

OUT-OF-SCHOOL TIME PROGRAMS: RESEARCH SUMMARY

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Council for
Children's
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Research Notes

The Out-of-School Time Research Summary was created by searching UNC-Charlotte library databases (e.g., Academic Search Premier, ERIC, Education Abstracts) for journal articles with keywords such as “afterschool”, “out-of-school time”, “school-age care”, “organized activities” and “positive youth development”. In addition to peer-reviewed journals, a similar search for research reports by foundations and other research organizations (e.g., Harvard Family Research Project, RAND Corporation, The Campbell Collaboration) was conducted utilizing Google Scholar and journal article references.

Summary and Limitations

Research on the effectiveness of out-of-school time programming generally concludes that programs do have the potential to improve important youth outcomes. However, the majority of rigorous evaluation studies find that out-of-school time programs have no effect on youth outcomes, and very little can confidently be said about how programs can achieve success. Research on out-of-school time is limited in a number of significant ways:

1. There are very few randomized control trial (RCT) evaluations from which to draw causal conclusions, limiting the ability to state that any observed effects resulted from the out-of-school time program.
2. Many quasi-experimental design (QED) evaluations suggest that out-of-school time programs may be beneficial, but most studies fail to control for selection bias (that is, most children or their families self-select into programs, and may differ systematically from those who choose not to attend in terms of motivation, aspiration, or other factors, potentially biasing the results).
3. Program design and delivery varies widely, and many programs are geographic- or population-specific, limiting the ability to draw conclusions across programs.
4. The trend toward aligning out-of-school time with a narrow set of academic outcomes (e.g. test scores, grades) informs what has been evaluated and limits what we know about other potential impacts of out-of-school time programs.

The Out-of-School Time Research Summary is organized into four sections:

1. Out-of-School Time Annotated Bibliography
2. Research-Informed Out-of-School Time Programs and Interventions
3. Randomized Control Trial (RCT) Program Evaluations
4. Out-of-School Time Outcomes Matrix

Out-of-School Time Annotated Bibliography

The first section of the research summary is an annotated bibliography that includes narrative reviews and meta-analyses that describe:

1. Research – the state of out-of-school time research;
2. Outcomes – the state of knowledge about the types of outcomes that participation in out-of-school time programs may impact and the nature of those impacts; and
3. Program components – the state of knowledge about “what works”, or the components of out-of-school time programs that may contribute to positive outcomes.

The following information is included for each article or report that was reviewed:

- Citation
- Type of study
- Developmental outcome(s)
- Program component(s)
- Summary

Research on out-of-school time is extensive; multiple studies that contribute to knowledge in the field are likely not included here. The following articles and reports were selected for their relevancy to topics of interest within the out-of-school time field, the currency of the research, and the methodological rigor of the reviews.

Citation	Study Type	Outcome(s)	Program Component(s)	Summary
Apsler, R. A. (2009). After-school programs for adolescents: A review of evaluation research. <i>Adolescence</i> , 44(173), 1-19.	Narrative review	N/A	A combination of: (1) specific goals, (2) structured programming based on sound educational techniques, and (3) frequent attendance. Unstructured after-school programs tend to have little or no observable impact on participants.	Numerous evaluations of after-school programs exist, but serious methodological flaws limit the conclusions that can be drawn with confidence from most of the studies. Major obstacles to conducting sound evaluations include difficulties in obtaining appropriate comparison groups and dealing with sporadic attendance and program attrition. Given the paucity of rigorous evaluations, conclusions drawn regarding the impact of after-school programs must be drawn cautiously and tentatively.
Bodilly, S., & Beckett, M. K. (2005). <i>Making out-of-school time matter: Evidence for an action agenda</i> . Santa Monica, CA: Rand Corporation. Retrieved from: http://www.rand.org/content/dam/rand/pubs/monographs/2005/RAND_MG242.pdf .	Narrative review	Modest positive impacts on academic achievement, academic attainment, and social behaviors such as reduced drug use and pregnancy.	A convergence of multiple, less rigorous sources on program factors that might be associated with improved youth outcomes includes: (1) a clear mission, (2) high expectations and positive social norms, (3) a safe and healthy environment, (4) a supportive emotional climate, (5) small total enrollment, (6) stable, trained personnel, (7) appropriate content and pedagogy relative to the children's needs and the program's mission, with opportunities to engage, (8) integrated family and community partners, and (9) frequent assessment.	Demand for OST programs remains unclear; the authors did not find systematic evidence of unmet demand for programs. Analysis of the research with the most rigorous designs suggests that the few programs that have been evaluated have, at best, had modest positive impacts. Program effects sometimes varied by grade level, background of children, level of participation, program content, and whether the program developed was well targeted toward the desired outcome. The cost-effectiveness of OST programs compared to other interventions is not well understood.

