

Pathways to Student Success

A Guide to Translating Good Intentions into Meaningful Impact



More than a million students in the U.S. drop out of school each year. They are left without the skills and postsecondary education they need to become productive, self-reliant adults. Failure to address student needs is costly not only to the students, but also to society, which must cover the additional expenses produced by an undereducated public with fewer tax dollars.

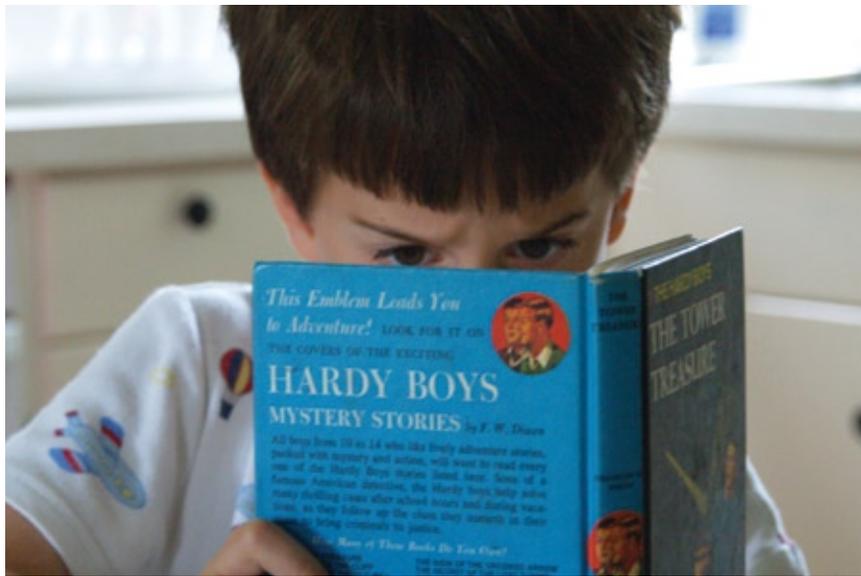


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The Center for High Impact Philanthropy

School of Social Policy & Practice | University of Pennsylvania

Pathways to Student Success

A Guide to Translating Good Intentions into Meaningful Impact

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Philanthropists can address the achievement gaps in the U.S. by targeting student needs both inside and outside of school. Despite good intentions, however, individual philanthropists often lack the time, relevant experience, and expertise needed to understand where their capital can have the greatest impact.

In this guide, the Center for High Impact Philanthropy offers analyses and advice to overcome these hurdles and help individuals find opportunities to produce as much good as possible with the dollars available.

We analyze the education pathway that students must navigate to achieve success in school and identify interim targets for academic success. The pathway comprises four phases: early childhood and preschool, primary school, secondary school, and postsecondary education. In each phase, we identify what at-risk students need and how philanthropists can assist.

We provide examples of ways in which philanthropists can and have helped. These include: *Early childhood and preschool*: building preschool skills and setting up periodic visits by nurses to homes; *Primary school*: improving early literacy instruction and instituting comprehensive school reform; *Secondary school*: extending learning time through apprenticeships and afterschool activities, connecting schools with

existing resources, and engaging and supporting students in college-track coursework; *Postsecondary education*: implementing long-term, wraparound support services with tuition guarantee, and providing social support through peer networks and university staff.

A number of strategies can improve the impact of a philanthropic gift. We offer advice on getting started in education philanthropy, including how to set a strategy, connect with networks of education experts, evaluate investment ideas, assess post-donation impact, and avoid practices that are known not to work.



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ABOUT THIS DOCUMENT

In this guide, we provide independent, practical advice on how to address achievement gaps in the U.S. education system through high impact, philanthropic gifts.

Objective

The Center for High Impact Philanthropy seeks to define philanthropy's efficient frontier, where invested dollars create the most good. To accomplish this mission in education, and thereby support individual philanthropists in their capital allocation decisions, we set out to answer three key questions:

- What is a meaningful change (impact) to target?
- What activities lead to that meaningful change for at-risk students?
- How much does it cost to achieve that change?

To find the answers, we used a multi-perspective, evidence-informed approach that relies on

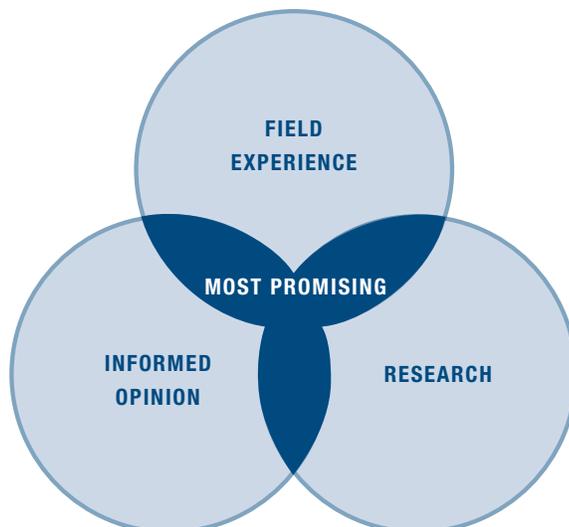
numerous sources of information. (PLEASE SEE DIAGRAM BELOW.) For example, we reviewed academic research, statistics from the U.S. Department of Education's National Center on Education Statistics, policy briefs from think tanks, program evaluations, financial and performance data on nonprofits, practitioner interviews, and the insights of a diverse set of thought leaders and educators. (SEE INSIDE BACK COVER FOR THE FULL LIST OF ADVISORS AND READERS.)

This report is the end result of our research and analysis. We translated our findings into practical guidance on which areas to target and how to get started. We included contact information for organizations to help along the way.

Our multi-perspective, evidence-informed approach

To meet our goal of providing smart, practical guidance to individual philanthropists, we synthesize the best available information from three domains: research, informed opinion, and field experience. By considering evidence from these three sources, we seek to leverage the strengths while minimizing the limitations of each. We believe the most promising opportunities exist where the recommendations of these three domains overlap.

SOURCES OF INFORMATION



FIELD EXPERIENCE

- Practitioner insights
- Performance assessments
- In-depth case studies

INFORMED OPINION

- Expert opinion
- Stakeholder input
- Policy analyses

RESEARCH

- Randomized controlled trials and quasi-experimental studies
- Modeled analyses (e.g., cost-effectiveness)

Structure

This report is divided into three sections. In the first section, we discuss the consequences of poor academic outcomes for at-risk students and society at-large. In the second, we discuss the key problem areas and promising practices in each stage of education as suggested by the existing evidence base. In the third section, we provide advice on getting started in education philanthropy, including how to choose a focus, identify and evaluate investment ideas, assess post-donation impact, and avoid pitfalls. Together, these three sections provide the fundamentals for developing an effective giving strategy.

The issues that we discuss are leverage points that philanthropists can target to make a difference in the lives of at-risk students. Readers who already know which areas in education they want to address may wish to skip directly to the practices that we highlight as having a promising record of impact. (SEE TABLE OF CONTENTS.)

Scope

In this report, we focus primarily on “direct service” program models that support disadvantaged students and/or the teachers trying to engage them. We also focus on efforts led by external groups rather than on district-driven reforms.¹ Many philanthropists choose to work with these groups because doing so entails fewer of the bureaucratic constraints or preconditions that working directly with a school district may involve, such as a readiness to change at the teacher and administration level. (SEE CHANGING SCHOOL PRACTICES IN THE CALLOUT BOX BELOW.)

How to use this report

The information in this document can be used in one of four ways:

- *Fund one of the many models discussed.* All of the programs highlighted are “good bets” based on available evidence from multiple sources.

Changing school practices

This strategy is tempting as it leverages existing personnel and infrastructure, thereby potentially reducing the cost to the philanthropist and allowing for greater scale. In fact, both **Children’s Literacy Initiative** (p. 31) and **Advancement Via Individual Determination (AVID)** (p. 46) successfully utilize existing school resources to achieve attractive cost-per-impact estimates.

However, some philanthropists report actively avoiding opportunities to change school practices, citing concerns about whether large, bureaucratic school districts could use their funds wisely. Others hesitate because they anticipate resistance from school leadership, including the superintendent’s office, the school board, and the teachers’ union. At the same time, many educators do not welcome philanthropists’ efforts, fearing the “programitis” that occurs when a “hot” new model is introduced, only to be dropped once its promoters lose interest.

One way an individual can learn whether school leadership can collaborate with funders, steward effective change, and sustain impact is to network with a local foundation that has worked with the school district in the past and is likely to do so again in the future.

- *Promote the entrepreneurial use of these models by other organizations.* This option makes sense when no organization is delivering the model in the community or when a local organization not mentioned here is well-positioned to deliver the model. In some situations, local schools may be capable of incorporating the model into their standard practice, rather than receiving it as an add-on service from outside nonprofits.
- *Create an entirely new model to address an issue outlined in the report.* There is plenty of room for innovation in the education sector. However, it is important to watch out for ill-informed models or misguided vanity projects; these can be distracting and burdensome to schools. Thus, like all effective philanthropy, innovation should be shaped by an empirical understanding of what the problems are, where the critical leverage points for intervention exist, and what works (and does not work) for the students of interest.
- *Use the evidence presented in this report to test the value proposition of program models other than the ones we discuss here.* Our review of existing practices is not comprehensive. There are many other nonprofits that are improving students' lives. When considering nonprofits that we have not discussed, be sure to assess whether their descriptions of the problems they address and the tools they use are logically consistent with the evidence presented in this document.

Funding direct services is by no means the only way to improve educational outcomes. Philanthropists can also consider investments in needed infrastructure (e.g., efforts to bolster the talent pipeline), advocacy to change the rules governing the public education system, and research to expand the sector's knowledge base.

Future reports

This report is the first in a series on ways to improve the education of disadvantaged children in the U.S. In the analyses that follow, we will take a closer look at each segment of the education pathway (e.g., early childhood), as well as at the broader issues that affect students at every phase. Future reports will investigate the philanthropic opportunities in areas such as education policy reform, talent recruitment and retention, infrastructure development, and research to expand the sector's knowledge base.

To learn more about the work of the Center for High Impact Philanthropy, please visit our website (www.impact.upenn.edu), contact us at (215) 573-7266, or email impact@sp2.upenn.edu.



HOW WE SELECT OPPORTUNITIES TO HIGHLIGHT

In this guide, we have interspersed case examples and short descriptions of promising practices to show how philanthropic investment can make an impact.

Throughout this guide, we identify philanthropic “on-ramps”, promising practices that have a record of improving disadvantaged students’ chances for educational success. We include five in-depth case examples in callout boxes, which are marked with a book symbol (📖) in the Table of Contents. In each phase, we also present brief summaries of additional promising practices within the text. Taken together, these on-ramps provide a list of high impact investment opportunities.

We selected our case examples based on the following criteria:

- Targets what current data indicate are unmet student needs
- Uses practices that are informed by the existing evidence base for what works
- Recognizes and insists on a set of core implementation components to ensure impact, but also demonstrates a willingness to adapt to local contexts
- Has been (or is willing to be) examined by a neutral third party, in the case of more mature programs

For each case example, we reviewed available internal and external evaluations assessing the rigor of the research methods, the number of students who participated, and the statistical and practical relevance of the results. For instance, we examined the researchers’ metrics to see if they were

meaningful and not easily manipulated to emphasize change over true impact. We also conducted interviews with the program’s senior staff. In these conversations, we learned how the program creates change and how much impact it expects to produce.

In the case examples, we include results from existing evaluations to illustrate the program’s impact. When there were multiple existing evaluations, we selected the results from the evaluation with the most rigorous design. (SEE P. 62 TO LEARN MORE ABOUT PROGRAM EVALUATION DESIGN.) In addition, we linked considerations of these results with cost by estimating a cost-per-impact figure. These back of the envelope estimates can be useful starting points from which to understand what you can realistically achieve with the money you give. (SEE P.72 FOR HOW WE CALCULATE COST PER IMPACT IN EDUCATION.)

We also make note of other practices in **boldface** or [hyperlinked text](#). These are opportunities that we are still evaluating, but feel are worth noting, based on publicly available information such as evaluations, cost-benefit analyses, and expert opinion.

For both the case examples and the brief descriptions, we applied professional judgment to decide whether the evidence in total creates a clear signal of progress. The end result are the report’s promising practices.

Refer a promising practice to the Center

We recognize that there are many practices doing good work for disadvantaged students in the U.S. and welcome recommendations for programs to be considered for future reports. Individuals who wish to recommend a practice that is making a measurable impact on students’ lives can visit our website (www.impact.upenn.edu) or call us at (215) 573-7266 for instructions.

We are supposed to live in the land of opportunity, where all young people who are willing to work for it have the chance to succeed. But the way our schools are now, opportunity is something you have to luck into.

—William H. Gates Sr., Philanthropist ²



I. BACKGROUND

In the past thirty seconds, three more people were born in the United States. All three of these infants may be equally capable, but as they grow older and make their way through the U.S. education system as it currently stands, there is a strong chance that only two will graduate from high school.

Without the right support, the third – most likely poor and not white – could instead start his or her adult life with a disadvantage that will be hard to overcome. This is the core problem of the U.S. education system: stopping the flood of at-risk (or “disadvantaged”) students who fail to learn the skills they need to become productive and self-reliant adults.

Defining the problem

The EPE Research Center estimates that a third of the 4.2 million students in the class of 2008 will not graduate on time, including nearly half of all Native American, Latino, and African-American students in that cohort.³ These 1.2 million students will join society without the skills, diploma, and postsecondary education they need to qualify for all but the lowest-paying jobs.

Without these skills, the students will find it hard to earn enough income to provide for themselves and their families, much less the surplus income they will need for stability, healthcare, home ownership, education for their children, and retirement. As high school dropouts, they will be two to three times more likely than college graduates to be unemployed.⁴ When they do find employment, their wages are likely to be much lower. Although estimates vary, research suggests that high school

dropouts earn roughly \$23,000 less each year than those with a bachelor’s degree or higher, accumulating to a difference of more than \$1 million over their lifetimes.⁵ (SEE CHART ON P. 50.)

Furthermore, these high school dropouts are more likely to become involved with the criminal justice system,⁶ more likely to rely on social services such as Medicaid and food stamps,⁵ more likely to have unhealthy lifestyles and poorer health outcomes,⁵ and less likely to volunteer, vote, and engage with their communities.⁷ Taken together, these factors will result in higher government costs, higher healthcare costs, lower tax revenues, less productive citizens, lower global competitiveness, and a weaker economy.

Even when students complete high school, the poor quality of their public education creates additional costs for remediation. Strong American Schools estimated that we spend more than \$2 billion per year to provide remedial education – college catch-up courses that teach basic academic skills including reading, writing, and arithmetic – to students who have recently graduated from high school.^{8,9}

The social impact of underachievement is clear. Closing this gap represents an enormous opportunity for philanthropists to make a difference.

What does it mean to be “at risk”?

Our shared hope is that all students meet their achievement and attainment goals at each stage in their education. However, clear gaps in the education system exist so that a disproportionate number of low-income and/or minority students – in urban, rural, and even suburban areas – are at risk of not meeting the same targets as their peers.

For example:

- High school graduation rates have actually decreased across the U.S. since the 1960s;¹¹ today in the country’s largest cities, only about half of the students earn the degree.¹²
- By the end of high school, African-American and Latino students’ reading and math skills are approximately equivalent, on average, to those that White students typically have mastered by eighth grade.¹³
- Far fewer minority students complete college. For example, only 18% of the country’s African-American and 12% of the Latino adults aged 25 and older have obtained a bachelor’s degree, compared with about a third of White adults.¹⁴

Thus, more than a half century after the U.S. Supreme Court ruled that segregated schools were unconstitutional (*Brown v. Board of Education*), students’ experiences and outcomes – and their future prospects – remain decidedly unequal.¹⁵

Make no mistake. Public education is the key civil rights issue of the 21st century. Our nation’s knowledge-based economy demands that we provide young people from all backgrounds and circumstances with the education and skills necessary to become knowledge workers.

– *Eli Broad, Philanthropist*¹⁰

The role of government in education reform

Local, state, and federal agencies have not ignored the long-standing problem of achievement gaps.

Public education today is primarily the domain of local and state decision makers. However, in recent years, the federal government’s role has increased.¹⁶ Since the 1990s, government efforts to improve education have fallen into four categories: standards, testing, and accountability; school finance reforms; teacher training and school resources; and school choice options.¹⁷ In 2001, the federal government passed the No Child Left Behind Act of 2001 (NCLB), expanding its presence in educating the nation’s youth. Like preceding standards-focused efforts, NCLB uses an approach that borrowed performance-based principles from successful private-sector management practices. It seeks to increase the level of accountability for states and school districts, while giving parents more flexibility in school choice.¹⁸

These efforts to “fix the system” have not always helped at-risk students. Furthermore, many of the problems that these students face are in fact outside the school system, and schools are often ill-prepared to address them.

However, targeted efforts to improve educational opportunities for at-risk students over the past two decades have demonstrated that progress is possible.¹⁹ Students who have been a part of these efforts have shown that they can thrive amid difficult circumstances when they have access to the right supports.^{20,21}

Understanding student needs

Family risk factors, such as living below the poverty line or in a single-parent household, generate needs that, if unmet, can affect the educational outcomes of at-risk students.

In this document, we refer to student needs in school and outside of school. *In-school needs* are those that educators are responsible for fulfilling, such as high-quality instruction, safe and healthy school environments, career guidance, and sufficient resources (e.g., books and supplies). By *out-of-school needs*, we refer to all the other complex physical, emotional, psychological, and cognitive requirements that students have. These needs persist at all times, whether in school or outside of school, but schools typically have limited capacity to address them.

Michael and I started our foundation with a commitment to children and their future. Our primary focus has been to improve the health and education of children. We understand that in order to do well in school, children must first be healthy.

– Susan Dell, *Philanthropist*²²

While the in-school needs of at-risk students are obvious requirements for achievement, and are the primary focus of this document, philanthropists should not overlook the importance of out-of-school needs. For example, low-income students may lack proper nutrition, sufficient healthcare, or enriching extracurricular activities. There is no question that the second-grader who skipped meals over the weekend will find it hard to prepare for Monday's spelling test, or that the fifth-grader with a toothache will struggle to concentrate on fractions. Similarly, the ninth-grader without access to internships that could help develop marketable skills will be at a disadvantage when entering the workforce.

How philanthropists can help

In 2002, donors invested somewhere between \$1.5 and \$2 billion in K-12 education,²³ which is less than 0.5% of the nearly \$490 billion that the public spends each year.²⁴ However, philanthropic dollars can have a powerful impact in ways that government funds often cannot.

- *Philanthropic dollars can be more nimble:* The public budgeting process is understandably time intensive, given the legislative calendar, procurement rules, and line-item restrictions. There are also the requirements for approval from multiple parties, who in turn are pulled in different directions by a variety of constituents. Philanthropists, in contrast, can act on an opportunity in real time by simply writing a check.
- *Philanthropic dollars can fund riskier, more experimental work:* Philanthropists are often better situated than government agencies to seed, test, and refine new program ideas – especially those that are somewhat risky. Donors frequently sponsor pilot tests of these novel approaches to see whether they can improve outcomes for students. After a successful pilot, public investment is more likely.
- *Philanthropic dollars can help establish public-private partnerships:* Philanthropists can provide incentives to bring multiple parties to the table for the necessary coalition building, while giving school districts and other partners time to create a consensus for reform and reallocate funds appropriately.
- *Philanthropic dollars can ignore (some) politics:* Individual donors have the ability to invest in programs that might be controversial or otherwise untenable for government investment.

