Harvard Family Research Project

OUT-OF-SCHOOL TIME EVALUATION SNAPSHOT

A Review of Out-of-School Time Program Quasi-Experimental and Experimental Evaluation Results

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Harvard Family Research Project's series of Out-of-School Time Evaluation Snapshots *distills the wealth of information compiled in our Out-of-School Time Program Evaluation Database[1] into a single report. Each* Snapshot *examines a specific aspect of out-of-school time (OST) evaluation. This* Snapshot *provides an overview of what the quasi-experimental and experimental evaluations in the database reveal about the impact of out-of-school time programs on an array of academic, prevention, and youth development outcomes. It also includes a resource list of other OST evaluation reviews and related evaluation information.[2]*

The past five years have witnessed overwhelming public support for the funding of out-of-school time (OST) programs. This support has been fueled by public concern that young people need safe places in the out-of-school hours—places that provide supervision by caring adults and productive activities that support school success as well as broader development. Given the amount of resources now being allocated to OST programming, stakeholders have a growing interest in knowing if these programs are attracting those most in need of services and if youth are acquiring the intended benefits of program participation, such as improved school performance, lower risk taking, and positive youth development. This interest, coupled with increasing pressure from policymakers for programs to demonstrate research-based results, has sparked interest in OST evaluations that have employed rigorous research designs to examine program outcomes.

OUR SAMPLE AND METHODOLOGY FOR REVIEW

This brief provides an overview of the 27 evaluations in the HFRP Out-of-School Time Program Evaluation Database that used experimental and quasi-experimental research designs to make statements about program outcomes.[3] (See the box for research design definitions.) As of June 2003, evaluations of 54 OST programs were profiled in our database. Of these 54 programs, 27 used quasi-experimental designs and 11 used experimental designs during some phase of their evaluation; 3 programs used both. Many also included a non-experimental design component as well. The set of evaluations reviewed for this *Snapshot* represents a range of programs from small single-site programs to city- and statewide programs operating multiple sites in multiple locations to national programs such as the 21st Century Community Learning Centers program. Appendix A provides a brief description of all programs reviewed, as well as citations for the evaluation reports. In most cases, the programs also collected implementation data that was used to help shape program execution and inform future evaluation efforts.

The results presented in this brief represent statistically significant outcomes ($p<.10$) found to be linked to overall program participation as reported in the set of 27 evaluations reviewed.[4] However, there are some statements of caution about interpreting the results of OST impact evaluations. First, due in part to the diversity of OST programming, most OST evaluations assess overall program impact, answering the question, Did the *combined* results of the various program components result in changes in participant out-

DEFINITIONS OF RESEARCH DESIGNS OF REVIEWED EVALUATIONS

Experimental Design (also known as Randomized Control Trial) – Random assignment of individuals to either a treatment or control group. A comparison between groups is made to determine program effects.

Quasi-Experimental Design – Nonrandom selection of individuals to treatment and comparison groups or conditions, as well as the use of controls to minimize threats to the validity of conclusions drawn. Subject to selection bias. Types of quasi-experimental designs include: comparison group pretest/posttest design, time-series and multiple time-series designs, matched pairs, nonequivalent control group, and counterbalanced designs.

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comes? Few evaluation studies have attempted to link *specific* program activities with outcomes—and this set of 27 evaluations is no different. This means making statements about *causal* links between specific OST activities and specific outcomes is not possible from this set of evaluations.

Second, this summary is based on a review of evaluation reports and the results presented herein reflect what evaluators and program leaders chose to print in those reports and make available to the public. In many cases, the findings in this set of evaluation reports are predominantly positive and sometimes neutral, but seldom negative. A review of the complete evaluation reports, including the formative findings, reveals that programs identify many areas for self-improvement. This information, however, does not lend itself to quantification using statistical analysis and therefore is beyond the scope of this review.

Also beyond the scope of this review are the rich implementation findings included in each evaluation report, which are essential for interpreting the program results in the context of the program.

Finally, it is important to note that statistically significant results often held only for a subgroup (e.g., middle school versus elementary school students, girls versus boys, etc.). In addition, significant findings often varied by situation. For example, positive findings for participants may only apply to one particular school year or the results of one particular test, but other school years and tests might have different results. The results presented below are a synthesis of results across subgroups. For a complete reporting of the statistically significant results by program evaluation, including information about subgroups, see Appendix B.

RESULTS FROM PROGRAMS THAT ASSESS ACADEMIC OUTCOMES

Evaluators use a broad array of performance measures to assess academic outcomes.[5] They range from grades to standardized testing to homework completion. Results from the 25 evaluations that assessed academic outcomes in this sample indicate that participation in OST programs is linked to:

- Better attitudes toward school and higher educational aspirations
- Better performance in school, as measured by achievement test scores and grades
- Higher school attendance (as measured by attendance and tardiness)
- Less disciplinary action (e.g., suspension)

Specifically, this set of OST evaluations found statistically significant improvements in the following areas related to academic achievement:

IN FOCUS: A Quasi-Experimental Evaluation of Academic Outcomes

The **Foundations** organization operates extended-day programs in large urban areas in the Mid-Atlantic and Northeast, serving 1,200 children in 41 different sites. The programs feature a curriculum emphasizing academic subjects as well as experiences designed to foster physical and emotional development. Participants also spend time on field trips, homework assistance, and in the computer lab, and family involvement is encouraged. Results from its two-year quasi-experimental evaluation of fourth grade participants indicate that participation in a Foundations program improves school grades and performance as measured by the Terra Nova Reading/Language Arts and Mathematics Computation Tests.