<p>Cooper, H., Charlton, K., Valentine, J. C., & Muhlenbruck, L. (2000). Making the most of summer school: A meta-analytic review. <i>Monographs of the Society for Research in Child Development</i>, 65(1), 1-118.</p>	<p>Meta-analysis (includes QED and RCT), Narrative review</p>	<p>Overall positive impact on the knowledge and skills of participants.</p>	<p>Remedial programs have larger effects when: (1) the program is relatively small, and (2) instruction is individualized. Remedial programs may have more positive effects on math than on reading. Requiring parent involvement also appears related to more effective programs.</p>	<p>A research synthesis is reported that used both meta-analytic and narrative procedures to integrate the results of 93 evaluations of summer school. Results revealed that summer programs focusing on remedial or accelerated learning or other goals have a positive impact on the knowledge and skills of participants. Although all students benefit from summer school, students from middle-class homes show larger positive effects than students from disadvantaged homes. Students at all grade levels benefit from remedial summer school, but students in the earliest grades may benefit most.</p>
<p>Durlak, J. A., & Weisberg, R. P. (2007). <i>The impact of after-school programs that promote personal and social skills</i>. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning. Retrieved from: http://www.pasesetter.com/reframe/documents/ASP-Full.pdf.</p>	<p>Meta-analysis (includes QED and RCT)</p>	<p>Positive impacts on child self-perceptions, school bonding, positive social behaviors, reduction in problem behaviors, reductions in drug use, and achievement tests. No significant effect found for school attendance.</p>	<p>Programs must: (1) devote sufficient time to skill enhancement, (2) be explicit about what they wish to achieve, (3) use activities that are coordinated and sequenced to achieve their purpose, and (4) require active involvement on the part of participants.</p>	<p>Meta-analysis of 66 after-school program evaluations that seek to enhance the personal and social development of children and adolescents indicated that youth improved in three general areas: feelings and attitudes, indicators of behavioral adjustment, and school performance. Programs that used evidence-based approaches for skill training produced significant improvements among participants in all of the outcomes areas. To improve youth's personal and social skills, programs must be SAFE – sequenced, active, focused and explicit. Limitation: only 17 of the 66 studies in the analysis used random assignment, and effect sizes based on analysis of these 17 studies were not reported separately, potentially overstating the effects.</p>

<p>Gardner, M., Roth, J. L., & Brooks-Gunn, J. (2009). Can after-school programs help level the academic playing field for disadvantaged youth? <i>Equity Matters: Research Review No. 4</i>. Retrieved from: http://www.equitycampaign.org/i/a/document/11242_After-school_report_10-7-09_web.pdf.</p>	<p>Narrative review</p>			<p>After-school programs may have positive and meaningful effects on academic outcomes for low-income youth, but after-school programs are best viewed as part of a multifaceted approach toward closing the achievement gap.</p>
<p>Lauer, P. A., Akiba, M., Wilkerson, S. B., Apthorp, H. S., Snow, D. & Martin-Glenn, M. L. (2006). Out-of-school time programs: A meta-analysis of effects for at-risk students. <i>Review of Educational Research</i>, 76(2), 275-313.</p>	<p>Meta-analysis (includes QED and RCT)</p>	<p>Positive impact on reading and mathematics achievement.</p>	<p>Analyses revealed several moderating influences: (1) positive impact of tutoring on reading achievement, (2) for reading, positive effect sizes were highest in the lower elementary grades, and (3) for mathematics, positive effect sizes were highest for students in middle and high school.</p>	<p>Meta-analysis of 35 out-of-school time program evaluations that seek to assist at-risk students in reading and/or mathematics indicated small but statistically significant positive effects of OST on both reading and mathematics student achievement and larger positive effect sizes for programs with specific. Whether the OST program took place after school or during the summer did not make a difference in effectiveness. Limitation: only 9 of the 35 studies in the analysis use random assignment, and effect sizes based on analysis of these 9 studies were not reported separately, potentially overstating the effects.</p>

