academics (every week) • Advanced Academic Summer Session (7 weeks) 	
9th GRADE	<ul style="list-style-type: none"> • Academic Advising • Counseling and Support through Prep for Prep • Social Activities to Build Peer Support Network • Optional Participation in Prep for Prep/Goldman Sachs Institute for Entrepreneurship 	
10th GRADE	<ul style="list-style-type: none"> • Academic Advising • Counseling and Support through Prep for Prep • Social Activities, Contingent Days to Build Peer Support Network • Aspects of Leadership Retreats 	
11th GRADE and 12th GRADE	<ul style="list-style-type: none"> • Academic Advising • College Guidance including SAT Preparation Course, College Information Meetings and Individual Counseling, Financial Aid Counseling, and Overnight College Trips • Counseling and Support through Prep for Prep • Aspects of Leadership Retreats • Optional Participation in Professional Advancement (e.g., Summer Jobs Bank and Professional Skills Workshops) • Optional Participation in Prep Leadership Development Opportunities (e.g., Travel Abroad, Public Policy Institute) 	

Princeton University Preparatory Program (PUPP)

Princeton University's Preparatory Program (PUPP) is an academic and cultural enrichment program that supports low-income, high-achieving high school students from Ewing, Princeton, and Trenton public high schools. Students supported by GSF participate in rigorous academic summer institutes covering a broad range of academic subjects and receive help with personal development and college preparation. PUPP also provides school-year programming, including weekly academic enrichment sessions, college admissions guidance, standardized test preparation, and exposure to cultural activities.

Program Activities and Participant Profile

9th GRADE	<ul style="list-style-type: none"> • Recruiting/Application Process 	<p>Princeton University Preparatory Program Profile</p> <p>Princeton University Princeton, NJ</p> <p>Total per student program cost: \$16,800</p> <p>Gender: Female: 64% Male: 36%</p> <p>Race: African American: 52% Hispanic: 27% Other: 21%</p> <p>Admission grade: 9th</p> <p>Attend public high schools: 100%</p> <p>Home state: NJ</p> <p>Median income: \$30,653</p> <p>Percent with family income under \$21,200: 20%</p> <p>At least one parent with bachelor's degree: 23%</p> <p>Program persistence/completion rate: 95%</p> <p>Number of graduating classes during grant period: 4</p> <p>Selective College Enrollment: 67%</p>
10th GRADE	<ul style="list-style-type: none"> • Rigorous academic summer program (6 weeks non-residential) <ul style="list-style-type: none"> – Coursework in math, writing, literature, biological sciences and cultural arts – Special Personal Development course and excursions to local cultural institutions and colleges • Weekly academic enrichment programs and tutoring during academic year • Excursions to a series of theatrical events, including drama, musicals and opera 	
11th GRADE	<ul style="list-style-type: none"> • SAT Prep • Rigorous academic summer program (6 weeks non-residential) <ul style="list-style-type: none"> – Coursework in math, writing, literature, biological sciences and cultural arts – Special Personal Development course and excursions to local cultural institutions and 2 colleges • Weekly academic enrichment programs and tutoring during academic year • Excursions to a series of theatrical events, including drama, musicals and opera • Attendance at local college fairs • Financial aid and application process workshops for parents and students 	
12th GRADE	<ul style="list-style-type: none"> • Rigorous academic summer program (6 weeks non-residential) • Excursions to a series of theatrical events, including drama, musicals and opera <ul style="list-style-type: none"> – Coursework in math, writing, literature, biological sciences and cultural arts – Special Personal Development course and excursions to local cultural institutions and 2 colleges – College Admissions 101 – Test prep materials for AP® and SAT subject tests • Weekly academic enrichment programs and tutoring during academic year • Focused college admissions guidance, including application/essay support, financial aid support, and one-on-one guidance through the matriculation process • SAT refreshing 	

Collegiate Scholars Program

University of Chicago’s Collegiate Scholars Program is a three-year enrichment program that identifies promising ninth-grade students in Chicago’s public school system and, over three years, provides them with developmental experiences to allow them to successfully compete for enrollment in selective colleges and universities. GSF, in partnership with the University’s Booth School of Business and the Collegiate Scholars Program, implemented an entrepreneurship course for these students as part of their developmental process. Business executives, including Goldman Sachs professionals, volunteer their services to judge final projects developed as part of this two-week intensive entrepreneurship course. GSF also has supported a series of career exploration seminars for students to learn firsthand about careers in the arts, business, law, education, government, engineering and information technology.