For the full profile of this evaluation see the Harvard Family Research Project Out-of-School Time Program Evaluation Database at www.gse.harvard.edu/hfrp/projects/afterschool/evaldatabase.html.

- Academic involvement
- Achievement motivation
- Achievement test scores
- Attitude toward school or academics
- College attendance
- Competence
- Educational aspirations
- Expulsions
- Grades
- Homework completion
- Lower rates of course failure
- Overall academic performance[6]
- Reduced suspensions
- School attendance (includes dropout and tardy rates)

While there were some subsamples for which the results were neutral, this set of evaluations did not report negative academic achievement results associated with overall participation.

RESULTS FROM PROGRAMS THAT ASSESS PREVENTION OUTCOMES

Outcomes that fall into the prevention category include changes in sexual behavior, feelings of personal safety, changes in drug and alcohol use and abuse, and overall improvements in physical health. While fewer out-of-school time programs—and therefore fewer evaluations—focus on prevention, results from evaluations of programs that do

articulate prevention as a program component indicate that OST programs can have a positive prevention impact. Specifically, results from the 12 evaluations that assessed prevention outcomes in this sample indicate that participation in OST programs is linked to:

- Avoidance of drug and alcohol use
- Decreases in delinquency and violent behaviors
- Increased knowledge of safe sex and avoidance of sexual activity and pregnancy
- Increased skills for coping with peer pressure

This set of OST evaluations found improvements in the following areas of prevention:

- Avoidance of delinquency (including criminal arrest)
- Avoidance of drug and alcohol use (including cigarette smoking)
- Avoidance of sexual activity
- Avoidance of violence
- Knowledge about drug and alcohol use (including perceived social benefits)
- Knowledge of sexuality issues (including attitudes toward sex)
- Reduced pregnancy rates
- Use of safe sex practices

Looking beyond these positive results, one program evaluation, the 21st Century Community Learning Centers evaluation, reported a negative relationship between overall program participation and drug abuse. It is not clear how to interpret this result, but it suggests that the relationship between program participation and prevention is complicated and needs further analysis to determine the specific impacts that OST programs can have in the category of prevention.

IN FOCUS: An Experimental Evaluation of Prevention Outcomes

The **Children's Aid Society Carrera-Model Teen Pregnancy Prevention Program** (CASCM) was launched in Harlem in 1984 and there are currently 21 replication sites nationwide. Twenty-nine other sites maintain program variations. Five main activity components and two main service components constitute CASCM. The five activity components are: (1) a work-related intervention called job club that includes stipends, development of an individual bank account, graduated employment experiences, and career awareness; (2) an educational component that includes individual academic assessment, tutoring, homework help, PSAT and SAT preparation, and assistance with college entrance; (3) family life and sex education; (4) self expression through the arts; and (5) lifetime individual sports.

Its experimental evaluation of 12 sites used random assignment to develop treatment groups (589 adolescents) and control groups (474 adolescents). Annual surveys were collected from both groups as well as annual pretests and posttests of knowledge related to sexuality topics. Results from these surveys indicate that program participation among boys resulted in significantly higher levels of knowledge about sexuality and reproductive outcomes. At the third-year follow-up program girls had significantly lower pregnancy rates and births than did control group girls.

For the full profile of this evaluation see the Harvard Family Research Project Out-of-School Time Program Evaluation Database at www.gse.harvard.edu/hfrp/projects/afterschool/evaldatabase.html.

RESULTS FROM PROGRAMS THAT ASSESS YOUTH DEVELOPMENT OUTCOMES

Many OST evaluations assess youth development outcomes, which are broadly defined as those outcomes that assess the social and emotional development of program participants. Outcomes that fall into this category range from standardized measures of self-esteem, participant behavior, and interpersonal skills to decision making, goal setting, leadership, and career development. Results from the set of 15 evaluations that have assessed positive youth development results indicate that OST program participation is linked to:

- Decreased behavioral problems
- Improved social and communication skills and/or relationships with others (peers, parents, and/or teachers)
- Increased community involvement and broadened world view
- Increased self-confidence and self-esteem

Specifically, this set of OST evaluations found improvements in the following positive youth development areas:

- Communication skills
- Community involvement
- Computer skills
- Confidence/self-esteem
- Conflict resolution
- Decision making
- Decreased aggression
- Desire to help others
- Exposure to new experiences
- General well-being
- Goal setting
- Interactions/relationships with adults

IN FOCUS: A Quasi-Experimental Evaluation of Youth Development Outcomes

The **San Francisco Beacons Initiative** aims to help youth develop competencies that will help them become responsible adults through out-of-school time programs that focus on five areas: leadership, career development, arts and recreation, health, and education. This citywide program operates Beacons Centers at eight sites and in 1999–2000 served 7,500 youth and adults.

Its quasi-experimental evaluation included all youth (Beacon Center participants and nonparticipants) in the sixth and seventh grades at each of the three middle schools hosting Beacon Centers. Survey data from middle school students indicate that youth participating at the Beacons Centers reported significantly greater opportunities to assume a range of formal, informal, and representation-type leadership roles than did nonparticipant youth. Further, middle school participants reported spending approximately two and a half hours more per week in productive leisure activities—art, music, dance, drama, and tutoring—than youth who attended the schools but not the Centers.