<p>Little, P. M. D., Wimer, C., & Weiss, H. (2008). After school programs in the 21st century: Their potential and what it takes to achieve it. <i>Issues and Opportunities in Out-of-School Time Evaluation</i>, 10, 1-12.</p>	<p>Narrative review</p>	<p>Positive impact on a range of academic, social/emotional, prevention, and health and wellness outcomes.</p>	<p>Three primary and interrelated factors that are critical for creating positive settings that can achieve positive youth outcomes: (1) access to and sustained participation in the program, (2) quality programming (particularly appropriate supervision and structure, well-prepared staff, and intentional programming), and (3) promoting strong partnerships among the program and the other places where students are learning.</p>	<p>Narrative review based on past ten years of experimental and quasi-experimental research studies determined that well-implemented programs can have a positive impact on a range of academic, social, prevention, and other outcomes, particularly for disadvantaged children and youth. However, not all research and evaluation studies have shown benefits, highlighting how complex a task it is to provide high-quality, effective supports for youth and their families. The review suggests that programs do work when key factors are addressed – factors of access, sustained participation, program quality, and strong partnerships.</p>
<p>Mahoney, J. L., Larson, R. W., Eccles, J. S., & Lord, H. (2005). Organized activities as developmental contexts for children and adolescents. In J. Mahoney, J. Eccles, & R. Larson, (Eds.), <i>Organized activities as contexts for development: Extracurricular activities, after-school and community programs</i> (pp. 3-22). Mahwah, NJ: Erlbaum.</p>	<p>Narrative review</p>	<p>Positive impacts on academic performance and reduced problem behaviors, school absences, and improved work and study habits.</p>	<p>National Research Council identified eight features of contexts that promote positive development: (1) physical and psychological safety, (2) appropriate structure, (3) supportive relationships, (4) opportunities for belonging, (5) positive social norms, (6) support for efficacy and mattering, (7) opportunity for skill building, and (8) integration of family, school and community efforts.</p>	<p>After-school program participation appears to promote competence in several key developmental tasks during middle childhood including academic performance, school engagement, and social behaviors and relationships. The likelihood for beneficial outcomes appears greatest for: (1) after-school programs of higher quality and those in later stages of development, (b) students who show greater consistency in their program participation, and (c) programs serving low-income and low-achieving students at high risk for developing social-academic problems. Parents of participants also report that after-school programs support their work schedules and that they worry less about their children's safety.</p>

<p>Redd, Z., Boccanfuso, C., Walker, K., Princiotta, D., Knewstubb, D., & Moore, K. (2012). Expanding time for learning both inside and outside the classroom: A review of the evidence base. Retrieved from: http://www.childtrends.org/Files/Child_Trends_2012_08_16_RB_TimeForLearning.pdf.</p>	<p>Narrative review</p>	<p>Positive impact on scholastic Behaviors (academic skills, homework completion, study habits) and educational expectations.</p>	<p>Identified a number of effective practices for ELO program implementation: (1) Frequent participation, (2) targeted outcomes, (3) individualized attention to students through tutoring or mentoring, and (4) multiservice interventions.</p>	<p>Report synthesizes what is known about the effectiveness of interventions that aim to address deficiencies and inequities in academic achievement and educational attainment by expanding learning opportunities for students both inside and outside of school. Expanded learning opportunity (ELO) programs (out-of-school time programs) have the potential to impact of range of educational outcomes, though impacts varied considerably across programs. ELO programs are more effective in improving scholastic behaviors (such as academic skills, homework completion, and study habits) than in affecting indicators of educational adjustment (such as school attendance, academic achievement, and high school graduation). Studies tended to find that effects were larger and stronger for lower-income students, lower-performing students, and other more disadvantaged subgroups.</p>
<p>Zief, S. G., Lauver, S., & Maynard, R. A. (2006). Impacts of after-school programs on student outcomes. Campbell Systematic Reviews 2006:3. Retrieved from: www.campbellcollaboration.org/lib/download/58/.</p>	<p>Meta-analysis (RCT only)</p>	<p>Positive impact on number of hours spent in self-care and participation in athletic and arts activities.</p>	<p>Primarily null impacts could be a function of limited duration of the interventions or the relatively low participation rates across the studies.</p>	<p>Review of five rigorous, experimental studies of programs that combined academic programming with other activities. Looking across the 97 impacts measured by the five studies reveals primarily null findings – 84 percent showed no significant differences between the program and control youth. The review suggests that initial optimism about program impacts are tempered when more stringent review criteria are applied and meta-analytic techniques are used to pool program impacts across multiple studies.</p>