Program Activities and Participant Profile

9th GRADE	<ul style="list-style-type: none"> • Recruiting/Application Process 	<p>Collegiate Scholars Program Profile</p> <p>The University of Chicago Chicago, IL</p> <p>Total per student program cost: \$14,922</p> <p>Gender: Female: 58% Male: 42%</p> <p>Race: African American: 43% Hispanic: 20% Other: 37%</p> <p>Admission grade: 9th</p> <p>Attend public high schools: 100%</p> <p>Home state: IL</p> <p>Median income: \$75,000</p> <p>Percent with family income under \$21,200: 8%</p> <p>At least one parent with bachelor’s degree: 56%</p> <p>Program persistence/completion rate: 97%</p> <p>Number of graduating classes during grant period: 3</p> <p>Selective College Enrollment: 70%</p>
10th GRADE	<ul style="list-style-type: none"> • Rigorous academic summer program (6 weeks) <ul style="list-style-type: none"> – Coursework in areas such as humanities, math, physics, chemistry and writing – Cultural events for students and parents • Individual academic advising • Saturday seminar and lecture series; cultural and arts events; community service; career exploration 	
11th GRADE	<ul style="list-style-type: none"> • Rigorous academic summer program (6 weeks) <ul style="list-style-type: none"> – Coursework in areas such as humanities, math, physics, chemistry, biology, writing, social sciences and entrepreneurship – TEACH Research Program with University of Chicago Hospital – Course in the College – ACT test preparation – Cultural events for students and parents • Individual academic advising and SAT test preparation • Saturday seminar and lecture series; cultural and arts events; community service; career exploration 	
12th GRADE	<ul style="list-style-type: none"> • Rigorous academic summer program (5 weeks) <ul style="list-style-type: none"> – College Boot Camp – College Countdown course – Course in the College – Admissions panel with over 20 visiting colleges and universities – Coursework in areas such as humanities, math, physics, chemistry, biology, writing, social sciences and entrepreneurship – Cultural events • Individual academic advising • Saturday seminar and lecture series; cultural and arts events; community service; career exploration • East Coast College Tour 	

Increasing Access to Postsecondary Education

University of Southern California’s Increasing Access to Postsecondary Education is a two-year program that combines college preparatory mentoring with intensive summer writing coursework to enhance college readiness among low-income, high-achieving Los Angeles-area high school students. With Foundation support, students not only participate in an intensive summer writing program, but also attend weekend academic sessions and college exploration and knowledge sessions, and are provided customized guidance and advising during the academic year.

Program Activities and Participant Profile

10th GRADE	<ul style="list-style-type: none"> • Recruiting/Application Process 	<p>Increasing Access to Postsecondary Education Program Profile</p> <p>University of Southern California Los Angeles, CA</p> <p>Total per student program cost: \$8,232¹⁴</p> <p>Gender: Female: 68% Male: 32%</p> <p>Race: African American: 13% Hispanic: 63% Other: 24%</p> <p>Admission grade: 10th</p> <p>Attend public high schools: 98%</p> <p>Home state: CA</p> <p>Median income: \$22,500</p> <p>Percent with family income under \$21,200: 16%</p> <p>At least one parent with bachelor’s degree: 19%</p> <p>Program persistence/completion rate: 86%</p> <p>Number of graduating classes during grant period: 2</p> <p>Selective College Enrollment: 60%</p>
11th GRADE	<ul style="list-style-type: none"> • During academic year: <ul style="list-style-type: none"> – College exploration workshops, “college knowledge” sessions and visits to local colleges to prepare students for college and financial aid application process during their senior year – Individual sessions with writing tutors – Bi-weekly advising meetings for assistance with early college-bound preparation 3 weekend academic sessions during academic year <ul style="list-style-type: none"> – Writing program as part of student’s mentoring process – Guest lectures by visiting professors, high-profile guests 	
12th GRADE	<ul style="list-style-type: none"> • Intensive writing instruction via SummerTIME Writing Program (1 month non-residential) <ul style="list-style-type: none"> – Writing assistance with individual writing during month-long program During academic year: <ul style="list-style-type: none"> – College campus trips, “college knowledge” sessions such as financial aid and time management – Bi-weekly individual student assessments and customized assistance with transition to their college or university destination 3 weekend academic sessions during academic year: <ul style="list-style-type: none"> – Writing program 	
NEW HIGH SCHOOL GRADUATE	<ul style="list-style-type: none"> • Intensive writing instruction via SummerTIME Writing Program (1 month non-residential) as rising college freshman <ul style="list-style-type: none"> – Writing assistance with individual writing tutors 	

¹⁴ SummerTIME cost is \$3,389/yr and the IAM program is \$727/yr.