For the full profile of this evaluation see the Harvard Family Research Project Out-of-School Time Program Evaluation Database at www.gse.harvard.edu/hfrp/projects/afterschool/evaldatabase.html. This profile will be updated soon. To be notified when it is available sign up for our OST website change notification email at www.gse.harvard.edu/hfrp/subscribe.html.

- Interactions/relationships with peers
- Job experience/skills
- Leadership skills
- Maturity
- Money management skills
- Opportunities for leadership roles
- Overall happiness/well-being
- Performance skills (e.g., music)
- Planning/organizing
- Positive attitude about the future
- Positive behavior
- Problem solving
- Productive use of leisure time
- Projected success in career/the future/college
- Public speaking skills
- Respect for diversity
- Respect for others
- Social/interpersonal skills
- Task orientation
- Understanding of a value system
- World view broadened

While there were some subsamples for which the results were neutral, this set of evaluations did not report negative youth development results.

PARTICIPATION RATES RELATED TO OUTCOMES

OST programs have been characterized by mixed patterns of program participation by young people, both in the frequency and duration of their program attendance. However, with the increased public investments in OST programs, we are seeing increased expectations and accountability for how young people will be impacted as a result of their participation in these programs. This has raised important research questions for evaluators of OST programs with significant implications for program expectations and design. Specifically, How much participation is enough? What level of participation—times per week and duration of involvement over time—is required to predict positive program effects on youth outcomes?

A growing number of OST evaluations have included research questions that help them assess the important link between duration and intensity of participation and participant outcomes. Nine of the studies in this review examined their outcomes findings in light of program participation rates and eight found statistically significant positive relationships between time spent in the program and academic and positive youth development outcomes. For example, the 4-H Youth Development program (Cornell Cooperative Extension) evaluation found that the longer youth participate in 4-H (as measured in years spent in the program), the more likely they were to have learned a specific skill from the program. Further, duration of participation was linked to higher scores on a developmental assets assessment.

Examining the set of results that related frequency of participation to academic performance, there is a similar pattern. While the 21st Century Community Learning Centers evaluation did not find a relationship between frequency of participation and academic achievement, the other seven studies that analyzed outcomes in relation to participation reported that greater frequency of participation was associated with better school attendance rates, lower rates of course failure, and higher measures of academic achievement. The latest The After-School Corporation (TASC) evaluation indicates that students who participated in TASC the most consistently and for the longest period of time experienced the greatest gains in math as assessed by standardized achievement tests. Further, the Maryland After School Community Grants Program found that shorter programs—those meeting fewer than 9.5 hours per week—actually had significant negative effects on academic performance.

While there is still much work to be done to answer the question of how much is enough, it is clear that programs are beginning to collect evaluation data that can help program leaders better understand how participation rates affect participant outcomes.

HARVARD FAMILY RESEARCH PROJECT OUT-OF-SCHOOL TIME PROGRAM EVALUATION DATABASE

The Harvard Family Research Project (HFRP) Out-of-School Time Program Evaluation Database contains profiles of out-of-school time (OST) program evaluations. Its purpose is to provide accessible information about previous and current evaluations to support the development of high quality evaluations and programs in the OST field.

Types of Programs Included in the Database

Evaluations in the database meet the following three criteria:

1. The evaluated program/initiative operates during out-of-school time.
2. The evaluation(s) aim to answer a specific evaluation question or set of questions about a specific program/initiative.
3. The evaluated program/initiative serves children between the ages of 5 and 19.

Types of Information Included in the Database

Each profile contains detailed information about the evaluations as well as an overview of the OST program/initiative itself. Web links to actual evaluation reports, where available, are also provided, as are program and evaluation contacts.

How to Use the Database

The database is located in the OST section of the HFRP website at: www.gse.harvard.edu/hfrp/projects/afterschool/evaldatabase.html. The search mechanism allows users to refine their scan of the profiles to specific program and evaluation characteristics and findings information.

The Scan for This Snapshot

For this review, we conducted two scans. First, we checked off the box on the search page marked "Experimental" and obtained a list of all the experimentally designed evaluations in the database. Then, we went back to the search page and checked off the box marked "Quasi-Experimental" for all the quasi-experimentally designed evaluations.

CONCLUSION

It is important to underscore that out-of-school time programming is just emerging as a field. Currently, OST programs vary greatly in program quality and consistency of participation. And, until recently, there was relatively little attention given to OST programs regarding their actual impact on young people. The high level of expectations that we now hold for OST programming is a recent phenomenon and provides an opportunity to redefine the field and its evaluation. As such, the field is now working to set realistic outcomes for OST programs and to implement evaluations that can help identify best practices and standards to guide program design and implementation in the service of achieving positive outcomes.

Just as the OST field is in its fledgling stage of development, so is the knowledge as to how to best evaluate program efforts. Some "flagship" evaluations (such as those of TASC and Los Angeles Better Educated Students for Tomorrow) have been underway for several years, but for the most part, evaluating OST programs is unfamiliar territory for many program leaders. However, the new context of scientifically based research means that now, more than ever, it is important that OST programs use evaluation to build the case for continued support of their programs—and, if possible, that they do so using scientifically based research practices.[7]

While there is no substitute for rigorous experimentally designed evaluations, the reality of the context of OST programming makes this type of design challenging and not applicable to many OST settings. Alternatively, many OST programs included in our review have chosen to conduct quasi-experimental evaluations that use comparison groups to make statements about program effectiveness. Although subject to selection bias, quasi-experimental evaluations can provide a reasonable assessment of program impact. And, combined with results from experimental studies, they can be used to examine the range of OST program impacts so that decision makers can better understand the benefits and limitations of OST programs.