Research-Informed Out-of-School Time Interventions and Curricula

The next section of the research summary provides summary information about research-informed out-of-school time interventions and curricula.

Criteria. To be included in this review, the program must:

1. Be designated as evidence-based/peer reviewed by **two** or more of the sources listed below.
2. Be able to be implemented within out-of-school time only and with children only. Comprehensive community programs or those with both in-school and out-of-school time components are not included. Similarly, promising research about family interventions or programs that include parent interventions are not included.

Sources. To develop this matrix, the following evidence-based registries were reviewed:

- Office of Juvenile Justice and Delinquency Prevention (OJJDP) Model Programs Guide
- Coalition for Evidence-Based Policy
- National Registry of Evidence-Based Programs and Practices (N-REPP) (SAMSHA)
- Blueprints for Violence Prevention
- California Evidence-Based Clearinghouse (CEBC)
- Promising Practices Network
- Find Youth Info
- Child Trends
- Washington State Institute for Public Policy

Matrix. The following information is included for each intervention or curriculum:

- Program name
- Target population
- Description
- Key findings
- Citation

The Larry King Center of the Council for Children's Rights does not endorse any intervention or curricula cited in this document. The material provided is strictly for informational purposes.

Program name	Target population	Description	Key findings	Citation
Across Ages	9- to 13-year old children at risk for substance abuse	One-to-one mentoring program pairing older adults (55 and over) with young adolescents. Intervention also includes weekly community service, weekly curriculum component delivered in a classroom setting, and monthly weekend activities for children and their families.	Positive impacts on school attendance, attitudes towards school and the future, reaction to situations involving drug use, and helping behavior/social responsibility.	LoSciuto, L., Rajala, A., Townsend, T., & Taylor, A. (1996). An outcome evaluation of Across Ages: An intergenerational mentoring approach to drug prevention. <i>Journal of Adolescent Research</i> , 11(1), 116-129.
Be Proud! Be Responsible!	Low-income African-American adolescents, particularly inner city environments	Curriculum designed to increase HIV/AIDS-related knowledge and weaken problematic attitudes toward risky sexual behavior. Additional related curricula exist, but have not been rigorously evaluated.	Positive impacts on reproductive health risk behavior.	Multiple studies. See http://www.childtrends.org/Lifecourse/programs/BeProud.htm .
Big Brothers Big Sisters - Community	5- to 18-year old children at risk for substance use, school failure, and problem behaviors	Intensive, community-based, one-to-one mentoring program designed to provide a sense of safety and security, emotional support, social skill promotion, and help with academic, technical, and other skills.	Positive impacts on substance use initiation, social skills, aggression, school attendance – for girls, also GPA, and for white males, also family relationships.	Grossman, J.B., & Tierney, J.P. (1998). Does mentoring work?: An impact study of the Big Brothers Big Sisters program. <i>Evaluation Review</i> , 22, 403-426.