Appendix C

Application, Acceptance and Enrollment Rates by Programs

Figure C1: The Percentage of Students at Developing High-Potential Youth Programs Who Applied to a Selective College Compared to Grade 10 African American or Hispanic Students with Family Incomes of \$35,000 or less and a B or Higher GPA as of Fall 2009

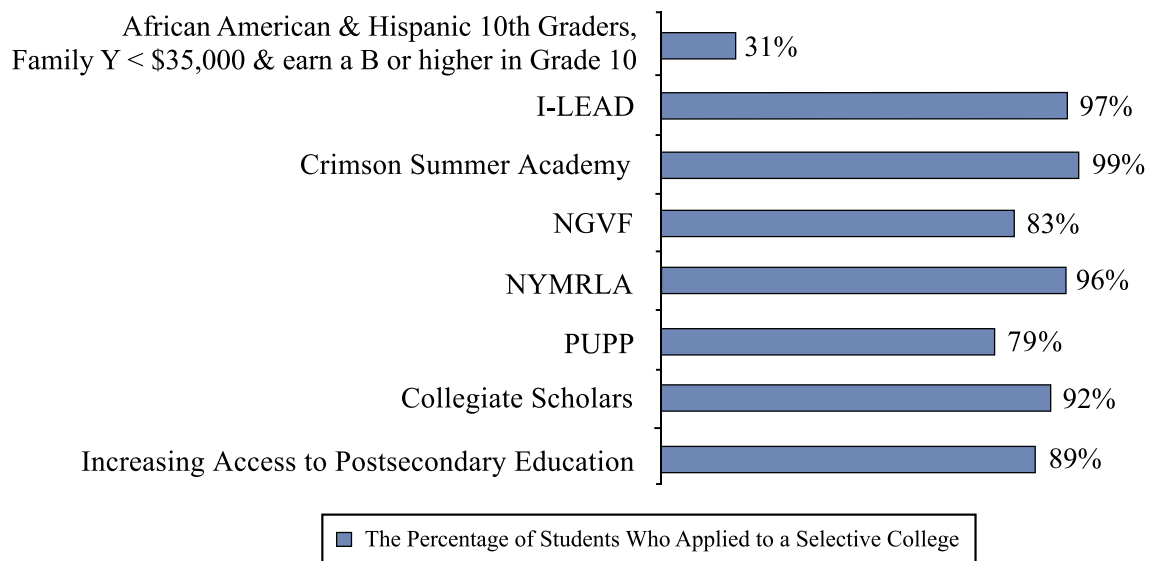


Figure C2: The Percentage of Students at Developing High-Potential Youth Programs Who Were Accepted to a Selective College Compared to Grade 10 African American or Hispanic Students with Family Incomes of \$35,000 or less and a B or Higher GPA as of Fall 2009