Finally, programs need to continue to collect implementation information that can provide useful feedback to programs for quality improvement. Moving forward, there may always be a tension between collecting data for program improvement and collecting data to satisfy stakeholder accountability requirements. Ultimately, programs need to do both, using implementation information to create the context in which to interpret program impacts.

Priscilla M. D. Little, Project Manager
Erin Harris, Research Assistant

RECENT REVIEWS OF OST EVALUATIONS

Afterschool Alliance. (2003). *Afterschool Alliance backgrounder: Formal evaluations of afterschool programs*. Washington, DC: Author. www.afterschoolalliance.org/backgrounder.doc (Word file)

Beckett, M., Hawken, A., & Jacknowitz, A. (2001). *Accountability for after-school care: Devising standards and measuring adherence to them*. Arlington, VA: RAND. www.rand.org/publications/MR/MR1411

Brown, E. G., McComb, E., & Scott-Little, C. (2003). *Expanded learning opportunities programs: A review of the research and evaluations on participant outcomes in school readiness and after-school programs*. Greensboro, NC: SERVE.

Eccles, J., & Gootman, J. A. (Eds.). (2001). *Community programs to promote youth development*. Washington, DC: National Academies Press.

Eccles, J. S., & Templeton, J. (2002). Extracurricular and other after-school activities for youth. *Review of Research in Education, 26*. Washington, DC: AERA.

Fashola, O. S. (2001). *Building effective afterschool programs*. Thousand Oaks, CA: Corwin Press. www.corwinpress.com/book.aspx?pid=7405

Little, P. M. D. (Ed.). (2003). Evaluating out-of-school time [Special issue]. *The Evaluation Exchange, 9*(1). www.gse.harvard.edu/hfrp/eval/issue21/index.html

Hollister, R. (2003). *The growth in after-school programs and their impact*. Washington, DC: Brookings Institution. www.brook.edu/views/papers/sawhill/20030225.htm

Miller, B. M. (2003). *Critical hours: Afterschool programs and educational success*. Quincy, MA: Nellie Mae Education Foundation. www.nmefdn.org/CriticalHours.htm

Peter, N. (2002). *Outcomes and research in out-of-school time program design*. Philadelphia: Best Practices Institute. www.cbps.org/outcomes.pdf (Acrobat file)

Scott-Little, C., Hamann, M. S., & Jurs, S. G. (2002). Evaluations of after-school programs: A meta-evaluation of methodologies and narrative synthesis of findings. *The American Journal of Evaluation, 23*(4), 387–419.

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NOTES

[1] Our database contains profiles of out-of-school time (OST) program evaluations, which are searchable on a wide range of criteria. It is available in the OST section of the HFRP website at www.gse.harvard.edu/hfrp/projects/afterschool/evaldatabase.html.

[2] This and future *Snapshots* in the series will be available in the OST section of the HFRP website at www.gse.harvard.edu/hfrp/projects/afterschool/resources.html. (To be notified when *Snapshots* become available online sign up for our OST website change notification email at www.gse.harvard.edu/hfrp/subscribe.html.)

[3] While some OST evaluation reviews have imposed evaluation quality criteria to define their review's sample size, we chose to take a more comprehensive approach to look across a range of evaluations. For reviews that applied stringent evaluation criteria to identify their samples, in the Recent Reviews of OST Evaluations box, see the Hollister and the Scott-Little, Hamann, and Jurs publications.

[4] P-values indicate levels of significance of statistical tests and indicate the probability that the result obtained would occur by chance. Lower p-values are associated with stronger statements of significance. This review uses a $p<.10$ value because that is a cutoff that many OST evaluators employ.

[5] We plan to post a listing of academic performance measures and their data sources compiled from the HFRP OST Program Evaluation Database in the OST section of our website in summer 2003. (To be notified when this resource is available sign up for our OST website change notification email at www.gse.harvard.edu/hfrp/subscribe.html.)

[6] This measure was generally assessed by teacher and student reports of overall academic gains. As such, it differs from more specific measures of academic achievement such as grades and test scores.

[7] For an overview of scientifically based research, see Bouffard, S. (2003). Doing what works: Scientifically based research in education. *The Evaluation Exchange, 9*(1), 15, 17. www.gse.harvard.edu/hfrp/eval/issue21/bbt1.html

Harvard Family Research Project

Harvard Family Research Project
Harvard Graduate School of Education
3 Garden Street
Cambridge, MA 02138
Tel: 617-495-9108
Fax: 617-495-8594
Email: hfrp@gse.harvard.edu
Website: www.hfrp.org