Program name	Target population	Description	Key findings	Citation
Children's Aid Society – Carrera Adolescent Pregnancy Program (CAS-Carrera)	13- to 15-year old students at risk for teen pregnancy and school failure, program continues through high school	Intensive, multi-year, year-round afterschool and summer program, typically available five to six days per week (community school model). Intervention provides a variety of activities and services, including employment, academic assistance, and health care, and is designed to promote positive youth development and positive reproductive health.	Positive impacts on reproductive health (pregnancies, births, STDs), life skills, achievement test scores, and educational expectations.	Philliber, S., Kaye, J. W., Herrling, S., & West, E. (2002). Preventing pregnancy and improving health care access among teenagers: An evaluation of the Children's Aid Society Carrera Program. <i>Perspectives on Sexual and Reproductive Health</i> , 34(5), 244–251.
Early Risers “Skills for Success”	6- to 10-year old children who display aggressive/disruptive behavior	Summer program with 1 day/week afterschool, includes social skills training, reading/education enrichment activities, and contingency management of aggressive behavior. Also includes an optional home-visiting and family intervention component.	Positive impacts on school adjustment, social competence, academic achievement, and reductions in problem behaviors for aggressive children.	Multiple studies. See http://www.childtrends.org/Lifecourse/programs/EarlyRisers.htm
SPORT	Adolescents	A brief, multiple behavior program integrating substance abuse prevention and fitness promotion. Involves a health behavior screen, a 10-minute personal consultation, and a fitness goal plan.	Positive impact on substance use risk factors and physical activity.	Werch, C.E., Moore, M.J., DiClemente, C.C., Bledsoe, R., & Jobli, E. (2005). A multi-health behavior intervention integrating physical activity and substance use prevention for adolescents. <i>Prevention Science</i> , 6(3), 213-226.

Program name	Target population	Description	Key findings	Citation
Teen Outreach Program (TOP)	Middle- and high-school students at-risk for teen pregnancy and school failure	Curriculum designed to engage young people in a high level of structured, volunteer community service that is closely linked to classroom-based discussions of future life options, such as those surrounding future career and relationship decisions.	Decreased risk of pregnancy, course failure, and school suspension.	Multiple studies. See http://www.ojjdp.gov/mpg/Wyman's%20Teen%20Outreach%20Program%20%20174;-MPGProgramDetail-706.aspx .

Randomized Control Trial (RCT) Program Evaluations

The next section of the research summary provides summary information about out-of-school time programs that have conducted rigorous program evaluations.

Criteria

To be included in this review, programs must:

1. Be referenced in at least one of the research syntheses listed in the out-of-school time annotated bibliography
2. Have published results from a randomized control trial
3. Demonstrate positive impacts on one or more outcome measure

Notes

The effect or impact of an out-of-school time program is defined as the change in the outcome measure of the program that was due to participation in the program as opposed to other factors affecting participants. Since most quasi-experimental design (QED) evaluations of out-of-school time programs fail to control for selection bias, only randomized control trial (RCT) evaluations are included. RCT evaluations determine whether the program produces an effect over and above what would have occurred without the program – not whether the outcome measure itself changed.

Note that this matrix does not assess the frequency or discuss the magnitude of effects across studies. The purpose is to highlight where there is evidence that effects have been found in at least one rigorous program evaluation.

The following information is included for each evaluation report reviewed:

- Citation
- Program name
- Sample
- Description
- Key findings
- Limitations/notes

Citation	Program Name	Sample	Description	Key Findings	Limitations/Notes
Blakely, C. H., Menon, R., & Jones, D. J. (1995). <i>Project BELONG: Final report</i> . College Station, TX: Texas A&M University, Public Policy Research Institute.	Project BELONG	Middle school students in Texas (n=385)	Academic-oriented mentoring/tutoring program designed to improve school functioning and discourage substance use	Positive impact on classroom engagement and ratings of school importance, decrease in math failure, reductions in problem behaviors.	
Cave, G., & Quint, J. (1990). <i>Career Beginnings impact evaluation: Findings from a program for disadvantaged high school students</i> . New York: Manpower Demonstration Research Corporation.	Career Beginnings	11 th and 12 th graders at seven sites(n=1,233)	Mentor program with academic support and summer work experience	Reduction in unexcused absences and positive impacts on college enrollment and length of stay in college.	
Chaplin, D., & Capizzano, J. (2006). <i>Impacts of a summer learning program: A random assignment study of Building Educated Leaders for Life (BELL)</i> . Washington, DC: The Urban Institute/Mathematica Policy Research.	Building Educated Leaders for Life (BELL) - Summer	1 st through 6 th graders in three cities (n=835)	6-week tutoring and enrichment summer program	Positive impact on reading test scores.	No impact on math test scores.