A relatively modest investment can mean an immediate difference in the lives of individual students, while generating quantifiable long-term returns. A study by Clive Belfield and Henry Levin showed that each high school dropout results in an

estimated average cumulative cost of \$209,100 (2004 dollars) to society. They conclude that, even before considering the benefits from potentially improving the chances for success in future generations, there are significant societal savings for each incremental dollar spent on effective educational interventions. For example, every dollar invested in any of the five interventions that Belfield and Levin were able to analyze resulted in at least \$1.46 less that society had to spend.^{26, 27}

Philanthropists can help at-risk children in other ways as well. Some donors also invest time in the nonprofit organizations that they support, such as by helping with fundraising efforts, becoming a

spokesperson, providing consulting services, and/or sitting on boards of directors. Another popular approach is to spend time with the students they support. Mentoring youth helps everyone – students see how education can make a difference in their lives, while philanthropists experience the students' struggles, which lets them develop a better understanding of their charitable investments' value. In fact, several donors have said that these personal interactions are a vital part of their satisfaction with philanthropic work. (SEE THE CENTER'S SEPTEMBER 2008 REPORT, [*"I'm Not Rockefeller": 33 High Net Worth Philanthropists Discuss Their Approach to Giving.*](#))

We are...at a difficult time for the United States. We are fighting wars in Iraq and Afghanistan. We're facing climate dangers, trade imbalances, and record deficits. The global financial crisis is costing people their businesses, their homes, their jobs, and their savings. And we have severe budget strain at every level of government.

That is the dominant story in the news. But it is not the defining story of our times...We can keep moving toward a world where every child grows up in good health, goes to a good school, and has opportunities waiting—as long as we stay confident about the future, and keep investing in it... We have to use this downturn to force a new fiscal vigilance that is more creative and more constructive than simply cutting spending; we have to demand smarter spending. A more equitable world is worth fighting for and paying for—and that's why we need to make sure we're getting as much as we can for every dollar.

—Bill Gates, *Philanthropist*¹⁹⁵

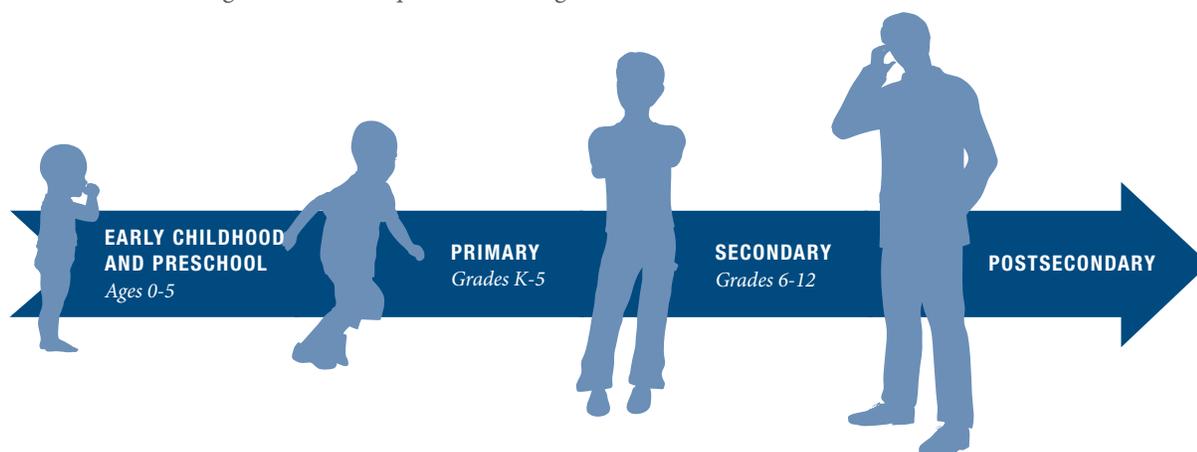
II. FINDING OPPORTUNITIES ALONG THE EDUCATION PATHWAY

In this section, we present the education pathway, our framework for thinking systematically about where high impact opportunities exist. We describe the common unmet in-school and out-of-school needs that your capital can target, as well as specific philanthropic “on-ramps” to consider. These on-ramps are examples of promising practices for improving the educational outcomes of at-risk students. To help you understand how some nonprofits deliver these practices, including how to link cost and impact, we provide five in-depth case examples.

The education pathway

Imagine education as a pathway on which students travel. The hope is that all children will develop along this education pathway and accumulate the social, emotional, and cognitive skills required to emerge

as productive and self-reliant adults. We divide this journey into four phases.²⁸ The chart below describes the key issues disadvantaged students typically encounter in each.



Key issues

During the first three years, children’s brains are rapidly developing the neural pathways that support language, problem solving, behavioral and social skills, as well as emotional health. If not used, these pathways begin to disappear by late childhood, threatening future school performance.²

By the start of this phase, many at-risk children are already academically behind their more affluent peers. This hinders them from acquiring the foundational skills and behavioral predispositions (e.g., self-control, school engagement) that move them from “learning to read” to “reading to learn” and enable them to perform basic calculations required in future problem solving.³

Adolescence is a difficult period as it entails biological, social, and emotional challenges that all students inevitably confront. At the same time, many at-risk students also have to catch up to overcome earlier gaps in learning. Such learning is required to master the content of the critical ninth grade on time, excel in college-preparatory courses, and succeed in the experiences that develop the skills (e.g., critical thinking and communication) that employers seek.

Since the 1980s, salaries for individuals who have completed high school or less have dropped while wages for postsecondary graduates have remained relatively even,⁴ leading many to set postsecondary completion as the ultimate educational goal.

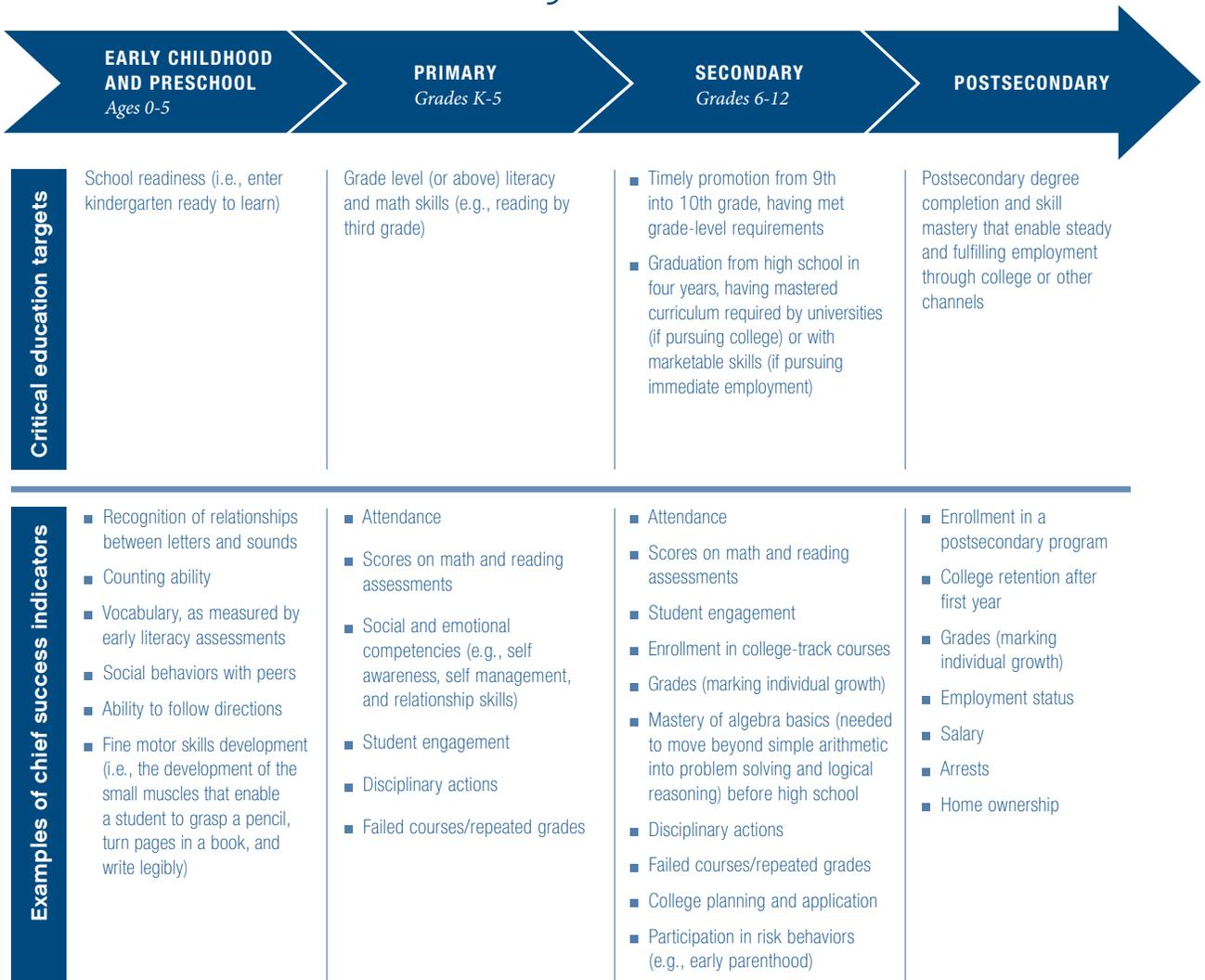
In each phase, certain targets are commonly associated with students' readiness to succeed in the next phase. These targets include:

- School readiness (e.g., enter kindergarten ready to learn)
- Early literacy and math skills
- Timely promotion from 9th to 10th grade (with age-appropriate academic skills)
- Completion of high school with mastery of curriculum required by universities (if pursuing college) or with marketable skills or aptitudes (if pursuing employment)

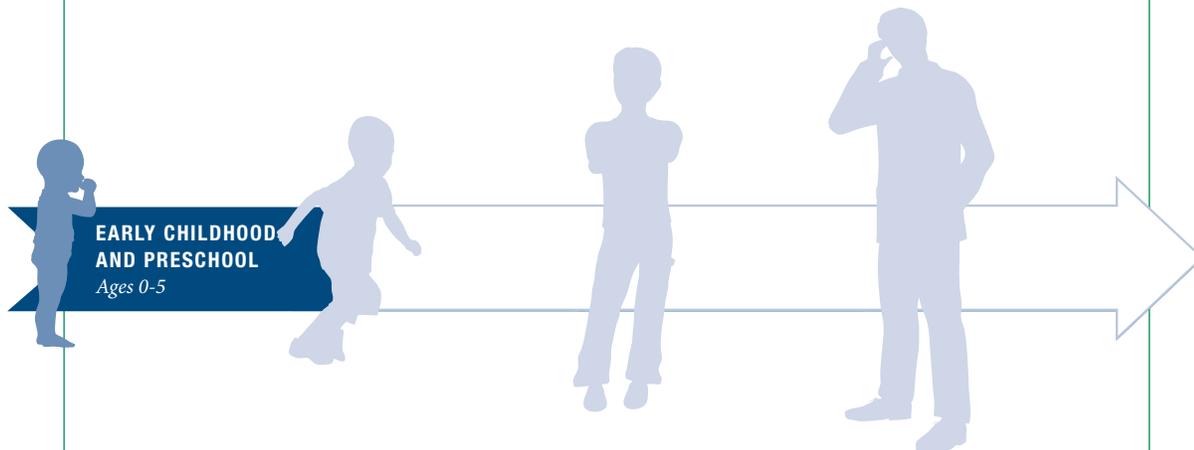
- Postsecondary attainment to enable steady and fulfilling employment

To understand whether your philanthropic efforts are making progress towards achieving these established goals, you will need indicators that allow you to monitor students' progress. Such indicators enable the kind of ongoing assessment and course corrections that increase the probability of success and are a hallmark of smart investing. Examples of commonly used success indicators are identified in the chart that follows.

Education Pathway



**THE EDUCATION PATHWAY:
EARLY CHILDHOOD AND PRESCHOOL**



Critical education target:

- School (kindergarten) readiness

Chief success indicators:

- Recognition of relationships between letters and sounds; the ability to count past 10; vocabulary development; positive social behaviors with peers; the ability to follow directions; fine motor skills (i.e., development of the small muscles that will enable a child to grasp a pencil, turn pages in a book, and write legibly)²⁹

What philanthropists can address:

- *In school:* Providing parents with very young children access to quality child care and early learning programs
- *Out of school:* Age-appropriate development of social, behavioral and cognitive skills from parent-child interactions, nutrition, and quality healthcare; resources for parents to increase nurturing quality of home environment, and increased access to spoken language and printed materials

PHASE I: EARLY CHILDHOOD AND PRESCHOOL

Problem areas and promising practices in early childhood and preschool

Our first phase covers the earliest years, a time when children’s brains are rapidly developing the neural pathways that support language, problem solving, behavioral and social skills, as well as emotional health.³¹ In this phase, parents and educators are trying to make sure that children enter kindergarten ready to learn. School readiness requires critical behavioral and social skills – such as the ability to sit still and follow directions – and the development of vocabulary and early literacy skills. Because children are not yet burdened by histories of poor achievement and missed benchmarks, it is often easier for philanthropists and nonprofits to achieve success in this period than in later phases.³²

Childhood is a multi-stage process where early investments feed into later investments.
Skill begets skill; learning begets learning.

–*Flavio Cunha, James Heckman, Lance Lochner, & Dimitriy Masterov, Economists*³⁰

Access to affordable, high-quality child care and preschool

Differences in the opportunities for learning are already apparent at this early stage. One underlying problem is that many low-income parents are over-extended in multiple jobs and caring for several dependents, sometimes as single parents. The end result is that they are not able to spend enough time with their children. This problem is measurable: children in low-income households hear fewer words than children in more affluent households, and their caretakers read to them less frequently.³³ This reality affects children’s learning: exposure to language is one of the most important factors in literacy development, along with caretakers’ responsiveness to their social and emotional needs.

Gaps in school readiness skills forewarn of future academic and social problems. Once students fall behind their peers, it becomes increasingly difficult for them to catch up, especially as the curriculum becomes more difficult. Over time, students can accumulate a learning deficit that may develop, if left unchecked, into a debilitating problem that prevents academic success. Research has found that students who enter kindergarten cognitively unready are less likely to do well in elementary and high school and are more likely to become teen parents, suffer from depression, and/or get involved with criminal activities than their better-prepared preschool peers.³⁴

Some philanthropists find that providing access to affordable, high-quality child care and preschool programs is an attractive way to eliminate educational gaps from the start. Research supports this approach; Nobel laureate James Heckman and colleagues concluded that programs focused on getting at-risk children on track for school success in early childhood were more cost effective than later interventions.³⁵ These prevention efforts not only promote school success, but also reduce costly outcomes, such as by decreasing the need for special education and making it less likely that the child will commit a crime in the future. For example, Hank Levin and Clive Belfield’s cost-benefit analysis of Perry Preschool showed that the benefits of the program were at least twice their costs.³⁶ (SEE P. 63 FOR A SUMMARY OF PERRY PRESCHOOL’S RESULTS.) However, there is a danger that if students do not receive continued support, the benefits that they gain from early childhood programs will fade away once they enter the traditional K-12 school system.³²

Philanthropists can support efforts to **make high-quality child care and preschool programs accessible to at-risk children.**

Good childcare and preschool programs are hard for low-income families to find. In a recent national poll, more than half of the parents with a household income of \$40,000 or less a year reported difficulty finding an affordable, high-quality learning environment for their child.³⁷ States have increased funding for preschool by \$2 billion over the last three years in response to significant lobbying efforts. However, access is still a problem for many families.³⁸ Only eleven states offer at-risk children access to preschool.^{38, 39} Accordingly, fewer than half of the country's 3- and 4-year-olds are enrolled in either public or private preschool programs.⁴⁰

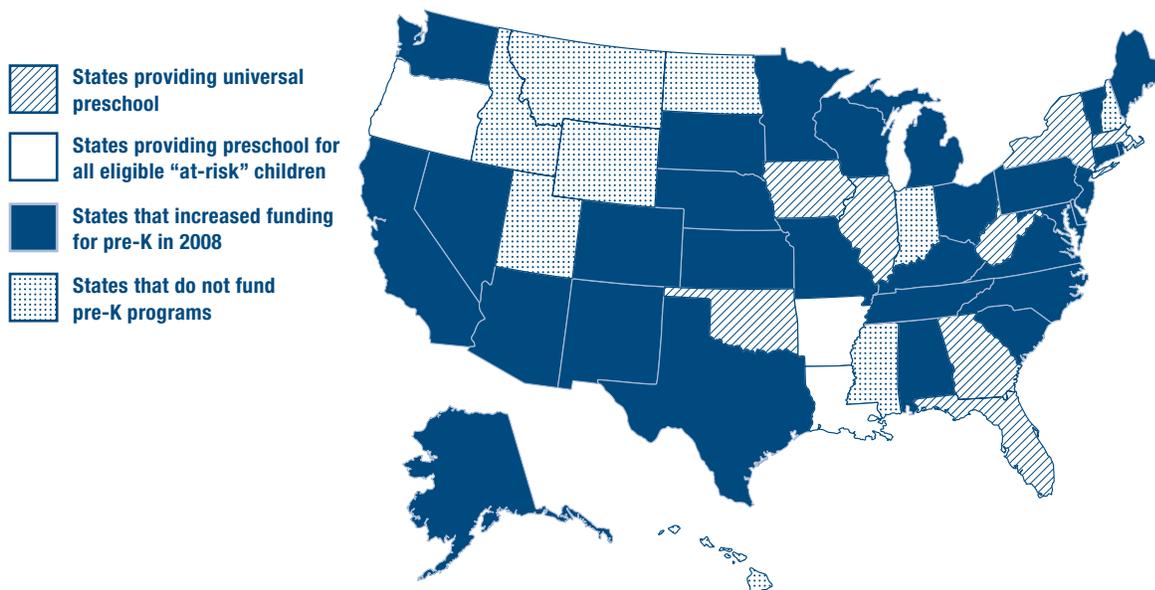
One way that philanthropists have succeeded in expanding access to preschool is by supporting advocacy organizations, which focus on convincing policy makers to invest public dollars in students. For example, [Fight Crime: Invest in Kids](#) is

a well-respected national organization of law-enforcement officers such as police chiefs, prosecutors, and sheriffs. Its mission is to channel federal and state dollars into high-quality, early education and afterschool programs for disadvantaged children and into efforts to reduce child abuse and neglect. **Fight Crime's** work is paying off. For example, it helped convince policy makers in Pennsylvania to fund the enrollment of an additional 11,000 disadvantaged 3- and 4-year-olds in quality preschools (i.e., those that comply with the state's early learning standards and are regulated by the state's Board of Education) during the 2007-2008 school year.⁴²

As preschool programs become more affordable, the need to improve preschool quality becomes increasingly urgent. Researchers evaluate the quality of child care and preschool programs using qualitative data on the child's experiences in the school plus

Pre-Kindergarten Funding

In fiscal year 2008, 36 states increased funding for pre-kindergarten, committing an additional \$528 million to provide access for more than 80,000 more children to pre-K.



Sources: The Pew Charitable Trusts. (2008). *Votes Count: Legislative Action on Pre-K Fiscal Year 2008*. Retrieved July 29, 2008, from http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Pre-k_education/LegislativeReport_Sept2007.pdf; Associated Press. (2008, July 31). Mass. Gov. signs bill to expand pre-kindergarten. *The Boston Globe*. Retrieved August 5, 2008, from http://www.boston.com/news/local/massachusetts/articles/2008/07/31/mass_gov_signs_bill_to_expand_pre_kindergarten/

quantitative data on structural characteristics such as class size, teacher qualifications, and teacher compensation.⁴³ Research that focuses on these dimensions shows that low-income and minority families are more likely to enroll their 3- and 4-year-olds in lower quality preschools. At these schools, children receive less of the supportive interactions that they need to improve their language and social skills relative to their more affluent or non-minority peers.^{33,44}

Philanthropists can improve the quality of care at early learning facilities by supporting the existing range of nonprofits or developing programs in

a variety of ways. Some programs succeed by increasing the one-on-one time between at risk preschoolers and attentive adults. One such program, [Jumpstart](#), places trained, caring adults in preschool classrooms. There, the adults build strong relationships with preschoolers using evidence-based practices to bolster students' readiness for kindergarten. (SEE CASE EXAMPLE ON THE FOLLOWING PAGE.)



Image provided by Jumpstart.

Indicators of preschool quality⁴³

Evaluations of preschools typically focus on two quality factors: process and structure.

