

Testing the Impact of Higher Achievement's Year-Round Out-of-School-Time Program on Academic Outcomes

Carla Herrera, Leigh L. Linden, Amy J. A. Arbreton and Jean Baldwin Grossman



Testing the Impact of Higher Achievement's Year-Round Out-of-School-Time Program on Academic Outcomes

Carla Herrera

Leigh L. Linden, University of Texas at Austin

Amy J. A. Arbreton

Jean Baldwin Grossman

P/PV Public/Private Ventures (P/PV)

P/PV is a national nonprofit research organization that works to improve the lives of children, youth and families in high-poverty communities by making social programs more effective. We identify and examine gaps in programs designed to create opportunities for people in poverty. We use this knowledge to stimulate new program ideas, manage demonstration projects, conduct evaluations, and expand or replicate effective approaches.

P/PV is a 501(c)(3) nonprofit, nonpartisan organization with offices in Philadelphia, New York City and Oakland. For more information, please visit: www.ppv.org.

Board of Directors

Cay Stratton, Chair
Senior Fellow
MDC

Yvonne Chan
Principal
Vaughn Learning Center

Robert J. LaLonde
Professor
The University of Chicago

John A. Mayer, Jr.
Retired, Chief Financial Officer
J. P. Morgan & Co.

Siobhan Nicolau
President
Hispanic Policy Development
Project

Marion Pines
Senior Fellow
Institute for Policy Studies
Johns Hopkins University

Clayton S. Rose
Senior Lecturer
Harvard Business School

Sudhir Venkatesh
William B. Ransford Professor of
Sociology
Columbia University

William Julius Wilson
Lewis P. and Linda L. Geyser
University Professor
Harvard University

Research Advisory Committee

Jacquelynne S. Eccles, Chair
University of Michigan

Robert Granger
William T. Grant Foundation

Robinson Hollister
Swarthmore College

Reed Larson
University of Illinois

Jean E. Rhodes
University of Massachusetts,
Boston

Thomas Weisner
UCLA

Acknowledgments

This research was made possible by grants from the William T. Grant Foundation and The Atlantic Philanthropies. Bank of America also provided funding for the project.

We are very grateful to the youth, parents, mentors, teachers and program staff who took the time to complete surveys or participate in our interviews and focus groups. Without their efforts, this study would not have been possible.

Staff at Higher Achievement were supportive partners throughout the study's implementation. Numerous staff helped set up our site visits, participated in interviews and broader data collection efforts, and patiently responded to our many requests over the course of the evaluation. Gail Williams and Edsson Contreras were particularly instrumental to the study's success through their efforts at youth recruitment. Special recognition also goes to Richard Tagle, Lynsey Jeffries and Maureen Holla, whose leadership and support of the project internally throughout its development and implementation have been crucial to its success.

We also thank our partners at Survey Research Management (SRM). Their excellent staff, research know-how and tireless efforts collecting all of the parent and youth surveys for the project yielded strong response rates at every wave of data collection. Linda Kuhn, Rob Schroder and Tony Lavender were central in orchestrating SRM's data collection efforts.

The contributions of several individuals at Columbia University and P/PV were also crucial to completing the report. At Columbia University, Annelies Raue provided exceptional assistance in conducting the analyses discussed in this report. Mariesa Herrmann, Evan Borkum and Ama Baafra Abeberese also assisted with data analysis during earlier phases of the project. At P/PV, Jennifer McMaken co-directed the project throughout the first several years of its implementation. Laura Colket, Siobhan Cooney, Jennifer Pevar, Brittany Rhoades and Salem Valentino joined the project

as summer interns, conducting site visits, analyzing the resulting data and assisting with survey development and analysis. Nora Gutierrez and Becca Raley conducted site visits and interviewed staff and mentors to provide implementation feedback to the program. Nadya Shmavonian and Wendy McClanahan reviewed a draft of the report and provided feedback that helped structure the final text.

Yolanda Fowler and Claudia Ross translated our surveys and consent forms.