Citation	Program Name	Sample	Description	Key Findings	Limitations/Notes
James-Burdumy, S., Dynarski, M., Moore, M., Deke, J., Mansfield, W., & Pistorino, C. (2005). <i>When schools stay open late: The national evaluation of the 21st Century Community Learning Centers program final report</i> . U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from: http://www.ed.gov/ies/ncee	21 st Century Community Learning Centers (CCLC) – National Evaluation	Elementary school students nationally (n=1,258)	After-school academic enrichment program	Positive impact on social studies grades, higher levels of supervision by adults, improved feelings of safety after school.	No impacts on the number of students without adult supervision during the hours after school, and no impact on reading and math grades or test scores. Program design and delivery varied widely across 21 st CCLC sites, and most students participated infrequently (2 days/week average).
Gottfredson, D. C., Soule, D. A., & Cross, A. (2004). <i>A statewide evaluation of Maryland After School Opportunity Fund Program: Final report</i> . College Park, MD: Department of Criminology and Criminal Justice, The University of Maryland, College Park.	Higher Achievement Program	5 th and 6 th graders in Washington, D. C. in 2010 (n=951)	Multi-service after-school program	Positive impact on engagement with academic activities, reading and problem solving on standardized tests.	

Citation	Program Name	Sample	Description	Key Findings	Limitations/Notes
Harrington, N. G., Giles, S. M., Hoyle, R. H., Feeney, G. J., & Youngbluth, S. C. (2001). Evaluation of the All Stars character education and problem behavior prevention program: Effects on mediator and outcome variables for middle school students. <i>Health Education & Research, 28</i> (5), 533–546.	All Stars – Character Education and Problem Prevention Program	6 th and 7 th graders in 14 schools (n=1,655)	Curriculum designed to reduce adolescents' engagement in risk behaviors such as substance use, violence and sexual activity	Reductions in substance use risk factors (impulsive decision-making and sensation-seeking behavior).	Results found for teacher-implemented program only. Program implementation is key. See Gottfredson, et al (2009) study of All Stars incorporation into Baltimore County ASPs at http://www.education.umd.edu/EDMS/fac/Harring/Past-Classes/EDMS645/Notes/Gottfredson-2009.pdf . Authors found no positive effects.
Lauver, S. C. (2002). <i>Assessing the benefits of an after-school program for urban youth: An impact and process evaluation</i> . Philadelphia: Author.	Cooke Middle School After-school Program	Middle school students in Philadelphia in 1999 (n=126)	Multi-service afterschool program designed to promote physical and social/emotional well-being	Positive impact on homework time, increased educational aspirations beyond high school.	Challenges with program implementation including low student participation rates and inconsistent staff attendance.
LeCroy, C.W. (2004). Experimental evaluation of "Go Grrrls" preventive intervention for adolescent girls. <i>The Journal of Primary Prevention, 25</i> , 457-473.	Go Grrrls	7 th grade girls in AZ (n=118)	Curriculum for adolescent girls designed to promote social competence by focusing on six tasks necessary for healthy psychosocial development	Positive impacts for body image, assertiveness, self-efficacy and self-liking.	Evaluation not conducted by an independent evaluator.

Citation	Program Name	Sample	Description	Key Findings	Limitations/Notes
Maxfield M., Schirm, A., & Rodriguez-Planas, N. (2003). <i>The Quantum Opportunity Program demonstration: Implementation and short-term impacts</i> . Washington, DC: Mathematica Policy Research, Inc.	Quantum Opportunities Program	Rising 9 th graders (n=580)	Vocational program with academic and service learning components	Improved academic skills and positive impact on educational expectations.	Short-term impacts only – found while students were still in high school. There were no impacts on improvements in test scores, academic grades, or credits earned. Additionally, there were no impacts on reducing risky behaviors, and in fact, increased behaviors in a handful of areas, including substance use and binge drinking.
Myers, D., Olsen, R., Seftor, N., Young, J., & Tuttle, C. (2004). <i>The impacts of regular Upward Bound: Results from the third follow-up data collection</i> . Washington D.C.: Mathematica Policy Research, Inc.	Upward Bound	8 th through 11 th graders (first-generation college and low-income) (n=1,500)	6-week academic and enrichment summer program, year-round mentoring and tutoring, counseling, career planning, and cultural activities	Positive impact on postsecondary credits earned and number of hours per week worked during college.	No significant effect on college attendance rates or high school graduation rates for the experimental group as a whole, but certain subgroups experienced these program gains.
Schacter, J. & Jo, B. (2005). Learning when school is not in session: a reading summer day-camp intervention to improve the achievement of exiting First-Grade students who are economically disadvantaged. <i>Journal of Research in Reading</i> , 28(2), 158-169.	Read to Achieve	Rising 2 nd graders in CA (n=162)	8-week tutoring and enrichment summer program	Positive impact on reading comprehension scores.	By the nine-month follow-up, there was no longer a significant impact.