Appendix A
Program Descriptions and Evaluation Reports

Program Name & Description	*Experimental & Quasi-Experimental Evaluations*
The **21st Century Community Learning Centers** program provides expanded learning opportunities for elementary and middle school children in a supervised environment nationwide.	U.S. Department of Education, Office of the Under Secretary. (2003). *When schools stay open late: The national evaluation of the 21st-Century Community Learning Centers program, first year findings*. Washington, DC: Author. Available at www.ed.gov/pubs/21cent/firstyear.
The **4-H Youth Development Program – Cornell Cooperative Extension** is an experiential education program for youth ages 5 to 19 in New York State.	Rodriguez, E., Hirschl, T. A., Mead, J. P., & Goggin, S. E. (1999). *Understanding the difference 4-H Clubs make in the lives of New York youth: How 4-H contributes to positive youth development*. Ithaca, NY: Cornell University. Available at www.cce.cornell.edu/4h/Resources/4-HClubStudy.htm.
The **Across Ages** program uses older adults (age 55+) as mentors for at-risk youth in Philadelphia, Pennsylvania to help youth develop awareness, self-confidence, and skills to resist drugs and overcome obstacles.	LoSciuto, L., Rajala, A. K., Townsend, T. N., & Taylor, A. S. (1996). An outcome evaluation of Across Ages: An intergenerational mentoring approach to drug prevention. *Journal of Adolescent Research, 11*(1), 116–129.
The **After School Achievement Program** provides a safe, supervised place for youth in Houston, Texas and aims to reduce delinquency, crime, and school dropout and enhance academic enrichment and positive citizenship.	Smith, D. W., & Zhang, J. J. (2001). *Shaping our children's future: Keeping a promise in Houston communities year 4 evaluation of the Mayor's After School Achievement Program (ASAP)*. Houston, TX: University of Houston.
Bayview Safe Haven is an after school program in the San Francisco Bayview/Hunter's Point neighborhood in California for at-risk youth ages 10 to 17. It is designed to help youth stay in school and out of the criminal justice system, while positioning them for a responsible adulthood and improving the quality of life in their families and communities.	LaFrance, S., Twersky, F., Latham, N., Foley, E., Bott, C., & Lee, L. (2001). *A safe place for healthy youth development: A comprehensive evaluation of the Bayview Safe Haven*. San Francisco, CA: BTW Consultants & LaFrance Associates.
The **Big Brothers and Big Sisters of America** program has nationwide affiliates that provide one-on-one mentoring to at-risk youth between the ages of 10 and 16.	Tierney, J. P., Grossman, J. B. (with Resch, N. L.). (2000). *Making a difference: An impact study of Big Brothers Big Sisters*. Philadelphia: Public/Private Ventures.
The **Children's Aid Society Carrera-Model Teen Pregnancy Prevention Program** is a national program that aims to empower youth, help them develop a desire for a productive future, and aid them in improving their sexual literacy and understanding the consequences of sexual activity.	Philliber, S., Kaye, J., & Herrling, S. (2001). *The national evaluation of the Children's Aid Society Carrera-Model Program to prevent teen pregnancy*. Accord, NY: Philliber Research Associates. Available at www.childrensaidsociety.org/media/general/cas-full_12-site_report1.pdf (Acrobat file).
From 1995 to 1997 the **Extended-Day Tutoring Program** provided after school literacy tutoring based on the Success for All model to elementary school students in the city of Memphis, Tennessee Title I schools.	Ross, S. M., Lewis, T., Smith, L., & Sterbin, A. (1996). *Evaluation of the extended-day tutoring program in Memphis city schools: Final report to CRESPAR*. Memphis, TN: University of Memphis.
Foundations operates before and after school enrichment programs for children pre-K through twelfth grade in several urban schools in the Mid-Atlantic and Northeast of the U.S.	Hamilton, L. S., Le, V., & Klein, S. P. (1999). *Foundations School-Age Enrichment Program: Evaluation of student achievement*. Santa Monica, CA: RAND Education.
The **Howard Street Tutoring Program** provides after school remedial reading instruction through one-on-one tutoring to second and third graders in Chicago, Illinois who have fallen behind their peers in reading.	Morris, D., Shaw, B., & Perney, J. (1990). Helping low readers in grades 2 and 3: An after-school volunteer tutoring program. *The Elementary School Journal, 91*(2), 133–150.