Chelsea Farley edited the report and provided excellent feedback that shaped its direction and tone. Cara Cantarella provided final copyediting. Malish & Pagonis designed the report, and Laura Johnson coordinated its publication.

The achievement gap has long been a major challenge facing the American educational system. Students from historically disadvantaged backgrounds—ethnic minorities and youth from low-income homes—perform below their peers on a range of academic measures (Stern 1989). These children enter school at a deficit and fall further behind as they progress into higher grades (Campbell et al. 2000; Neal 2006). While some of these differences may be driven by a lack of resources at home, the quality of schools typically attended by these youth may also play a significant role. Far too often, youth from disadvantaged backgrounds attend lower-quality schools with environments much less conducive to success than those schools available to more advantaged students (Morgan, Sirageldin 1968; Johnson, Stafford 1973).

As youth progress through school, they are faced with new challenges that can increase educational disparities. For example, the transition to middle school is a difficult period for many youth, during which even strong students can experience academic slides (Eccles, Midgley 1989; Seidman et al. 1994; Blyth et al. 1983). These slides can be particularly evident for minority students (Simmons et al. 1991) and for youth from low-income backgrounds (Bronstein et al. 1998), serving to widen an already troubling achievement gap.

Funders and policymakers have begun to take notice of out-of-school-time (OST) programs as a way to increase access to academic supports and opportunities that have the potential to offset these educational disparities. OST programs that target youth as they transition to middle school and serve them throughout the critical middle school years may be especially helpful. Programs that carefully integrate both school-year (i.e., after-school) and summer learning opportunities also may be particularly promising, as they extend the amount of time youth devote to learning across the entire year. Finally, OST programs that explicitly encourage application and matriculation to competitive high schools may serve as a catalyst for moving disadvantaged children into higher-quality educational tracks—the same ones available to their more advantaged peers.

Higher Achievement's After-School Academy

During the school year, Higher Achievement's After-School Academy is offered to participating fifth through eighth grade students—or “scholars”—three days a week, from 3:30 p.m. to 8:00 p.m. The program runs for 25 weeks; each daily session includes homework help, dinner, an arts or recreation elective, a 25-minute “community gathering” and 75 minutes of small-group academic instruction using a structured curriculum. The small groups are led by volunteer mentors—with one day a week focused on math, one on literature and one on a seminar that includes such topics as robotics, creative writing, conflict resolution or technology.

The curriculum that guides these groups is designed to follow skill standards set by the DC and Virginia public school systems and to reflect common core state standards that are being developed and adopted across the country. The curriculum is framed around four social justice themes: freedom, justice, solidarity and voice.

The After-School Academy also offers scholars the opportunity to take part in monthly field trips, career shadowing days and community service projects. The program has an explicit focus on the high school transition, including individual help for parents and youth on high school applications and several mentoring sessions devoted to completing them.

Very few OST programs have all of these characteristics. Even fewer explicitly focus on youth who are highly motivated but could fall behind without additional support—a group that is easily forgotten, since they are often performing adequately in school and don't appear to need “extra” help. Understanding whether—and how—such programs benefit youth is of vital importance to school districts, program staff, funders and policymakers around the country. Do these programs support youth's involvement in enriching activities to which they might otherwise not be exposed? Do they ultimately boost youth's academic attitudes, behaviors and performance? Answers to these questions can inform larger efforts to improve educational opportunities among low-income youth and ultimately shed light on how to close the achievement gap.

This report summarizes the encouraging interim results from an ongoing evaluation of one high-intensity academic OST program for middle school

youth. It presents rigorous evidence of the positive role this kind of program can play in supporting academic gains—including significantly increasing students' scores on standardized tests.