Process indicators of quality:

- Positive relationships between teachers and children
- Sufficient materials and toys
- Teachers encourage communication throughout the day using techniques like mutual listening, talking/responding, and prompting for problem-solving and logical reasoning
- Frequent opportunities for art, music, science, math, and theatrical play
- High parent involvement

Structure indicators of quality:

- Small group sizes, low ratios of teachers to children
- Teachers and other staff are qualified and well compensated
- Staff is supervised
- Staff has opportunities for professional development



CASE EXAMPLE:

Building school readiness skills through increased time in one-on-one relationships with trained, caring adults

PROBLEM: Disadvantaged students enter kindergarten with significantly fewer cognitive and social skills than their more affluent peers. Compared to children without family risk factors (e.g., living below the poverty level, primary home language is not English, single-parent household, mother did not complete high school), children with two or more family risk factors at the start of kindergarten are:

- Almost three times as likely to score in the bottom quartile in reading (47% vs. 16%)
- More than 1.5 times less likely to be able to identify letters of the alphabet (44% vs. 75%)
- About a third as likely to be able to associate letters with sounds at the end of words (6% vs. 22%)
- More than 1.5 times less likely to be able to count beyond 10 (38% vs. 68%)
- Twice as likely to be described by teachers as often in fights with classmates (14% vs. 7%)
- Almost twice as likely to be described by teachers as “never” or only “sometimes” eager to learn (36% vs. 20%)
- More likely to be described by teachers as “sometimes” or “never” paying attention well (44% vs. 28%)⁴⁵

Without these academic skills, and with these counter-productive behaviors and attitudes, students are less likely to acquire the literacy tools they need to read fluently, build vocabularies, and explore new domains of knowledge (e.g., topics like trains and dinosaurs) that will help them understand and learn from what they read.⁴⁶

SOLUTION: Building school readiness skills, such as language, literacy, and emotional and social skills, through increased time in one-on-one relationships with caring adults

SUCCESSFUL MODEL: This program model sets up one-to-one relationships over the course of a school year between motivated caring adults – largely college students but also working and older adults – and low-income three- and four-year-olds who attend a community-based preschool (including Head Start). The program partners with colleges and

universities to recruit and train a team of undergraduates – its “corps members.” After 30 hours of training, each “corps member” is paired with one preschooler who is selected based on need (as identified by the program’s diagnostic tool). The corps member then works with the preschooler for about 240 hours across one school year to build the early literacy and behavior skills he or she will need to succeed in kindergarten. Activities include larger group work to build language and social skills and dialogic reading to promote literacy and vocabulary development. (“Dialogic reading” is a technique that actively involves the child in reading, where the adult listens, questions, and prompts the child into becoming the story teller.⁴⁷) The program also provides activities for parents to share with children at home that reinforce the learning that occurs in school.

EXEMPLAR AGENT: **Jumpstart** piloted this program model in 1993 at Yale University by serving 15 preschoolers. Since then, it has grown rapidly to serve approximately 13,000 preschoolers in 70 communities in 20 states.

ACCOUNTABILITY PRACTICES: **Jumpstart** evaluates both its outcomes and quality of implementation on an annual basis. It has begun planning for a multi-year study focused on its work in Boston that will track students from kindergarten through third grade to see whether its impact is lasting and meaningful. **Jumpstart** also has an Assessment Advisory Committee that is responsible for maintaining high evaluation standards for the program. This committee consists of **Jumpstart** staff plus experts in a range of fields, including early childhood education, early language and literacy development, preschool assessment, and program evaluation.

WHAT’S THE IMPACT? In an internal evaluation of its implementation nationwide in 2006/2007, **Jumpstart** found that 60% of the students enrolled in the program outperformed their matched comparison group of preschoolers from the same classrooms on a school readiness measure – a statistically significant improvement.^{48, 49} This result means that **Jumpstart** children are more likely to enter kindergarten on track to succeed. Based on research findings regarding quality preschool programs, we can expect these children to perform better in kindergarten than their non-participating peers.⁵⁰

Jumpstart is currently conducting a longitudinal study to understand how the program's gains affect student achievement past kindergarten. Until the results of that study are available, we can consider the results of other long-term studies on the sustainability of quality preschool effects. While the long-term effects of early education programs depend in part on the quality of the students' subsequent instruction, research suggests that students who participated in preschool – especially in high-quality programs – perform better than peers during elementary school. For example, a recent study considered the effect of preschool on more than 2,500 British children who had attended on average for 18 months.⁵¹ Based on the study's results, its lead investigator concluded that at age 10, the children who went to a high-quality preschool performed 27% higher on a standardized math test than their peers who did not attend preschool.⁵²

HOW MUCH DOES CHANGE COST? Between \$1,600 (at lowest cost sites) and \$3,100 (at highest cost sites) per additional student making greater gains on **Jumpstart's** "school success" composite measure, indicative of students' development of early literacy and language skills, and their social and emotional development. Some factors that influence whether a site is high or low cost include location, the existing level of resources in the preschools, resources that partners can provide, as well as local and state support for early childhood education.

SECONDARY IMPACTS OF THE PROGRAM:

- Decreases pupils-per-instructor ratio in preschool classrooms so that students in the class get more one-to-one attention from instructors
- Improves teaching quality in preschool classrooms by sharing evidence-based strategies with teachers and providing occasional training
- Provides corps members with extensive experience and opportunities to learn about childhood development, motivating them to become educators and leaders in early education
- Supplements existing classroom resources with books, supplies, and volunteers for special projects (e.g., classroom painting and repairs)
- Keeps parents up-to-date on child's progress in language, literacy, social, and behavioral skills development
- Raises public support for early education through national and local campaigns (costs not included in the cost-per-impact figure)
- Works with education policymakers to promote improvements in access to and quality of preschool (costs not included in the cost-per-impact figure)

CASE SNAPSHOT

Core practice – Supports one-on-one relationships between trained, caring adults and students

Impact sought – Increased school readiness, including early literacy and social skills

Success rate – Of 100 preschoolers participating, the practice would enable an additional 60 students to increase their school readiness scores

Cost per beneficiary – Average annual cost per student (as reported by the nonprofit) ranges between \$981 and \$1,873

Estimated cost per impact – Roughly between \$1,600 and \$3,100 per additional student with increased school readiness

For more information, see **Jumpstart's** website: <http://www.jstart.org> or contact Joe Wiinikka-Lydon, Associate Director of Development, at (617) 542-5867.

Other promising programs provide effective curricula to learning centers to help prepare students for elementary school. Several target behavioral and emotional preparedness for school. For example, [I Can Problem Solve \(ICPS\)](#) and [The Incredible Years](#) series have demonstrated success in multiple evaluations.

ICPS works to change the way young children think to promote positive social behaviors, decrease impulsiveness, and reduce inhibition. In a small group setting, students engage in the program's curriculum through pictures, role-playing, puppets, and group interaction. The curriculum recreates situations that students frequently encounter to demonstrate how to resolve interpersonal conflicts. The activities teach the students how to recognize the thoughts, feelings, and motives that can create problematic situations, and encourage the students to generate solutions while considering the consequences.⁵³ In addition, a curriculum for parents (**Raising a Thinking Child**) is available to help them support their children's positive development.

Several evaluations have assessed the program and found it to be most beneficial for four- and five-year-olds; but it is still helpful for students through sixth grade. An independent evaluation of a randomized-site controlled trial (i.e., similar schools were randomly selected to receive or not receive treatment to minimize selection bias) found that the program increased students' positive behaviors and decreased their aggressive behaviors.⁵⁴ An additional study found that low-income, minority students who participated in the program in kindergarten showed improved classroom behavior and problem-solving skills through fourth grade (when the study concluded) as compared to peers who did not participate. These students also performed better on standardized tests in fourth grade.⁵⁵

Some programs provide training to students to better manage themselves, while educating their parents and teachers in techniques to prevent, reduce, and treat behavioral and emotional problems. One such series, **The Incredible Years**, supplies comprehensive curricula for children ages

two through ten, their parents, and their teachers. Trained facilitators use short videos to encourage group discussion and problem solving around children's behavioral issues, while promoting the effective use of praise and encouragement, and demonstrating how to set limits and handle children's misbehavior. They also engage participants in role-playing exercises to help them acquire and practice the techniques that they learn. The student curriculum helps the children develop empathy for others, while learning how to communicate feelings, manage anger, resolve conflicts, and understand school rules.

A large number of studies have evaluated **The Incredible Years**, mostly in randomized controlled trials. These evaluations provide strong evidence that the program improves students' readiness for school: it reduces conduct-related problems, increases cooperation at home and in school, and raises students' ability to solve problems and use more positive conflict management strategies with their peers.⁵⁶

Nurturing home environment

Supporting preschool programs is just one of the ways in which philanthropists can help. Another option is to focus on supporting parents' efforts to provide a nurturing home environment. Programs such as **The Incredible Years** (described above) provide one way to meet at-home needs. Another successful technique is home visitations.

Hunger and health can affect the school readiness of at-risk children. One third or more of low-income households are "food insecure," where children go hungry.³³ In the inner cities, the food easily available to children tends to be less healthy, leaving them frequently nutrient-starved and at greater risk of becoming sick.⁵⁷ At-risk children also often receive poorer primary healthcare despite a higher risk of illness,⁵⁸ and higher exposure to indoor toxins in their homes from lead, mold, and infestation.¹⁹²

Philanthropists can help families identify health and safety concerns by supporting home visits by nurses. [The Nurse-Family Partnership](#), for example,

Philanthropists can support nurse visits to low-income households, which **lower the health and safety risks** that disrupt children's healthy development and eventual school readiness.

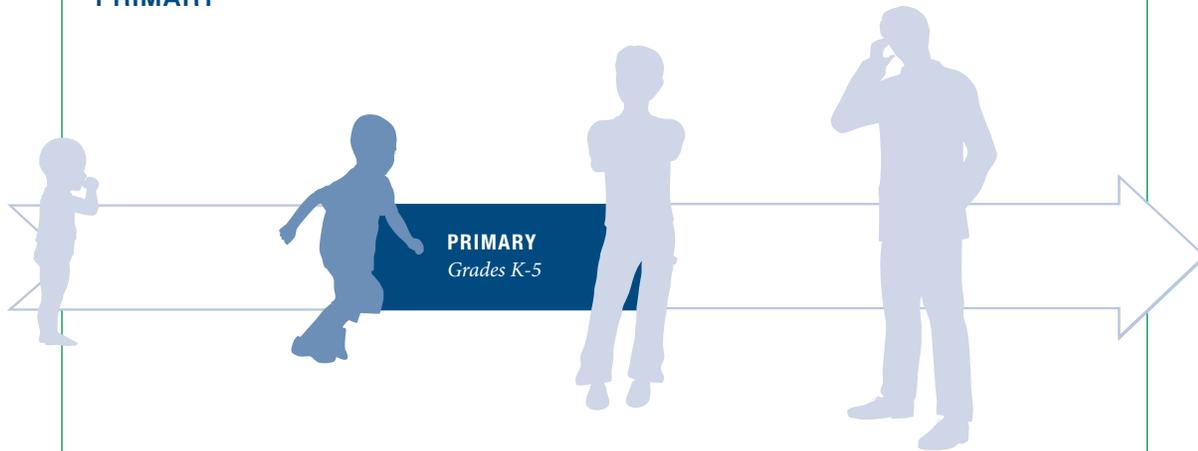
arranges monthly visits by nurses to low-income women during pregnancy and until their child is two years old. In three separate randomized controlled trials, in a diverse variety of sites (Elmira (NY), Memphis, and Denver), the program effectively improved families' lives in comparison to control groups.³² One study found substantially fewer occurrences of child abuse and neglect. In another study, which followed up with the children at age six, far fewer children exhibited

behavioral problems; these same children also made gains in intellectual function and vocabulary.⁵⁹

Another benefit that the **Nurse-Family Partnership** provides is better health outcomes for very young children. One study found that homes visited by nurses had fewer hazards for children, 40% fewer reported incidents of injury or ingestion, and a third fewer trips to the emergency room.⁶⁰



**THE EDUCATION PATHWAY:
PRIMARY**



Critical education target:

- Literacy and math skills (e.g., reading by third grade)

Chief success indicators:

- Math and reading assessments; no repeated grades/failed coursework; social and emotional competencies (e.g., self awareness, self management, social awareness, relationship and social skills); and attendance

What philanthropists can address:

- *In school:* Professional development for teachers and principals; financial incentives for teachers and principals; adequate school supplies and facilities
- *Out of school:* Access to quality out-of-school activities; parent involvement; nutrition; health issues including dental care, vision, and hearing

PHASE II: PRIMARY SCHOOL (KINDERGARTEN THROUGH GRADE 5)

During the primary school years, children should learn to read and develop early math skills. These are the tools that children will need to gather knowledge along the rest of the pathway.⁶¹

As educators like to say, “Learn to read by third grade, and read to learn thereafter.” If students do not pick up these skills in their early elementary years, it is highly unlikely that they will ever catch up to their peers.^{62, 63} Primary school is also when children develop behaviors critical to long-term school success: self control, the ability to concentrate over a sustained period of time, and continued language and emotional development.⁶⁴

Problem areas in primary school

In kindergarten, measurable gaps start to appear between the reading test scores of at-risk students and those of their peers. These gaps increase as the students move through the first few years of elementary school.^{65, 66} Research shows a particularly sharp decline in test scores around 4th grade, when the students’ reading tasks move from basic decoding and word recognition to comprehension.⁶⁷

Once the gap in reading skills appears, it is unlikely to disappear. Connie Juel, professor at Stanford’s Graduate School of Education, found that only one in ten students in the group of students she followed who were reading poorly at the end of first grade read proficiently at the end of fourth grade.⁶² While Juel’s study ended in fourth grade, it is clear that many students fail to even catch up: of U.S. 17-year-olds, only about 6% can read and gain information from specialized text (e.g., the science section in the local newspaper), including 1 in 12 White students, 1 in 50 Latino students, and 1 in 100 African-American students.⁶³ Thus, it is important to try to catch reading problems early.

Unfortunately, many public schools lack the resources or skills they require to meet the scholastic and personal needs of at-risk students to close the widening gaps. At-risk students are especially vulnerable to school-specific problems that persist –

and sometimes intensify – across the K-12 school system. These issues include a revolving door of teachers and principals, poor facilities, and a shortage of resources. Many of these issues are related, in part, to discrepancies in funding.

Fewer resources

Local, state, and federal governments together spend roughly half a trillion dollars each year on public elementary and secondary education in the U.S.²⁴ The amount distributed to each district—and to each school within a district—is governed by a variety of

Philanthropists can **advocate for changes in how schools are funded** to match resources with needs more effectively.

funding formulas, some at the federal level, others at the state and local levels. Too often, funding disparities arise across states, across districts within a state, and even across schools within the same district. While not the situation everywhere,⁶⁸ the end result is that on average, U.S. schools serving low-income students have fewer resources. For example, an affluent district receives, on average, \$38,000 more per classroom than a poor school district, and \$600,000 more per elementary school.⁶⁹

More money does not necessarily mean better results. What the district buys is as important as how much it spends. However, inequities leave fewer discretionary dollars available for the resources that at-risk children need: tutors, reading specialists, and additional learning opportunities.⁷⁰ For example, the inequities prevent schools from getting the supplies or offering the professional

Fewer books

The U.S. General Accountability Office found that in New York City, inner-city schools had fewer than 1,000 library books per 100 students, while suburban schools had more than 2,000 library books per 100 students.¹⁸⁹

Broken pipes

Deferred maintenance and overcrowding have left school facilities in high-poverty areas with broken plumbing, rotting support beams, and poor ventilation systems, all of which threaten the health and safety of students.¹⁹⁰

development that would make instruction more engaging to students, and deprive them of the funds they need to maintain safe and adequate facilities.

The money problem also affects the ability of a district to attract and retain good teachers – sometimes in unexpected ways. For example, New York City’s Department of Education had an aging human resources system that made it difficult to add to the payroll the 6,000 to 8,000 teachers who join each year. This meant that new hires had to wait

months for their first paychecks. The city felt if it were to implement its vision for change and develop the talent of its workforce, it would need to fix this system first. With the generosity of a consortium of foundations, the Department successfully retooled its human resources infrastructure and can now recruit new teachers earlier, when the best candidates are available.

mobility (school transfers for reasons other than grade promotion).⁷¹ For example, more than a quarter of the students (on average) left their original schools in the Newark City Schools district (NJ) during the 2006/7 school year. In several of these schools, almost half of the students entered or left sometime during the school year.⁷²

Children who move frequently tend to have poorer achievement. They also have more behavioral problems and more difficulty in developing friendships. As a result, these children are ultimately at higher risk of eventually dropping out of high school. Student mobility also has a deleterious effect on peers, teachers, and administrators. Teachers in high mobility schools must spend more time providing remedial work, and must frequently slow the instructional pace to allow students to catch up. Administrators struggle with resource allocation, as the unpredictability of student enrollment undermines their ability to plan ahead.⁷³

School districts are still seeking solutions to the student mobility issue. Part of the difficulty in solving the problem is that there are different reasons for student mobility, such as placement in foster care or caregivers’ reliance on migrant work.

One strategy is to provide distance-learning courses. For example, at the University of Texas at Austin, the K-16 Education Center’s [Migrant Student Graduation Enhancement Program](#) provides courses and services that enable the children of

Philanthropists can improve school district operations **that impact teachers’ work environment and the quality of instruction in classrooms.**

months for their first paychecks. The city felt if it were to implement its vision for change and develop the talent of its workforce, it would need to fix this system first. With the generosity of a consortium of foundations, the Department successfully retooled its human resources infrastructure and can now recruit new teachers earlier, when the best candidates are available.

Highly mobile student populations

Schools with large groups of migrant workers’ children, homeless children, and children from low-income families often have high rates of student



migrant workers to complete their coursework at any time, and from any location, to graduate from high school. The courses are aligned with the Texas Essential Knowledge and Skills standards, and students can complete them with or without access to computers or the Internet. (Other programs provide free computers and reimburse families for the expense of Internet access.) As of March 2007, the program reports that 81% of the students who enroll in the program complete the coursework.⁷⁴

Another strategy that many urban school districts are currently using is to establish a common curriculum, whereby all teachers across a district teach the same content using the same textbooks. While this strategy minimizes the discontinuity in lessons for students who move from school to school, it also reduces teachers' ability to customize their lesson plans to their students' particular strengths and weaknesses.

Lower quality instruction

All students benefit from good teaching. As Eric Hanushek, a senior fellow at Stanford University's Hoover Institution, concluded, "The difference in student performance in a single academic year from having a good as opposed to a bad teacher can be more than one full year of standardized achievement."⁷⁵ Studies considering the value that teachers add to student achievement have found that Tennessee

students who had high-performing teachers for three years exceeded the standardized test scores of students who had poorly performing teachers over the same period by around 50 percentile points.⁷⁶ This gap can mean the difference between a student in need of remediation and a student who is enrolled in accelerated classes.⁷⁷ More recent analyses based on the Tennessee STAR study, which randomly assigned students and teachers to classrooms in 79 schools across the state, found that teachers influenced student performance more than school size or class size.^{78, 79} Furthermore, it showed that poor students are especially sensitive to teacher quality.⁸⁰

While education experts have not yet reached a consensus on the best way to measure teacher quality, teachers in high-poverty schools tend to have less of what likely matters—experience and content knowledge—than teachers in more affluent schools.⁸¹ One of the most pressing issues for high-poverty schools is the ability to retain their most qualified teachers. Schools with the most need tend to hire the newest teachers. After acquiring the experience that makes them better instructors, these teachers frequently leave for positions in more affluent schools, where the work conditions are better and the pay is higher. This staffing pattern creates the constant need to fill open positions. As a result,

low-income schools frequently use substitutes to fill full-time teacher vacancies, at the expense of student achievement.⁸²

At low-income schools, principals often follow the same trajectory as the teachers; they enter as novice leaders, and then leave for more affluent schools. This problem is more common at the elementary and middle school levels, but it also affects high schools.^{83, 84}

Philanthropists can provide quality professional development and incentives to **encourage trained and experienced teachers and principals to stay longer.**

There are many strategies available to help improve teaching quality. These include training before entering the classroom, mentoring during the first years of teaching, and incentive structures to attract and retain better teachers at the lowest-performing schools. It is important that any training or development draw upon the evidence base for

what works, as many teachers report that much of the professional development that they receive is a waste of their time, and “just one more thing they have to do.”⁸⁵

Beginning teachers need more practical skills. Their knowledge of theory does not easily translate into practice; they want ...more practical experience.