Citation	Program Name	Sample	Description	Key Findings	Limitations/Notes
Shapiro, J. Z., Gaston, S. N., Hebert, J. C., & Guillot, D. J. (1986). <i>The LSYOU project evaluation</i> . Baton Rouge, LA: College of Education Administrative and Foundational Services, Louisiana State University.	Louisiana State Youth Opportunities Unlimited	High school students ages 14-16 in LA (n=105)	6-week residential drop-out prevention summer program	Positive impacts on high school completion rates and math computation, decreased rate of reading comprehension loss.	
Sinclair, M. F. & Lehr, C. A. (2001). <i>Dakota County: Check & Connect early truancy prevention programs: Program evaluation 2001 summary report</i> . Minneapolis, MN: University of Minnesota, Institute of Community Integration.	Check and Connect	9 th graders from urban school districts (n=164)	Mentoring and individual advocacy program	Positive impact on school attendance, high school dropout, and school completion.	
Stern, R. & Repa, J. T. (2000). <i>A study of the efficacy of computerized skill building for adolescents: Reducing aggression and increasing pro-social behavior</i> (Report No. IR020414). New York, NY: New York City Board of Education.	RELATE for Teens	7 th and 8 th graders in NYC (n=57)	Computer-based curriculum designed to help improve behavioral skills, prevent usage of drugs and alcohol, improve academic achievement, and reduce aggressive and violent behavior	Increase in positive social behaviors and decrease in negative social behaviors.	Two treatment groups with small sample sizes (n=17); implemented during "free time" in school, but potentially could be implemented during out-of-school time. Impacts found for both treatment groups – with and without teacher direction.

Citation	Program Name	Sample	Description	Key Findings	Limitations/Notes
Story, M., Sherwood, N. E., Himes, J. H., Davis, M., Jacobs, Jr., D. R., & Cartwright, Y. (2003). An after-school obesity prevention program for African-American girls: The Minnesota GEMS pilot study. <i>Ethnicity & Disease, 13</i> (1), 54-64.	Girlfriends for KEEPS	8 to 10-year old African-American girls (n=26)	Curriculum in after school program (2 days/week) designed to prevent obesity among African-American girls through physical activity and dietary habits	Increase in physical activity and positive impact on behavior intentions related to nutrition and physical activity; however, treatment group more likely to report engaging in moderate and unhealthy behavior related to weight concern.	Small sample size. No impacts on measures of physical activity, dietary intake, or body mass index (BMI).
Weiss, F. L., & Nicholson, H.J (1998). Friendly PEERsuasion against substance use: The Girls Incorporated model and evaluation. <i>Drugs & Society, 12</i> (1/2), 7-22.	Girls Inc.'s Friendly PEERsuasion	6 th through 8 th grade girls in AL (n=127)	Curriculum designed to prevent substance abuse for at-risk middle-school aged girls	Reduced initiation of substance use in younger participants (ages 11-12); marginal impacts for older participants (ages 13-15).	Only one of five sites was evaluated due to low attendance, high attrition, and inability to implement program with fidelity in other four sites.
Yin, Z., Hanes, Jr., J., Moore, J. B., Humbles, P., Barbeau, P., & Gutin, B. (2005). An after school physical activity program for obesity prevention in children: The Medical College of Georgia FitKid Project. <i>Evaluation & the Health Professions, 28</i> (1), 67-89.	FitKid	3 rd through 5 th graders in GA (n=182)	Recreational afterschool program with academic component	Reduction in BMI and increased physical activity.	Impact only for children who attended greater than 40% of sessions (49% of sample). Children reported participating in other after school recreational and sports activities; only partial random assignment (sample not large enough so some participants were recruited after the schools had been assigned).