The Higher Achievement Program

Higher Achievement is an intensive, long-term, academically focused program. It began in its current form in 1999 in Washington DC.¹ The program targets youth who have the motivation to succeed academically but lack the resources to support that success. Higher Achievement recruits these youth in the spring before they enter the fifth or sixth grade and serves them throughout the middle school years at "Achievement Centers" located in elementary or middle schools in their neighborhoods.² The program's goal is to help youth develop skills, behaviors and attitudes that will improve their academic performance and ultimately increase their acceptance into competitive high schools that could launch them toward college and careers. Higher Achievement relies on a very structured approach:

- Youth are required to stay in the program through the eighth grade (three to four years total). Once in the program, participants must adhere to the structure of classes and activities offered.
- The program is guided by grade-level curricular standards that are tied to those in the DC and Virginia public school systems.
- It focuses on small-group instruction and provides youth with substantial individual attention and support, with an average of 2 to 3 scholars assigned to each mentoring group and 13 assigned to each summer class (see text boxes for more details about this programming).
- Higher Achievement's staff are well trained and supported. New center staff receive a range of trainings over 90 days, and summer teachers receive a 7-day orientation prior to teaching.
- Higher Achievement strives to involve parents to ensure that families support the program's goals.

The program estimates its yearly total (i.e., direct and indirect) costs per youth to be about \$4,500, which covers approximately 650 hours of academic instruction and enrichment activities over the school year and during the summer months.

Higher Achievement's Summer Academy

Higher Achievement's six-week Summer Academy operates from 8:00 a.m. to 4:00 p.m., five days a week. The goal of the Summer Academy is to expose youth to the academic concepts they will cover in the coming school year. Some time is also devoted to reviewing concepts from the previous school year and practicing core academic skills. Summer interns—high school students who are program alumni—serve as program assistants and potential role models for scholars (e.g., in 2010, all interns were attending competitive high schools).

Summer Academy participants attend four classes a day taught by paid teachers in math, science, social studies and literature. Teachers use a curriculum that, like the school-year curriculum, is aligned with the DC and Virginia public school standards and assessment instruments. Each lesson concludes with a concept check to reinforce learning.

In addition, students can choose two electives, such as sculpture, chess or martial arts. They take weekly field trips, engage in academic competitions and participate in a three-day out-of-town university trip. Eighth graders also spend two days visiting competitive high schools and engaging in guided discussions about these schools.

The Evaluation

In 2006, in collaboration with Dr. Leigh Linden, a professor at the University of Texas at Austin,³ P/PV began a comprehensive multiyear evaluation of Higher Achievement to test its impact on participants' academic performance, attitudes and behaviors and on their enrollment in competitive high schools (the latter of which will be examined in a forthcoming report). This evaluation uses random assignment—the most rigorous evaluation design available to researchers—and includes 951 students, recruited for the program in the spring of 2006, 2007 and 2008, as they were entering fifth or sixth grade.

Youth who met Higher Achievement's admissions criteria completed a standardized test and were surveyed (as were their parents) when they joined the study. A lottery was then used to determine which students were offered the opportunity to participate in Higher Achievement (i.e., the treatment group) and which were not (i.e., the control group). Both

groups were free to attend other academic enrichment programs. We surveyed youth and their parents again one, two and four years after random assignment.^{4, 5}

This design ensures that the only systematic difference between the two groups at the start of the study is the treatment group's access to Higher Achievement. All other characteristics of the youth, including ability and motivation level, will be—on average—identical. At any point in time, the experience of the control group represents what the treatment group would have experienced had they not had the option to enroll in the program. Random assignment thus allows us to conclude that any differences that emerge between the treatment and control groups over time are a direct result of the Higher Achievement program.

At each time point, our surveys measured youth's attitudes, behavior, program participation, and demographic information. Standardized tests were also administered to assess youth's performance in reading comprehension and problem-solving.⁶ In addition, we conducted program observations and interviews with Higher Achievement staff and surveyed Higher Achievement teachers and mentors to elicit information on staff training, curriculum, organizational culture and other implementation issues.

This report summarizes findings from the one- and two-year follow-up assessments, which are described in more detail in Linden, Herrera, and Grossman (2011). Another report examines the specific impacts achieved over the summer of 2010 (see Herrera et al. 2011). A third report will discuss impacts seen at the four-year follow-up.