Program Name & Description	*Experimental & Quasi-Experimental Evaluations*
Los Angeles Better Educated Students for Tomorrow aims to provide youth in Los Angeles, California with: a safe environment, enhanced opportunities through the integration of an educational support structure, educational enrichment activities, recreational activities, and interpersonal skills and self-esteem development.	Huang, D., Gribbons, B., Kim, K. S., Lee, C., & Baker, E. L. (2000). *A decade of results: The impact of the LA's BEST after school enrichment initiative on subsequent student achievement and performance.* Los Angeles: UCLA Center for the Study of Evaluation, Graduate School of Education & Information Studies, University of California. Available at www.lasbest.org/learn/uclaeval.pdf (Acrobat file). Brooks, P. E., Mojica, C. M., & Land, R. E. (1995). *Final evaluation report: Longitudinal study of LA's BEST after school education and enrichment program, 1992–94*. Los Angeles: UCLA Center for the Study of Evaluation, Graduate School of Education & Information Studies, University of California.
The **Louisiana State Youth Opportunities Unlimited** summer program provides dropout prevention services for at-risk youth on the Louisiana State University campus.	Shapiro, J. Z., Gaston, S. N., Hebert, J. C., & Guillot, D. J. (1986). *The LSYOU project evaluation*. Baton Rouge: College of Education Administrative and Foundational Services, Louisiana State University.
The **Maryland After School Community Grant Program** serves to strengthen youth resiliency and prevent substance abuse, violence, and delinquency by increasing the availability of high quality, structured after school programs for youth in Maryland.	Weisman, S. A., Soulé, D. A., & Womer, S. C. (under the direction of Gottfredson, D. C.). (2001). *Maryland After School Community Grant Program: Report on the 1999–2000 school year evaluation of the phase I after-school programs*.
The **New Orleans ADEPT Drug and Alcohol Community Prevention Project** is a primary-level alcohol and other drug use prevention program that provides after school child care to 24 low-income elementary schools of the New Orleans, Louisiana public school district.	Ross, J. G., Saavedra, P. J., Schur, G. H., Winters, F., & Felner, R. D. (1992). The effectiveness of an after-school program for primary grade latchkey students on precursors of substance abuse. *Journal of Community Psychology*, OSAP special issue, 22–38.
North Carolina Cooperative Extension Service provides training and technical assistance to school-age care providers throughout North Carolina with the aim of raising the quality of out-of-school time experiences for elementary through high school students.	Locklear, E. L., & Mustian, R. D. (1998). Extension-supported school-age care programs benefit youth. *Journal of Extension, 36*(3). Available at www.joe.org/joe/1998june/rb4.html.
The **Project Learn/Educational Enhancement Program** is a community-based program implemented in local Boys & Girls Clubs across the country and designed to improve academic achievement of at-risk students.	Schinke, S. P., Cole, K. C., & Poulin, S. R. (2000). Enhancing the educational achievement of at-risk youth. *Prevention Science, 1*(1), 51–60.
The **Quantum Opportunities Program** was a national pilot initiative from 1989 to 1993 that tested whether youth from families receiving public assistance could make a "quantum leap" up the ladder of opportunity if given a comprehensive and multi-year set of supports.	Hahn, A., Leavitt, T., & Aaron, P. (1994). *Evaluation of the Quantum Opportunities Program: Did the program work?* Waltham, MA: Brandeis University.
San Diego's "6 to 6" Extended School Day Program provides access to high quality, affordable enrichment programs before and after school to elementary and middle school students in San Diego, California.	Hoffman, J. (2001). *San Diego After School Regional Consortium: Academic indicator report 1999–2000*. San Diego, CA: Hoffman, Clark & Associates.
The **San Francisco Beacons Initiative** aims to help youth in San Francisco, California through participation in out-of-school time Beacons Center activities focused on helping youth develop competencies and become responsible adults.	Walker, K. E., & Arbreton, A. J. A. (2001). *Working together to build Beacon Centers in San Francisco: Evaluation findings from 1998–2000*. Philadelphia: Public/Private Ventures. Available at www.ppv.org/content/reports/beacons.html.
The **Santa Ana After School Learning and Safe Neighborhoods Partnerships Program** integrates academics with recreational enrichment to meet students' academic and social needs. The program operates in four urban public middle schools in the Santa Ana Unified School District in California.	Prenovost, J. K. E. (2001). *A first-year evaluation of after school learning programs in four urban middle schools in the Santa Ana Unified School District*. Irvine, California: Author.

Program Name & Description	*Experimental & Quasi-Experimental Evaluations*
The **Stay SMART** program is a national prevention program offered by the Boys & Girls Clubs of America that seeks to teach youth a broad spectrum of social and personal competence skills and to help them identify and resist peer and other social pressures to use alcohol, cigarettes, and marijuana, as well as to engage in early sexual activity. **SMART Leaders I and II** are booster programs designed to reinforce the initial program.	St. Pierre, T. L., Kaltreider, D. L., Mark, M. M., & Aikin, K. J. (1992). Drug prevention in a community setting: A longitudinal study of the relative effectiveness of a three-year primary prevention program in Boys & Girls Clubs across the nation. *American Journal of Community Psychology, 20*(6), 673–706. St. Pierre, T. L., Mark, M. M., Kaltreider, D. L., & Aikin, K. J. (1995). A 27-month evaluation of a sexual activity prevention program in Boys & Girls Clubs across the nation. *Family Relations*, *44*, 69–77.
The **Teen Outreach Program** is a nationwide school-based program involving young people ages 12 to 17 in volunteer service in their communities. Designed to increase academic success and decrease teen pregnancy, it helps youth develop positive self-images, learn valuable life skills, and establish future goals.	Allen, J. P., Philliber, S., Herrling, S., & Kuperminc, G. P. (1997). Preventing teen pregnancy and academic failure: Experimental evaluation of a developmentally based approach. *Child Development, 64*(4), 729–742. Allen, J. P., & Philliber, S. (2001). Who benefits most from a broadly targeted prevention program? Differential efficacy across populations in the Teen Outreach Program. *Journal of Community Psychology, 29*(6), 637–655. Available at www.cornerstone.to/top/prevent.pdf (Acrobat file).
The After-School Corporation After-School Program has a two-part mission: (1) to enhance the quality of after school programs in New York State by emphasizing program components associated with student success and program sustainability and (2) to increase the availability of after school opportunities by providing resources and strategies for establishing and expanding after school projects.	Reisner, E. R., White, R. N., Birmingham, J., & Welsh, M. (2001). *Building quality and supporting expansion of After-School Projects: Evaluation results from the TASC After-School Program's second year*. Washington, DC: Policy Studies Associates. Reisner, E. R., Russell, C. A., Welsh, M. E., Birmingham, J., & White, R. N. (2002). *Supporting quality and scale in after-school services to urban youth: Evaluation of program implementation and student engagement in TASC After-School Program's third year.* Washington, DC: Policy Studies Associates.
The **Thunderbirds Teen Center Program** is a multifunctional facility in North Phoenix, Arizona that aims to promote teens' positive self-development by providing a comprehensive service system that focuses on the whole individual during out-of-school time.	Baker, D., Hultsman, J., & Garst, B.A. (1998). *Thunderbirds Teen Center Program evaluation*. Phoenix Parks, Recreation and Library & Arizona State University. Available at rptsweb.tamu.edu/Faculty/Witt/conpubs/thunder.pdf (Acrobat file).
Virtual Y brings YMCA after school programs and staff into 100 New York City public elementary schools. It offers support for classroom learning by extending the school day and helping children achieve reading proficiency through literacy-based activities.	Foley, E. M., & Eddins, G. (2001). *Preliminary analysis of Virtual Y after-school program participants' patterns of school attendance and academic performance. Final evaluation report program year 1999–2000*. New York: National Center for Schools and Communities, Fordham University. Available at www.ncscatfordham.org/binarydata/files/rpt_academic.pdf (Acrobat file). Foley, E. M., & Eddins, G. (2001). *Impact of the Virtual Y on children's classroom behavior. Final evaluation report program year 1999–2000.* New York: National Center for Schools and Communities, Fordham University.
The **Voyager Summer Program** is a national summer intervention program with a core curriculum that helps struggling readers. The program aims to close the achievement gap between white and minority students.	Roberts, G. (2000). *Technical evaluation report on the impact of Voyager summer reading interventions*. Austin: University of Texas.
The **Woodrock Youth Development Project** is a program of intervention strategies and support systems for youth in the Kensington neighborhood in Philadelphia, Pennsylvania. It aims to reduce alcohol, tobacco, and other drug use among adolescents by improving youths' awareness about the dangers of substance abuse, problem-solving and coping skills, self-perceptions, academic achievement, and cultural pride.	LoSciuto, L., Freeman, M. A., Harrington, E., Altman, B., & Lanphear, A. (1997). An outcome evaluation of the Woodrock Youth Development Project. *Journal of Early Adolescence*, *17*(1), 51–66.