Out-of-School Time Sector Outcomes Matrix

The final section of the research summary is an outcomes matrix that provides an overview of the evidence for the range of possible outcomes for the out-of-school time sector as identified by narrative reviews, meta-analyses, evidence-based practice registries, and rigorous program evaluations. The matrix is organized by three developmental domains – social/emotional, cognitive (academic), and physical (health) – and outcomes are categorized as initial, intermediate, or long-term. It is important to note that the developmental domains are not independent of one another. It is likely that initial outcomes across developmental domains must be achieved before intermediate and long-term outcomes can occur. However, the precise interaction of outcomes across developmental domains is not well understood.

While the range of possible outcomes for the out-of-school time sector is large and varied, few programs have shown evidence of these outcomes and no program has shown evidence of effects for all outcomes. This research summary highlights two important goals for the out-of-school time sector in our community:

- Need to define realistic expectations for out-of-school time programs and identify appropriate measures of program effects
- Need for programs to explicitly define their goals and align evidence-based strategies and program activities to achieve those goals

Developmental Domain: Social/Emotional					
Outcomes			Evidence		
Initial	Intermediate	Long-term	Meta-Analysis of Programs	RCT Program Evaluations	Research-Informed Interventions or Curricula
Child Self-Perceptions (self-efficacy, self-concept, self-esteem)			Durlak & Weissberg, 2007	Go Grrrls	
Social Skills (social competencies and social skills)	Positive Social Behaviors (cooperation, leadership, positive interactions)		Durlak & Weissberg, 2007		Big Brothers Big Sisters, Early Risers
	Civic Engagement (political involvement, community services, social responsibility)			Quantum Opportunities Program, Adolescent Social Action Program	Across Ages
	Problem Behaviors (aggression, impulsivity, intimidation, hyperactivity)	Problem Behaviors (delinquency, criminal offenses)	Durlak & Weissberg, 2007	Project BELONG, RELATE for Teens	Teen Outreach Program, Big Brothers Big Sisters, Early Risers
Life Skills (problem-solving, assertiveness, self-sufficiency)				All Stars, Go Grrrls	CAS-Carrera, Across Ages

Developmental Domain: Cognitive (Academic)					
Outcomes			Evidence		
Initial	Intermediate	Long-term	Meta-Analysis of Programs	RCT Program Evaluations	Research-Informed Interventions or Curricula
		Academic Achievement (school grades and achievement test scores)	Durlak & Weissberg, 2007; Lauer et. al., 2006	BELL Summer, Career Beginnings, Higher Achievement Program, Project BELONG, Read to Achieve	CAS-Carrera, Big Brothers Big Sisters, Early Risers
	Engagement in School (attendance and effort)			Project BELONG, Check and Connect, Higher Achievement Program	Big Brothers Big Sisters
Scholastic and Academic Skills (academic skills, study skills, time management)	Scholastic Behaviors (homework completion, study habits)			Cooke Middle School, Project BELONG, Quantum Opportunities Program	CAS-Carrera
		Educational Attainment (course failure, on-time promotion, high school completion, postsecondary credits)		Career Beginnings, Check and Connect, Louisiana State Youth Opportunities, Upward Bound	Teen Outreach Program
Achievement Motivation (attitudes towards school, school bonding, educational expectations)			Durlak & Weissberg, 2007	Project BELONG, Quantum Opportunities Program, Cooke Middle School	CAS-Carrera

Developmental Domain: Physical (Health)					
Outcomes			Evidence		
Initial	Intermediate	Long-term	Meta-Analysis of Programs	RCT Program Evaluations	Research-Informed Interventions or Curricula
Substance Use (knowledge and refusal skills)	Substance Use (tobacco, marijuana, alcohol)			All Stars, Girls Inc. Friendly PEERsuasion	Big Brothers Big Sisters, Across Ages, SPORT
Reproductive Health (knowledge and skills)	Reproductive Health Risk Behaviors (initiation and frequency of sex, use of contraception, use of condoms, number of partners)	Reproductive Health (pregnancies, births, STDs)			Teen Outreach Program, CAS-Carrera, Be Proud! Be Responsible!
Physical Health (knowledge of health and nutrition)	Physical Health (food choices, physical activity)	Physical Health (reduction in BMI, improved blood pressure)		Girlfriends for KEEPS, Cooke Middle School, FitKid	SPORT, CAS-Carrera