The Findings

- 1. Higher Achievement successfully recruited a group of low-income youth from their targeted population: children doing well in school, but not performing as well on standardized tests as they might need to in order to succeed, longer term.** Almost all of the youth recruited were African American or Hispanic, and almost two thirds were eligible for free or reduced-price lunch at school. When they were recruited, the students—those in both the treatment and control groups—were getting good grades in school and were highly motivated. All had families who wanted to enroll their children in an intensive year-round academic OST program and were willing to go through a demanding application process that includes a written application and interviews with both the youth and their parent(s) (about 80 percent of recruited families follow through on all of these steps). Although the students were doing well in school, with 52 percent reporting that they received mostly As and Bs, their average standardized test scores were very close to the national average, indicating that they had considerable room for improvement and could benefit from additional academic support. This is precisely the group that Higher Achievement targets and who the program is currently designed to serve.
- 2. Higher Achievement retained 74 percent of these enrollees over one year and 67 percent over two years.**⁷ At both time points, most of the treatment parents who were surveyed reported that their children were still attending Higher Achievement. The program is intentionally structured around retaining scholars over time, and to do so it enforces a rigorous attendance policy.⁸ Youth are required—and commit—to stay in the program through the eighth grade. And youth who leave the program are not “replaced” by new recruits. The program simply serves fewer youth in older age groups.
- 3. Higher Achievement had a significant impact on youth's involvement in a variety of positive academic and enrichment activities.** After one and two years of access to Higher Achievement, treatment youth were much more likely to participate in academic programs: About 87 percent of youth in the treatment group had attended some type of academic OST program by the first-year follow-up, compared with about 35 percent of controls.⁹ Treatment youth also spent a significant amount of time in these programs—much more than their control group counterparts (14 hours per week versus 4 during the school year, and 24 hours per week versus 4 during the summer).¹⁰ Finally, treatment youth were more likely to engage in several kinds of academic and enrichment activities, including those related to selecting and applying to high schools and pursuing a career, such as visiting a college campus,

participating in academic contests and speaking with non-parental adults about how to get into a good high school.

- 4. Higher Achievement's intensive year-round program significantly improved youth's standardized test scores.** After two years of access to the program, treatment youth showed significantly larger gains in their reading and problem-solving scores than those experienced by control youth.¹¹

Importantly, effects on test scores were only seen after two years of exposure to the program; they were not evident at the first-year follow-up. This pattern is not out of line with reports from other studies of OST programs, suggesting that changes in outcomes (particularly test scores) take time to occur and often appear after a minimum of a year of participation (see Metz et al. 2008). These findings suggest that long-term programs that fail to produce measurable impacts after a year should not be dismissed out of hand, as they may very well produce results after students have had more exposure to the program. Impacts were also fairly consistent for all youth, regardless of gender, geographical area of enrollment, family income or academic standing when they first applied to the program.

- 5. Higher Achievement produces these results by providing long-term, year-round, intensive academic programming, embedded in a culture of hard work and academic rigor.** Although we do not know exactly which program components are necessary for achieving these results, we do know that Higher Achievement looks different from many OST programs: It is not a drop-in program with broad, youth development goals; it has specific academic goals and is carefully structured around achieving them.
- 6. While Higher Achievement increased test scores, the program did not improve youth's academic attitudes or behavior.** In addition to assessing Higher Achievement's impact on test scores, we also examined changes in academic attitudes, which are often precursors to improved performance. We did not find improvements in youth's academic attitudes and behaviors. Both treatment and control youth displayed the declines in academic attitudes over the transition to middle school that other studies have documented. And in fact, by the first follow-up assessment,

treatment youth had experienced bigger "dips" in attitudes (e.g., perceptions of their own academic abilities, creativity and curiosity) than those seen in the control group. Interestingly, treatment youth also reported *increases* in certain negative behaviors (e.g., being sent to the principal's office or taking something that didn't belong to them) at both follow-ups.