*–Bill Vasey, Former Assistant Superintendent,
Professional Development and Curriculum Support
Division at the California Department of Education⁸⁶*

One example of quality professional development is the work of [Children’s Literacy Initiative \(CLI\)](#). This nonprofit provides teachers (pre-K through third grade) with training in effective literacy teaching techniques, plus coaching to help them implement the strategies in their classrooms. (SEE CASE EXAMPLE ON THE FOLLOWING PAGE.)



CASE EXAMPLE:

Improving quality of literacy instruction through group training and extensive coaching of elementary school teachers

PROBLEM: Many teachers enter their classrooms unready to respond effectively to the needs of their students.⁸⁸ Lack of training in early literacy instruction results in large numbers of elementary school students who fail to gain the necessary vocabulary and literacy skills they need to learn to read. Furthermore, students who do not gain these skills early are unlikely to improve significantly over time. Research has shown that only one in ten students who are reading poorly at the end of first grade read proficiently at the end of fourth grade.⁶²

SOLUTION: Improving quality of literacy instruction through group training and extensive coaching of elementary school teachers

SUCCESSFUL MODEL: This program model trains pre-K through 3rd grade teachers in effective literacy instructional techniques, and provides coaching to help teachers implement the strategies in their classrooms. Teachers participate in workshops, receive classroom book collections, and then work with a coach one-on-one for three years to incorporate the techniques in their classroom. The organization also trains

at least one literacy instructor at the school site to ensure each campus has a teacher-leader who effectively models the approach and can provide immediate support.

EXEMPLAR AGENT: Children's Literacy Initiative (CLI) has provided professional development for teachers in literacy instruction since 1988. It has worked with teachers in New York, Baltimore, Newark (NJ), Chicago, Philadelphia, Washington (DC), Boston, Atlanta, and White Plains (NY).

ACCOUNTABILITY PRACTICES: CLI has been externally evaluated and has conducted internal assessments of its work.

WHAT'S THE IMPACT? A rigorous external evaluation using a randomized controlled trial design assessed CLI's Philadelphia Kindergarten Literacy Intervention Project during the 1995-1996 school year. A total of 377 students were present at both the start and end of the school year. The study compared the literacy skills of kindergartners in 6 urban schools. Two schools received CLI's training and books, two received the books only, and two received neither the books nor the program. Children in the CLI classrooms



significantly outperformed the other groups across all measures. For example, researchers found a 10-point gain on the Peabody Picture Vocabulary Test, an early literacy measure that assesses a student's vocabulary and is used commonly as a rough assessment of IQ.⁸⁹ This increase is equivalent to the difference between scoring at the 25th percentile versus the bottom 9th percentile, and demonstrates students' increased ability to comprehend text and become competent readers. A more tangible result is that students with **CLI**-trained teachers wrote an average of 21 words on a test at the end of the school year, greater than twice the number that students in the control classrooms wrote (8 words).⁸⁷ In a more recent implementation in White Plains, NY, an internal assessment found that the program enabled an additional third of the participating students to meet literacy benchmarks.

HOW MUCH DOES CHANGE COST? About **\$586** per incremental kindergartner meeting literacy benchmarks, plus the additional benefit to students of increased enjoyment of reading⁹⁰

SECONDARY IMPACTS OF THE PROGRAM:

- Increases the productivity of existing school teachers by leveraging public investments already made, resulting in a noticeably low cost-per-impact figure
- Increases teacher satisfaction and improves teacher recruitment and retention
- Helps develop school culture and climate that promote literacy development

CASE SNAPSHOT

Core practice – Quality professional development and coaching in literacy instruction for teachers

Impact sought – Increased literacy skills in grades Pre-K through 3rd to meet national benchmarks

Success rate – Of every 100 students taught by teachers who participate in the program, the practice would enable an additional 32 students to meet literacy benchmarks

Cost per beneficiary – Average annual cost per student (as reported by the nonprofit) is approximately \$182

Estimated cost per impact – Roughly \$586 per additional student meeting literacy benchmarks

For more information, see **CLI's website: www.CLIontheweb.org** or contact Linda Katz, Executive Director, at (215) 561-4676.

Another promising practice is comprehensive school reform, in which districts combine the most promising strategies from **CLI** and other successful professional development programs and align them to address the structural, leadership, and instructional needs of the selected school(s). While still uncommon, more school districts are successfully pursuing these tactics using philanthropic dollars. One standout project is [The Benwood Initiative](#) in Hamilton County, Tennessee (Chattanooga metropolitan area), where a partnership of local and national foundations is supporting the district's bundle of reforms targeting teacher and leadership quality.⁹¹

Eight urban elementary schools in Chattanooga were rated among Tennessee's 20 lowest-performing schools. In contrast, the predominantly White students in the area's County schools scored in the 90th percentile on the state's exams.⁹² The school district attributed the achievement gap to teachers' poor qualifications, weak practices, high turnover, and poor morale, as well as to weak leadership at the targeted schools.⁹³ The district "reconstituted" the schools by dismissing all teachers and requiring them to reapply for their positions. The district then rehired more than two thirds of the staff at the "new" schools. It also transformed the school environment through a package of reforms, including intensive staff development (e.g., hiring consultant teachers, extending opportunities for teachers to collaborate and mentor others, facilitating a free master's program for teachers), developing principals' ability to lead and support teachers, and providing student and family support (e.g., afterschool tutoring, parent-involvement programs).⁹²

As a result of these efforts, student achievement has improved. The percentage of third graders passing the state reading exam in the **Benwood** schools grew from 53% in 2003 to 80% in 2007. Teacher turnover declined, from 68 new teachers in 2002 to 28 in 2006. More importantly, according to value-added analyses that use statistical modeling techniques to isolate a teacher's effect on student achievement, teacher instruction also has improved. Specifically, the analyses found that 4th and 5th grade math teachers

with at least three years of experience improved their performance from significantly below the district average in 2000 to above average by 2005.^{91, 92} This early success has prompted the funding coalition to continue investment in the district and expand the scope of the reform efforts to additional schools.

Another strategy for improving teacher quality is to acquire more talented teachers by tapping into non-traditional pipelines (i.e., outside of schools of education). One organization that school districts are increasingly turning to is [The New Teacher Project](#) (TNTP), which has helped more than 200 school districts hire or train 28,000 teachers.⁹⁴ TNTP partners with school districts to recruit, select, develop, and certify talented teachers for high-need classrooms. The organization starts with a very large applicant pool from which it accepts only a few candidates. In New York, for example, only one out of ten who applied has become a teacher. The strategy appears to be working, as districts and researchers are linking improvements in teacher quality to the program's efforts. One recent study found that the gap in teacher quality between New York's high- and low-poverty schools has narrowed since 2000. Over this period, the student achievement gap has also become smaller. The authors of that study attribute much of this progress to the district's work with TNTP and **Teach For America**.⁹⁵ (SEE P. 38 FOR A DESCRIPTION OF TEACH FOR AMERICA.)

Problem areas outside of primary school

No supplemental learning experiences

Some disadvantaged children do not receive enough supervision and caregiver involvement in their education for many reasons, such as their caregivers' long workdays and personal struggles. Nor can poor families often afford the personal tutors and private schools that would help their children catch up to peers in meeting primary school education targets. Low-income parents also lack the means to enroll their children in the quality extracurricular

activities that more affluent students enjoy.⁹⁶ The results are measurable: one study by researchers at Johns Hopkins University showed that the lack of summer learning activities, which are more likely to be available to affluent students, contributed significantly to the cumulative educational gap between high- and low-income children in Baltimore.⁹⁷

Philanthropists can help give students access to high-quality **afterschool activities that complement their schoolwork and enhance their learning.**

Absenteeism

Educators define chronic absenteeism as having missed 18 or more school days during the year. Kindergarten students with one or more risk factors are four times more likely to be chronically absent than their more affluent peers. This rate fluctuates from grade to grade, until fifth grade, when poor students are five times more likely to be habitually absent.⁹⁸ Teachers report that students who are less mature, have less self-control, and exhibit more problem behaviors in the classroom are more likely to miss school habitually. These problems, combined with a variety of health issues, result in low-income students missing more than five additional days of school per year on average than middle-class children.⁹⁹

Absenteeism is associated with poor student achievement. Students who missed 10% or more of their kindergarten year performed below average in first grade, while their peers who missed 3% or less outperformed the average.⁹⁹

Philanthropists can help keep children in school by supporting practices that seek to identify and address students' unmet needs, whether in school, at home, or in the community. **Communities in Schools** (CIS) provides an example of this approach. CIS aims to increase student

achievement and graduation rates by first understanding what low-income students need, and then scouring the community to locate existing resources to meet those needs. This could mean locating an afterschool tutoring program to engage the student in learning activities, finding a dentist willing to provide free care, or connecting families with social services. Where no resources exist, CIS creates new ones.

Its efforts are paying off. Students that participate in CIS programs have better attendance and fewer disciplinary referrals, both of which translate into meaningful outcomes. For example, 81% of all CIS-eligible seniors, who are overwhelmingly low-income and minority youth, graduate from high school. In contrast, the national average (regardless of income) for minority seniors is 53% for African-American youth and 58% for Latino youth.¹⁰⁰ CIS wants to expand this success and has recently undertaken major strategic planning efforts to increase its core operation capacity to improve and sustain its impact.

Philanthropists can improve absenteeism, student engagement, and eventual graduation by supporting nonprofits that **broker existing community resources to fulfill student needs.**

Health issues

Poor health, improper diet, and a lack of exercise can further complicate the academic problems of disadvantaged students. Students with uncorrected vision and hearing problems make seemingly careless mistakes in schoolwork, have a hard time following directions, and find it difficult to complete tasks.¹⁰¹ Poor nutrition renders students lethargic in class, leading teachers to mislabel them as "slow" and place them unnecessarily in special education programs.¹⁰² Many students – minority girls in particular⁹⁹ – have low levels of physical activity, and miss out on the boost to brain functioning that research is beginning to show that exercise

can provide.¹⁰³ Poor dental care can also distract students from schoolwork. For example, a recent survey of 35 elementary schools in the Flint, Michigan area found that almost half of the kindergarten children had untreated cavities. Almost a fifth reported that tooth discomfort made it hard to concentrate in class.¹⁰⁴

Philanthropists can work with nonprofits to reverse the conditions that lead to poor health among at-risk children and thereby support student learning. One program, [The Food Trust](#), provides low-income students with what they need to make healthier food choices: knowledge, social support, and access to local fruits and vegetables. **The Food Trust's** classroom curriculum teaches students the key concepts of nutrition and how to read food labels, while helping them develop a preference for fruits and vegetables. At the same time, the organization educates parents on the benefits of consuming locally grown fruits and vegetables, and advises them on how to shop for food, prepare meals, and provide snacks to their children. A randomized controlled trial showed that kindergartners who participated in the program made statistical gains in their initial sounds fluency (an indicator of literacy preparedness) relative to control students.^{105, 106} A study of a similar program that targeted 4th through 6th graders found that after two years, the **The Food Trust** intervention reduced the number of children who became overweight.¹⁰⁷

Another example of successful health outreach is the [Philadelphia Eagles Eye Mobile](#). Launched in 1995 with NFL offensive lineman Jermane Mayberry's initial contribution of \$50,000, this vision care clinic-on-wheels goes to low-income Philadelphia schools and provides students with free comprehensive eye

exams, prescription glasses, and referrals for further medical treatment as needed.¹⁰⁸ In the 2007/2008 school year alone, more than 3,000 children had their eyes examined by the **Eagles Eye Mobile** – and more than three quarters of them needed and received free prescription eyeglasses.¹⁰⁹

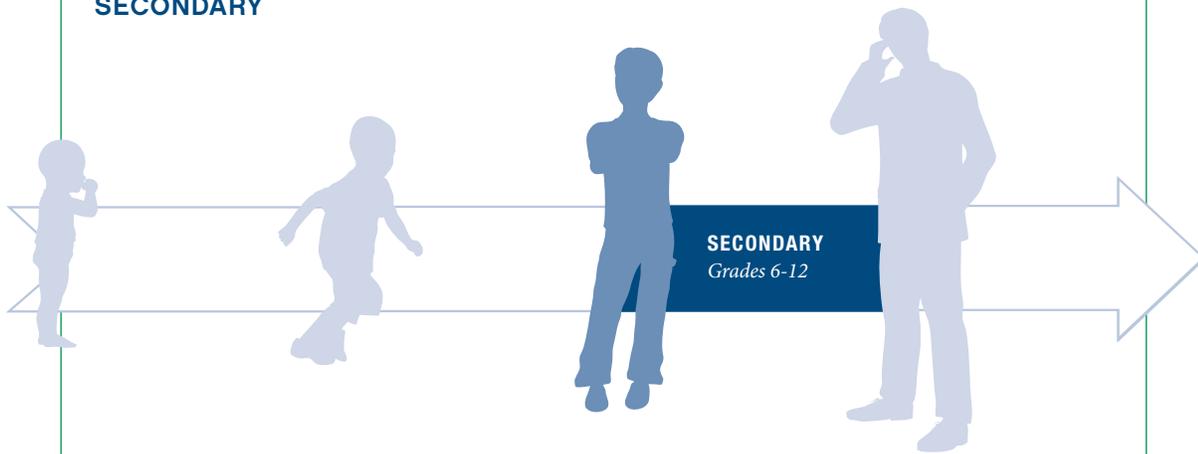
If you've ever seen a child put on glasses for the first time and be able to see the definition of a leaf or words on the blackboard or read a label, you'd know how good it feels for me to give back in this way.

– *Jermane Mayberry, Philanthropist*¹⁰⁹



Philanthropists who support efforts to **educate parents and children on proper nutrition** can improve health and early literacy skills.

**THE EDUCATION PATHWAY:
SECONDARY**



Critical education target:

- Timely promotion from 9th grade into 10th grade, having met grade-level achievement requirements; on-time high school completion with mastery of curriculum required by universities (if pursuing college) or marketable skills and aptitudes (if pursuing employment)

Chief success indicators:

- Attendance; grades (to mark individual growth); student engagement, as measured by, for example, student surveys and disciplinary data; Mastery of algebra basics (needed to move beyond simple arithmetic into problem solving) before high school; lack of repeated grades or failed coursework; enrollment in rigorous course track; college planning and application to postsecondary institutions

What philanthropists can address:

- *In school:* Teacher quality; guidance counselor quantity; school leadership; rigorous curriculum options
- *Out of school:* Anxiety and depression; risk behaviors (e.g., substance use, early sexual activity); young parenthood; need for positive role models, both adult and peer; lack of enriching out-of-school activities

PHASE III: SECONDARY SCHOOL (GRADES 6 THROUGH 12)

Adolescence is difficult for all children. As students move from childhood into the teenage years, they encounter biological changes, an increasing need for peer acceptance, and a desire for independence – all of which can affect educational outcomes.

Biological changes distract students from their work. Without support from caring adults, students will find that hormones and “bad break-ups” can undermine their ability to concentrate. Adolescents’ need to be accepted as part of a group can strengthen their commitment to school, or undermine it, depending on whether they choose friends who value, or reject, school’s importance. During this period, adolescents are also trying to develop identities that are distinct from those of the adults in their lives. As such, they are more likely to question and dismiss directives that fail to connect their interests and aspirations to their schoolwork.

By the start of high school, large numbers of low-income and minority students have not acquired the academic tools they need to master the content of the critical ninth grade year in a timely manner. Thus, at-risk adolescents must deal with common biological, social, and emotional problems while

trying to catch up to their peers academically. All of these pressures – combined with the fact that students now have the option of dropping out if they lose interest in school – contribute to the high attrition rates of at-risk students.

Philanthropists can improve educational outcomes in secondary school by supporting the academic needs of students (e.g., instruction quality, career counseling) and by developing more positive and challenging environments for students outside of school. We begin by looking at the academic needs.

Problem areas and promising practices in secondary school

Many of the school-based obstacles that at-risk students encountered in primary school persist through secondary school. Philanthropists can help remove these obstacles through investments in teaching quality, leadership, college counseling, and school curriculum.

Teaching quality

As we discussed earlier, low-income schools are in a perennial struggle to fill open teaching positions. In secondary school, the problem worsens to the point that these schools have to rely heavily on under-prepared substitutes and out-of-field teachers to fill vacancies. (“Out-of-field” teachers are those teaching a subject other than the one in which they majored or minored.) For example, in high schools where at least 75% of the students were low income, there were three times as many uncertified or out-of-field instructors teaching English and science than in affluent schools.¹¹¹ While experts debate the value of certification as an indicator of teacher quality, research has shown that deep content knowledge and teaching experience, which substitutes and out-

Across America today, adolescents are confronting pressure to use alcohol, cigarettes, or other drugs and to have sex at earlier ages. Many are depressed...Others are growing up lacking the competence to handle interpersonal conflict without resorting to violence...The social and technological changes of this century...have also introduced new stresses and risks into the adolescent experience...Many adolescents feel adult-like pressure without experiencing the rewards of belonging and of being useful in the valued settings of adult life. Especially in low-income neighborhoods where good education and jobs are scarce, young people can grow up with a bleak sense of the future.

– *Carnegie Corporation of New York*¹¹⁰

of-field instructors are less likely to have, improve student achievement.¹¹²

Philanthropic dollars have brought talented individuals to the teaching profession. For example, [Teach For America](#) (TFA) recruits high-achieving graduates from elite colleges and universities. These graduates commit to teaching in high-need schools for at least two years after an intensive five weeks of training. One third of these young, motivated teachers continue to teach even after meeting their original commitments.¹¹³

TFA teachers are making a difference. A recent study by the Urban Institute found that students in North Carolina's high schools performed better on their end-of-course exams—particularly in math and science—when their teachers were TFA corps members rather than teachers who came to the profession through traditional channels. As the study's authors wrote, "Our findings show that secondary school TFA teachers are more effective than the teachers who would otherwise be in the classroom...Other things being equal, the findings suggest that disadvantaged children taught by TFA teachers are better off than they would be in the absence of TFA."¹¹⁴

TFA is making investments to help produce these positive results for more students. TFA's recent strategic planning efforts have resulted in the development of the systems and capacity to support its improvement over time. For example, it has developed a continuous assessment system to measure corps members' effectiveness.¹¹⁵

Investments in programs such as TFA have other powerful benefits. Many of its alumni continue to work to improve educational opportunities for disadvantaged youth after the program by becoming leaders in the field. Examples include Michelle Rhee, the chancellor of Washington, D.C.'s schools, as well as Michael Feinberg and Dave Levin, two education entrepreneurs who founded the [Knowledge is Power Program](#) (KIPP). (SEE P. 40 FOR A DISCUSSION OF KIPP.)¹¹³

School Leadership

A number of factors are destabilizing the leadership of urban and high-poverty schools, including funding limits, school politics, and personal family sacrifices. The Council of the Great City Schools reports that the average tenure of a superintendent in an urban school district is 3.1 years.¹⁹¹ Turnover among principals is also high: for example, in urban high schools in Texas, the annual high school principal turnover rate ranges from 18% to 25%.⁸⁴ This principal and superintendent turnover can impact teacher effectiveness.

Philanthropists can consider a number of approaches to establishing strong leadership in low-income schools. For example, educational entrepreneur Jon Schnur created an organization, [New Leaders for New Schools](#), which trains and supports aspiring school principals. The organization is currently working with the RAND Corporation to evaluate its efforts and will have results to report by 2012.

Philanthropists should keep in mind that a **change in school leadership can mean the premature end of a promising reform effort.**

Other organizations try to increase the number and quality of applicants for leadership positions across school districts. For instance, The Broad Foundation prepares executives from fields such as business, public policy, and law to lead school districts through its [Broad Residency in Urban Education](#). It has a similar program for school administrators, [The Broad Superintendents Academy](#). These two programs prepare future education leaders for roles

Philanthropists can **draw enthusiastic and committed leaders into education from other fields.**

in urban school districts or charter schools (i.e., public schools that operate independently from traditional school systems) by providing them with intensive management training and on-the-job learning experiences. The Foundation has placed over 140 Broad Residents in more than 35 urban school districts and charter management organizations; 94% of these leaders have stayed on after completing the two years of professional development offered by the Foundation. The Broad Foundation also reports that of the districts in which its Academy graduates have served as superintendents, nearly three quarters are outperforming similar schools, primarily by raising overall student achievement, and by reducing the achievement gaps in reading and math.¹¹⁹

Philanthropists can support or create programs that **help students think about, prepare for, and navigate through the unfamiliar college application process.**

Guidance counselors

Secondary school students need to know how educational goals such as high school graduation and college attendance relate to what they want in their lives and careers. This is normally the role of the guidance counselor. However, counselors are often responsible for so many students that they cannot effectively serve this role or provide sufficient support, such as directing students to the courses that they need to reach their professional aspirations. In schools where more than 75% of the students are minorities, school counselors are responsible for 305 students on average, 55 more than what is recommended by the American Counseling Association.^{111, 120} This high student-to-counselor ratio makes it hard to provide the structure that students need to successfully apply and enroll in colleges or technical training programs. The latter is especially important to students whose parents did not attend college.