Appendix B
Outcomes Linked to Participation in OST Programs

While this set of experimental and quasi-experimental evaluations assessed many outcomes, **this table only reports those for which there were statistically significant findings** ($p<.10$). "E" denotes experimental design; "QE" denotes quasi-experimental design. Results are grouped as positive, neutral, or negative and listed in alphabetical order. Parentheses following an improvement area refer to the subsample for which the result was statistically significant.

Program Name	*Outcomes*
21st Century Community Learning Centers program, national (E and QE)	**Academic** *Middle School Results* Positive: achievement motivation, grades (black and Hispanic middle school students, math only), school attendance Neutral: homework completion, overall academic performance *Elementary School Results* Positive: achievement motivation Neutral: grades (except for social studies), homework completion *Participation* Students who attended more frequently did not have higher academic outcomes than students who attended less frequently. **Prevention** *Middle School Results* Negative: avoidance of delinquency, avoidance of drug/alcohol use **Youth Development** *Middle School Results* Neutral: interactions/relationships with peers Negative: conflict resolution *Elementary School Results* Positive: productive leisure time (frequent participants only) Neutral: interactions/relationships with peers, positive behavior *Participation* While elementary school participants were no more or less likely to watch TV than the control students, frequent elementary school participants were significantly more likely to be engaged in tutoring and extracurricular activities such as band, drama, art, etc.
4-H Youth Development Program – Cornell Cooperative Extension, NY (QE)	**Academic** Positive: achievement motivation, educational aspiration, grades **Youth Development** Positive: communication skills, community involvement, confidence/self-esteem, conflict resolution, decision making, desire to help others, goal setting, interactions/relationships with adults, interactions/relationships with peers, leadership skills, planning/organizing, problem solving, projected success in career/the future/college, public speaking skills, respect for diversity, understanding of a value system, world view broadened *Participation* The longer youth participate in 4-H, the more likely they are to report having learned a specific skill from 4-H. Length of time that youth participate in 4-H was found to have a significant impact on asset development. Longer participation led to higher scores on the developmental asset areas. Type of 4-H Club was not found to be associated with developmental asset outcomes.
Across Ages,[1] Philadelphia, PA (E)	**Academic** Positive: attitude toward school/academics, school attendance **Prevention** Positive: avoidance of drug/alcohol use **Youth Development** Positive: community involvement, general well-being, interactions/relationships with adults, projected success in career/the future/college (most significant for those with "exceptional mentoring relationships")
After School Achievement Program, Houston, TX (QE)	**Academic** Positive: achievement test scores (in science and fine arts) **Prevention** Neutral: avoidance of delinquency
Bayview Safe Haven, San Francisco, CA (QE)	**Academic** Positive: reduced suspensions Neutral: expulsions, school attendance (all results are for the intervention period only, not for post-intervention follow-up) **Prevention** Positive: avoidance of delinquency *Participation* Youth who participated voluntarily had fewer arrests than those who participated as a condition of probation.

[1] Results reported are for the curriculum + mentoring group only.