Implications For Policy And Practice

These findings suggest a number of key lessons for school district officials and public and private funders of education initiatives:

- 1. Keeping middle school youth engaged in additional instructional time during the out-of-school hours is challenging, but this study indicates that it can be done.** Two thirds of surveyed youth in the treatment group were still attending Higher Achievement two years after their enrollment. The design of the study does not allow us to identify exactly which program components are important for keeping youth engaged over time. However, it is clear that the program works hard to keep youth interested and invested, for example, by providing them with consistent adult relationships and offering a wide range of activities and leadership opportunities throughout the year. Higher Achievement also involves parents (e.g., at the first-year follow-up, 64 percent of parents whose children attended the program reported that they talked with Higher Achievement staff about their child's progress at least once a month) and has strict attendance policies, which may encourage retention.

As youth progress through middle school, they are at increased risk for falling behind academically, getting involved in dangerous behaviors, and ultimately failing to successfully transition to high school. Ironically, this is also a time when youth become difficult to engage in OST programs (in part because they may have other options or demands on their time—caring for younger siblings, "hanging out" with friends, etc.). A program that successfully engages these youth in the out-of-school hours, and that *keeps* them involved over time, is noteworthy.

2. The association between test scores and other outcomes, such as youth's attitudes and behaviors, may be complicated for this group of highly motivated middle school students. Higher Achievement's goal is to help youth develop skills, behaviors and attitudes that will improve their academic performance and increase their acceptance into competitive high schools. Our findings suggest that the program significantly improved youth's test scores, but not by improving their attitudes. In fact, at the first follow-up, we measured dips in the attitudes of the treatment group that preceded increases in their test scores. Our analyses challenge the assumption that attitude improvement is a necessary precursor to improved performance. Perhaps, instead, programs like Higher Achievement help students improve their test scores simply by providing youth with opportunities they wouldn't have otherwise had, to learn and practice skills.

Another surprising finding is the fact that youth in the treatment group reported increases in certain negative behaviors. Because these findings are based on youth's self-reports, it is unclear whether they reflect true differences in negative behaviors or a difference in how youth perceived our questions, based on program involvement. There could also be characteristics of the program (e.g., close interactions with older peers) that simply foster more "acting out" behavior. This trend—one seen at both follow-ups—certainly warrants further exploration, and we will continue to examine it as we follow the youth into high school.

Taken together, our findings suggest that "negative" changes in youth attitudes may not be indicative of program failure—in fact, youth may benefit from rethinking their own abilities. That is, for youth to believe that their efforts to improve are worthwhile, they may first need to realize that they have room for improvement. Regardless of the explanation, our findings make clear that the association between middle school youth's academic performance and their attitudes is not as straightforward as might be assumed.

3. For financially strapped school districts, programs like Higher Achievement may help fill a gap in opportunities available to low-income students and, in doing so, may help to offset existing educational disparities. The experiences

Higher Achievement offers—such as high school and college visits and career-oriented activities—can supplement what youth have access to at school, providing enriching academic activities throughout the year that can help put students on a path toward higher educational attainment. In this study, Higher Achievement youth engaged in a much more intensive level of academic activity over the school year and summer than did control group youth, and in turn, they experienced bigger gains in test scores.

4. The investment in quality instructional programming in the OST hours appears to pay off in academic gains—however, these gains take time and significant resources to produce. Higher Achievement is a comprehensive, long-term investment in children's lives. The program costs about \$4,500 per scholar per year. These funds support 650 hours of academic instruction and enrichment activities over the school year and summer, employing well-trained staff who are guided by a curriculum that mirrors and builds on what youth learn during the school day. The fact that many other rigorous studies of OST programs have not found improvements in test scores suggests that it may take this type of significant investment—of both time and money—to yield the kind of academic benefits Higher Achievement produces, and that many funders and policymakers hope to gain from their investments in OST programs.

5. The benefits of this type of long-term investment may show up most strongly when measured in high school and beyond; therefore, long-term evaluations—like the one being conducted on Higher Achievement—are important. One of Higher Achievement's potential strengths is its *long-term* combination of school-year and summer programming. The fact that we found no effects on performance after one year, but did after two, highlights the importance of this long-term approach. Even so, the data gathered for this study focus on only the first two years of youth's involvement. An upcoming report will explore in more detail the longer-term impact of the program as youth complete the high school application process and begin their freshman year. Understanding these more enduring effects will be crucial in determining the true impact of this long-term, intensive program.