College Summit has developed an innovative approach to help low-income high schools increase their students' college enrollment rates. The organization's strategy consists of four activities:

- Integrating a college-planning curriculum into a core high school course
- Providing professional development and support to ensure that school staff has the knowledge and resources to help students enroll in college
- Training student influencers ("peer leaders") at summer workshops on how to choose the right college, compose compelling application essays, obtain financial aid, and promote other students' efforts towards college enrollment
- Delivering customized reports showing students progress toward college

College Summit reports that since 1993, 79% of the **College Summit** Peer Leaders (the academically mid-tier students who attend the summer workshops) went on to enroll in two- and four-year colleges.¹²¹ In contrast, the national college enrollment rate for low-income students is below 50%. **College Summit** also reports that one school district where it works saw its college enrollment rate rise 22 percent faster than rates across the state over a three-year period.

Coursework

A large number of students view their high school classes as uninteresting or irrelevant. This is one of the top five reasons that former students report for dropping out.¹²²

The academic intensity of the student's high school curriculum still counts more than anything else in pre-collegiate history in providing momentum toward completing a bachelor's degree.

– Clifford Adelman, *Education Researcher*¹²³

Another problem is that students in high-minority and high-poverty high schools often lack access to, or fail to enroll in, the rigorous and engaging coursework that would prepare them to succeed in college or in a profession.¹²³ Using data from the U.S. Department of Education, researchers at the Manhattan Institute estimated that only 20% of all African-American students and 16% of all Latino students leave high school ready for college, compared to 37% of White and 38% of Asian students.¹²⁴ (By “ready for college,” we mean that the students have earned a high school diploma and have completed the courses needed to meet the requirements of the least competitive four-year institutions.) Based on these estimates, large numbers of students, and particularly students of color, must redo their high school coursework before starting their college studies.

One way that philanthropists can address these school-based issues is by supporting the creation of new schools that are organized and managed in innovative ways, making student achievement more likely. These new schools include district alternative schools, internal school reorganizations, and charter schools. Some of these new schools have begun to demonstrate success, although current evidence is admittedly mixed.

Knowledge Is Power Program (KIPP) provides a good example of how a charter school can change children's lives. KIPP started as a model for middle schools and is now adapting its practices for elementary and high schools. KIPP operates according to five principles:

1. High academic achievement expectations for all students

2. All students, parents, and faculty choose to enroll in **KIPP**; all commit to investing the time necessary to reach success
3. Extended learning time, through longer days and a longer school year, to allow students to master curriculum and participate in enriching outside activities
4. Strong school leadership with control over school budget and personnel
5. Continual assessment of student academic performance based on objective measures (e.g., standardized tests)

Philanthropists can **support or create innovative models for new schools** which can address multiple school problems in ways not easily available to traditional schools.

Several external evaluations are showing that the hard work required for **KIPP** is producing results, although its attrition rates can be high. For example, the Educational Policy Institute analyzed the 2003/4 standardized test scores of students in 24 KIPP schools and found that fifth grade **KIPP** students made greater achievement gains than the national norm on the reading, language, and mathematics sections of the Stanford Achievement Test (SAT).¹²⁵ A more recent independent evaluation by SRI International analyzed three years of student achievement data at five **KIPP** middle schools in the San Francisco Bay Area. These researchers found that the schools made “strong achievement gains,” particularly in the fifth and sixth grades, when compared to similar students who attended other area schools and as compared with national norms. However, the schools' attrition rates were higher than in area schools: 60% of students entering **KIPP** as fifth graders in 2003/4 left before the end of 8th grade. In the two area school districts, comparable rates were 22% and 50%. (The school districts rates, however, do not take into account student mobility among schools in the same district.)¹²⁶

KIPP's high attrition rates indicate that the charter school is likely not a solution for all at-risk students. However, the significant gains for the students who persist indicate that it represents a needed and important resource for a segment of the country's disadvantaged students.

Problem areas outside of secondary school

Without positive role models, education on health risk behaviors, and enriching afterschool activities, low-income and minority students are susceptible to physical, emotional, and psychological problems that can further undermine their studies. Low-income schools are often ill-equipped to address the unmet needs of students outside of the classroom, and are financially unable or unwilling to try programs that cannot guarantee success, creating an opportunity for philanthropists.

Health and social concerns can undermine academic achievement. Philanthropists can help **meet students' social needs via mentoring, afterschool activities, and summer enrichment programs.**

Health issues

The health issues that contributed to absenteeism and poor academic performance in primary school are still present in secondary school. For example, poor nutrition can result in obesity, which a recent study indicates can correlate to poor grades in secondary school.¹²⁷ As they grow older, adolescents have more freedom to choose whether to skip school. During this time, students also have higher levels of anxiety and depression that increase absenteeism and undermine the students' ability to concentrate when they are in school.^{128, 129}

Teenage parenthood is a significant predictor of school dropout for both males and females.¹³⁰ The most recent statistics produced by the Center for Disease Control (CDC), based on its national *Youth Risk Behavior Survey*, indicate that minority students are more likely to be currently sexually active (46% of African-American, 37% of Latino, and 33% of White students) and have had intercourse with four or more people (28% of African-American, 17% of Latino, and 12% of White students),¹³¹ making them more likely to become parents during their adolescence.

Philanthropists can reduce risk behaviors by supporting prevention programs. The [Seattle Social Development Project](#) (SSDP) helps students in first through sixth grades feel more connected to school by having them develop strong relationships with school adults. The program incorporates research-based techniques in classroom instruction, while providing students with lessons that help them recognize and avoid situations that may encourage risky behaviors (e.g., drug use or sex) and instead make positive choices. Researchers found that when the participating students were 18-years-old, they were 35% less likely to have become pregnant or cause a pregnancy.¹³²

Overall I don't like school. I would rather go play in traffic than come here. Sometimes school is fun because my friends are here [but] if they weren't, I wouldn't come.

– Eighth grade student, Los Angeles¹³³

Waning student engagement

In secondary school, students encounter increasingly rigorous coursework. As the gap between the skills they have and the skills they need widens, these students start to become disengaged from their studies. Exacerbating the situation is the fact that students now have the ability to walk away from school and occupy themselves in other, often less socially desirable, ways.

“Student engagement” is the term that educators use to describe the attitudes, behaviors, and emotions that make it possible for a student to believe that school is interesting today and important for tomorrow. Engaged students attend school regularly, sustain their attention, and are persistent in their tasks. They are excited about school, feel that they

It's almost everybody I know who doesn't like school. They just get mad at the teacher. There are some teachers, like the math teacher, they hate because [they] give too much homework. For worksheets, they just put things down or they copy off somebody else's. They don't want to be there.

– Eighth grade student, Los Angeles¹³³

belong there, and are interested in learning. They sense a connection between what they are learning and what they want in life. They have a preference for academic challenge, a positive image of themselves, and aspirations for further education. All of this relates to higher achievement.¹³⁴ However, as students get older, their interest and effort in school generally decrease, and are particularly low among minority and low-income youth.¹³⁵



One reason for the decline in student engagement is that by the time they reach secondary school, at-risk children have missed so many educational targets that schoolwork has become too hard. Another reason is that many students start to question why they are still in school; even when students aspire to careers requiring significant postsecondary training, many of them fail to connect these goals to the need and desire to complete high school.¹³⁶

Limited opportunities to develop critical “soft” skills

At the same time that at-risk students need academic support and encouragement, they also need opportunities to develop and practice the “soft” skills required by future employers. These include the ability to work in teams, speak and write effectively, make good decisions, and use computers productively. These skills develop from having real world experiences such as internships, volunteering, and other quality out-of-school (i.e., summer and afterschool) activities.¹³⁷ Without access to these types of programs, disadvantaged youth will face an additional gap in skills that can heighten the barriers to steady employment.¹³⁸

Furthermore, adolescents need a productive and healthy way to occupy their time afterschool. Between 2:00 and 6:00 pm, adolescents without supervision frequently use their time for less constructive activities like watching television and playing video games. These are also the hours when they are most at risk of becoming a victim of crime, and/or engaging in criminal and risky behaviors such as unprotected sex and drug use.¹³⁹

One promising practice, as exemplified by [Citizen Schools](#), provides students with school support and hands-on apprenticeships during afterschool hours. This practice also provides students with opportunities to learn the soft skills that their future employers will require. (SEE CASE EXAMPLE ON FOLLOWING PAGE.)



CASE EXAMPLE:

Extending learning time through afterschool apprenticeships, academic support, and leadership development

PROBLEM: There are few quality afterschool programs available for adolescents. As a result, almost four million middle school students in the U.S. are unsupervised in the afternoons.¹⁴⁰ More low-income and minority students lack the organized activities that their financially better off peers can afford (e.g., private music lessons, tutoring sessions, and dance classes).⁹⁶ Such extracurricular activities are positively associated with academic engagement and achievement.¹⁴¹ The government is currently not filling the gap as most of its afterschool funding goes to programs serving elementary-age children. For example, only a third of the *21st Century Community Learning Centers* (a federal grant that provided \$1.1 billion to afterschool programs in fiscal year 2008) supports activities for middle and high school youth.¹⁴² Even for the 6% of middle school students who participate in afterschool programs, the quality of their experiences varies significantly.¹⁴⁰

The net result is that disproportionate numbers of low-income, middle school youth miss opportunities to engage in activities that could help them develop their scholastic aptitude and attitude while also acquiring “soft” skills; at the same time, these students have greater opportunities to participate in

unproductive time fillers like Internet surfing and video gaming as well as negative activities like crime and risky health behaviors (e.g., unprotected sex).¹³¹

SOLUTION: Extending learning time through afterschool apprenticeships, academic support, and leadership development

SUCCESSFUL MODEL: The program model provides afterschool activities for low-income middle school students. These activities are characterized by three core strategies that, when integrated, offer the quality experience that improves students’ regular attendance and accelerates their learning. These include:

1. Small group leadership training that improves students’ ability to become active learners and stewards of their own futures, focusing on helping students successfully transition to high school and raise their aspirations for college.
2. Academic support that builds students’ organizational and “school-navigation” skills (e.g., how to take notes and study for tests) and the provision of daily homework help.



3. Twice-weekly “hands-on” apprenticeships that are taught by community volunteers. The apprenticeships enable the students to develop “soft” skills and see the relevance of their school work through real world application in multiple ways, which include building solar cars, litigating mock trials, and managing stock portfolios.

EXEMPLAR AGENT: Citizen Schools has pioneered the program model and is working to advance the afterschool sector, reconceptualizing it as a partner with schools to further student learning outside the traditional school day.

ACCOUNTABILITY PRACTICES: Agent pursues internal monitoring and assessment of practices as well as external evaluation of the Boston site that focus on in-school performance measures (e.g., grades). **Citizen Schools** has plans for external evaluation of additional implementation sites.

WHAT’S THE IMPACT? Internal assessments have found that **Citizen Schools** students are 8 to 27 percentage points more likely to graduate on time than their peers in Boston public schools. Independent evaluations are likewise promising.¹⁴³ They have found that **Citizen Schools** students outperformed similar, nonparticipating middle school youth on multiple measures, including the selection of higher quality high schools and lower suspension rates. Participants also outperformed comparable students on several academic indicators. For example, the evaluators found that during their

first year in the program, sixth and seventh grade participants who attended the program regularly earned better grades in English and math. They also attended school more frequently, amounting to an additional nine school days over the year. Improvements in attendance persisted into high school, where **Citizen Schools** youth attended 14 extra days in 9th grade and 9 extra days in 10th grade.¹⁴⁴

HOW MUCH DOES CHANGE COST? On average, about **\$13,000** (when non-responders are not counted), most likely between **\$12,000** (least conservative estimate) and up to **\$40,000** (most conservative estimate) per incremental, on-time high school graduate. Additional benefits to participating students include increased self-confidence, increased rates of advancement to high-quality high schools,¹⁴⁵ and enrollment in four-year colleges.¹⁴⁶

SECONDARY IMPACTS OF THE PROGRAM:

- Improves practice across the afterschool sector (e.g., by convincing the sector to focus on talent development)
- Provides positive volunteer experiences for Citizen teachers, the community members who lead apprenticeships
- Influences policymakers regarding provision of out-of-school time opportunities for “older” children
- Motivates and trains young professionals to work in education/out-of-school time field

CASE SNAPSHOT

Core practice – Extended learning opportunities through apprenticeships, academic support, and leadership development

Impact sought – Increased on-time high school graduation

Success rate – Of 100 students participating, the practice would enable an additional 8 to 27 students to graduate from high school on-time

Cost per beneficiary – Average annual cost per student (as reported by the nonprofit) is \$3,194

Estimated cost per impact – Roughly between \$12,000 and \$40,000 per additional on-time high school graduate

For more information, see **Citizen Schools’** website: <http://www.citizenschools.org> or contact David Stolow, Director of Strategic Development, at (617) 695-2300 extension 129.

Lack of role models

Role models are important to students' academic success. They provide living examples of how educational attainment is possible and worth pursuing. In many underprivileged families, the parents cannot provide this model, as they tend to have completed fewer years of formal education than their more privileged peers.¹⁴⁷ At every stage of the college decision process – from aspiration through enrollment – more of the students whose parent(s) completed college move on to the next stage than those whose parents did not. The end result is that far more of the students with a college-educated parent entered college (65% vs. 21%).¹⁴⁸

Those parents who lack personal experience with education are at a disadvantage in convincing their children that college is a practical and attainable goal that requires mastery of core high school subjects. They are also often less able to share practical advice on a complex application process that includes standardized test taking, essay writing, and financial aid procurement.

One of the few strategies proven through rigorous research methods to benefit disadvantaged students is mentoring, in which students develop one-on-one relationships with caring adults who become role models. The organization best known for facilitating the positive, caring and supportive relationships for youth, particularly those from single parent homes, is [Big Brothers Big Sisters of America](#) (BBBS). In the BBBS traditional model, an adult volunteer commits to spending three to five hours per week with a student for a minimum of one year. Volunteers are rigorously screened to ensure they have the capacity to form positive bonds with a child. After passing the background check, an extensive interview and home assessment, volunteers then participate in mandatory orientation. Next, they are carefully matched with students, based on the needs observed during the student assessment piece, the abilities of the volunteers, and the preferences of the parents. BBBS then supervises the relationship through frequent follow-ups with the volunteer, parent, and/or students, to ensure that the relationship provides the student with the social support they need.

These relationships clearly help the students, as demonstrated in a rigorous, randomized controlled trial evaluating eight BBBS agencies' impact on more than 1,000 students. In this trial, students were randomly selected to participate or become a member of the control group (this is the best method for controlling for selection bias). Both groups consisted almost entirely of low-income students who were living in a single-parent household; many of these students had a history of family violence or substance abuse. Evaluators found that even though the program did not target behaviors like academic improvement or drug use,¹⁴⁹ after 18 months of participation, the BBBS students were 46% less likely to initiate illegal drug use, 27% less likely to initiate alcohol use, and 52% less likely to skip a day of school, all while attaining slightly higher grade point averages than the control group students.¹⁵⁰

Students also need help from their peers, who have an especially strong influence during the adolescent years. Peer pressure can work both ways. Negative peer pressure can draw students into delinquency and risk behaviors, while positive peer relationships can promote enrollment in challenging coursework and application to college or technical schools. In schools with high concentrations of poverty and low levels of parental attainment, it is much harder for students to connect with positive peers.

One promising practice has been to raise expectations for youths. For example, [Advancement Via Individual Determination](#) (AVID) insists on high achievement expectations for students from teachers, principals, parents, and the students themselves. AVID improves student outcomes by placing disadvantaged and underachieving students in highly rigorous classes, while enabling teachers to provide the social support needed to ensure that students can succeed.¹⁵¹ It also encourages students to work together and push each other towards academic success. (SEE CASE EXAMPLE ON FOLLOWING PAGE.)



CASE EXAMPLE:

Engaging students in college-track coursework and providing academic support to succeed

PROBLEM: One of the strongest predictors of college graduation is the completion of a rigorous high school curriculum.¹²³ However, disadvantaged students are disproportionately under-enrolled in college preparatory curriculum and do not develop the skills necessary to succeed in postsecondary education. Researchers at the Manhattan Institute estimated that while 14% of the high school class of 2001 were African American and another 17% were Latino, only 9% of all college-ready graduates were African American and 9% were Latino.¹²⁴ (College ready is defined as having met course and graduation requirements of the least competitive four-year colleges.) One obstacle preventing these students from becoming college-ready is a general lack of knowledge of how to be a good student (e.g., how to study, take notes, and actively participate in class discussions). They also lack the social support that would help them press toward starting and completing a college degree.

SOLUTION: Engaging students in college-track coursework and providing academic support to succeed

SUCCESSFUL MODEL: In this program model, school-wide reform efforts instill in staff, students, and parents high expectations for all students' achievement and provide support for students. In doing so, they are improving college readiness rates of low-income and minority youth. These efforts focus on training teachers, principals, and guidance counselors to use instructional techniques that actively engage all students (e.g., by centering instruction around asking questions, pushing students to analyze the materials and synthesize the results). School staff members encourage students to enroll in the more rigorous college preparatory courses plus an elective class where teachers provide extensive training in critical academic behaviors such as note taking, time management, and writing, while developing supportive relationships with the students. In addition, the elective teachers involve the students in collaborative small group tutorials (facilitated by trained college tutors) twice a week to provide more attention, and to help the students overcome their individual weaknesses and make the best use of their strengths.



EXEMPLAR AGENT: Mary Catherine Swanson, a high school teacher in San Diego, developed a program to address the needs of the inner-city students entering her school following the city's school desegregation efforts in the early 1980s. Her work grew into a nonprofit, **Advancement Via Individual Determination (AVID)**, which provides training and support to schools committed to enabling the success of all their students. Funders, educators, and policy makers widely recognize the program's success in its mission of preparing students for college. **AVID** is currently implemented in about 3,500 schools in 45 states and 15 countries, serving about 300,000 students.

ACCOUNTABILITY PRACTICES: The organization uses internal monitoring and certification processes to examine the extent to which a school has faithfully implemented the program as well as internal assessments of student outcomes. In addition, **AVID** has engaged several third-party evaluators to analyze the program's results. A randomized controlled trial, its most rigorous evaluation to date, is currently underway in British Columbia, Canada, where researchers are tracking 1,100 students at 19 schools across their high school years to measure the program's impact. Results are expected in Fall 2010.

WHAT'S THE IMPACT? AVID students are more likely to enroll in rigorous coursework and complete college preparatory curriculum at rates above the nation's average. For example, in 2006/7, based on information from 10,000

AVID graduates, 88% of **AVID** students in California completed four-year college entrance requirements, compared to the state and national average of 36%. Results from Texas (with the second largest number of **AVID** students) mirror the California statistic. **AVID** graduates are also more likely to enter college: 43% of **AVID**'s Latino graduates (who have participated in the program for at least three years) enrolled in four-year colleges, as compared to the national average for Latinos of 29%. Also, 55% of **AVID**'s African-American graduates enrolled in four-year colleges, compared to a national average of one third.

HOW MUCH DOES CHANGE COST? About **\$1,700** per additional college-ready high school student, where college ready means successful completion of coursework required by 4-year colleges.¹⁵² Additional benefits to participating students include increased rates of participation in advanced placement coursework, more college credits acquired prior to matriculation, and higher rates of college attendance and graduation.