Big Brothers and Big Sisters of America, national (E)	**Academic** Positive: competence (strongest for minority females), grades (strongest for minority females), school attendance (strongest for females) Neutral: homework completion **Prevention** Positive: avoidance of drug/alcohol use (strongest for minority youth), avoidance of violence Neutral: avoidance of delinquency **Youth Development** Positive: interactions/relationships with peers Neutral: confidence/self-esteem, world view broadened
Children's Aid Society Carrera-Model Teen Pregnancy Prevention Program, national (E)	**Academic** Positive: achievement test scores, educational aspiration, overall academic performance **Prevention** Positive: avoidance of drug/alcohol use (boys), avoidance of sexual activity (marginal significance), knowledge of sexuality issues, reduced pregnancy rates (girls), use of safe sex practices (girls) **Youth Development** Positive: computer skills, job experience/skills, money management skills
Extended-Day Tutoring Program, Memphis, TN (QE)	**Academic** Positive: achievement test scores (tutored third grade frequent participants only)
Foundations, national (QE)	**Academic** Positive: achievement test scores (highest gains for fourth graders in year one and first and second graders in year two; no gains for grade 5), grades (in math for one site only)
Howard Street Tutoring Program, Chicago, IL (E)	**Academic** Positive: achievement test scores
Los Angeles Better Educated Students for Tomorrow, Los Angeles, CA (QE)	**Academic** Positive: achievement test scores, attitude toward school/academics, educational aspiration *Participation* Greater participation was significantly related to positive achievement on standardized tests, better school attendance, and fewer absences. **Youth Development** Positive: interactions/relationships with adults (especially after school staff)
Louisiana State Youth Opportunities Unlimited, LA (E)	**Academic** Positive: achievement test scores, attitude toward school/academics, competence, educational aspiration, school attendance **Youth Development** Positive: job experience/skills
Maryland After School Community Grants Program, MD (E and QE)	**Academic** Neutral: overall academic performance *Participation* Shorter programs—those meeting for less than 9.5 hours a week—appear to have significant negative effects on academic performance ($p<.05$). **Prevention** Positive: avoidance of delinquency (only significant for one middle school site), avoidance of drug/alcohol use (two sites only) **Youth Development** Positive: positive behavior (middle school students only), social/interpersonal skills
New Orleans ADEPT Drug and Alcohol Community Prevention Project, New Orleans, LA (QE)	**Academic** Positive: achievement test scores for participation in a self-esteem-building curriculum group Neutral: achievement test scores overall **Youth Development** Neutral: confidence/self-esteem (and other personality measures), overall happiness
North Carolina Cooperative Extension Service, NC (QE)	**Academic** Positive: achievement test scores, homework completion, school attendance **Youth Development** Positive: communication skills, community involvement, interactions/relationships with adults, interactions/relationships with peers, maturity, task orientation (this set of results only reached significance for school-age providers surveys; surveys of parents and classroom teachers revealed higher, but not significant results)
Project Learn/ Educational Enhancement Program, national (QE)	**Academic** Positive: academic involvement, achievement test scores, attitude toward school/academics, grades, overall academic performance, school attendance *Participation* Increased program attendance led to higher outcomes on measures of academic achievement and enjoyment of reading.

Program Name	*Outcomes*
Quantum Opportunities Program, national (E)	**Academic** Positive: achievement test scores, college attendance, school attendance **Prevention** Positive: avoidance of drug/alcohol use, reduced pregnancy rates **Youth Development** Positive: community involvement, projected success in career/the future/college Neutral: job experience/skills (as assessed by self-reporting of the need for help in this area), overall happiness (regarding family life)
San Diego's "6 to 6" Extended School Day Program, San Diego, CA (QE)	**Academic** Positive: achievement test scores Neutral: school attendance
San Francisco Beacons Initiative, San Francisco, CA (QE)	**Youth Development** Positive: opportunities for leadership roles (middle school students), productive leisure time
Santa Ana After School Learning and Safe Neighborhoods Partnership Program, Santa Ana, CA (QE)	**Academic** Positive: school attendance (significant for high-dosage participants only) Neutral: achievement test scores (not significant, but high-dosage participants tended to score better) *Participation* Increased program attendance led to better academic outcomes overall.
Stay SMART and SMART Leaders program, national (QE)	**Prevention** Positive: decrease in perceived benefits of sex (non-virgins only), attitudes about sexual issues (non-virgins), avoidance of drug/alcohol use, avoidance of sexual activity (non-virgins only), knowledge about drug/alcohol use, knowledge of sexual issues
Teen Outreach Program, national (E and QE)	**Academic** Positive: reduced suspension, grades (in one of the two evaluations, this was most significant for females, ethnic minority youth, and youth with histories of suspension) *Participation* In one of the two evaluations, significantly less course failure was reported by students who worked more volunteer hours in the program. **Prevention** Positive: reduced pregnancy rates (females; most significant for those who were already teen parents)
The After-School Corporation After-School Program, NY (QE)	**Academic** Positive: achievement test scores (for mathematics; most significant for low-achieving, special education, English language learner, African-American, and Hispanic students), school attendance Neutral: achievement test scores (for language arts) *Participation* Positive academic outcomes were reported for "active participants," i.e., those that participated at least three days per week. Those who participated at least 60 days and at least 60% of possible days gained four scale-score points in math after two years of participation and six scale-score points after three years. Those who participated at least 80 days and at least 80% of possible days gained six scale-score points in math after two years of participation. **Youth Development** Positive: interactions/relationships with peers, leadership skills (middle school students), performance skills (such as playing a musical instrument, singing, or public speaking), world view broadened
Thunderbirds Teen Center Program, Phoenix, AZ (QE)	**Academic** Neutral: grades, school attendance
Virtual Y, New York, NY (QE)	**Academic** Positive: achievement test scores (fourth grade), school attendance (third and fourth grade) **Youth Development** Positive: interactions/relationships with peers, positive behavior, social/interpersonal skills, task orientation
Voyager Summer Program, national (QE)	**Academic** Positive: achievement test scores
Woodrock Youth Development Project, Philadelphia, PA (E)	**Academic** Positive: school attendance **Prevention** Positive: avoidance of drug/alcohol use Neutral: attitudes about drug/alcohol use **Youth Development** Positive: confidence/self-esteem, positive behavior, decreased aggression, respect for diversity