Final Thoughts

No one program, on its own, can eliminate educational disparities. Higher Achievement targets and serves one specific group of youth that can easily fall through the cracks. Since the *No Child Left Behind* Act was passed in 2001, schools and programs have often prioritized those youth who need help the most. This focus is certainly an important one, and, in fact, programs often show the biggest gains with the lowest achievers. However, this focus can also mean that youth who are doing fairly well in terms of their grades may not be getting the extra help they need to perform well on tests and build the kinds of long-term skills that will allow them to be successful.

Higher Achievement is able to attract and retain many of these high-potential, historically disadvantaged students, increasing their involvement in positive activities and ultimately boosting their standardized test scores. These outcomes are not easily gained, however. They result from an intensive, long-term investment in youth by a program that boasts many of the features that research suggests are key to achieving academic impacts. Whether this type of investment can yield sustainable impacts in youth's long-term educational choices and academic success will only become clear as we continue to follow these young people into high school.

Endnotes

1. An earlier version of the program operated from 1975 to 1998 and provided some of the services included in the current model exclusively to gifted and advanced students.
2. The program is currently located in four cities: Washington, DC; Alexandria, VA; Baltimore, MD; and Richmond, VA. City offices are supported by a National Office in DC. Within each city, there are one or more Achievement Centers. This study focuses on five of the six centers located in DC and Alexandria. The sixth center began operating in 2010, after recruitment for the study was completed. Thus, that center is not included in the evaluation. Each center serves about 85 students.
3. For the majority of the project, Dr. Linden worked at Columbia University. We are grateful for the University's support of the project during this period.
4. As of the writing of this report, data collection for the four-year follow-up is ongoing.
5. In addition, in the spring and fall of 2010, we surveyed those youth (and parents) who had not yet aged out of the program to learn more about how Higher Achievement affected youth's experiences and learning over the summer (see Herrera et al. 2011).
6. Standardized tests were administered as part of all follow-up surveys.
7. These percentages reflect attendance for only those youth/parents who responded to our survey (86 and 82 percent of the total sample at the first and second follow-up, respectively). Because youth in the treatment group who dropped out of the study—and whose parents did not complete the follow-up surveys—were also much more likely to have dropped out of Higher Achievement, these numbers likely overstate Higher Achievement's retention rates. That is, the retention rate for all youth offered admission to Higher Achievement is likely lower than the rate estimated from the youth who continued to participate in the study. Comparing parent-reported rates with Higher Achievement's MIS data for the full sample during the summer of 2010, when the program began collecting reliable attendance data, suggests that, in fact, the actual retention rate was 16 percentage points lower than that reflected through follow-up reports by parents.
8. When youth miss 25 percent of the program's required days, they can no longer attend the program through the end of the semester. To return the following semester, they must attend a conference with their family and the center director to show that they are committed to participating through the eighth grade.
9. The proportion for control youth given here is the actual percentage of control parents reporting that their child had attended an academic OST program in the last year. The treatment proportion is an estimate, rather than the actual proportion of treatment students enrolled in a program. The treatment proportion is calculated by adding two values: (1) the actual proportion of control students whose parents reported that they attended an academic OST program, and (2) the estimated impact of the program on academic OST participation. This second value was estimated, holding constant youth's baseline scores on several key outcomes, age, gender, grade at baseline, free/reduced-price-lunch status, ethnicity, income, single-parent status, household language, parental education level and the cohort in which the youth was recruited.
10. Values for the treatment group were estimated as described in endnote 9.
11. Effect sizes at the second follow-up were .09 for reading comprehension and .12 for problem-solving. These effects are larger than those outlined in other large-scale, rigorous evaluations of OST programs such as the evaluation of Enhanced Academic Instruction in After-School Programs (Black et al. 2008) or the evaluation of the 21st Century Community Learning Centers (James-Burdumy et al. 2007). For further discussion, please see Linden, Herrera, and Grossman (2011).