SECONDARY IMPACTS OF THE PROGRAM:

- Increases the productivity of existing school teachers and principals by leveraging existing public investments, producing a noticeably low cost-per-impact figure
- Improves teacher morale and self efficacy

CASE SNAPSHOT

Core practice – Academic support to ensure success in highly rigorous courses

Impact sought – Increased mastery of coursework required by four-year colleges through school-wide transformation emphasizing college readiness

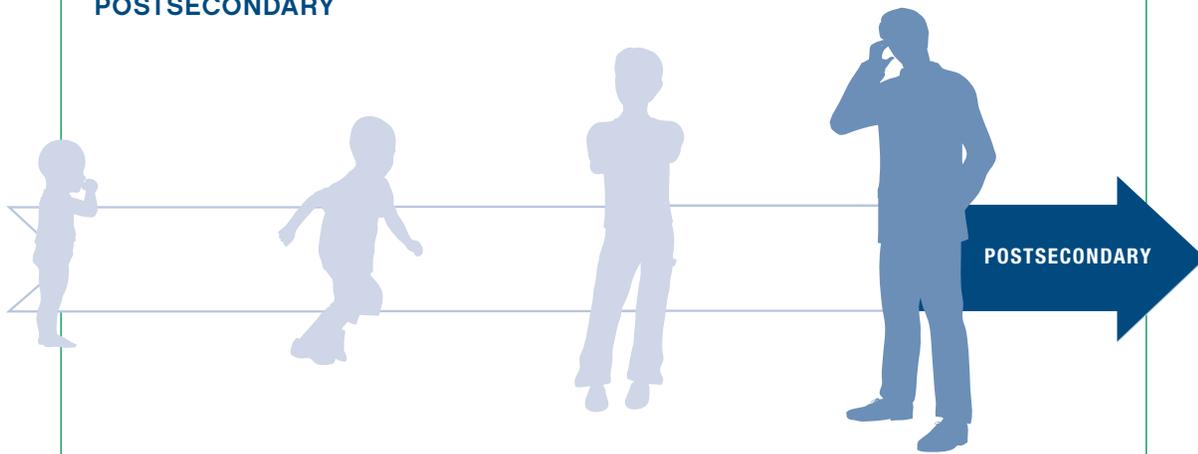
Success rate – Of 100 students participating, the practice would enable 52 additional students to be ready for college

Cost per beneficiary – Average annual cost per student (as reported by the nonprofit) is \$291

Estimated cost per impact – Roughly \$1,700 per additional college-ready high school graduate

For more information, see **AVID**'s website: <http://www.avidonline.org> or contact Rob Gira, Executive Vice-President, National Programs at (858) 380-4755.

**THE EDUCATION PATHWAY:
POSTSECONDARY**



Critical education target:

- Postsecondary degree or skills attainment to enable steady and fulfilling employment, through college or other channels

Chief success indicators:

- College enrollment and retention after first year; grades (for individual growth assessment); independent coursework and honors; employment status and salary

What philanthropists can address:

- *In school:* Direct and indirect costs of postsecondary enrollment; monitoring student progress and providing academic supports when needed
- *Out of school:* Social support networks of peers and adults

PHASE IV: POSTSECONDARY EDUCATION

In the postsecondary phase, the goal is to help young adults qualify for careers that provide both reasonable wages and opportunities for growth and fulfillment. There is no question that education is critical to this aspiration; college degrees are increasingly a prerequisite for economic self-reliance.

Some education experts debate whether college is an appropriate destination for all youth. However, what is clear is that a college degree is a more realizable aspiration for some students than for others. Fewer than one in five Black and one in ten Hispanic students graduate from community or four-year colleges. In contrast, a third of White students and more than half of Asian-American students complete these degrees.¹⁵⁴

There are a number of reasons for the disparities between different student groups. First, we have seen time and again how achievement gaps tend to accumulate during a student's journey along the education pathway. In addition, at-risk students face the financial burden of college attendance, plus social and cultural barriers that can be discouraging to their efforts.

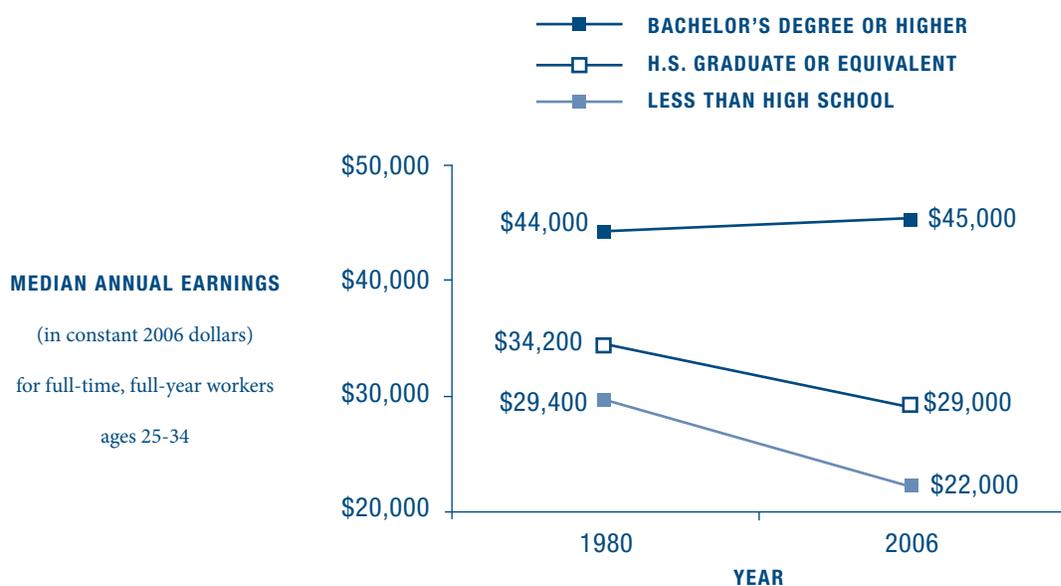
Even at this late stage, philanthropists continue to have an important role in **helping at-risk students with financial, academic, and social support.**

In the postsecondary phase, philanthropists can help ensure that academic and social support networks are mindful of students' progress in college and ready to step in as needed. In addition, philanthropists can help cover the financial expenses of college.



Image by KOR via College Summit.

Increasing earnings gap for those without college



Source: Planty, M., Hussar, W., Snyder, T., Provasnik, S., Kena, G., Dinkes, R., KewalRamani, A., and Kemp, J. (2008). *The Condition of Education 2008* (NCES 2008-031). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved 5/29/08, from http://nces.ed.gov/programs/coe/2008/pdf/20_2008.pdf

Problem areas and promising practices in postsecondary education

Student attrition in college

The first step to a bachelor's degree is successfully navigating the college application process and gaining admission to a college. (FOR A NONPROFIT ADDRESSING THIS ISSUE, SEE **College Summit** ON P. 39.) However, low-income and minority students remain highly vulnerable to school failure even after crossing this threshold.

For example, of all African-American students who enroll in a four-year college, less than half graduate within six years. This rate is about 20% lower than that for White students.¹⁵⁵ Experts believe that students are only out of danger of dropping out once they have successfully completed their first year of college and return for a second.¹²³

We previously mentioned one of the most important factors that contribute to a student's success

in the postsecondary years is access to challenging college preparatory coursework in high school. In addition, financial, social, and cultural barriers result in disparities at the college level.

The risk factors that get in the way of the successful completion of college include:¹⁵⁶

- Delayed entry into postsecondary education after high school
- Attending college on a part-time basis
- Working full-time while attending college
- Having dependent children (especially as a single parent)

Many philanthropists provide **"last dollar" scholarships that are based on financial need** to reduce costs of attending college.

Financial burden

Students must manage not only tuition costs, but also the indirect costs of attendance, including the immediate need for income and/or the fulfillment of family responsibilities (e.g., child care). The College Board's analysis of the costs associated with college attendance (including tuition, fees, room and board) found that full-time attendance by low-income students at public four-year universities, net of the financial aid they received, required 39% of their families' income for the academic year 2003-4. Public two-year colleges required about 28% of their family's income.¹⁵⁸

Lack of academic and social support

Even if students enter college unprepared for the coursework, they can still catch up and pass their classes with sufficient supplementary academic and social support.

Some colleges provide additional support to low-income and/or first-generation college students to smooth the transition into college, and continue the support as long as it is needed. For example, Florida State University (FSU)'s [Center for Academic Retention and Enhancement \(CARE\)](#) begins by counseling students in middle school on how to access college, then orients them toward college through a seven-week summer session before their freshman year of college, and sees them through to graduation with consistent monitoring of their progress combined with tutoring and advising as needed. Through this program, FSU is able to graduate these students. Participants in **CARE** enter college with an average SAT score of 940, which at most universities would suggest a graduation rate of 56%. However, nearly three quarters of **CARE** students complete their bachelor's degree (73%).¹⁵⁵

Peer support is also important for encouraging students to continue working for their college degrees. Minority students have fewer peers in college with whom to relate, and so they often report feeling less support from friends than their White peers.¹⁵⁹ Programs like [The Posse Foundation](#) are addressing this need by building

multicultural groups ("posses") of high school students and preparing them to succeed as a team at well-respected universities such as Boston University and Oberlin College. The program chooses a group of 10 exceptional students that may be missed by traditional college admissions processes, provides them leadership training, and facilitates their enrollment at partnering colleges or universities. Primarily, screeners look for students with leadership talent, the ability to work as a team member, and a talent for working with people from different backgrounds. For the next eight months, these Posse Scholars then participate in workshops that build their academic skills and prepare them for leadership roles on their future college campuses, where they can help fellow students address issues of diversity. The program shows promise: the **Posse Foundation** reports that 90% of the Posse students graduate from college, as compared to a national average at four-year institutions of about half.^{154, 160}

Problem areas across the entire education pathway

We have seen recurring issues across each phase of the education pathway. In school, these issues include the need to recruit, retain, and develop high-quality teachers and capable school leaders. Outside school, the issues that appear throughout the pathway include constrained family and community resources—both economic and social—and individual needs such as personal health. We have also seen that students require a range of supports to successfully navigate the entire education pathway. To sustain the positive impact of supports provided in one phase, other service providers must be ready to step in once the students move into the next stage.

What we have not yet discussed, however, is how the *transitions* themselves between the stages can cause problems. One significant issue impeding student achievement and attainment is the lack of coordination among the school levels that mirror the pathway's stages. In the U.S., the three levels of the education system (Pre-K, K-12 and

Few states have entities in education, or in the legislative or executive branches, that span K-16 policy and practice. No organized group lobbies for K-16 linkages. Little data and no accountability systems measure K-16 performance. And nobody loses a job for poor K-16 linkage or performance.

– Patrick M. Callan & Michael W. Kirst,
Education researchers¹⁶²

postsecondary) developed separately, and continue to function independently, resulting in an education pathway that is oftentimes fractured and poorly aligned.¹⁶¹

Students are lost as they transition across school levels because of poor coordination among staff and weak alignment of schools' curricula. For example, about half of the college students in the U.S. must take remediation classes before starting their

postsecondary studies in spite of completing their high school's designated "college track" courses.¹⁶² Further complicating the issue is the high level of mobility experienced by low-income students.

Long-term programs such as "[I Have A Dream](#)" [Foundation](#) and [Say Yes to Education](#) help finance students' college education while providing the

Philanthropists can help **smooth the transitions** across the education system by supporting program models that follow a **cohort of children along the entire pathway**.

different social and academic supports that students need along the way to make college graduation an attainable goal. (SEE CASE EXAMPLE ON FOLLOWING PAGE.)



Image provided by "I Have A Dream" Foundation.



CASE EXAMPLE:

Implementing long-term, wraparound support services with tuition guarantee

PROBLEM: Disadvantaged students face many barriers to college entry and completion. Finances are a concern: the College Board's analysis of the costs associated with college attendance (including tuition, fees, room and board) found that full-time attendance by low-income students at public 4-year universities, net of financial aid, required 39% of their families' income in 2003-4.¹⁵⁸ Arguably more devastating, however, are the gaps in preparation for college that have likely developed over disadvantaged students' lifetimes. Issues related to poor health, limited social resources, poor quality of schooling, and overall low expectations, can combine to push students off the path that leads to a college degree. The end result is that only 18% of African-American and 12% of Latino adults aged 25 and older have completed a bachelor's degree in the U.S., compared to about a third of White adults.¹⁶⁶

SOLUTION: Implement long-term, wraparound support services with college tuition guarantee

SUCCESSFUL MODEL: This model comprises two critical components that together establish high expectations for students and the means for them to succeed in school. First, it guarantees "last dollar" tuition assistance, to make college a realistic option. ("Last dollar" refers to the gap between existing sources of funding, including scholarships and financial aid, and the total financing that attendance requires.) Second, the model offers long-term and comprehensive supports (e.g., academic, health, social, legal) that students need to progress across the education pathway toward the goal of college readiness upon high school graduation. A philanthropist, individually or in combination with others, typically sponsors a cohort of young students – usually an entire grade level in an elementary school, no later than third grade – and provides comprehensive supports through college enrollment or graduation, depending on a sponsor's focus. Key to the model's success is its coordinator, typically an educator or social worker, who is on duty "around the clock" to respond to students' needs by securing resources, such as tutors and family counselors, to fulfill them. While the actual services provided depend entirely on the sponsored class, they usually include extensive mentoring relationships, tutoring, afterschool and summer enrichment programs, college tours, and assistance with college applications and college assimilation. In some implementations, similar

services are offered to the enrolled students' families. For instance, **Say Yes to Education** (see below) extends its tutoring services to the students' siblings, and also helps students' parents complete a GED, if needed, or enroll in multiple postsecondary education opportunities.

EXEMPLAR AGENT: Two organizations that implement this model are "**I Have A Dream**" **Foundation (IHDF)** and **Say Yes to Education (Say Yes)**. Both were founded by individual philanthropists.

IHDF: After learning that 70% of one elementary school's students would likely drop out before finishing high school, Eugene Lang initiated **IHDF** in 1981. The program has since grown and provided support to nearly 15,000 students across 27 states. Currently, **IHDF** serves over 4,000 students in 17 states, Washington (DC) and New Zealand. Its entrepreneurial approach, which gives sponsoring philanthropists flexibility to innovate and tailor the program to the specific needs of the local community, has supported its expansion. To extend the impact of its broad network, **IHDF** is currently focused on increasing the capacity of the national office to better support local implementations and to leverage its experience to influence broader policy and practices.

Say Yes: In 1987, George Weiss sought to build on **IHDF's** model by incorporating research partnerships through which the program could continuously learn and refine its implementation model. Since 1987, **Say Yes** has operated six chapters across Philadelphia (PA), Hartford (CT), Cambridge (MA), and Harlem (NY), sponsoring approximately 1,000 children. These pilot implementations have relied on independent researchers to develop a deep knowledge base. A rigorous, independent study of the first 20 years of **Say Yes** work (completed in 2007) resulted in a set of benchmarks and indicators, as well as the development of a comprehensive student assessment and monitoring system to sharpen the focus of its field-based work and enhance performance. **Say Yes** is now using this knowledge base to influence practice on a larger scale. In Fall 2008, **Say Yes** began to scale its program by implementing two ambitious public-private partnerships: a new K-12 **Say Yes** International Baccalaureate school model in Hartford (CT) and a new district-wide model in Syracuse (NY), where it will serve more than 22,000 students.

ACCOUNTABILITY PRACTICES: IHDF pursues both external and internal assessments at the local level. Since 1991, more than a dozen external research studies have examined **IHDF**'s results at several local sites. It is now in the preliminary stages of an external evaluation at the national level, and is also building capacity to capture performance data from all of its sites systematically.

Since its initiation, **Say Yes** has supported five independent studies of its work and documented significantly increased high school and postsecondary attainment rates across all chapters. In addition, **Say Yes** has contracted with local research and technical assistance providers (e.g. Research for Action (PA), NCREST/Columbia University) for site-specific continuous improvement feedback and training support. As **Say Yes** moves to scale its work in Syracuse and Hartford, it has engaged the American Institute for Research to conduct in-depth, third-party longitudinal studies of its work. Future research will include an experimental study in Hartford (CT), a rigorous quasi-experimental study in Syracuse (NY), and propensity score-matching studies in Harlem (NY) and Philadelphia (PA).

WHAT'S THE IMPACT? External evaluation of two **IHDF** Chicago implementations found a 34 percentage point increase in on-time high school graduation and a 35 percentage point increase in college enrollment when compared with similar students living in the city.^{167,168} Internal evaluation of two cohorts in East Palo Alto found similar impacts, showing a 20 to 41 percentage point increase in high school graduation in comparison with the local school district rates. Its internal evaluation of a program for students residing in a New York City public housing project found that the implementation was able to exceed the city's on-time graduation rates by 8 to 10 percentage points, even though all of its students qualified for free/reduced lunch and several had severe learning disabilities, such as Downs Syndrome.

The internal figures reported above likely underestimate the true impacts of the program, as the best available comparisons were district averages from the New York City Department of Education, which is responsible for educating around 1.1 million students. The comparable statistics included students from more privileged backgrounds who are more likely to

graduate (e.g., students attending the competitive Stuyvesant High School, where more than 84% of students graduate on time). The same is true for the East Palo Alto site estimates, as the comparison statistics from the Sequoia Union High School District included students from the affluent community of Menlo Park, who likely pushed up the district's averages. Better comparisons would be the graduation rates of area students with similar demographic backgrounds (e.g., for NY, graduation rate for the city's students who reside in public housing). Currently, these statistics are not available in the public domain. For example, licensing agreement restrictions limit how researchers may report graduation rates calculated using the Common Core of Data (CCD) that are disaggregated by race/ethnicity and/or gender, particularly at the district level.

An independent evaluation of **Say Yes**'s Belmont Chapter in Philadelphia found a 36 percentage point increase in high school graduation – even though the **Say Yes** program started when the students were in 7th grade – as compared to students from their community from the preceeding year. An independent evaluation of **Say Yes**'s Cambridge site found a 25 percentage point increase in high school graduation, as compared to similar students in the area. In addition, **Say Yes** tracked students through their postsecondary education and found that 60% completed either a two- or four-year college degree, 34 percentage points higher than the average college completion rate in Massachusetts.¹⁶⁹

*Just as was the case with **IHDF** estimates, impact of **Say Yes**'s Cambridge site is likely underestimated. The average college graduation rate at the state level, which is the best available data point to use as a comparison, included students from affluent areas across the state who are more likely to graduate from college than students from poorer neighborhoods. A better comparison would be the college graduation rate of Boston-area students with similar demographic backgrounds.*

WHAT DOES CHANGE COST? Costs associated with the program depend in large part on the site's location, the severity of student needs, and whether the program's comprehensive supports ended at college enrollment or continued through college graduation. Some examples of the costs per additional **on-time high school graduate** include: \$29,000 (**IHDF** in East Palo Alto, CA),¹⁷⁰ and

between \$204,000 (when three students with severe cognitive disabilities are excluded from the calculation) and \$250,000 (when all students are included) for **IHDF**'s first implementation at a New York City public housing project.¹⁷¹ At **Say Yes**'s Cambridge (MA) site, the cost of an additional **college graduate** (from either a two- or four-year institution) was approximately \$150,000.¹⁷²

As both programs are implementing changes to their practice, we expect that these cost-per-impact ratios will not remain constant. **IHDF** investments in extensive monitoring and system-wide infrastructure will likely increase costs, at least in the short term. However, these investments are intended to improve the organization's efficiency by supporting more consistently high effectiveness across its many sites and

helping it to better utilize its existing resources. As **Say Yes** scales up, its past investments in its knowledge base and its student assessment and monitoring system can now be spread across more students, which could reduce the current annual cost-per-beneficiary of \$3,500 while ideally maintaining a relatively consistent success rate. In addition, **Say Yes** is developing public-private partnerships (e.g., relationships with colleges and universities that will cover the student college costs in the Syracuse implementation) that will create an implementation scenario where program costs for sponsoring philanthropists are further reduced. **IHDF** hopes to create similar relationships with colleges and other nonprofits in the future.