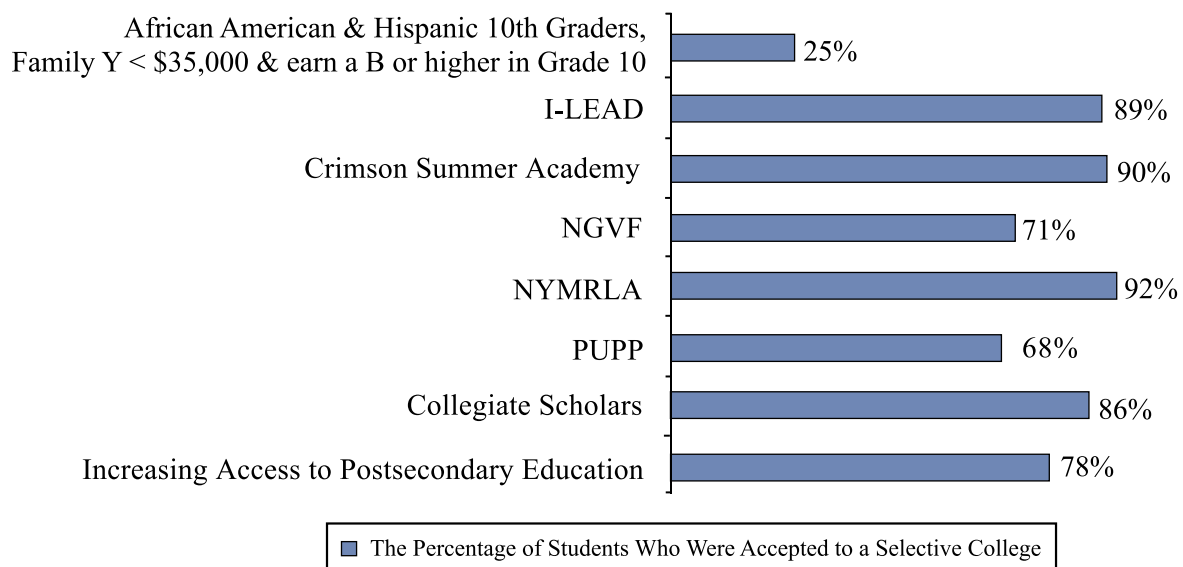
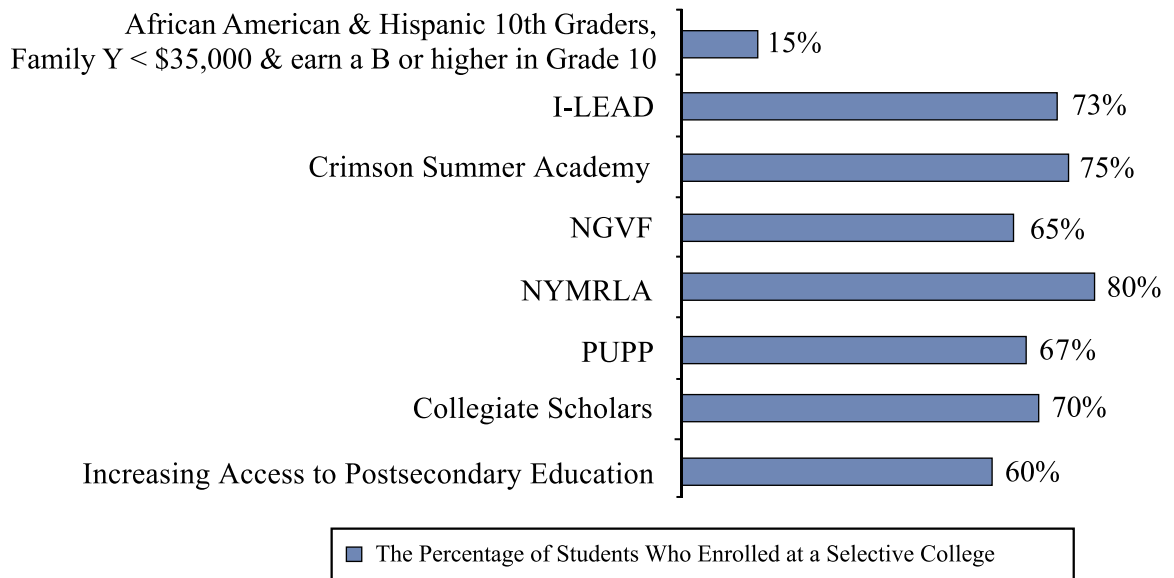


Figure C3: The Percentage of Students at Developing High-Potential Youth Programs Who Enrolled as First-Time Freshmen at a Selective College Compared to Grade 10 African American or Hispanic Students with Family Incomes of \$35,000 or less and a B or Higher GPA as of Fall 2009



Appendix D

Analytical Caveats

There are a couple of analytical caveats that should be noted.

- The total program cost figure may not include additional contributions to the programs from their host institution (e.g., no charge for space at college or universities), the possible donation of a program director's or other staff member's time to the program, or the opportunity costs that students incur when they elect to participate in a GSF program rather than work during the summers or academic years.
- This report examines the returns attributable to a group that has a particular qualification (e.g., bachelor's degree holders) rather than the economic returns achieved by an individual with a qualification (e.g., a bachelor's degree) (Pricewaterhouse Coopers LLP, 2005). Also, we are not able to take into account personal motivation or innate ability.
- Since we do not have data for GSF program graduates' college majors or application rates to graduate school, our analyses do not account for the influence that academic major might have on earnings (Eide, 1994; Eide & Waehrer, 1998; Jacobs, 1995; Loury & Garman, 1995; Thomas, 2003) or the long-term effect of earning a graduate degree(s) on either lifetime earnings or other professional success (Day & Newburger, 2002; Krueger, 2000).
- Personal wealth may be a factor that influences an individual's choices about occupations, salaries and graduate school attendance. We are not able to estimate its effects in this study.
- We were not able to capture the intrinsic rewards to individuals that are not dollar-denominated, such as greater self-efficacy or satisfaction with their jobs (Holtom & Inderrieden, 2006).
- We are not able to capture the non-monetary investment of GSF and Goldman Sachs. Goldman Sachs' support goes beyond simply writing a check. At Goldman Sachs, venture philanthropy is a part of the corporate culture. Employees at all levels of the corporate structure participate in grantee activities.¹⁵

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¹⁵ Employees partake in grantee activities ranging from participating in a grantee's board of trustees to mentoring students or judging an entrepreneurship competition.

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