References

- Black, Alison Rebeck, Fred Doolittle, Pei Zhu, Rebecca Unterman, and Jean Baldwin Grossman**
2008 *The Evaluation of Enhanced Academic Instruction in After-School Programs: Findings After the First Year of Implementation* (NCEE 2008-4021). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.
- Blyth, Dale A., Roberta G. Simmons, and Steven Carlton-Ford**
1983 "The Adjustment of Early Adolescents to School Transitions." *Journal of Early Adolescence*, 3 (1-2), 105-120.
- Bronstein, Phyllis, Paula Duncan, Joann Clauson, Craig L. Abrams, Nancy Yannett, Golda Ginsburg, and Mavis Milne**
1998 "Preventing Middle School Adjustment Problems for Children from Lower-Income Families: A Program for Aware Parenting." *Journal of Applied Developmental Psychology*, 19 (1), 129-152.
- Campbell, Jay R., Catherine M. Hombo, and John Mazzeo**
2000 *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance* (NCES 2000-469). Washington, DC: U.S. Department of Education, National Center for Educational Statistics, Office of Educational Research and Improvement.
- Eccles, Jacquelynne S. and Carol Midgley**
1989 "Stage-Environment Fit: Developmentally Appropriate Classrooms for Young Adolescents." In Carol Ames and Russell Ames (Eds.), *Research on Motivation in Education: Goals and Cognitions* (Vol. 3, 139-186). New York: Academic Press.
- Herrera, Carla, Leigh L. Linden, Amy J. A. Arbreton, and Jean Baldwin Grossman**
2011 *Summer Snapshot: Exploring the Impact of Higher Achievement's Year-Round Out-of-School-Time Program on Summer Learning*. Philadelphia: Public/Private Ventures.
- James-Burdumy, Susanne, Mark Dynarski, and John Deke**
2007 "When Elementary Schools Stay Open Late: Results from the National Evaluation of the 21st Century Community Learning Centers Program." *Educational Evaluation and Policy Analysis*, 29 (4), 296-318.
- Johnson, George E. and Frank P. Stafford**
1973 "Social Returns to Quantity and Quality of Schooling." *The Journal of Human Resources*, 8 (2), 139-155.
- Linden, Leigh L., Carla Herrera, and Jean Baldwin Grossman**
2011 *Achieving Academic Success After School: A Randomized Evaluation of the Higher Achievement Program*. Working Paper for the University of Texas at Austin, Department of Economics.
- Metz, Rachel A., Julie Goldsmith, and Amy J. A. Arbreton**
2008 *Putting It All Together: Guiding Principles for Quality After-School Programs Serving Preteens*. Philadelphia: Public/Private Ventures.
- Morgan, James and Ismail Sirageldin**
1968 "A Note on the Quality Dimension in Education." *Journal of Political Economy*, 76 (5), 1069-1077.
- Neal, Derek A.**
2006 "Why Has Black-White Skill Convergence Stopped?" In Eric Hanushek and Finis Welch (Eds.), *Handbook of Economics of Education* (511-576). Maryland Heights, MO: Elsevier.
- Seidman, Edward, LaRue Allen, J. Lawrence Aber, Christina Mitchell, and Joanna Feinman**
1994 "The Impact of School Transitions in Early Adolescence on the Self-System and Perceived Social Context of Poor Urban Youth." *Child Development*, 65 (2), 507-522.
- Simmons, Roberta G., Ann Black, and Yingzhi Zhou**
1991 "African American Versus White Children and the Transition into Junior High School." *American Journal of Education*, 99 (4), 481-520.
- Stern, David**
1989 "Educational Cost Factors and Student Achievement in Grades 3 and 6: Some New Evidence." *Economics of Education Review*, 8 (2), 149-158.



Public/Private Ventures

2000 Market Street, Suite 550
Philadelphia, PA 19103
Tel: (215) 557-4400
Fax: (215) 557-4469

New York Office

55 Exchange Place, Suite 405
New York, NY 10005
Tel: (212) 822-2400
Fax: (212) 949-0439

California Office

Lake Merritt Plaza, Suite 1700
1999 Harrison Street
Oakland, CA 94612
Tel: (510) 273-4600
Fax: (510) 273-4619

www.ppv.org