OTHER STRENGTHS OF THE MODEL:

Both organizations produce the following additional benefits:

- Provides a “proof point” of an effective model for public school systems and the federal government to replicate, as demonstrated in **IHDF**'s influence on the federal program GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) and on the design and leadership of Chicago's Community Schools, as well as **Say Yes**'s current district-wide work in Syracuse, NY and school-wide implementation in Hartford, CT
- Impacts participants' ability as parents to support their future children's educational success
- Engages community's interest in education, resulting in more resources being made available to students

*Strengths specific to **IHDF** implementation include:*

- Generates a pipeline of educational entrepreneurs, who through their experience as **IHDF** sponsors, have acquired the additional know-how needed to start new nonprofits and charter schools

- Has operated across a national scale, now enabling the organization to learn from and disseminate best practices across the country as well as develop a national perspective on education reform

*Strengths specific to **Say Yes** implementation include:*

- Produces and deliberately captures information on what prevents disadvantaged students from succeeding and how they overcome these obstacles; **Say Yes** then shares this information with educators and practitioners across the country
- Supports reform and improved practice by working with and training educators at the public schools attended by participating students
- Addresses community inequity further by extending services to participating students' parents and siblings

CASE SNAPSHOT

Core practice – Long-term, wraparound supports and college tuition guarantee

Impact sought – Increased on-time high school and college graduation

Success rate – Of 100 students participating, the practice would enable an additional 8 to 41 to graduate from high school on-time (as compared to district rates) and an additional 34 to graduate from college (as compared to the state's rate); these figures, however, likely underestimate

the true impact as the comparable rates are not limited to students with similar backgrounds

Cost per beneficiary – Average annual cost per student (as reported by the nonprofit) ranges between \$983 and \$3,500

Estimated cost per impact – Roughly between \$29,000 and \$250,000 per additional on-time high school graduate/college graduate

For more information on “**I Have A Dream**” Foundation, see its website: <http://www.ihaveadreamfoundation.org> or contact Iris Chen, President & CEO, at (212) 293-5480 ext. 21.

For more information on **Say Yes to Education**, see its website: <http://www.sayyestoeducation.org> or contact Mary Anne Schmitt-Carey, President, at (212) 415-7191.

III. TRANSLATING GOOD INTENTIONS INTO HIGH IMPACT PHILANTHROPY

Up to this point, we have analyzed the education pathway and identified examples of what you, as a philanthropist, can target to improve the educational outcomes of at-risk students.

We have described promising practices for delivering impact, provided examples of nonprofits that are implementing these practices, and estimated what it costs these organizations to make an impact. Next, we will help you consider how to use this evidence base and analyses in setting a strategy for giving.

1. Set a philanthropic focus

The first step is to think about where you want to target your philanthropic investment.

The Center for High Impact Philanthropy was inspired by a vision to define the “efficient frontier” of philanthropy – where investments have the greatest impact per dollar. For this reason, it makes sense to ask: Where is the most efficient investment in education philanthropy?

Because so few nonprofits and their funders invest in collecting the information needed to generate cost and impact benchmarks, it is currently impossible to say which of the hundreds of programs out there are most efficient. However, of the five programs we examined closely, **AVID** (p. 46) and **CLI** (p. 31) stand out for the high impact they achieve for a relatively low cost. This is not surprising as both successfully leverage existing school resources to heighten their productivity. Another efficiency-focused choice is **Jumpstart** (p. 22) that targets early childhood, which some researchers argue provides the strongest opportunity for social return.³⁵ Alternatively, targeting disadvantaged students already performing well, but who still need a small boost to remain on track, is likewise a highly efficient choice.

However, we know from our own research on philanthropic decision making and from conversations with dozens of advisors, decision scientists, and nonprofit leaders, that few philanthropists have such a pure focus on efficiency

when making allocation decisions.¹⁷³ Instead, they balance other considerations such as a commitment to addressing inequities, a preference for particular issues or communities, their tolerance for risk, their willingness to make long-term commitments to the students, as well as their desire to play a role beyond check-writer.

Thus, for most philanthropists, the question is not “Where is the most efficient investment?” but some variation on “What is the most impact I can achieve for the students I wish to help?” Depending on your preferences, this question will have different answers. Consider the extent to which these factors are important to you. Here are some quick answers, based on the organizations we examined most closely:

- *Programs addressing equity concerns:* All the organizations profiled, by focusing on the needs of at-risk youth, are concerned about equity. However, the model used by **Say Yes** and **IHDF** (p. 53) stands out as they deliberately sponsor an entire cohort of students living in a high-need area regardless of expense. **Say Yes’s** implementation efforts have gone even farther in addressing equity concerns by providing services to the siblings and parents of participating students.
- *Program addressing a frequently overlooked education phase:* **Citizen Schools** (p. 43) targets the important, albeit challenging, middle school phase, which receives less attention from researchers and educators than other phases.
- *Program providing an active role for the philanthropist:* **IHDF** (p. 53) creates a role for sponsors to develop personal relationships with the students they help, thereby allowing the philanthropist-sponsor to directly observe the impact of their gift.

No matter which of these or other factors you choose to emphasize, high impact philanthropy involves seeking practices and agents that can do the most good with your philanthropic dollars. Arguably, efficiency is of even greater concern when targeting the neediest students, as the expanse of student needs requires that you stretch your dollars to the greatest extent possible.

Before we move on, however, here is one more thought to consider on the question of setting a focus: we believe it is important to start with an issue that resonates with you. This is not because we believe philanthropy should be donor-driven; in fact, our directive is to help move donors away from an arbitrary, “flavor of the day” approach to one that is based on evidence and focused on impact. However, converting passion and good intent into meaningful impact requires an enduring commitment to learn relentlessly. We have seen that it is difficult to sustain this focus without a strong personal connection to the specific issues at stake.

2. Select an organization to support

All of the nonprofits that we discuss are “good bets” targeting a meaningful need in the lives of disadvantaged students. Each has a track record of delivering impact, and most have developed a national presence.

However, before writing a check to any nonprofit organization, consider the organization’s capacity to accept and use your gift to benefit students. There are a number of resources available to guide you through the due diligence process. At minimum, you should try to learn, prior to investment, how your gift will be used, what kind of impact the organization expects your investment to make, and how the organization will determine the investment’s actual results. Finally, never underestimate the importance of the quality of implementation, specifically the people who will be executing the program and the faithfulness of their efforts to the program model: impact depends on smart execution of a program’s critical components.

The difference between a great and an okay executive director can make the difference between success and failure.

– *West Coast Philanthropist*¹⁹³

Here, as an example, is how we performed the due diligence for the programs that we chose to include in this primer.

As we narrowed down our list of nonprofits, we looked to see whether each had the management and technical expertise to succeed; whether it could clearly articulate how it would use donated capital to target a meaningful impact; and if its strategy was consistent with the evidence base that exists for U.S. education. We reviewed all available external evaluations and internal assessments to understand the nonprofit’s track record in the field and to affirm the nonprofit’s responses. In addition, we examined the nonprofit’s commitment to monitoring its progress, improving its practices, and sharing this information.

In our assessments, we also considered what it costs to produce results. Such evidence is increasingly important in education philanthropy, as the need is vast and the amount of available capital is limited.

We found that few organizations currently link their outcomes to the costs of the required inputs. More often, the organizations instead use a cost-per-beneficiary figure, which links inputs (e.g., the number of tutors at an afterschool program) to outputs (the number of elementary students who received math tutoring), but not to results (the participating students’ mastery of fractions). For this reason, we calculated “back of the envelope” cost-per-impact ratios for the case examples. (SEE HOW WE CALCULATED COST PER IMPACT IN EDUCATION ON P. 72.) These calculations allow us to provide philanthropists with rough estimates of what change costs, offer a benchmark to use in comparisons with future implementations, while helping us develop insight into how the nonprofit works.

Furthermore, the cost-per-impact estimate is a good comparison point for the approximated costs associated with poor student outcomes. For instance, Levin and Belfield calculated that each high school dropout costs society \$209,100.²⁶ Comparing this figure with the cost-per-impact range of \$12,000 to \$40,000 per additional on-time high school graduate for extending learning time through after-school apprenticeships (SEE **Citizen Schools** ON P. 43), or the range of \$29,000 to \$250,000 per additional on-time high school graduate or \$150,000 per additional college graduate for implementing long-term,

wraparound supports (SEE **IHDF AND Say Yes** ON P. 53), you can see that all of these programs are promising social investments.

In most cases, nonprofits will not have a cost-per-impact figure readily available; you will need to work with them to understand what drives the cost of implementation and how much they realistically need to make the difference that they seek.

As you get started, other considerations will arise. Some will be specific to your own giving strategy, such as how you think about equity and efficiency

Some questions to ask a nonprofit

How will your organization make a difference in the lives of at-risk youth?

- *Information the answer should provide:* Identification of the leading (i.e., what is likely to change first such as student attitudes) and lagging (i.e., the impact ultimately desired, such as college graduation) indicators and clarification on how these are measured
- *Follow-up questions to consider:* Ask how the nonprofit distinguishes itself from similar organizations

How will you know your organization is making that difference in the short-term and over the long-term?

- *Information the answer should provide:* Explanation of how the nonprofit evaluates itself
- *Follow-up questions to consider:* Ask about the specific measures that it uses, the kind of data it collects (e.g., student test results, teacher feedback), and how the results are used to improve practice

How would my contribution help your organization?

- *Information the answer should provide:* Indications that the nonprofit has thought about how to use a donor's dollars effectively
- *Follow-up questions to consider:* Ask how other contributions are used and how a donor's dollars are different from the other funds it receives

How will your organization report and/or track progress for donors?

- *Information the answer should provide:* Outline of data that a nonprofit can currently make available for a donor regarding the extent to which target measures are being met and when information will be available
- *Follow-up questions to consider:* Ask what resources the organization would need to better link dollars to impact

We've learned many valuable lessons. Each lesson has given us insight on how to improve our programs so that we're better able to provide students and their families with the varied supports they need to succeed. We are continuing to codify and strengthen our programs, evaluations, and processes to make them even more effective and efficient in the future. Among other enhancements, we've created explicit benchmarks for grades K-2, 3-5, 6-8, and 9-12, as well as postsecondary achievement standards for **Say Yes** students. We're also creating online data management systems that will help us better share what we have learned with our partners and sponsors.

– *George Weiss, Philanthropist and Founder of Say Yes to Education*¹⁷⁵

issues, your appetite for risk, your patience for results, your willingness and ability to partner with others, and your existing relationships.

We expect that you will have many questions once you begin. Many resources are available to answer these questions about what does – and just as importantly – what does not work in education philanthropy and how to find great programs and the people making them happen. These resources include not only print publications and web-based tools, but also networks of individuals already engaged in education philanthropy in communities across the country. (FOR A LIST OF RESOURCES, PLEASE SEE OUR WEBSITE.)

There are additional reasons to look beyond this report for organizations. Philanthropists who want to start a new organization should investigate the local nonprofit scene to ensure that the new group would not duplicate services that others are already providing in the community. Furthermore, funders who want to implement these national programs in new communities need to be aware that their success relies heavily on community organizations to adapt the model to fit local needs.

Finally, there is also the “business of philanthropy,” which includes the legal, tax, and financial considerations that go into giving. Wealth management advisors, donor-advised funds, community foundations, family offices, and estate and tax lawyers can all serve as sources of information and guidance on these issues.

3. Measure what matters after you have written the check

Your involvement with the nonprofit should not end once you have signed the check. By continuing to engage with the organization, you will not only add an element of accountability, but you can become a savvier investor and subsequently improve practices across the field by sharing both your successes and disappointments.

Continuous improvement requires ensuring that nonprofits measure what matters and use this information to improve student outcomes. Thus, a critical post-allocation task includes the tracking and assessment of a project's progress once it is underway.

You can consider different assessment goals based on the program's maturity. In the early years (typically the first three to five years), it is usually best to focus on examining the implementation to understand the participants' experience and what can be improved. Once the implementation issues have been resolved, it is time to assess the program's outcomes.

Prior to getting the philanthropic project underway, you may want to reach out to evaluation experts

for help in developing a feasible and sufficiently rigorous evaluation design that will meet your requirements for precision, timeliness, and cost. A good place to begin is by contacting a site director of the *Institute of Education Sciences' Pre- and Postdoctoral Interdisciplinary Research Training in the Education Sciences* (<http://pirt.wceruw.org>) at one of its multiple university sites. These experts lead federally funded programs that provide rigorous training to aspiring educational researchers across the country. Alternatively, consider contacting an evaluator included in the registries available at the *What Works Clearinghouse* (http://wwcv1.mathematica-mpr.com/ncee/wwc/tech_assistance/find_eval.asp), a resource provided by the *U.S. Department of Education*, and the *American Evaluation Association* (http://www.eval.org/find_an_evaluator/evaluator_search.asp). You will likely find that small projects (less than \$80,000) are best suited to individual consultants, as administrative

and overhead costs typically preclude evaluation firms from engaging in the work.

In the table on the following page, we describe three levels of evaluations: best case, next best, and minimum requirements. The majority of programs will not meet the requirements of a “best case scenario” because of credible constraints such as a lack of expertise, financial costs, and the time demanded to observe the desired impact for the program’s participants. (For example, an early childhood program designed to improve high school graduation rates would require observations over more than 13 years to examine its effectiveness.) At minimum, an organization should be able to provide evidence indicating its willingness to engage in evaluation, a commitment to learn from past experience, and a desire to build accountability into its operations.



WHAT TO LOOK FOR IN EVALUATIONS

EVALUATION CHARACTERISTICS	BEST CASE SCENARIO...	...LESS RIGOROUS BUT STILL INFORMATIVE	...AT MINIMUM SHOULD INCLUDE
IS OBJECTIVE	Completed by neutral third party	Data collected by external group but analyzed in-house	In-house data monitoring and assessment
PROVIDES COMPARISON GROUP	Randomly assigns sizable number of students to a control group to ensure that the difference between groups is no larger than what chance would create ^{176, 80}	Carefully matches participants with comparable students on key characteristics or uses statistical techniques to "control for" differences at project's start	Considers externally calculated national, state, district and/or other comparable measures
INCLUDES A SUFFICIENT NUMBER OF STUDENTS (SAMPLE SIZE)	Depends on size of effect; the larger the effect, the fewer students required for it to be found statistically significant – even a small pilot of a dozen students might be sufficient to inform practitioners on how to improve practice and whether the program is worth scaling up		
MEASURES A BASELINE	Assesses participants and control/comparable group along critical metrics (e.g., reading ability) prior to program's implementation		Measures participants along critical metrics prior to program's implementation and obtains reasonable, comparable statistic (e.g., state) from the same point in time
ASSESSES ATTRITION (STUDENTS WHO LEAVE PROGRAM)	None or few students exit either the program or control group	Identifies attrition and provides hypotheses that account for students' exiting and suggests how it might affect study's outcomes	
USES OBJECTIVE AND MEANINGFUL MEASURES	Relies on measures identified prior to implementation including school records (e.g., attendance, disciplinary rates, standardized test scores) that are consistently kept; when surveys are used (e.g., to measure student attitudes), employs those that have been externally evaluated for their ability to measure the intended factor consistently across the student population of interest	Presents reports from multiple parties (e.g., parents, teachers, students) and identifies likely biases	Considers reports from one party and identifies likely biases
CONSIDERS PROGRAM'S REPLICABILITY	Evaluates multiple implementations in a diversity of sites	Evaluates multiple implementations in similar settings	Evaluates a single implementation

A program with potential for successful replication will have evaluations that convincingly demonstrate that participants in the program are statistically better off than comparable students. Even better, the evaluations would have observed positive results in multiple sites and across different demographic groups of students. Evaluations that are also able to show that the positive effects last over time can be useful for understanding the sustainability of the results. However, such evaluations are uncommon as they require costly data collection over the long-term, even after students have exited the program and/or the public school system. Even rarer are the evaluations that consider the costs involved in creating impact, which makes it possible to compare those costs to the program's expected benefits.

An exceptional example of a nonprofit that did consider the long term effects of an intervention using an especially strong research design is the High/Scope Perry Preschool Project. (FOR RESULTS, SEE BOX BELOW.) The program randomly selected 123 low-income 3- and 4-year-old African-American children to participate in a preschool program that emphasized active learning through child-initiated experiences. In addition, teachers made weekly home visits. Researchers followed both the children who participated and the control group for nearly three decades, measuring the program's outcomes over the children's lifetimes. The results showed that for high-quality preschools, the benefits of improving the lives of disadvantaged children far outweigh the costs.^{32, 36, 177}

RESULTS OF THE PERRY PRESCHOOL PROJECT¹⁹⁵

Educational attainment - Fewer children who had been enrolled in the program (17%) were held back a grade or placed in special education than were children who had not been enrolled in the program (38%). The preschool program group had significantly higher average achievement scores at age 14 and literacy scores at age 19. 71% of those in the program group graduated from high school or received a GED, compared with 54% of those in the control group.

Incidence of crime - Only 7% of adults who had participated had been arrested five or more times, compared with 35% of those who had not participated in the preschool program.

Earnings and economic status - Adults in the program group were four times more likely (29%) to earn \$2,000 or more per month than were adults in the control group (7%). Almost three times as many (36%) owned their homes, compared to those in the control group (13%). As adults, 59% of those in the program group had received welfare assistance or other social services at some time, compared to 80% of those in the control group.

Single parenthood - At age 27, 57% of women who participated were single parents, compared to 83% of those in the control group.

Net result - Estimates show that benefits of the program were at least twice as large as its costs.

My reading of the evaluation research literature is that there is less than meets the eye. That is, there is a huge stock of educational research, but much of it is of poor quality or idiosyncratic so that it cannot be generalized.

– Henry M. Levin, *Economist*¹⁷⁸

4. Avoid proven mistakes in education philanthropy

Henry Levin's observation from 2001 (see above) still holds true: it is very hard to find rigorous program evaluations that show that a given education intervention has unambiguous and meaningful positive effects.¹⁷⁸ Just as rare are the reports that prove unequivocally that a program model harms students. However, we now have enough data to know that the following two practices do *not* work.

- *Avoid “scared straight” programs* - Programs that organize visits by delinquents and at-risk youth to prison facilities intend to deter them from further involvement in crime by exposing them to the realities of prison life. However, randomized controlled trials showed that this approach actually increased the odds that juvenile delinquents would commit another crime. For example, 41% of the students who attended **Scared Straight** in New Jersey returned to their previous pattern of delinquent behavior, versus 11% of the control group.¹⁷⁹
- *Steer clear of brief mentoring relationships (i.e., less than three months)* - Evaluations of volunteer mentoring programs indicate a range of benefits to students, including improvements in academic performance, better high school graduation rates, and lower rates of alcohol and drug use. However, the duration of the match is critical. Relationships that lasted a year or more showed the highest impact. As the length of the relationships shortened, the studies found progressively fewer positive results. Relationships that were terminated within three months resulted in

a *negative* impact on the participating students, whose perceptions of self worth and school competence dropped in comparison to the control group.¹⁸⁰

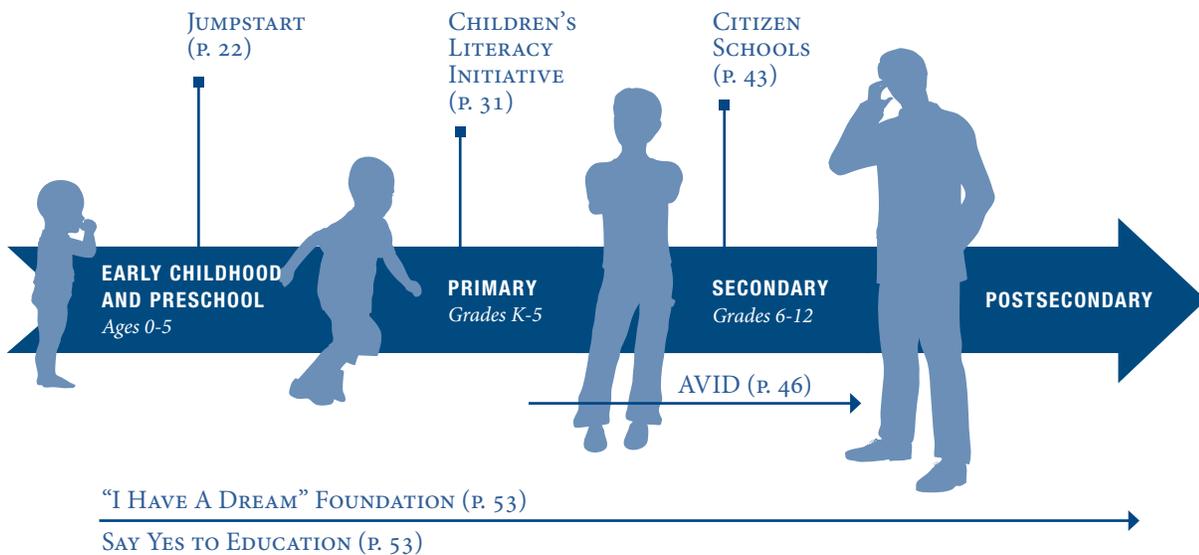
Other pitfalls to consider:

- *Avoid programs that require more resources than you (and your partners) can provide to be effective* - Some interventions may be efficacious in improving student achievement, but are not feasible for most individual philanthropists, given the costs required. For example, consider the case of class-size reduction. The rigorous Tennessee Project STAR study showed that reducing class size in elementary schools improved student achievement, especially during the early primary school years and for low-income students.¹⁸¹ Meaningful impact, however, requires that class sizes are capped at 15 or fewer, which is a significant reduction when you consider that classrooms commonly contain 30 or 35 students. This approach requires an adequate supply of quality teachers, continued provision of school services to support teachers' efforts (e.g., reading specialists and school psychologists, as small class size is not intended to displace their responsibilities), and sufficient classroom space. Taken together, these requirements drive the cost of implementation beyond the capacity of most individual donors. Also note that the impact of this strategy on students at the secondary level is still unknown.
- *Remember that there is no one “right” phase to support, as each is necessary but not sufficient* - At-risk students in all phases need the range of supports that philanthropists can provide. Focusing on one phase is worthwhile, but also requires some thought into what efforts have been provided in the stage before that might enhance the current work, and what will be provided later to sustain and grow this impact. Consider how your investment will provide the continuity of supports that students need.

- *New and innovative strategies are not necessarily better than old, effective practices* – Too often in the social sector, significant inefficiencies result when efforts are invested in new initiatives that essentially “re-invent the wheel.” In fact, novelty itself can create costs. New techniques can be confusing to teachers and parents and require training and reinforcement for effective implementation. These needs can increase implementation costs beyond the benefits they produce. For example, the introduction in the 1960s of “new math,” which emphasizes math structure (e.g., set theory) over rote memorization (e.g., multiplication tables), rendered parents who were schooled in “old” math unable to help their children with their homework, provoking “math wars” between parents and schools.¹⁸²
- *Be wary of equating correlation with causality* – The critical factor behind student outcomes may not be obvious. In the 2000s, for example, reformers pressed for more small high schools, observing that small schools had better outcomes than large, comprehensive schools. However, education researchers who scrutinized the evidence from the previous 30 years found that school design, and not school size, likely had the most influence on outcomes: school size correlated to good outcomes, but did not likely cause them. Instead, researchers concluded that students were benefiting most from the careful design that produced stronger student-teacher relationships, more opportunities for student involvement, and rigorous, student-tailored instruction.¹⁸³
- *Be reluctant to implement a program at a large scale without first pilot testing* – Often, funders are tempted to rely too greatly on emerging evidence and push programs to scale-up prematurely before their impacts (and the efforts and costs required to ensure them) are understood. In California’s class size experiment, for example, policymakers reduced the average class size in all of the state’s kindergarten through third grade classrooms from 30 to 20 students without testing its effectiveness first through smaller scale implementations.¹⁸⁴ While the policy cost the state \$1.7 billion a year (estimate for 2005),¹⁸⁵ or roughly the same amount as all philanthropic dollars invested in K-12 education in 2002,²³ a consortium of researchers, including the RAND Corporation and American Institutes for Research, deemed its impact on student achievement to be inconclusive.¹⁸⁶
- *Question any model whose cost and impact profile seems less efficient when compared to other programs working with the same students to achieve the same results* – Examine whether additional funds actually create additional value. What may appear at first as an inefficiency may actually produce additional, important secondary outcomes. For example, a high school dropout prevention program might help individual students graduate on time but might also invest time and resources to improve instruction in the public schools they attend, thereby impacting the outcomes of future students. However, when no such additional value is apparent, move on to a model that uses your philanthropic capital more wisely.

A CLOSING THOUGHT

It is important to remember that every philanthropic investment can do good, do harm, or do nothing at all. Good intentions and a lot of money do not necessarily result in good outcomes. Armed with the facts, the best available analysis, and a commitment to learning, philanthropists can improve the educational and life opportunities of disadvantaged students.





Appendices

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Examples of Philanthropic “On-Ramps”

3-5 YEARS



CASE EXAMPLE – Build school readiness through increased one-on-one time with a trained, caring adult (e.g., **Jumpstart**, p.22)

TARGETED BENEFICIARIES – Low-income, 3- and 4-year-olds who are identified as needing additional support to ensure school readiness

COST PER BENEFICIARY – Average annual cost per student (as reported by the nonprofit) ranges between \$981 and \$1,873

ESTIMATED COST PER IMPACT – Roughly between \$1,600 and \$3,100 per additional student with increased school readiness

PRE-K - GRADE 3



CASE EXAMPLE – Improve quality of literacy instruction through group training and extensive coaching of elementary school teachers (e.g., **Children’s Literacy Initiative**, p.31)

TARGETED BENEFICIARIES – Students in high-poverty classrooms

COST PER BENEFICIARY – Average annual cost per student (as reported by the nonprofit) is approximately \$182

ESTIMATED COST PER IMPACT – Roughly \$586 per additional student meeting literacy benchmarks

GRADES 6-8



CASE EXAMPLE – Extend learning time through afterschool apprenticeships, academic support, leadership training, and homework help (e.g., **Citizen Schools**, p.43)

TARGETED BENEFICIARIES – Low-income, middle school youth capable of regularly attending an afterschool program

COST PER BENEFICIARY – Average annual cost per student (as reported by the nonprofit) is \$3,194

ESTIMATED COST PER IMPACT – Roughly between \$12,000 and \$40,000 per additional on-time high school graduate

GRADES 4-12



CASE EXAMPLE – Engage students in college-track coursework while providing academic support (e.g., **Advancement Via Individual Determination (AVID)**, p.46)

TARGETED BENEFICIARIES – Underachieving minority students who are likely to be the first in their families to attend college

COST PER BENEFICIARY – Average annual cost per student (as reported by the nonprofit) is \$291

ESTIMATED COST PER IMPACT – Roughly \$1,700 per additional college-ready high school graduate

PRE-K - COLLEGE GRADUATION



CASE EXAMPLE – Implement long-term, wraparound support services with college tuition guarantee, from elementary school to college graduation (e.g., **“I Have A Dream” Foundation & Say Yes to Education**, p.53)

TARGETED BENEFICIARIES – All students, regardless of need, in a group such as a high-poverty classroom or across a public-housing facility

COST PER BENEFICIARY – Average annual cost per student (as reported by the nonprofits) ranges between \$983 and \$3,500

ESTIMATED COST PER IMPACT – Roughly between \$29,000 and \$250,000 per additional on-time high school graduate/college graduate

**EXEMPLARY MODELS OF PROMISING PRACTICES
MENTIONED IN THIS REPORT**

ORGANIZATION	YEAR EST.	WHERE THEY WORK	WEBSITE
AVID	1980	45 states, including DC, and 15 countries	http://www.avidonline.org
Benwood Initiative	2001	Hamilton County, Chattanooga, TN	http://www.pefchattanooga.org/tabid/64/Default.aspx
Big Brothers Big Sisters of America	1902	Nearly 400 affiliates across all 50 states, Puerto Rico and Guam	http://www.bbbs.org/site/c.diJKKYPLJvH/b.1539751/k.BDB6/Home.htm
Broad Residency in Urban Education & The Broad Superintendents Academy	2002 (both)	Across the US	http://www.broadresidency.org & http://www.broadacademy.org
Children's Literacy Initiative	1988	Philadelphia area, Newark (NJ), Baltimore, DC, North Carolina, New Jersey, Delaware, Chicago, New York, and Atlanta	http://www.cliontheweb.org
Citizen Schools	1995	California, Massachusetts, New Jersey, New Mexico, New York, North Carolina, and Texas	http://www.citizenschools.org
College Summit	1993	Colorado, California, West Virginia, National Capital Region (Virginia, Maryland, and DC), St. Louis (MO), South Carolina, New York, Miami, and Indianapolis	http://www.collegesummit.org
Communities in Schools	1978	27 states	http://www.cisnet.org
Center for Academic Retention and Enhancement (CARE) at Florida State University	1999	Florida State University	http://care.fsu.edu
Eagles Eye Mobile	1996	Philadelphia area	http://www.philadelphiaeagles.com/partnership/eyemobile.asp

**EXEMPLARY MODELS OF PROMISING PRACTICES
MENTIONED IN THIS REPORT** *(cont'd)*

ORGANIZATION	YEAR EST.	WHERE THEY WORK	WEBSITE
Fight Crime: Invest in Kids	1996	State offices in Maine, New York, Pennsylvania, Ohio, Michigan, Illinois, Tennessee, Washington, Oregon, and California; national office in Washington, DC	http://www.fightcrime.org
“I Have A Dream” Foundation	1981	16 states, DC, and New Zealand	http://www.ihaveadreamfoundation.org
I Can Problem Solve	1980s	Across the US including Arkansas, Florida, Delaware, New York, Louisiana, New Jersey, Georgia, Kansas and Illinois, as well as in the UK and Norway	http://www.thinkingpreteen.com/icps.htm
Jumpstart	1993	20 states	http://www.jstart.org
KIPP: Knowledge is Power Program	1994	19 states and DC	http://www.kipp.org
Migrant Student Graduation Enhancement Program, University of Texas at Austin	1987	Texas	http://www.utexas.edu/cee/dec/migrant/index.php?page=overview
New Leaders for New Schools	2000	Baltimore/Prince George's County, Chicago, Milwaukee, Memphis, New Orleans, New York, San Francisco Bay Area, and DC	http://www.nlins.org
Nurse-Family Partnership	1996	25 states across the US	http://www.nursefamilypartnership.org
Posse Foundation	1990	Boston, Chicago, Los Angeles, New York, DC, and Atlanta	http://www.possefoundation.org

**EXEMPLARY MODELS OF PROMISING PRACTICES
MENTIONED IN THIS REPORT** *(cont'd)*

ORGANIZATION	YEAR EST.	WHERE THEY WORK	WEBSITE
Say Yes to Education	1987	Philadelphia, Hartford, Cambridge, and Harlem	http://sayyestoeducation.org
Teach for America	1990	29 regions across the US	http://www.teachforamerica.org
The Food Trust	1992	Philadelphia area	http://www.thefoodtrust.org
The Incredible Years	1980s	In at least 15 states (Arkansas, California, Colorado, Delaware, Florida, Kansas, Ohio, Oregon, Maine, Massachusetts, Minnesota, New York, North Carolina, Pennsylvania, and Washington) and in Australia, Canada, Denmark, England, Germany, Ireland, The Netherlands, New Zealand, Norway, Portugal, Russia, Scotland, Sweden, and Wales	http://www.incredibleyears.com
The New Teacher Project	1997	18 locations including Baltimore, Chicago, Washington, DC, Denver, Indianapolis, Memphis, Miami, Milwaukee, New York City, Oakland, Philadelphia, Phoenix, Prince George's County (MD), New Orleans, and Saint Paul	http://www.tntp.org
The Seattle Social Development Project	1981	Seattle, WA	http://depts.washington.edu/ssdp

HOW WE CALCULATED COST PER IMPACT IN EDUCATION

Cost per impact is a measure that is critical to the concept of high impact philanthropy. This “back-of-the-envelope” estimate helps a donor make decisions based on an empirical definition of success for a given objective, which is linked to the costs (as observed in previous implementations) required to achieve this success. It is intended to provide a starting point from which a philanthropist can evaluate an opportunity.

To consider how much change realistically costs, we estimated this figure for several organizations. These calculations were created in three steps by combining the program’s estimated costs with empirical results from past implementations:

1. *Costs*: Depending on the data available, nonprofits provided us with cost estimates. These figures were based on a budget for a future implementation in a given site of an appropriate scale (i.e., an investment of around \$1 million) or the historical figures from a past implementation for which *impact* data is available. In the best case scenario, the nonprofit was able to provide both, enabling us to consider a range of costs. Only direct costs, such as salaries, supplies and evaluation, were included. To reflect the actual costs for philanthropists, we also did not include costs covered by other partners, such as donated space and equipment, when such donations are part of the program’s model. Assumptions regarding costs, including what was and was

not included in the calculation, are described in an endnote. (E.G., SEE ENDNOTE 90 ON P.79).

2. *Results*: We obtained empirical results from past implementations of the model from the nonprofits and/or third party evaluations of their programs. For the sake of simplicity, we use a primary impact that the program produces (e.g., an additional high school graduate). Please note: successful programs often have multiple additional benefits that are more difficult to quantify or compare. These are listed separately as “secondary impacts” in the case description.
3. *Ratio*: With the above estimates, we divided the costs by the results, to produce a cost-per-(primary) impact figure.

Frequently, however, nonprofits were not able to provide detailed information regarding total cost, but were able to provide a cost-per-beneficiary figure. We then used the equation below to convert this figure into cost-per-impact ratio.

We calculated a success rate for the program by taking the number of students enrolled in a site implementation (for which impact data was available) and divided it by the number of students who showed improvement after participation. We then multiplied the success rate by the cost-per-beneficiary figure provided by the nonprofit to estimate a cost-per-impact ratio.

Cost per beneficiary

$$\frac{\text{Costs of delivering program}}{\text{No. of students in program}}$$

X

Success rate

$$\frac{\text{No. of students in program}}{\text{No. of students “changed” by program}}$$

Cost per impact

$$= \frac{\text{Cost}}{\text{Impact}}$$

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ABOUT THE CENTER FOR HIGH IMPACT PHILANTHROPY

The Center for High Impact Philanthropy is a resource center designed to guide philanthropists and their advisors as they decide where to allocate their philanthropic dollars. Its goal is to provide information and tools to help philanthropists determine where their gifts would have the greatest potential to improve the lives of others.

Our staff gathers information from multiple sources and thinks systematically about what it suggests, how it fits together, and how best to use it. Staff members then translate their findings into clear and practical decision-making tools.

The Center identifies promising programs to support using a multi-perspective, evidence-based approach that synthesizes three types of information: field experience (e.g., practitioner's insights and performance assessments), research (e.g., randomized controlled trials and quasi-experimental studies), and informed opinion (e.g., expert analysis and stakeholder input).

We also identify practical ways to think through philanthropic decisions, measure social impact, and create new models for achieving impact. Our objective is to address not only the information gap in the world of philanthropy, but also the continuing uncertainty about the best ways to measure and compare effectiveness and the lack of analytic and decision frameworks to support philanthropists focused on achieving high impact.

REFERENCES AND ENDNOTES

- ¹ One drawback of our emphasis on the work of nonprofits over district reform is that nonprofits still work at the “margins” of the problems and are not (yet) able to reach the majority of students. District reform, although less successful so far, has greater access to the vast majority of students and should not be dismissed. For an example of a successful district reform effort, see the description of the **Benwood Initiative** on p. 33.
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- An additional 32% of kindergartners will meet literacy benchmarks (as based on the gain measured in a White Plains, NY implementation where school conditions (e.g., school leaders support and facilitate teachers' participation in the program) were conducive to implementation)
 - Cost is \$1 million over 3 years for the given initiative
 - Teachers require three years of training to sustain effect
 - 20 teachers will participate
 - On average, each teacher instructs 25 kindergartners per year for an additional 11 years after training is completed
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¹⁴⁶ **Assumptions include:**

- Students participate during their 8th grade year (one year of enrollment)
- Cost figure (as reported in January 2008) does not include national office expenses for policy development, research, new site development, or fundraising
- Cost figure assumes that 5 to 10 classes operate at each site
- Costs are based on the traditional Citizen Schools model and likely undercounts the costs involved in the program's 8th Grade Academy (for which impact analysis is available) where additional activities focusing on a writing development, high school choice, and exposure to the college experience add expense to the operation

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¹⁵² **Assumptions include:**

- Six teachers, an administrator, and a counselor from each of the 13 participating schools receive AVID training in the summer prior to the program's first year
- Three of the teachers per school who received the training will teach the elective class to one cohort of students for three years, the "dosage" required for sustained impact
- On average, 25 students are enrolled in the elective class
- Impact achieved is compared with results observed in CA, where a higher percentage of participating students completed four-year college entrance requirements than students across the state (88% vs. 36%)

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- Based on data from the "I Have A Dream" Foundation (June 2, 2008): *Tuition guarantee examples for the Center for High Impact Philanthropy*. Memo created by the "I Have A Dream" Foundation for the Center for High Impact Philanthropy; High school graduation rates for the Sequoia Union High School District as reported in *Diplomas Count 2008*. EPE Research Center. Retrieved July 10, 2008, from <http://www.edweek.org/apps/maps/>
 - Initiated in 1992 when half of the students entered 4th and half entered 5th grade
 - 67 students were enrolled and all remained in the program through high school graduation
 - Costs include summer programming, tutoring, mentoring, family outreach, field trips, tuition to parochial and private high schools, and administration expenses (e.g., national dues, administrative expenses like rent and insurance)
 - On-time high school graduation rates of the program's participants exceeded those of the students who attended the Sequoia Union High School District by 41% in 1999 and 20% in 2000 (97% vs. 56% in 1999; 97% vs. 77% in 2000)

¹⁷¹ **New York City site's assumptions include:**

- Based on data from “I Have A Dream” Foundation (June 2, 2008): *Tuition guarantee examples for the Center for High Impact Philanthropy*. Memo created by the “I Have A Dream” Foundation for the Center for High Impact Philanthropy; High school graduation rates for the New York City High School District as reported in Diplomas Count 2008. EPE Research Center. Retrieved July 10, 2008, from <http://www.edweek.org/apps/maps/>
- Initiated in 1993 when half of the students entered 2nd and half entered 3rd grade
- 89 students were enrolled and all but 4 (who moved out of state and with whom IHDF lost contact or who died; students were not replaced) remained in the program through high school graduation
- Costs include summer camps and internships, one-on-one tutoring, mentoring, tuition to parochial and private high schools, field trips, supplies, and administration expenses (e.g., national and regional dues, administrative expenses like rent and insurance)
- On-time high school graduation rate of the program's participants exceeded a weighted average of the two year results for the New York City School District (49.4% vs. 41.5%, when students with significant cognitive disabilities are included; 51.2% vs. 41.5% when they are not included)

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- Based on data from Schoolhouse Partners/American Institutes of Research. (2006, November 13). *Say Yes to Education organizational planning discussion*. Internal *Say Yes to Education* document shared with the Center for High Impact Philanthropy; college completion rates for the state of Massachusetts as reported in (2008, Spring). Trends & indicators in higher education 2008. *The New England Journal of Higher Education*, 22(5), 42. Retrieved August 26, 2008, from http://www.nebhe.org/info/pdf/nejhe/NEJHE_Spring08.pdf
- Initiated in 1991 when students entered 3rd grade
- 69 students participated
- Costs include afterschool and summer programming, school-day support, and professional development services for students' teachers, social work, family engagement, mentoring, relationship building with universities and college application supports, and project administration (e.g., meetings, staff development, financial management and administration , tuition, room & board)
- Total costs calculation assumed that cost-per-beneficiary (at primary school level) was expended for all students for 3 years, cost-per-beneficiary (at secondary school level) was expended for all students for 7 years, and cost-per-beneficiary (at post-secondary school level) was expended for all students for 4 years
- College graduation rates of the program's participants exceeded average MA students within 150% of entrance (6 years for 4-year schools; 3 years for 2-year schools in 2004) by 34 percentage points (60% vs. 26%)

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¹⁷⁶ Frequently, people have raised concerns about ethical issues involved in using a randomized process to select who is enrolled in a program. Evaluators have designed some thoughtful and equitable strategies to address these issues: as resources are inevitably limited, only so many children can be served by a program, so that randomly selecting students is the most equitable process to allocating the available “seats.” Plus, programs can have negative effects on students that without rigorous assessment, evaluators may not be able to identify.

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